Inverell Shire Council

KING + CAMPBELL

# STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

PREPARED FOR:
Inverell Shire Council
144 Otho Street
Inverell NSW 2360

PREPARED BY:
King & Campbell Pty Ltd
PO Box 243
PORT MACQUARIE NSW 2444

CONTACT:
David Tooby
T. 02 6586 2555
E. davidt@kingcampbell.com.au

DRAFT

October 2021

Job No. 6148

# TABLE OF CONTENTS

EXHIBITS ..... After Page No.

# Section 1: Introduction

## 1.1 Background

Inverell is an emerging regional centre with a population of approximately 12,000 and services a commercial catchment nearing 60,000. Inverell boasts a variety of commercial, industrial and residential opportunities with the Macintyre River at the heart of the town.

Under the former *Inverell Local Environmental Plan 1988* a number of areas on the fringes of the Inverell Township were zoned 1(a) Rural Agriculture and 1(d) Urban Investigation. These areas at that time identified lands to be investigated for possible future urban development.

With the findings of the *Inverell Living Lands Strategy 2009* and the gazettal of the Inverell *Local Environmental Plan 2012*, Council rezoned three areas from 1(a) Rural Agriculture and 1(d) Urban Investigation to R1 General Residential. These three areas are defined as "New Residential Areas" under the *Inverell Development Control Plan 2013* (IDCP 2013).

Section 2.13 of the *Inverell DCP 2013* requires that a Structure Plan be prepared for each New Residential Area prior to development being undertaken in those areas. Structure Plans provide an important overall framework for a New Residential Area.

## 1.2 Project Visions and Aims

The overall vision for the New Residential Areas for Inverell is summarised as follows:

| Vision |
| --- |
| *New Residential Areas for Inverell are well-planned urban communities, which respect and reflect their natural settings, sustain a healthy and connected community and provide valuable extensions to the township of Inverell.* |

The Structure Plans will provide an overall framework for New Residential Areas, ensuring that road linkages, stormwater drainage, open space and services provision be undertaken in an orderly and efficient manner.

The aims of the Structure Plans are to:

- Provide a framework for the co-ordinated development of three (3) New Residential Areas, considering street layout and connections, cycleway and pedestrian links and servicing.

- Ensure that impacts on the natural attributes of the sites (e.g. water courses, significant vegetation, etc.) are minimised and wherever possible integrated into the proposed layouts.

- Consideration to the sequencing of development, particularly with respect to the logical roll out of infrastructure.

## 1.3 Project Area

The New Residential Areas are generally described as:

- Area 1: East Inverell – To the south of Glen Innes Road between Lake Inverell Drive and Moore Street.

- Area 2: East Inverell – From Short Street to Swanbrook Road and from Moore Street to Onus Avenue.

- Area 3: West Inverell – Between Vernon Street and Jardine Road.

Exhibit 01 – Overall Site Context, indicates the location of the New Residential Areas.

## 1.4 Intended Use and Limitations of Structure Plans

As stated in Section 1.2, the aim of the Structure Plans is to provide an overall framework for each of the three New Residential Areas.

It is noted that the Structure Plans have been based principally on GIS mapping information, and information gleaned from consultation with Council staff and on-field observations. The Consultant Team also consulted with 'Dial Before You Dig' to confirm that there is no major telecommunications and electrical infrastructure in the Project Area.

The Structure Plans are illustrative only and are subject to detailed site survey, environmental and engineering assessment, and Council and State Government assessment processes.

The Structure Plans and the associated Development Vision (refer to Section 4), provide a suite of principles to guide detailed development proposals, and to assist Council in the assessment of development applications for subdivision.

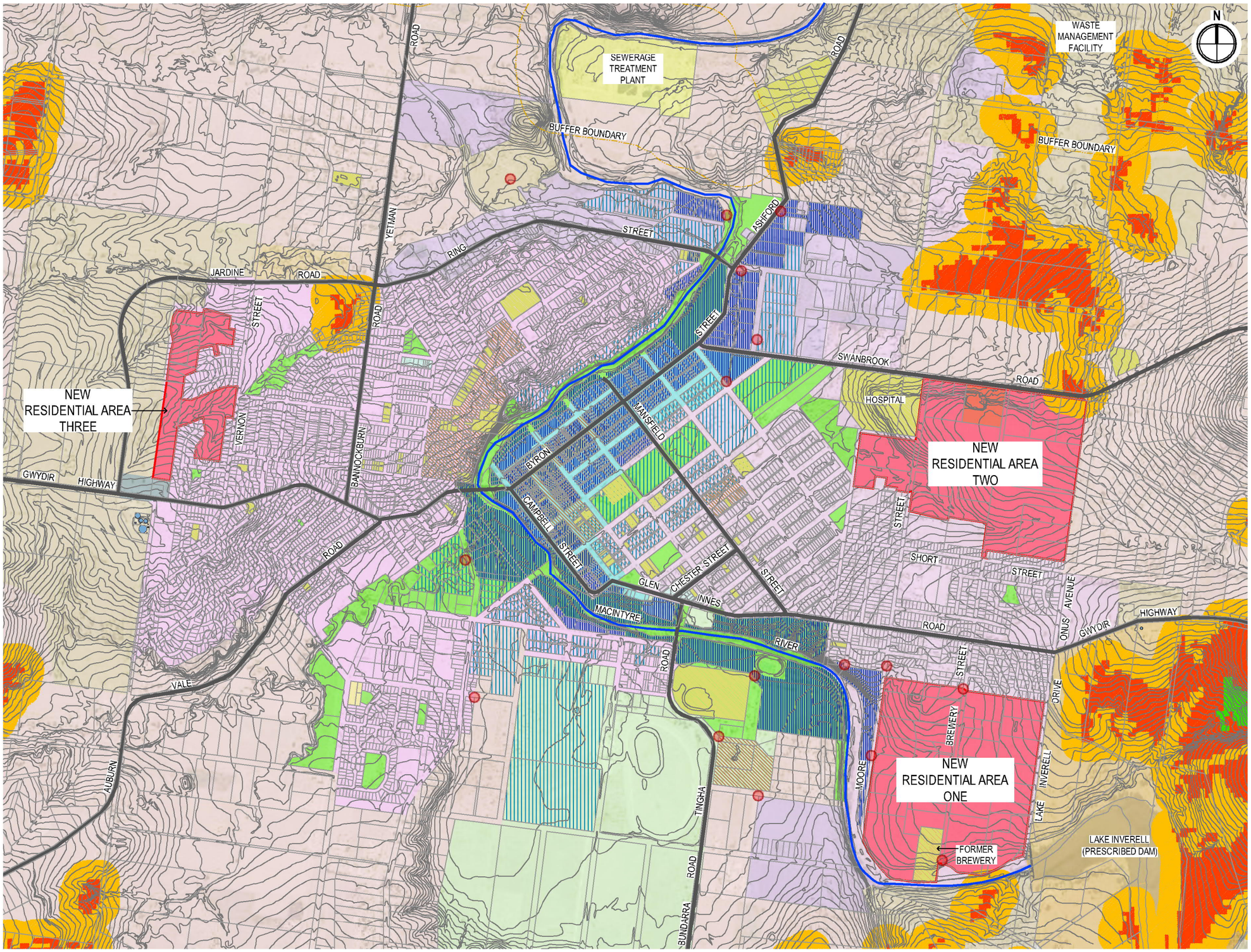
## 1.5. Current Regulatory Controls

### 1.5.1 Inverell Local Environmental Plan 2012

Each of the New Residential Areas are currently zoned R1 General Residential with a minimum lot size of 450m$^2$. The development of the land for residential purposes is permissible with consent.

The objectives of the R1 General Residential zone are detailed below:

- To provide for the housing needs of the community.
- To provide for a variety of housing types and densities.
- To enable other land uses that provide facilities or services to meet the day to day needs of residents.




## LEGEND

- SITES
- CADASTRE
- CONTOURS ( 2m INTERVAL) COUNCIL GIS
- KEY ROADS
- SEWER PUMPING STATION
- WATER STORAGE RESERVOIR AND BUILDINGS
- FLOOD ZONE - HIGH LEVEL IMPACT
- FLOOD ZONE - LOW LEVEL IMPACT
- BUSHFIRE BUFFER ZONE
- BUSHFIRE ZONE - VEGETATION CATEGORY 1
- BUSHFIRE ZONE - VEGETATION CATEGORY 2
- HERITAGE AREAS
- HERITAGE ITEMS

### LAND ZONING (INVERELL LEP 2012)

- B1 - NEIGHBOURHOOD CENTRE
- B2 - LOCAL CENTRE
- B5 - BUSINESS DEVELOPMENT
- E1 - NATIONAL PARKS AND NATURE RESERVES
- E3 - ENVIRONMENTAL MANAGEMENT
- E4 - ENVIRONMENTAL LIVING
- IN1 - GENERAL INDUSTRIAL
- R1 - GENERAL RESIDENTIAL
- R5 - LARGE LOT RESIDENTIAL
- RE1 - PUBLIC RECREATION
- RE2 - PRIVATE RECREATION
- RU1 - PRIMARY PRODUCTION
- SP2 - INFRASTRUCTURE

### CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\4C\REF-DWG\6148_Inverell Council - New Residential Areas\21_Planning\6148P_SITES.dwg - A1(L)-SITE CONTEXT, 6 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.06.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:10000 @ A1 (1:20000 @ A3)

0 5000

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY. LTD., IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY. LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

DRAWING TITLE: EXHIBIT 01 - OVERALL SITE CONTEXT

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 01 | F |

### 1.5.2 Inverell Development Control Plan 2013

Chapter 2 of the Inverell DCP 2013 (IDCP) outlines the provisions for the subdivision of land which requires the consent of Council. This section contains provisions relevant to subdivision including:

- Lot dimensions
- Lot orientation
- Frontage and access
- Roads
- Landscape
- Public Open Space
- Stormwater Drainage
- Utility Services; and
- Land Use Conflict.

Section 2.13 of the IDCP relates to the New Residential Areas - the subject of these Structure Plans - and outlines the requirements the Structure Plans must address.

# Section 2: Communication Strategy

## 2.1 The Process

Consulting with stakeholders, including landholders in the study area, neighbouring residents, and Council's technical staff, is an integral and important part of the study process. As such a comprehensive Communication Strategy has been implemented to inform the Structure Plan process. The Communication Strategy below was endorsed by Council in May, 2018.

Communication Strategy - Structure Plans for New Residential Areas 2018

Stage One - Communication Initiation (Inverell Shire Council)

- Media Release;
- Newspaper advertising – Inverell Times and Inverell Sentinel;
- Web-site and Facebook notifications;
- Identification of stakeholders and stakeholder groups; and
- Correspondence to "key" stakeholders identified for targeted consultation (Stage Three).

Stage Two - Targeted Consultations – Internal (King & Campbell)

- Workshop with council Planners and engineers;
- Individual Staff meetings, as required; and
- Meeting with Councillors, as required.

Stage Three - Targeted Consultations – External (King & Campbell)

- Stakeholder group interviews; and
- Draft Stakeholder Engagement report.

Stage Four - Draft Structure Plans (King & Campbell and Inverell Shire Council)

- Presentation of Draft Structure Plan to Council and Key Stakeholders; and
- Draft Structure Plan finalised and presented for endorsement (by Council) prior to exhibition.

Stage Five - Exhibition of Draft Structure Plan (King & Campbell and Inverell Shire Council)

- Exhibition period – minimum four weeks;
- Media release;
- Fact sheet;
- Newspaper advertising – Inverell Times and Inverell Sentinel;
- Radio advertising;
- Web-site and Facebook;
- Correspondence to "key" stakeholders and user groups; and
- Static displays – Council offices and library.

Stage Six - Review of Submissions (King & Campbell and Inverell Shire Council)

- Review submissions;
- Prepare report summarising issues raised during public exhibition period to Council;
- Council to determine if modification and/or re-exhibition of Draft Structure Plans are required; and
- King & Campbell to make any necessary changes to Draft Structure Plans.

Stage Seven - Finalisation of Draft Structure Plans (King & Campbell and Inverell Shire Council)

- ∇ King & Campbell finalise Draft Structure Plans; and
- ∇ Council Staff prepare report to Council for consideration and adoption of Draft Structure Plans.

## 2.2 Stakeholder Feedback

The following internal and external consultations have been completed:

- Meeting with Council planners and engineers on 27 June 2018.
- Meetings with individual landholders from all three (3) New Residential Areas on 5 and 6 September 2018.

The meetings with individual landholders from each of the three (3) New Residential Areas on the 5 and 6 September 2018 was a key initiative of the Communication Strategy. The purpose of these meetings was to:

- Listen to stakeholder aspirations for the future development of individual properties and the New Residential Areas generally;
- Communicate opportunities and constraints relating to future residential development; and
- Gauge support for the draft Structure Plans put forward.

The results of these meetings were compiled and tabulated. The following summary is provided for individual landholder feedback for the three New Residential Areas:

<u>All Three Areas</u>

A total of seventy-one (71) interviews were completed with landholders. Of these twenty-four (24) were landholders within one of the three (3) New Residential Areas and forty-eight (48) were neighbouring landholders or interested community representatives.

<u>New Residential Area 1</u>

- A total of nineteen (19) landholders interviewed were from within Area 1, two (2) were neighbouring landholders.
- The majority of landholders supported the process and were generally happy with the plans.
- A number of landholders recognised that the main watercourse through the site presented a significant constraint, and that the stormwater could not be piped.
- A small number of landholders expressed that they did not want to see development but acknowledged that they were not obligated to develop themselves and that the development of the area for conventional residential housing would likely take place over many years.
- A small number (three) of landholders requested minor changes to the layout to avoid existing buildings or to facilitate a different lot layout outcome.
- The owner of the old Brewery requested that the building have its heritage listing removed as it is too dilapidated for reuse.
- One (1) landholder suggested that a future pedestrian link (including bridge) to the showground and open space on the western side of the Macintyre River be considered.

New Residential Area 2

- A total of four (4) landholders interviewed were from within Area 2, eleven (11) were neighbouring landholders.
- The majority of landholders supported the process and were generally happy with the draft plans.
- The majority of landholders understood that development in Area 2 (particularly) will be longer term due to the absence of existing services and road infrastructure.
- Two (2) landholders expressed concern with the potential for Onus Avenue to be a major road.

New Residential Area 3

- A total of one (1) landholder interviewed was from within Area 3, thirty-one (31) were neighbouring landholders.
- The landholder supported the process.
- The majority of neighbouring landholders said they would prefer that the rural setting remain, but the majority of those acknowledged that the land was zoned for residential purposes and therefore development was inevitable.
- A number of neighbouring landholders, particularly those fronting Miles, Hopper and Vernon Streets expressed concern about the viability of the potential cul de sac running south from Vernon Street (up toward Hopper Street), for reasons of stormwater volumes (entering the site from Hopper Street).
- A small number of neighbouring landholders were concerned about existing inter-allotment drainage – that it wasn't working.
- One (1) landholder on Oakland Avenue and within Area 3 did not support the potential closure of Oakland Avenue (connection to Jardine Road).
- One (1) neighbouring landholder on Oakland Avenue did not support the closure of Oakland Avenue (connection to Jardine Road).

Stakeholders not from one of the three New Residential Areas

There were three stakeholders who did not come from one of the three (3) New Residential Areas.

1. One (1) stakeholder, a local doctor, was concerned about people's wellness, and wanted to encourage more footpaths and cycleways.

2. One (1) stakeholder, a real estate agent, was concerned that the identified New Residential Areas were not in the right areas; and

3. One (1) stakeholder was a resident of Inverell who did not live in or next to one of the three New Residential Areas. This stakeholder was generally supportive of the proposals.

# Section 3:
# Constraints & Opportunities Analysis & Mapping

## 3.1 New Residential Area 1

This section applies to New Residential Area 1 - East Inverell (hereafter referred to as Area 1), being land to the south of Glen Innes Road between Lake Inverell Drive and Moore Street.

This section should be read in conjunction with Exhibit 02 – Community Services and Facilities, and Exhibit 03 – Site Analysis – New Residential Area 1.

### 3.1.1 Native Vegetation

The majority of Area 1 has been cleared as part of previous agricultural and residential land uses. The floristic composition of native vegetation that remains is likely to be significantly modified from its pre-development state. Regardless, there does exist pockets of remnant native vegetation, particularly on properties on the western side of Brewery Street.

Where native vegetation exists, the value of the native vegetation on individual properties needs to be assessed as part of the Development Application process.

### 3.1.2 Landform and Watercourses

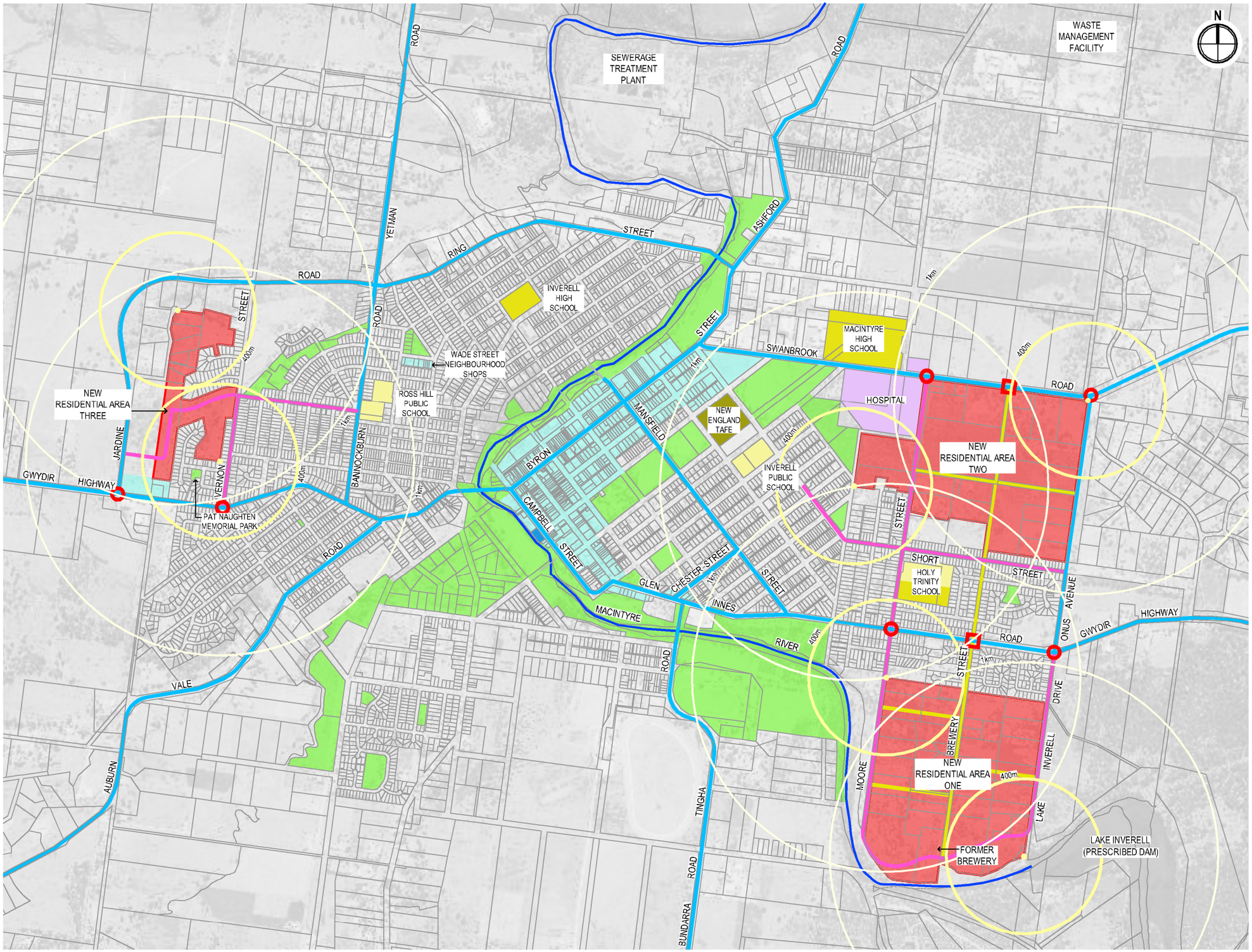
Slopes within Area 1 range from gently sloping to an approximate maximum of 10% on land adjacent Moore Street. The landform within Area 1 is considered appropriate for residential development.

The western and southern extent of Area 1 is largely defined by the Macintyre River, with Lake Inverell at the end of Lake Inverell Drive, at its south-eastern corner. The river is deeply incised and fringed by vegetation.

Two other mapped watercourses run through Area 1 (refer to Site Analysis Plan). One of them, which extends from the two dams located on 15 Brewery Street and extends west across Brewery Street and Moore Street before discharging into the Macintyre River, has a catchment area in excess of 70Ha.

Catchment areas of this size results in large volumes and flow (>1.5m³/s) of runoff during major rainfall events. To safely contain these flows within a piped drainage network would be cost prohibitive, requiring at least multiple large pipes, or concrete culverts, coupled with large detention facilities to ensure adequate protection for downstream properties and infrastructure. Best practice is considered to retain open channel flow swales within open space drainage reserves to minimise infrastructure cost and maintain the existing surface water flow regime as much as possible.

In addition, the retention of this natural watercourse within well considered lineal open space is considered to add significant value to Area 1, refer also to 3.1.6 Open Space.




## LEGEND

- SITES
- CADASTRE
- 400m DISTANCE ZONE
- 1km DISTANCE ZONE
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- POTENTIAL INTERSECTION TREATMENT
  - SHORT TERM CHANNELISED
  - LONGER TERM ROUNDABOUT OR SIGNALS
- POTENTIAL INTERSECTION TREATMENT
  - CHANNELISED AND/OR RESTRICTION OF RIGHT HAND TURNS OUT OF SECONDARY LEG (ie BREWERY STREET)
- SHOPPING AND BUSINESS CENTRES
- LIBRARY
- PUBLIC RECREATION AREAS
- PRIMARY SCHOOLS
- SECONDARY SCHOOLS
- TAFE
- HEALTH SERVICES

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\4C REF: D\6148_Inverell Council - New Residential Areas\01_Planning\6148P_SITES.dwg - A1LL-COMMUNITY SERVICES, 16- Sep- 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 65834064
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:10000 @ A1 (1:20000 @ A3)

0 5000

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

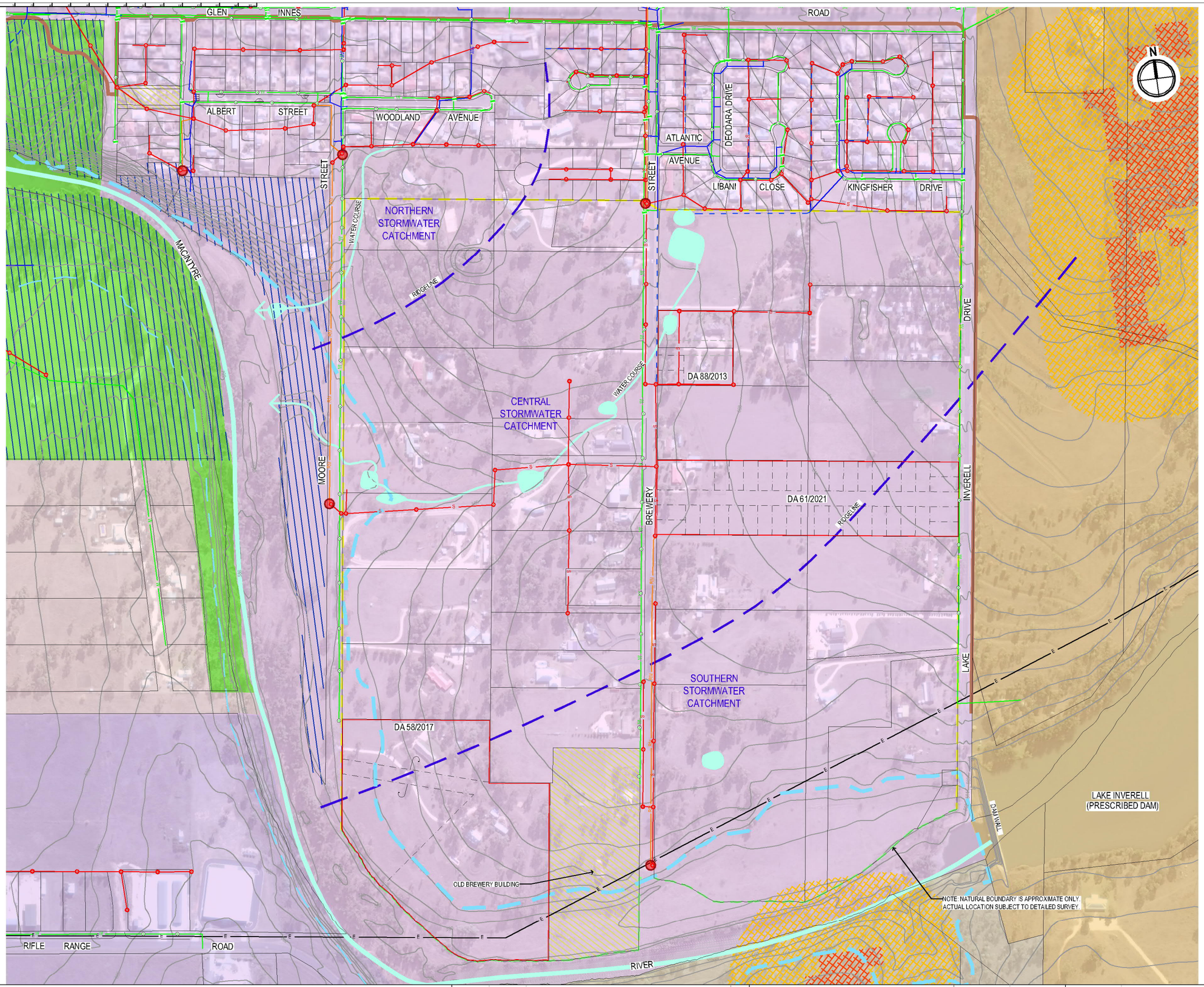
DRAWING TITLE: EXHIBIT 02 - COMMUNITY SERVICES AND FACILITIES

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 02 | F |




## LEGEND

- SITE
- SITE (NATURAL BOUNDARY)
- CADASTRE
- CONTOURS ( 2m INTERVAL)
- APPROVED DEVELOPMENT APPLICATIONS
- EXISTING CYCLEWAY/FOOTWAY
- RIDGELINE
- NATURAL WATER COURSE
- DAM
- OVERHEAD ELECTRICITY - MAJOR SUPPLY LINE
- SEWER PUMPING STATION
- SEWER
- SEWER RISING MAIN
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- FLOOD ZONE - HIGH LEVEL IMPACT
- BUSHFIRE BUFFER ZONE
- BUSHFIRE ZONE - VEGETATION CATEGORY 1
- HERITAGE ITEMS
- DCFDB EXTENT - (DAM SAFETY EMERGENCY PLAN FOR LAKE INVERELL DAM APRIL 2016)
- DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS

LAND ZONING (INVERELL LEP 2012)

- E3 - ENVIRONMENTAL MANAGEMENT
- IN1 - GENERAL INDUSTRIAL
- R1 - GENERAL RESIDENTIAL
- R5 - LARGE LOT RESIDENTIAL
- RE1 - PUBLIC RECREATION
- RU1 - PRIMARY PRODUCTION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\C-REF\C06146_Inverell Council - New Residential Areas\21_Planning\6148P_SITES.dwg - A1(L)-Site EXHT 1, 15 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD
SCALE: 1:2500 @ A1 (1:5000 @ A3)
0 125 250

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

DRAWING TITLE: EXHIBIT 03 - SITE ANALYSIS - NEW RESIDENTIAL AREA 1

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 03 | F |

### 3.1.3 Services Infrastructure

#### 3.1.3.1 Water and Sewer

Area 1 is serviced with an existing sewer and water network. The following is noted:

- Existing water infrastructure is located along the majority of Moore and Brewery Streets and Lake Inverell Drive. This water network may be readily extended to service the proposed development area. For the purposes of the preparation of this Structure Plan it has been presumed that upgrades to the surrounding water network will proceed as development within Area 1 proceeds.

- Area 1 is currently serviced by existing Sewer Pump Stations PS07 and PS15. Sewer flow from PS07 is directed to PS15, resulting in PS15 being the primary sewer pump station servicing Area 1. The existing sewer network in Area 1 has the potential to be expanded to service the entire catchment of future development. The potential locations of an additional sewer pump station to replace PS07 are subject to detailed geotechnical investigations and development progression.

Future developers will be responsible for the funding of any infrastructure upgrade works.

#### 3.1.3.2 Electrical and Telecommunication

An electrical transmission line cuts across the southern end of Area 1. This transmission line runs for most part generally in the same alignment as the Dam Crest Flood Dam Break (flood) level (*see note below), and hence is not considered to pose a significant constraint to the extent of potential development.

### 3.1.4 Natural Hazards

#### 3.1.4.1 Bushfire

A very small portion of the Area 1, along its southern boundary, is classified as a Bushfire Buffer Zone and is detailed on **Exhibit 01** - Overall Site Context Plan and **Figure 1**. This is not considered to pose any constraint to development.

#### 3.1.4.2 Flood & Stormwater

<u>Flood</u>

The Macintyre River is subject to flooding. Through consultation with Council officers it was determined that:

*'Residential Area Structure Plans should restrict development to above the Dam Crest Flood Dam Break level'*

* It is noted that the Dam Crest Flood Break level is a flood level that is higher than the 1 in 100 year flood level. It is particularly relevant to New Residential Area 1, and will impact land immediately downstream of the Lake Inverell Dam Wall.

The Dam Crest Flood Dam Break level is indicated on **Exhibit 03** – Site Analysis – New Residential Area 1 .

Stormwater

It is noted that the natural water course that runs through Area 1 has a large catchment and is subject to high flows during storm events. The future development of this land needs to accommodate these flows and any additional flows resulting from increased urban runoff. See also Section 3.1.2.

Figure 1: The area affected by bushfire is detailed above. The yellow refers to the bushfire buffer.

### 3.1.5 Road and Cycleway Infrastructure

Area 1 is serviced by three local north-south oriented roads, Moore Street, Brewery Street and Lake Inverell Drive. There are currently no east-west streets linking these roads.

Development in Area 1 is recommended to involve the retention and improvement of the existing north-south roads to provide appropriate stormwater infrastructure, and the provision of a network of additional perimeter and linkage streets.

An existing 2.5m cycleway is aligned down the eastern side of Lake Inverell Drive, providing a valuable link to the Gwydir Highway and town centre to the west. Future development within Area 1 should aim to extend the cycleway network through the area with the intention of connecting to the

wider cycleway network. A potential connection from this land peninsula to the showground and playing fields off Eucalypt Drive (on the western side of the Macintyre River bend) should also be considered.

### 3.1.6 Open Space

The western and southern extent of Area 1 is largely defined by the Macintyre River, with Lake Inverell at the end of Lake Inverell Drive, at its south-eastern corner. The river is deeply incised and fringed by vegetation. The river also poses a flood risk. This opens the opportunity to retain a significant area of river frontage as passive open space.

In addition, the watercourse which crosses Brewery Street and Moore Street before discharging into the Macintyre River, as described in 3.1.2 above, provides the potential for the establishment of lineal open space linking Moore and Brewery Streets.

### 3.1.7 Retail and Community Services and Facilities

An analysis of community services and facilities within the New Residential Areas and surrounding areas is illustrated on Exhibit 02 - Community Services and Facilities Plan.

<u>Education</u>

Area 1 is considered to be located in suitable proximity to primary and high schools.
The Inverell TAFE is located on the corner of Evans and Woods Streets and is considered to be in suitable proximity to Area 1.

<u>Health Services</u>

Area 1 is located within close proximity (1-2km) to the Inverell hospital.

<u>Shopping & Business Centres</u>

The Inverell Sporties (lawn bowls club) and nearby Albion Store is the closest commercial development to Area 1, being 1km from Area 1's north-eastern corner. Area 1 is also located approximately 2km from the Inverell town centre.

Based on the above distances it is considered appropriate for a neighbourhood shop to be located somewhere within Area 1.

To ensure that any neighbourhood shop is appropriately located, the following comments are provided:

- *Located to maximise residential catchment.*

  It is considered that a neighbourhood shop within Area 1 would cater for Area 1 as well as the existing residential catchment between Short Street and the Gwydir Highway.

- *Of a size suitable to provide general merchandise only.*

The intention of a neighbourhood shop in the Area 1 location is to provide general merchandise and food stuffs to the local area. It is considered that it should be appropriately sized so as not to compete with existing larger businesses in the Inverell town centre. The existing neighbourhood shops located in Wade Street, Inverell, are considered an appropriate example.

It is recognised that the definition of a *Neighbourhood Shop* in the *Inverell Local Environmental Plan 2012,* as well as the provisions of Clause 5.4, restrict the uses permissible as well as the maximum floor area of neighbourhood shops.

The commercial and retail facilities available within the Inverell town centre are considered adequate to service Area 1.

Public Transport

The existing bus services (Route 472 Belgravia) extends east to Lake Inverell Drive via Short Street and travels west into the Inverell town centre via the Gwydir Highway and Mansfield Street. It is considered that the development of Area 1 will require this bus route to be extended south into Brewery Street to capture the future residential population within the southern portions of Area 1.

Public Open Space

Due to bushfire and flood constraints, as well as the proposal to retain open channel swales along the main existing watercourse through Area 1, it is considered that appropriate public open space provision is potentially available to Area 1.

The open space along the Macintyre River corridor will link well with established neighbouring open space associated with Lake Inverell. This connection opens the potential for a continuous cycleway link around the river frontage.

### 3.1.8 Aboriginal and European Heritage

An Aboriginal Heritage Information Management System (AHIMS) Search reveals that no items of Aboriginal Heritage are known to exist in Area 1.

The property containing the Old Brewery on the southern end of Brewery Street (Lot 4 DP233354, 2 Brewery Street) is identified within the Inverell LEP 2012 as a local item of heritage significance (item 1081).

Given the location of the old brewery building close to the DCFDB flood level line (refer to 3.1.4) the potential exists to contain the building in open space between the Macintyre River and a future ring/perimeter road, and further, to consider the potential for an adaptive reuse of the building befitting of its public/open space setting.

### 3.1.9 Existing Approvals and Applications

There is an approval (DA 88/2013) for a four lot residential subdivision at Lot 1 DP 1046476, 13A Brewery Street. Lots are a minimum size of 700m$^2$.

There is also an approval (DA58/2017) for a Torrens Title Subdivision (One Lot into Two) of Lot 1 DP541493, 1 Moore Street. The approved lots are 2.876ha and 4.288ha.

There is a current Development Application for a Torrens Title Subdivision of Lot 1 DP 787664, Brewery Street, and Lot 2 DP 787664, Lake Inverell Drive. Stage 1 of this subdivision proposes the creation of four (4) lots fronting Lake Inverell Drive and two (2) lots fronting Brewery Street.

## 3.2 New Residential Area 2

This section applies to New Residential Area 2 - East Inverell (hereafter referred to as Area 2), being land from Short Street to Swanbrook Road and from Moore Street to Onus Avenue.

This section should be read in conjunction with Exhibit 02 – Community Services and Facilities, and Exhibit 04 – Site Analysis – New Residential Area 2.

### 3.2.1 Native Vegetation

The majority of Area 2 has been cleared as part of previous agricultural land uses. The floristic composition of native vegetation that remains is likely to be significantly modified from its pre-development state. Regardless, isolated pockets of remnant native vegetation exist in Area 2.

Where it exists, the value and proposals relating to native vegetation on individual properties needs to be assessed as part of the Development Application process.

### 3.2.2 Landform and Watercourses

Slopes in Area 2 range from almost flat on the main ridgeline and western end of the area to approximately 20% on land adjacent Moore Street. The landform within Area 2 is generally suitable for residential development, although steeper land (generally land above 15%) will require more careful consideration in terms of road alignment, drainage and block presentation.

A significant watercourse runs east-west across Area 2, crossing Onus Avenue at one end and Clive Street at the other. This watercourse has a catchment area in excess of 70Ha.

Catchment areas of this size results in large volumes and flow (>1.5m³/s) of runoff during major rainfall events. To safely contain these flows within a piped drainage network would be cost prohibitive, requiring at least multiple large pipes, or concrete culverts, coupled with large detention facilities to ensure adequate protection for downstream properties and infrastructure. Best practice is considered to retain open channel flow swales within open space drainage reserves to minimise infrastructure cost and maintain the existing surface water flow regime as much as possible.

In addition, the retention of this natural watercourse within a well-considered lineal open space network will add significant value to the area. Refer also to 3.2.6 Open Space.

### 3.2.3 Services Infrastructure

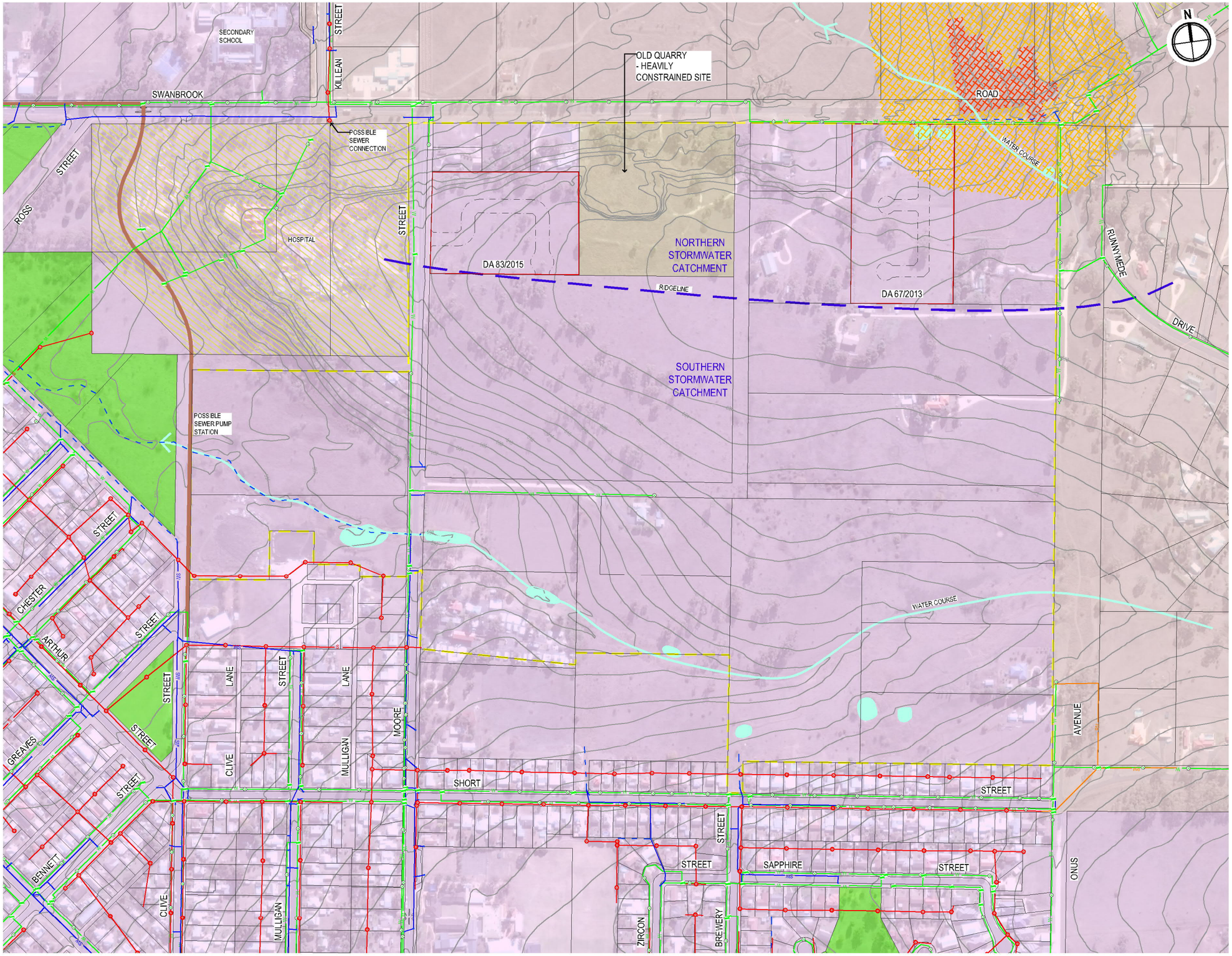
#### 3.2.3.1 Water and Sewer

With the exception of sewer and water infrastructure in Short Street and local streets to its west, and water mains in Swanbrook Road, Area 2 is largely un-serviced.

Initial advice from Council indicated that a possible sewer pump station to serve majority of the land could be located in land adjacent to Clive Street (Lot 51, DP753287). Further investigations have revealed an alternative to a new sewer pump station, that being the potential for the land to be drained to an existing sewer manhole (MH-1u/1) under gravity (i.e. no pump station required). However, it is noted that this alternative may require augmentation of the downstream sewer network.

Development in Area 2 will require new sewer and water infrastructure. Prior to development occurring within Area 2, detailed studies will need to be submitted to Council to ensure a coordinated approach to the delivery of water and sewer infrastructure.

The developer will be responsible for the funding of any infrastructure upgrade works.




## LEGEND

- SITE
- CADASTRE
- APPROVED DEVELOPMENT APPLICATIONS
- CONTOURS ( 2m INTERVAL)
- EXISTING CYCLEWAY/FOOTWAY
- RIDGELINE
- NATURAL WATER COURSE
- DAM
- SEWER
- SEWER RISING MAIN
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- BUSHFIRE BUFFER ZONE
- BUSHFIRE ZONE - VEGETATION CATEGORY 1
- HERITAGE ITEMS
- DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS

LAND ZONING (INVERELL LEP 2012)

- R1 - GENERAL RESIDENTIAL
- R5 - LARGE LOT RESIDENTIAL
- RE1 - PUBLIC RECREATION
- RU1 - PRIMARY PRODUCTION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\C:\REF-DWG\6148_Inverell Council - New Residential Areas\21. Planning\6148P_SITES.dwg - A1(L)-Site ENS72, 16- Sep- 2021, angelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.06.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 — 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

DRAWING TITLE: EXHIBIT 04 - SITE ANALYSIS - NEW RESIDENTIAL AREA 2

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 04 | F |

#### 3.2.3.2 Electrical and Telecommunication

An electrical transmission line runs down the western side of the unformed Travelling Stock Route (TSR) associated with Onus Avenue.

### 3.2.4 Natural Hazards

#### 3.2.4.1 Bushfire

A small portion of the Area 2, along its northern boundary with Swanbrook Road, is classified as a Bushfire Buffer Zone, Exhibit 01 – Overall Site Context Plan and Figure 2 . This is not considered to pose any significant constraint to development, given that Swanbrook Road acts as an effective Perimeter road.

It is noted that a land parcel in Area 2 associated with DA 67/2013 was required to address bushfire risk. The Development Consent required that Inner Protection Zones (IPZs) be maintained at various stages of the development.

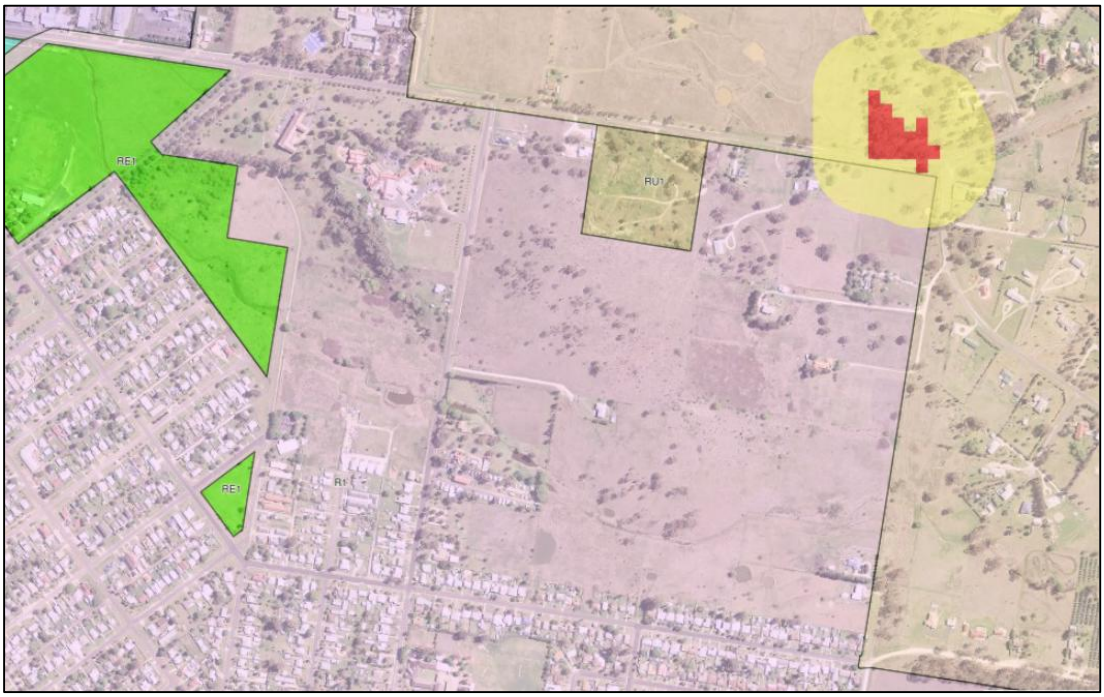



Figure 2: The area affected by bushfire is detailed above. The yellow refers to the bushfire buffer.

#### 4.4.2 Flood & Stormwater

<u>Flood</u>

Area 2 is not identified as being flood prone land but may be subject to localised flooding events.

<u>Stormwater</u>

It is noted that the natural water course that runs through Area 2 has a large catchment and is subject to high flows during storm events. The future development of this land needs to accommodate these flows and any additional flows resulting from increased urban runoff. See also Section 3.2.2.

### 3.2.5 Road and Cycleway Infrastructure

Area 2 is largely undeveloped, the only continuous north-south road through it being Moore Street. Swanbrook Road and Short Street provide major east-west links to the north and south respectively.

There are a number of unformed crown roads which provide potential for future access into and through Area 2, including the Travelling Stock Route associated with Onus Avenue.

Development in Area 2 will likely involve the retention and improvement of existing roads to provide appropriate stormwater infrastructure, the utilisation of existing unformed Crown Roads and the provision of a network of additional linkage streets.

An existing 2.5m cycleway is aligned down the eastern side of Clive Street and extends to the hospital and high school fronting Swanbrook Road. Future development should aim to extend the cycleway network through Area 2 – refer to Exhibit 04 – Site Analysis – New Residential Area 2.

### 3.2.6 Open Space

There is no existing dedicated open space within Area 2.

The watercourse running east-west across Area 2 crosses Onus Avenue at one end and Clive Street at the other. It offers good potential for the establishment of a continuous east-west lineal open space link.

### 3.2.7 Retail and Community Services and Facilities

An analysis of community services and facilities within the New Residential Areas and surrounding areas is detailed on Exhibit 02 - Community Services and Facilities Plan.

<u>Education</u>

Area 2 is considered to be located in suitable proximity to primary and high schools. Area 2 is located in close proximity to Macintyre High School (Swanbrook Road) and Holy Trinity School (Moore Street).

The Inverell TAFE is located on the corner of Evans and Woods Streets and is considered to be in suitable proximity to Area 2.

<u>Health Services</u>

The Inverell Hospital is located to the north-east of Area 2 and a medical centre is located opposite the Hospital on the northern side of Swanbrook Road.

<u>Shopping & Business Centres</u>

The eastern edge of the Inverell town centre (Evans Street) is located 1km from Moore Street, via Swanbrook Road, or 1.3km from Moore Street via Arthur Street.

Based on the short distances and good east-west connections available, it is considered that Area 2 is located an appropriate distance from the commercial town centre and its associated commercial and retail facilities.

Public Transport

The existing bus services (Route 472 Belgravia) extends east to Lake Inverell Drive via Short Street and travels west into the Inverell town centre via the Gwydir Highway and Mansfield Street. It is considered this bus route will be required to be extended north into Moore or Brewery Streets to capture the future residential population within the northern portions of Area 2.

Public Open Space

The western edge of Area 2 adjoins an existing area of open space which extends west to sporting grounds located on Ross Street.

The proposal to retain open channel swales along the existing watercourse is considered to provide the potential for appropriate public open space opportunities within Area 2. The implementation of gym and playground equipment within the identified public open spaces will ensure that Area 2 is appropriately serviced.

### 3.2.8 Aboriginal and European Heritage

An Aboriginal Heritage Information Management System (AHIMS) Search reveals that no items of Aboriginal Heritage are known to exist in Area 2.

The Inverell Local Environmental Plan 2012 does not identify any areas or items of European heritage significance within Area 2.

### 3.2.9 Existing Approvals and Applications

There is an approval (DA 83/2015) for a twenty-five lot residential subdivision at Lot 3 DP 826 509, 165 – 189 Moore Street. Lots are a minimum size of 800m$^2$.

There is an approval (DA 67/2013) for a thirty-one lot residential subdivision at Lot 2 DP 912844, 180 Swanbrook Road. Lots are a minimum size of 612m$^2$.

The above approved subdivisions have been considered in the preparation of the Structure Plan for Area 2.

## 3.3 New Residential Area 3

This section applies to New Residential Area 3 - West Inverell (hereafter referred to as Area 3), being land between Vernon Street and Jardine Road.

This section should be read in conjunction with Exhibit 02 – Community Services and Facilities, and Exhibit 05 - Site Analysis – New Residential Area 3.

### 3.3.1 Native Vegetation

The majority of Area 3 has been cleared as part of previous agricultural land users. The floristic composition of native vegetation that remains is likely to be significantly modified from its pre-development state.

Where it exists, the value and proposals relating to native vegetation on individual properties needs to be assessed as part of the Development Application process.

### 3.3.2 Landform and Watercourses

Slopes in Area 3 range from gently sloping to an approximate maximum of 15% on embankments associated with the watercourses through the area. The landform in Area 3 is generally well suited to residential development.

Two watercourses run through Area 3. One runs through the north-west corner of Area 3. A second runs through the middle of Area 3, in a north-east direction. There is a minor tributary associated with the second watercourse.

The retention of natural watercourses within a well-considered lineal open space network will add significant value to Area 3.

Both watercourses have been left open in the layout schemes associated with development applications DA156/2012 and DA 20/2018. This approach is supported.

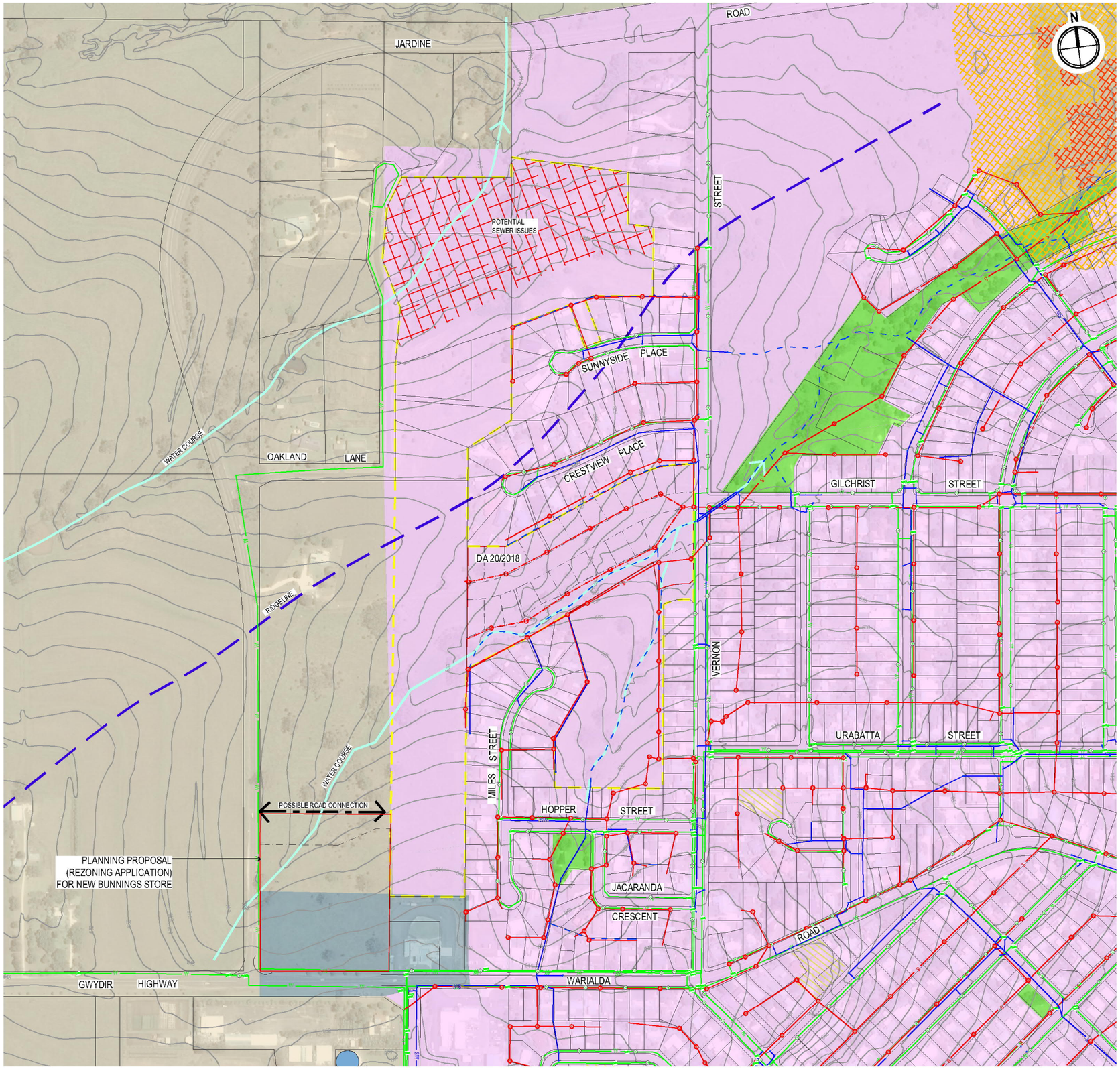
The tributary associated with the second watercourse (extending north from Hopper Street) has a relatively small catchment and is considered able to be carried in a piped system. A detailed stormwater management report and plan should accompany any application seeking to develop this portion of Area 3.

### 3.3.3 Services Infrastructure

#### 3.3.3.1 Water and Sewer

Area 3 is relatively well serviced with an existing sewer and water network. The following is noted with respect to water and sewer:

- Water mains run down Vernon Street and Oakland Lane.
- The existing sewer network has the potential of capturing most of the catchment in Area 3. The northernmost portion of Area 3 is unable to be serviced without an additional pump station. In this regard, consultation with Council engineers has revealed that the (small) size of the catchment, and the cost of implementing and maintaining an additional pump station is not feasible. Therefore, this portion of Area 3 is considered to be suitable for larger lots only (incorporating suitable on-site effluent disposal systems). This area is identified on the site analysis plan – refer to Exhibit 05 – Site Analysis – New Residential Area 3.




## LEGEND

- SITE
- CADASTRE
- APPROVED DEVELOPMENT APPLICATIONS
- CONTOURS ( 2m INTERVAL)
- RIDGELINE
- NATURAL WATER COURSE
- SEWER
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATER STORAGE RESERVOIR
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- BUSHFIRE BUFFER ZONE
- BUSHFIRE ZONE - VEGETATION CATEGORY 1
- HERITAGE ITEMS
- DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS

LAND ZONING (INVERELL LEP 2012)

- B5 - BUSINESS DEVELOPMENT
- E4 - ENVIRONMENTAL LIVING
- R1 - GENERAL RESIDENTIAL
- RE1 - PUBLIC RECREATION
- RU1 - PRIMARY PRODUCTION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

KKC REF: C:\6148_Inverell Council - New Residential Areas\01_Planning\6148P_SITES.dwg - A1(L) Site VIEST 3, 16 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4064
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD
SCALE: 1:2500 @ A1 (1:5000 @ A3)
0 — 125.0



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

| | | | | |
|---|---|---|---|---|
| DRAWING TITLE: | EXHIBIT 05 - SITE ANALYSIS - NEW RESIDENTIAL AREA 3 | | | A1 |
| PROJECT: | STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS | | | |
| CLIENT: | INVERELL SHIRE COUNCIL | DRAWING NO: | SHEET: | REVISION: |
| | | 6148P_SITES | 05 | F |

### 3.3.4 Natural Hazards

#### 3.3.4.1 Bushfire

No land within Area 3 is identified as being bushfire prone.

#### 3.3.4.2 Flood and Stormwater

Flood

Area 3 is not identified as being flood prone land, but may be subject to localised flooding events

Stormwater

Two watercourses run through Area 3. One runs through the north-west corner of Area 3. The second runs through the middle of Area 3, in a north-east direction. There is a minor tributary associated with the second watercourse. The future development of Area 3 needs to accommodate these flows and any additional flows resulting from increased urban runoff. See also Section 3.3.2.

### 3.3.5 Road and Cycleway Infrastructure

Area 3 is constrained in terms of existing and future road access.

Jardine Road is a heavy vehicle bypass road that runs around the western and northern sides of Area 3. To reduce the potential for conflict between light vehicles (cars) and heavy vehicles Oakland Lane is the only local road with access off Jardine Road. Moving forward, Council aims to minimise local road intersections with Jardine Road to maintain the benefits of the heavy vehicle route.

Vernon Street, provides one of the few access road options into Area 3, as evidenced by the existing development pattern within Sunnyside and Crestview Place.

An opportunity exists to seek an alternative road access option into Area 3 from a location on Jardine Road, closer to the Gwydir Highway, and continue that road link through the area to Vernon Street. A road link of this nature is considered important for the viability of residential development in the area – refer to Exhibit 05 – Site Analysis – New Residential Area 3.

### 3.3.6 Open Space

There is no existing dedicated open space within Area 3.

The watercourse running north-east through Area 3, crossing Jardine Road at one end and Vernon Street at the other, and in public reserve under DA 20/2018, offers good potential for the establishment of a continuous west to east lineal open space link.

Pat Naughten Memorial Park (2,500m$^2$) is located on the corner of Jacaranda Crescent and Hopper Street and has a small sheltered playground. Whilst no pedestrian connection is available between Area 3 and the park, it is located within close proximity and considered adequate for the area.

### 3.3.7 Retail and Community Services and Facilities

An analysis of community services and facilities within the New Residential Areas and surrounding areas is detailed in the Community Services and Facilities Plan. Refer to Exhibit 02 - Community Services and Facilities Plan.

Education

All of the New Residential Areas are considered to be located in suitable proximity to primary and high schools. Area 3 is located in close proximity to Ross Hill Primary School (Bannockburn Road) and Inverell High School (Brae Street).

The Inverell TAFE is located on the corner of Evans and Woods Streets and is centrally located between all three (3) of the New Residential Areas.

Health Services

The Inverell Hospital is located approximately 3km to the east of Area 3 and a medical centre is located opposite the Hospital on the northern side of Swanbrook Road.

Shopping & Business Centres

The eastern edge of the Area 3 is located approximately 1.5-2km from the Inverell town centre.

The Wade Street neighbourhood shops are located approximately 1km east of Area 3 and are considered appropriate to service the general day to day needs of Area 3. The Caltex Roadhouse is also located on the Gwydir Highway, to the immediate south of Area 3.

Based on the short distances to neighbourhood shops and the close proximity of the Inverell town centre, it is considered that Area 3 is appropriately serviced.

Public Transport

The existing bus services (Route 471 Ross Hill/Southside) extends west to Vernon Street and travels east into the Inverell town centre via south Inverell (Harland Street to Tingha Road). It is considered that the development of Area 3 will require this bus route to be extended north into the future road west of Gilchrist Street before travelling south-west to the Gwydir Highway and continuing with the route as existing.

Public Open Space

The proposal to retain open channel swales along the existing watercourse as a part of the current subdivision under construction is considered to provide appropriate public open space opportunities within Area 3.

Pat Naughten Memorial Park (2,500m2) is located on the corner of Jacaranda Crescent and Hopper Street and has a small sheltered playground. Whilst no pedestrian connection is available between Area 3 and the park, it is located within close proximity and is considered adequate.

### 3.3.8 Aboriginal and European Heritage

An Aboriginal Heritage Information Management System (AHIMS) Search reveals that no items of Aboriginal Heritage are known to exist in the Area 3.

The Inverell Local Environmental Plan 2012 does not identify any areas or items of European heritage significance within Area 3.

### 3.3.9 Existing Approvals and Applications

There is a recent approval (DA 52/2012/A) for a seven lot subdivision of Lot 7 DP 1190285, Oakland Lane. Each lot has a minimum 5000m$^2$ building footprint. Lots. 11,12 and 13 (northernmost lots) have approval for on-site effluent disposal. This subdivision has recently been constructed and lots are available for sale.

There is a recent approval (DA 20/2018) for a twenty-two lot residential subdivision south of and adjoining lots associated with Crestview Place. Lots are a minimum size of 800m$^2$. This subdivision has recently been constructed and lots are available for sale.

Currently, there is a Planning Proposal (to rezone land) on the corner of the Gwydir Highway and Jardine Road in for the purposes of a new Bunnings Store.

# Section 4: Structure Plans

## 4.1 Overall Vision

A vision for the New Residential Areas for Inverell is summarised as follows:

> **Vision**
>
> *New Residential Areas for Inverell are well-planned urban communities, which respect and reflect their natural settings, sustain a healthy and connected community and provide valuable extensions to the township of Inverell.*

## 4.2 Planning Principles

To achieve this vision, the following planning principles have been identified, based on State planning requirements, best-practice design, and community consultation:

### Social Environment

- Maximise opportunities to provide for a range of sustainable housing to accommodate the projected population growth in Inverell.
- Ensure the Structure Plans provide the potential for a range of lot sizes, whilst maintaining the rural character of the area.
- Provide an appropriate and connected movement network, including roads, cycleways and walkways.
- Provide adequate open space for active and passive recreation for new residents.

### Natural Environment

- Protect and enhance significant vegetation communities, including habitat areas and riparian corridors.
- Maintain water quality in local streams and in the receiving waters of the Macintyre River.
- Ensure environmental hazards are avoided and adequately managed.

### Economic Efficiencies

- Ensure infrastructure is able to be provided at reasonable cost and in time to serve growth, including efficient road, water, sewerage and stormwater networks.
- Ensure the cost of infrastructure and services does not place an unreasonable burden on the existing community.

Governance

- Provide a comprehensive Communication Strategy, to ensure that the process of planning for New Residential Areas provides opportunities for all interested stakeholders to engage.

## 4.3 Pattern and Character of Residential Development

From the above planning principles, a number of development design principles are generated. These design principles are cognisant of existing IDCP 2013 principles and design standards, and current best-practice design. This report section should be read in conjunction with Exhibit 06 - Desirable Residential Character.

### 4.3.1 Orientation

With the exception of recent development in Area 3, each of the three (3) New Residential Areas are blessed with an existing north-south / east-west orientated property and street network grid. This grid provides the basis for maximising optimal north-south and east-west orientated lots. The future road network and resulting lot configuration should respond to this.

### 4.3.2 Street Network

As discussed above, the current property and street grid orientation of all New Residential Areas (excepting recent development in Area 3) is good and the future street network should respond to this. In this regard, wherever possible, all future streets should run east-west or north-south. This may not be possible in all situations, and specifically where the preservation of water courses is desirable. The following specific design principles underpin the street network proposals for each residential area:

1. Hierarchy

   Currently all streets within the three (3) New Residential Areas are classified as local streets. No arterial or collector roads exist. To accommodate the projected increase in development and associated increases in traffic, the following road network hierarchy is proposed:

   - Arterial roads – In future it is envisaged that an arterial road connection between the Gwydir Highway and Swanbrook Road in Area 2 will benefit the broader town traffic circulation network. This arterial road would ideally be on the existing Onus Avenue alignment and within the existing travelling stock route reservation to its north. This road should nominally be 13 metres wide, within a minimum reservation width of 25 metres. It would have limited or no direct access for housing and should accommodate a cycleway / shareway on at least one side of the road. Refer to Exhibit 07 – Typical Section – Arterial Road.

   - Bus Street – Bus streets are key circulation routes around or through the residential areas that should be considered as public transport (bus) routes. The road width in these streets should nominally be 11 metres wide, within a minimum reservation width of 23 metres. The streets should accommodate a cycleway / shareway on one side of the road, lighting and tree planting. These streets should provide direct access to housing. Refer to Exhibit 08 – Typical Section – Bus Street.

MAXIMIZE THE RETENTION OF ENDEMIC VEGETATION ALONG WATERWAYS

2.5m WIDE CYCLEWAY DOWN ONE SIDE OF RETAINED WATERCOURSE - TO DOUBLE AS MAINTENANCE TRACK

PEDESTRIAN/CYCLEWAY CONNECTION ACROSS CREEK

REFER TO TYPICAL SECTION BELOW

4m WIDE GRAVEL MAINTENANCE TRACK AGAINST ALLOTMENTS WHERE THERE IS NO PERIMETER ROAD OR CYCLEWAY

A MIX OF CROSS STREETS AND T-INTERSECTIONS ENCOURAGED

KEY LINKAGE STREETS - DESIRABLE 20m WIDE RESERVATION

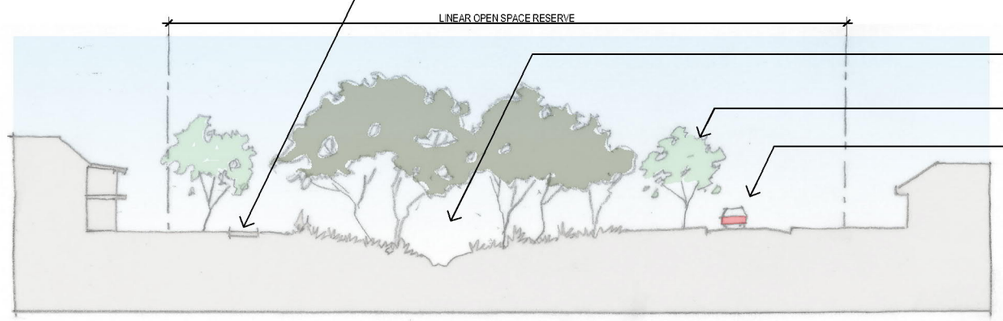
WATER QUALITY CONTROL BASINS TO TREAT STORMWATER DISCHARGING INTO WATERCOURSE

ALTERNATE LOT ORIENTATION ON SHORT STREET SECTIONS SO AS TO MINIMIZE THE POTENTIAL FOR SIDE FENCES TO DOMINATE THE STREETSCAPE

MINOR LINKAGE STREETS - DESIRABLE 20m WIDE RESERVATION

MAXIMIZE LENGTH OF PERIMETER ROADS TO EDGE OF WATERCOURSE

LOT SIZE
- DESIRABLE AVERAGE 800m²
- DESIRABLE MINIMUM DIMENSIONS
  18m FRONTAGE
  35m DEPTH




2.5m CYCLEWAY DOWN ONE SIDE OF WATERCOURSE - TO DOUBLE AS MAINTENANCE TRACK (4m WIDE GRAVEL MAINTENANCE TRACK WHERE THERE IS NO PERIMETER ROAD OR CYCLEWAY)

MAXIMIZE THE RETENTION OF ENDEMIC VEGETATION ALONG WATERWAYS

ENCOURAGE STREET TREE PLANTING IN ALL RESIDENTIAL STREETS

MAXIMIZE LENGTH OF PERIMETER ROADS TO EDGE OF WATERCOURSE

**TYPICAL SECTION THROUGH WATERCOURSE**

K+C REF: C:\6148_Inverell Cncl - New Residential Areas\21_Planning\6148P_SITES.dwg, DE A1, 16 Sep 2021, an ygilac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4064
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.06.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.06.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD SCALE: NOT TO SCALE

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

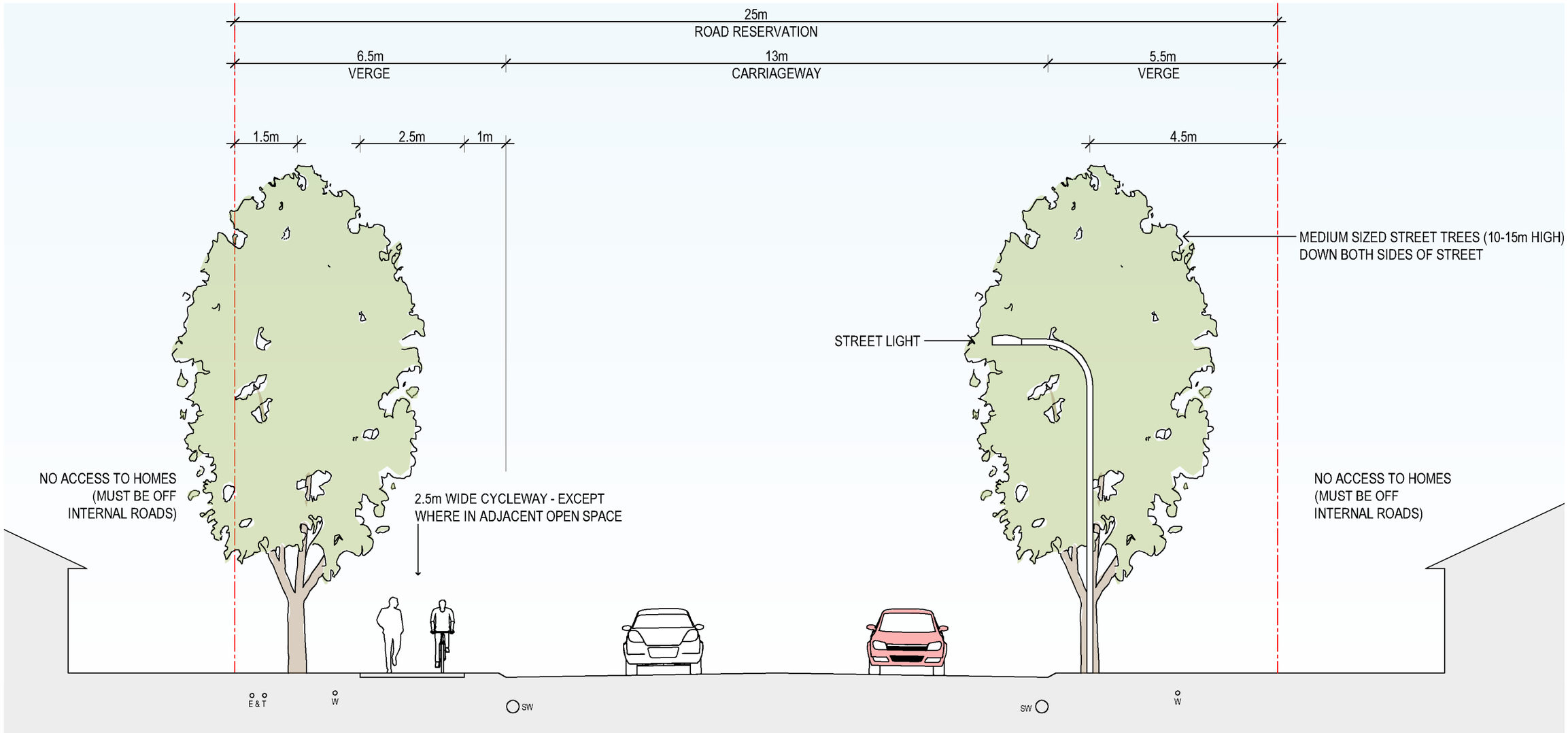
DRAWING TITLE: EXHIBIT 06 - DESIRABLE RESIDENTIAL CHARACTER

**A1**

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 06 | F |




## TYPICAL SECTION - ARTERIAL ROAD

KKC REF: G:\6148_Inverell Cncl - New Residential Areas\21_Planning\6148P_SITES.dwg - Sect A1, 16-Sep-2021 - jagolac

KING + CAMPBELL

Inverell Shire Council

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| C | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| D | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| E | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:50 @ A1 (1:100 @ A3)

0 2.5

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

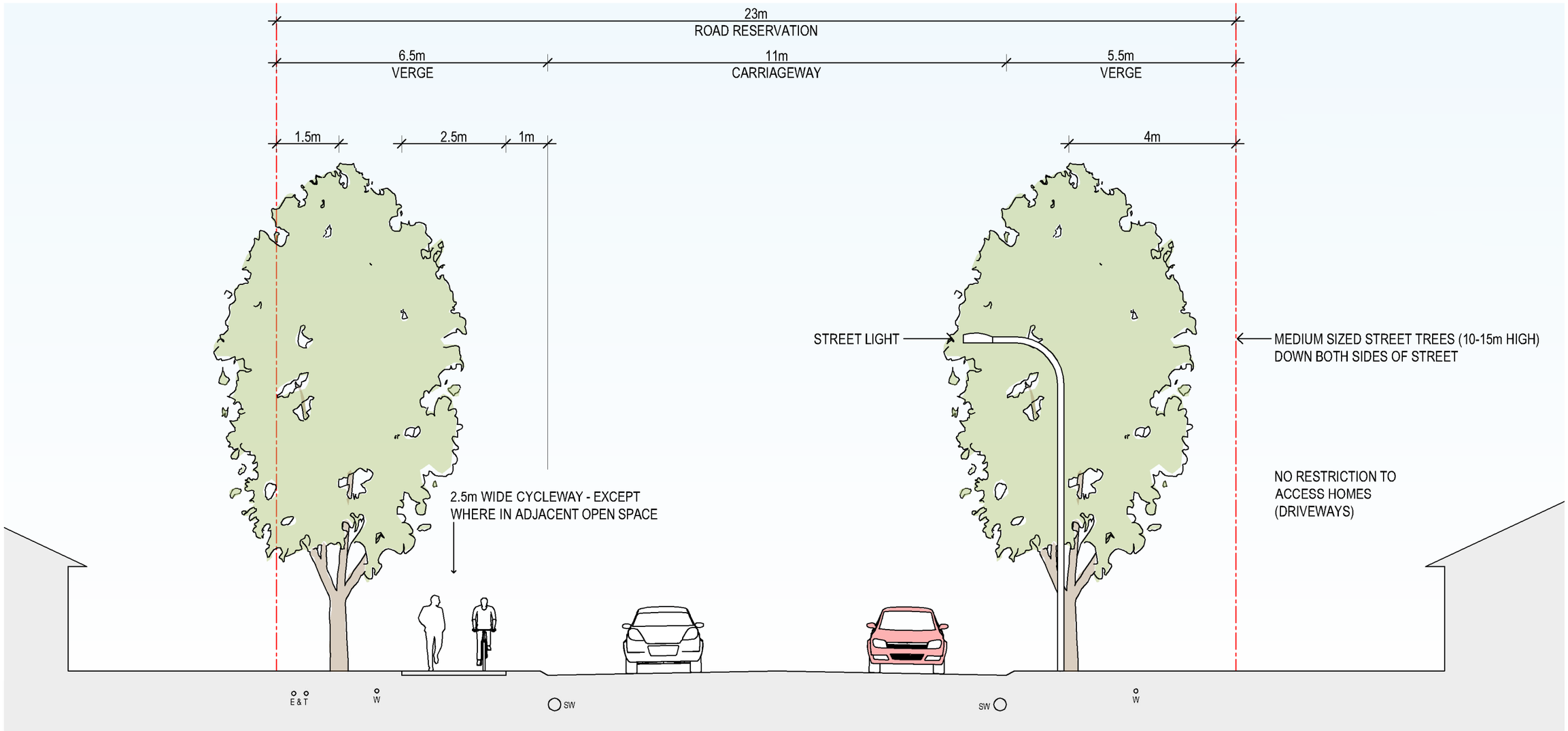
DRAWING TITLE: EXHIBIT 07 - TYPICAL SECTION - ARTERIAL ROAD

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 07 | E |




## TYPICAL SECTION - BUS STREET

KKC REF: G:\6148_Inverell Cncl - New Residential Areas\21_Planning\6148P_SITES.dwg - Sect 3 A1, 16-Sep-2021 - jaggelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| C | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| D | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| E | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:50 @ A1 (1:100 @ A3)

0 2.5

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

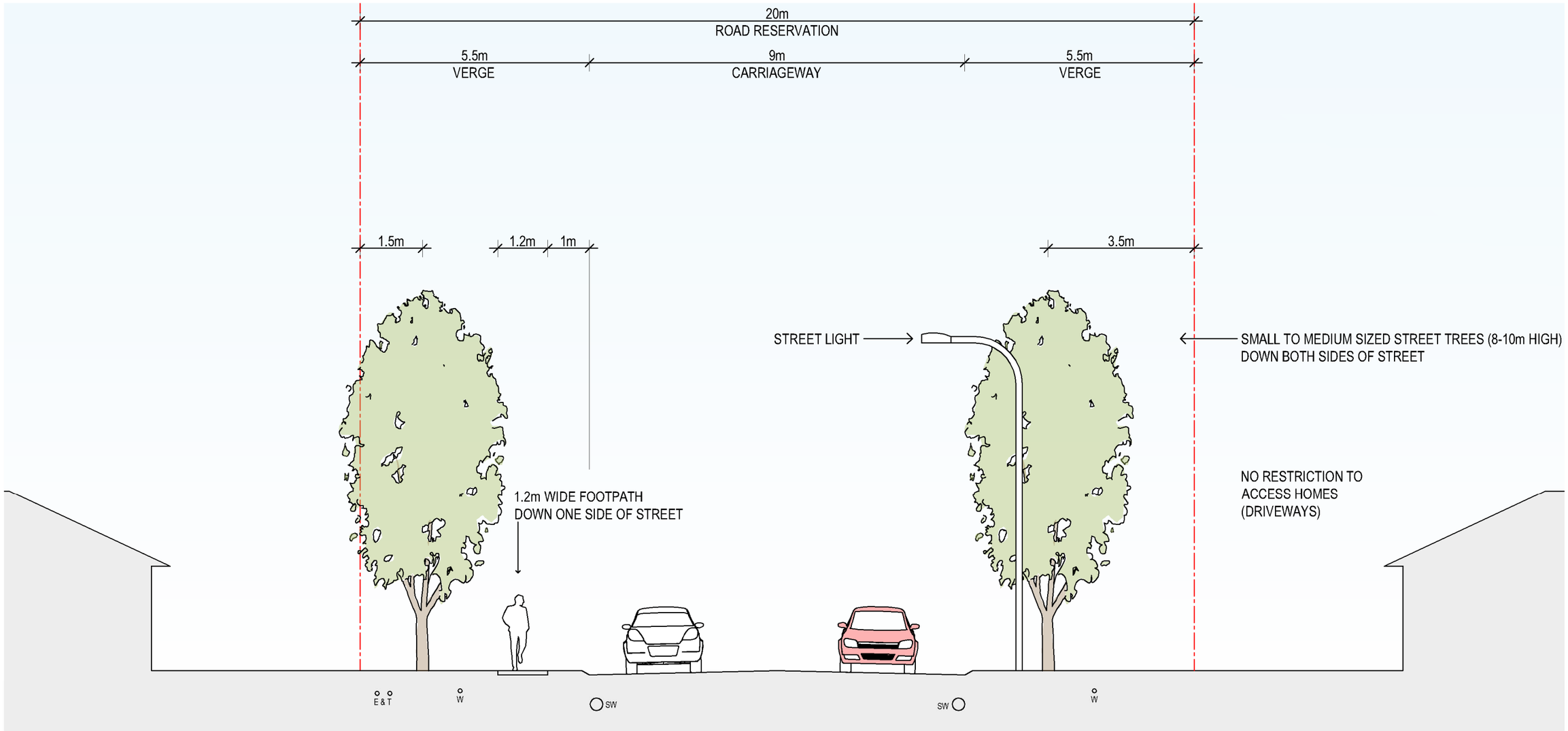
DRAWING TITLE: EXHIBIT 08 - TYPICAL SECTION - BUS STREET

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 08 | E |




## TYPICAL SECTION - CONNECTOR STREET

K+C REF: CR6148_Inverell Cncl - New Residential Areas\21_Planning\6148P_SITES.dwg - Sect2.A1, 16 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 65834064
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| C | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| D | 12.06.2021 | ISSUE FOR FINAL DRAFT | AJC |
| E | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:50 @ A1 (1:100 @ A3)

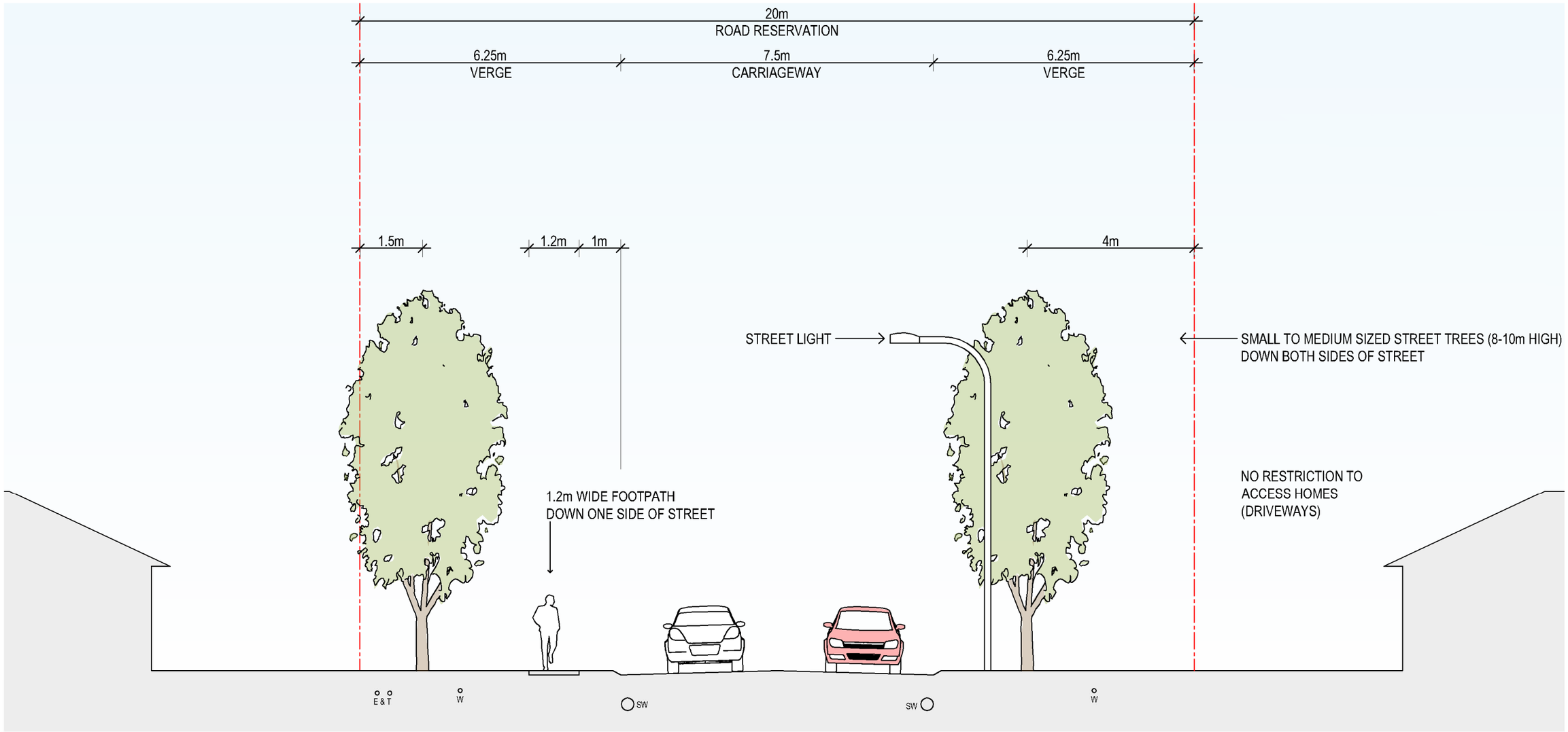
0 2.5

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

| | | | | |
|---|---|---|---|---|
| DRAWING TITLE: | EXHIBIT 09 - TYPICAL SECTION - CONNECTOR STREET | | | A1 |
| PROJECT: | STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS | | | |
| CLIENT: | INVERELL SHIRE COUNCIL | DRAWING NO: | SHEET: | REVISION: |
| | | 6148P_SITES | 09 | E |




## TYPICAL SECTION - ACCESS STREET AND PERIMETER STREET

KKC REF: G:\6148_Inverell Cncl - New Residential Areas\21_Planning\6148P_SITES.dwg - Sect 1 A1, 16-Sep-2021 - jaggiac

KING + CAMPBELL

Inverell Shire Council

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4064
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| C | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| D | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| E | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:50 @ A1 (1:100 @ A3)

0 2.5

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

DRAWING TITLE: EXHIBIT 10 - TYPICAL SECTION - ACCESS STREET & PERIMETER STREET

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 10 | E |

- **Connector Streets** – Connector streets are streets that provide valuable connection for vehicles, cyclists and pedestrians through a residential block. The importance of these streets means that the scope to vary their alignment and location (as shown on the drawings) is limited. The road width in these streets should nominally be 9 metres wide, within a minimum reservation width of 20 metres. The streets should accommodate a footpath on one side of the road, lighting and street tree planting. These streets should provide direct access to housing. Refer to **Exhibit 09** – Typical Section – Connector Street.

- **Access Streets** – Access streets provide the fine network of access through a neighbourhood for vehicles, cyclists and pedestrians. The street network should follow a logical (and legible) grid network as much as possible, including minimising no through roads. All access streets alignments indicated on the Structure Plan drawings are indicative only and will be subject to detailed property and site analysis, and the staging of development. Access streets on the Structure Plan drawings are shown as a broken or unbroken line. Where they are indicated as an unbroken line the intention to provide an additional cross-block connection (in addition to nominated connector streets) should be considered at the time that alternative alignments are nominated by individual developers. The road width in these streets should nominally be 7 to 7.5 metres wide, within a minimum reservation width of 20 metres. These streets are considered shareways, therefore footpaths are not considered essential, but they are desirable. Access streets should accommodate lighting and street tree planting. These streets should provide direct access to housing. Refer to **Exhibit 10** – Typical Section – Access Street and Perimeter Road.

- **Perimeter Streets** – Perimeter streets are essentially access streets with frontage to creek corridors and other open space (if the street is not an Arterial, Bus or Collector Street). Perimeter streets to creek corridors should be maximised to provide appropriate levels of surveillance of, and a public access to, the open space. Refer to **Exhibit 10** – Typical Section – Access Street and Perimeter Road.

## 2. Proposed Street Network Improvements

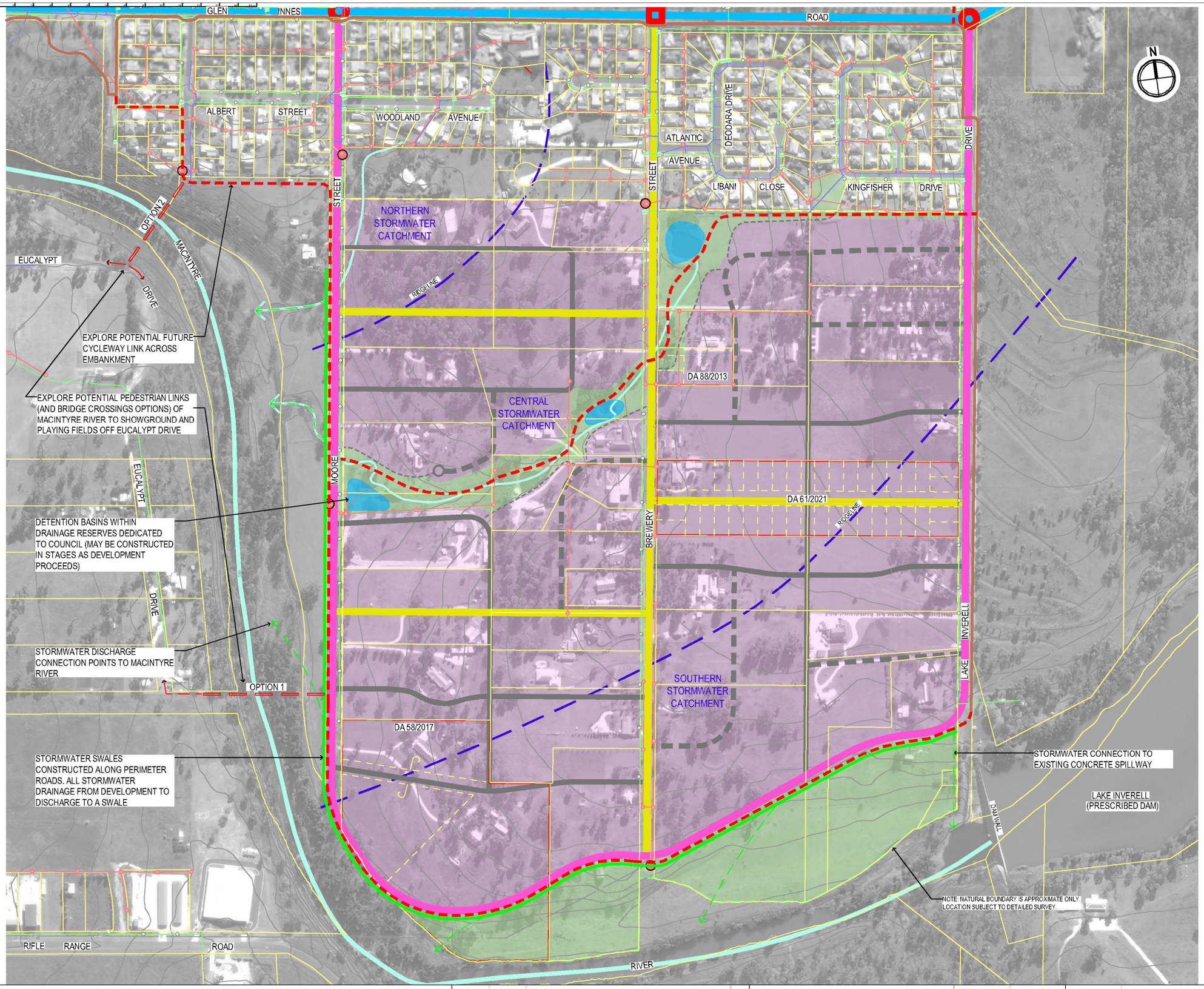
**Exhibits 11, 12 and 13** – Draft Structure Plan Area 1, 2 and 3, respectively, illustrate the pattern of development proposed for each New Residential Area, including street and cycleway network improvements and open space.

The following broad street network improvements are proposed to service the New Residential Areas:

<u>New Residential Area 1</u>

- Improvements to existing streets include the short to medium term upgrade of Moore Street, Brewery Street and Lake Inverell Drive, to accord with the requirements of a bus street (see **Exhibit 8**), with respect to Moore Street and Lake Inverell Drive, and the requirements of a connector street (see **Exhibit 9**), with respect to Brewery Street. The specific requirements and timing of these upgrades will be the subject of assessment as part of a future "Urban Traffic Analysis and Assessment". In the longer term these three (3) streets are proposed to be linked via a new street section along the Macintyre River frontage, which will allow the potential to link Moore Street and Lake Inverell Drive and provide a continuous bus loop.

- Three (3) east-west connector streets linking the existing north-south roads.




## LEGEND

- SITE
- SITE (NATURAL BOUNDARY)
- CADASTRE
- CONTOURS ( 2m INTERVAL)
- OVERHEAD ELECTRICITY - MAJOR SUPPLY LINE
- SEWER PUMPING STATION
- SEWER
- SEWER RISING MAIN
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)
- EXISTING CYCLEWAY/FOOTWAY
- PROPOSED CYCLEWAY
- POTENTIAL FUTURE PEDESTRIAN LINK
- GRAVEL MAINTENANCE TRACK
- POTENTIAL INTERSECTION TREATMENT
  - SHORT TERM CHANNELISED
  - LONGER TERM ROUNDABOUT OR SIGNALS
- POTENTIAL INTERSECTION TREATMENT
  - CHANNELISED AND/OR RESTRICTION OF RIGHT HAND TURNS OUT OF SECONDARY LEG (ie BREWERY STREET)
- STORMWATER BASINS
- STORMWATER SWALE

POTENTIAL DEVELOPMENT

- RESIDENTIAL LOTS
- PUBLIC RECREATION AREAS
- STORMWATER BASINS
- DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS
- 63.43ha — AREA OF POTENTIAL RESIDENTIAL DEVELOPMENT

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

KKC REF: C2618_Inverell Council - New Residential Areas\01_Planning\6148P_SITES.dwg - A1(L) Prelim Structure\ EST 1.15 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 — 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

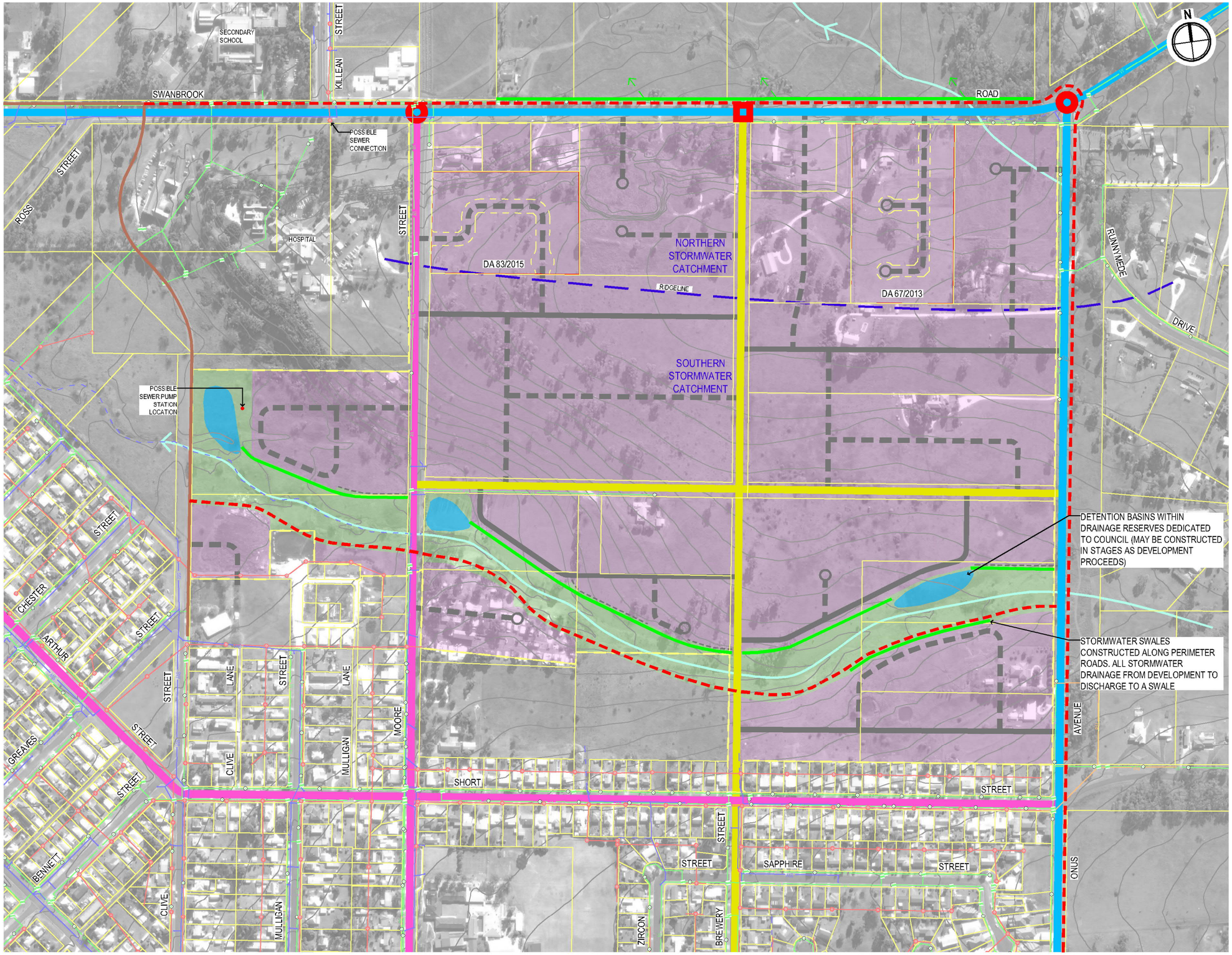
DRAWING TITLE: EXHIBIT 11 - STRUCTURE PLAN - NEW RESIDENTIAL AREA 1

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 11 | F |




## LEGEND

- SITE
- CADASTRE
- CONTOURS ( 2m INTERVAL)
- SEWER
- SEWER RISING MAIN
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)
- EXISTING CYCLEWAY/FOOTWAY
- PROPOSED CYCLEWAY
- GRAVEL MAINTENANCE TRACK
- POTENTIAL INTERSECTION TREATMENT
  - SHORT TERM CHANNELISED
  - LONGER TERM ROUNDABOUT OR SIGNALS
- POTENTIAL INTERSECTION TREATMENT
  - CHANNELISED AND/OR RESTRICTION OF RIGHT HAND TURNS OUT OF SECONDARY LEG (ie BREWERY STREET)
- STORMWATER BASINS
- STORMWATER SWALE

POTENTIAL DEVELOPMENT

- RESIDENTIAL LOTS
- PUBLIC RECREATION AREAS
- STORMWATER BASINS
- DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS
- 62.20ha — AREA OF POTENTIAL RESIDENTIAL DEVELOPMENT

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K+C REF: C6148_Inverell Council - New Residential Areas\21_Planning\6148P_SITES.dwg - A1(Lp-Prelim Structure Plans)\ 2.16 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

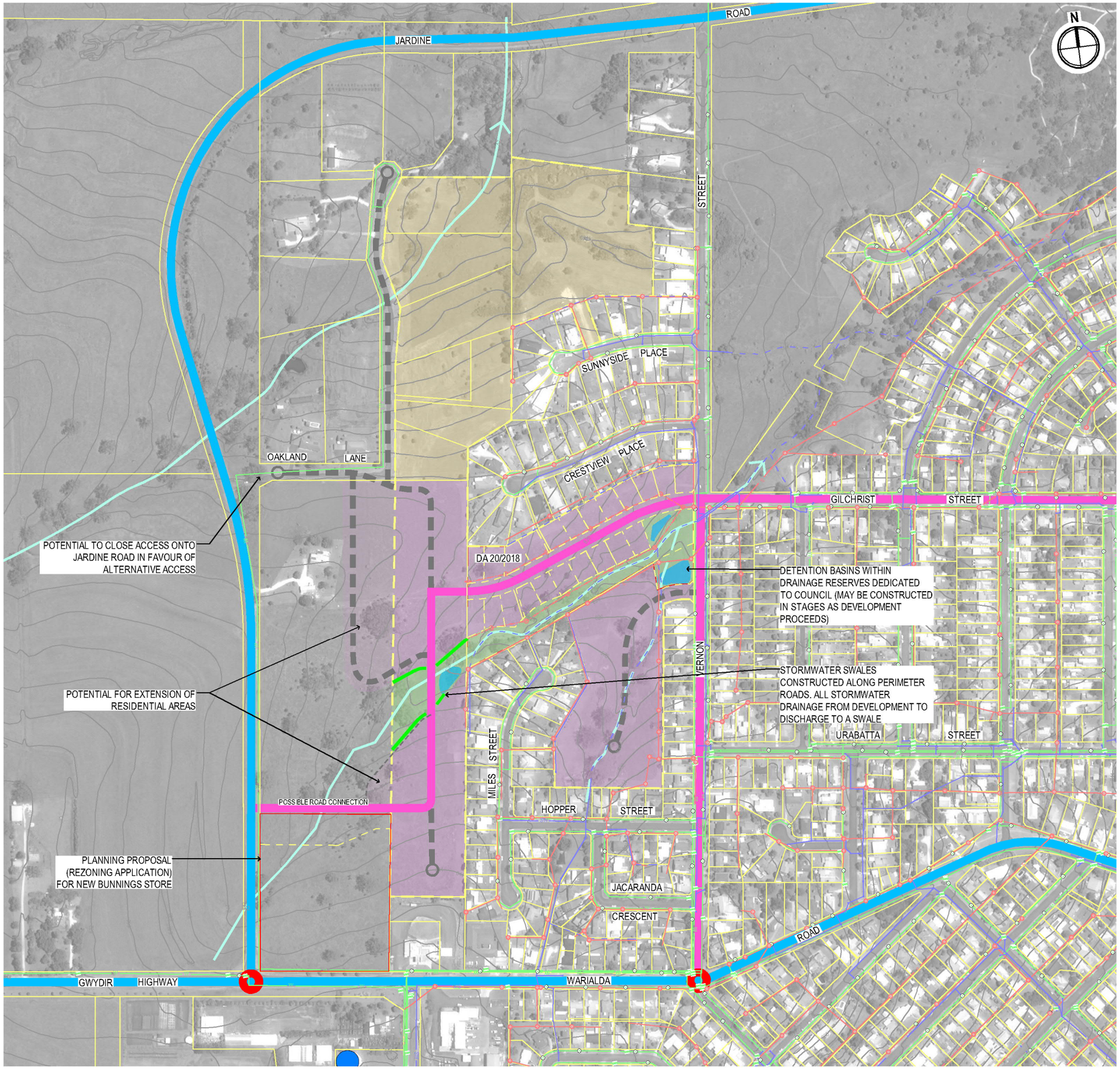
DRAWING TITLE: EXHIBIT 12 - STRUCTURE PLAN - NEW RESIDENTIAL AREA 2

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 12 | F |




## LEGEND

- SITE
- CADASTRE
- CONTOURS ( 2m INTERVAL)
- SEWER
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATER STORAGE RESERVOIR
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- ARTERIAL ROAD
- BUS STREET
- ACCESS STREET (INDICATIVE ALIGNMENT)
- GRAVEL MAINTENANCE TRACK
- POTENTIAL INTERSECTION TREATMENT
  - SHORT TERM CHANNELISED
  - LONGER TERM ROUNDABOUT OR SIGNALS
- STORMWATER BASINS
- STORMWATER SWALE

### POTENTIAL DEVELOPMENT

- RESIDENTIAL LOTS
- FUTURE DEVELOPMENT - ADJACENT SITE
- LARGER LOTS
- PUBLIC RECREATION AREAS
- STORMWATER BASINS
- DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS
- 9.23ha — AREA OF POTENTIAL RESIDENTIAL DEVELOPMENT
- 1.65ha — AREA OF POTENTIAL EXPANSION TO RESIDENTIAL DEVELOPMENT

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K+C REF: C16148_Inverell Council - New Residential Areas\01_Planning\6148P_SITES.dwg - A1(Land Planning Structure) VER 3.1, 16 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 20.08.2018 | ISSUED FOR INFORMATION | AJC |
| B | 25.09.2018 | ISSUED FOR INFORMATION | AJC |
| C | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| D | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| E | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| F | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 — 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

| | | | | |
|---|---|---|---|---|
| DRAWING TITLE: | EXHIBIT 13 - STRUCTURE PLAN - NEW RESIDENTIAL AREA 3 | | | A1 |
| PROJECT: | STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS | | | |
| CLIENT: | INVERELL SHIRE COUNCIL | DRAWING NO: | SHEET: | REVISION: |
| | | 6148P_SITES | 13 | F |

New Residential Area 2

- Improvements to Moore Street to meet its future role as a key bus street.

- An extension of Brewery Street through to Swanbrook Road to serve as a major north-south connector street.

- The potential longer-term establishment of an arterial road connection on the Onus Avenue alignment, between Swanbrook Road and Gwydir Highway.

- An east-west connector street linking the three (3) above mentioned north-south streets/arterial road.

New Residential Area 3

- A bus/connector street is proposed to link Vernon Street and Jardine Road through the approved subdivision (DA 20/2018) and the adjacent residential zone land to its west. The location of this road intersection with Jardine Road will be subject to a detailed investigation of a range of traffic issues relating to Jardine Road, including site distances, heavy vehicle operations / behaviour and intersection separation distances.

- The above bus street and its intersection with Jardine Road will allow the closure of Oakland Lane i.e. removal of its intersection with Jardine Road.

**3. Intersection Upgrades**

The projected increase in developments in the New Residential Areas will increase traffic circulation and hence place additional strain on existing intersections. Key intersections that will likely require improvement in the future, include:

New Residential Areas 1 and 2

- The intersection of Gwydir Highway, Glen Innes Road and Onus Avenue / Lake Inverell Drive – With additional traffic turning at Lake Inverell Drive, channelisation at this intersection may be required. In the longer term, particularly if Onus Avenue is upgraded as an arterial road, either a roundabout or signalisation will likely be required.

- The intersection of Moore Street and Gwydir Highway – In the short to medium term channelisation of this intersection will likely be required. In the longer term, once development in Area 1 and Area 2 has advanced, a roundabout or signalisation will likely be required.

- The intersection of Brewery Street and Gwydir Highway – As development advances in Area 1 and Area 2 the channelisation of this intersection or the restriction of right-hand turns may be required.

New Residential Area 2

- The intersection of Moore Street and Swanbrook Road – In the short to medium term channelisation of this intersection will likely be required. In the longer term, once development in Area 2 has advanced, a roundabout or signalisation will likely be required.

- The intersection of Brewery Street and Swanbrook Road – As development advances in Area 2 the channelisation of this intersection or the restriction of right-hand turns may be required.

- The intersection of Swanbrook Road and Onus Avenue – In the longer term, particularly if Onus Avenue is instated as an arterial road, either a roundabout or signalisation at this intersection will be required.

New Residential Area 3

- The intersection of Gwydir Highway and Jardine Road – The upgrade requirements for this intersection will only partially be dictated by residential development in Area 3. In this regard it is noted that ongoing development in Inverell's industrial areas and the adjacent undeveloped business site will likely be significant influences. In the short to medium term this intersection is likely to require a roundabout or signals.

- The intersection of Gwydir Highway and Vernon Street – In the short to medium term channelisation of this intersection may be required. In the longer term either a roundabout or signalisation will likely be required.

It should be noted that all of the above intersection upgrades are suggested options only and will be subject to specific future circumstances and detailed traffic analysis and assessment.

4. **New Intersections**

   Principles that underpin the configuration of intersections in the Structure Plans for each New Residential Area include:

   - Minimising cross intersections of main streets.
   - Offsetting T-intersections a minimum 30m.
   - A balance of cross-intersections and T-intersections at all other intersections is encouraged.

5. **Cul-de-sacs -** Cul-de-sacs should be discouraged wherever possible. In this regard, cul-de-sacs reduce connectivity and result in difficult and inefficient lot configuration.

### 4.3.3 Open Space

**Creek Corridors**

Three (3) important creek corridors have been identified, one for each of the three (3) residential areas. In each case, the volume of storm-generated water areas carried by each of the creeks was considered to be too great to be captured in subsurface drainage (pipes), and, in any event, the creeks offered a good opportunity to provide valuable open space corridors. The following specific design principles underpin the creek corridor proposals.

- **Width** – To maintain an average width of 40m and a minimum width of 30m across each new creek corridor (Area 1 and Area 2), not including perimeter roads, but including cycleways and gravel access tracks. These widths will need to accommodate peak stormwater flows.

- **Native vegetation** – That existing endemic vegetation, including ground-plane plants, be protected and enhanced wherever possible. New planting should use only endemic plant species.

- **Cycleway** – For Area 1 and Area 2, a continuous 2.5m wide cycleway be aligned down one side.

- **Perimeter Streets** –Perimeter street frontage should be maximised. See also **Section 4.3.2** above.

- Gravel access tracks – In the absence of perimeter roads and cycleways, 4m wide gravel access tracks should be provided. The principle purpose of gravel access tracks, in combination with perimeter roads and cycleways, is to provide comprehensive service vehicle access, and to promote natural surveillance to inhibit anti-social behaviour and illegal dumping.

Other Open Space

The Structure Plans propose another area of open space in Area 1, this being:

- Riverfront park – The southern end of Area 1 is not suitable for development owing to flood risk. This land will make a valuable addition to lineal open space parkland associated with Lake Inverell. This open space should be linked via the continuation of the cycleway in Lake Inverell Drive.

### 4.3.4 Cycleways and Walkways

A comprehensive cycleway and walkway network should be provided to maximise alternative movement modes and promote healthy living. There are existing cycleways along Lake Inverell Drive (in Area 1) and Clive Street linking to the hospital and High School (in Area 2), that should be connected. The following specific design principles, which are illustrated on Exhibits 14 and 15 – Indicative Subdivision – New Residential Area 1 and 2, respectively, underpin the proposals:

- Creating a continuous 2.5m wide cycleway connection down one side of each of the preserved creek corridors in Area 1 and Area 2;

- Providing a cycleway link from the western end of the creek corridor in Area 1, up Moore Street to the Gwydir Highway;

- Providing a cycleway link from the existing cycleway in Lake Inverell Drive, down Onus Avenue (including the future arterial road section) to Swanbrook Road and west to the existing cycleway on the western side of the hospital site.

- In relation to Area 1, a potential cycleway link (including bridge) across the Macintyre River to playing fields and the showground off Eucalypt Drive should also be considered. Two potential crossing point options have been nominated on the Structure Plan; and

- 1.5m wide walkways on one side of the road should be incorporated in all streets where cycleways are not provided.

### 4.3.5 Lots Size and Layout

In order to retain its rural character, the road network has been designed to encourage lots of an average size of 800m$^2$.

The minimum frontage and depth of lots is recommended to be 17m and 35m respectively (i.e. hence a minimum lot size of 595m$^2$). Other design principles that should be encouraged in residential subdivision include:

- Maximising the number of lots with favourable orientation, that being north-south or east-west;

- Minimising the opportunity for side fences to dominate streetscapes by alternating the orientation of lots on smaller cross streets; and

- Battle-axe lots should be avoided where possible.

### 4.3.6 Street Tree Planting

Street tree planting in all streets should be encouraged within the New Residential Areas. It is understood that street tree planting is currently not a mandatory requirement of Council. Nevertheless, trees in streets are a recognised means of enhancing street character and aesthetics whilst introducing valuable shade. Street trees should be provided within all residential streets at a minimum rate of one tree per lot. All trees should be planted at a minimum 75L size (at the time of planting) and should be maintained by the developer for a minimum one year (establishment period).

### 4.3.7 Street Lighting

Street lighting in residential streets improves security and enhances residential character. Street lighting to appropriate Australian Standards should be provided to all residential streets.

## 4.4 Preliminary Yield Estimate

Indicative subdivision layouts have been prepared for each of the New Residential Areas – refer to **Exhibits 14, 15 and 16** – Indicative Subdivision – New Residential Area 1, 2 and 3, respectively. The purpose of these indicative layouts is to illustrate development potential (only). Any subdivision layout on individual properties will be subject to:

- The willingness or otherwise of individual landholders to subdivide.
- A detailed site investigation of relevant environmental issues (bushfire, ecology, flooding, stormwater management, etc).
- Resolution of servicing requirements.
- Development Application with Inverell Shire Council; and
- Detailed design and Subdivision Works Certification.

The indicative layouts prepared also provide an understanding of the potential residential lot yields for each New Residential Area, being:

- Area 1 – 454 lots
- Area 2 – 449 lots
- Area 3 – 88 lots in residential zoned land
  – 11 lots in potential extension to residential zoned land

  Total all Areas – 1002 lots

This potential lot yield will provide for Inverell's land supply needs for many years. In this regard approximately 12-15 new urban dwellings are constructed each year in Inverell. Even in the event that this rate increases to twenty (20) dwellings per year Inverell will have sufficient urban land supply for the next fifty (50) years.

## 4.5 Stormwater Management

The Structure Plans for each of the three (3) New Residential Areas – as illustrated on **Exhibits 14, 15 and 16** – Indicative Subdivision – New Residential Area 1, 2 and 3, respectively – has considered broad stormwater management issues. Based on a preliminary analysis the following stormwater management measures have been incorporated:

- Retention of larger watercourses – In each of Areas 1, 2 and 3, broad catchment analysis has revealed that it is not feasible to pipe peak water flows. These watercourses have been retained as open space corridors – Refer also to **3.1.2, 3.2.2** and **3.3.2.**

GLEN INNES ROAD

ALBERT STREET

WOODLAND AVENUE

DA 70/06

ATLANTIC AVENUE

DEODARA DRIVE

LIBANI CLOSE

KINGFISHER DRIVE

MOORE STREET

BREWERY STREET

INVERELL DRIVE

LAKE

MACINTYRE DRIVE

EUCALYPT DRIVE

EUCALYPT DRIVE

EXPLORE POTENTIAL FUTURE CYCLEWAY LINK ACROSS EMBANKMENT

EXPLORE POTENTIAL PEDESTRIAN LINKS (AND BRIDGE CROSSINGS OPTIONS) OF MACINTYRE RIVER TO SHOWGROUND AND PLAYING FIELDS OFF EUCALYPT DRIVE

OPTION 1

DA 88/2013

DA 61/2021

DA 58/2017

DAM WALL

LAKE INVERELL (PRESCRIBED DAM)

NOTE: NATURAL BOUNDARY IS APPROXIMATE ONLY. LOCATION SUBJECT TO DETAILED SURVEY.

RIFLE RANGE ROAD

RIVER

N

## NOTE REGARDING SUBDIVISION LAYOUT

IT IS NOTED THAT THE SUBDIVISION LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.
ANY SUBDIVISION LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION

## LEGEND

- SITE
- SITE (NATURAL BOUNDARY)
- CADASTRE
- CONTOURS ( 2m INTERVAL)
- OVERHEAD ELECTRICITY - MAJOR SUPPLY LINE
- SEWER PUMPING STATION
- SEWER
- SEWER RISING MAIN
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)
- EXISTING CYCLEWAY/FOOTWAY
- PROPOSED CYCLEWAY
- POTENTIAL FUTURE PEDESTRIAN LINK
- GRAVEL MAINTENANCE TRACK
- POTENTIAL INTERSECTION TREATMENT
  - SHORT TERM CHANNELISED
  - LONGER TERM ROUNDABOUT OR SIGNALS
- POTENTIAL INTERSECTION TREATMENT
  - CHANNELISED AND/OR RESTRICTION OF RIGHT HAND TURNS OUT OF SECONDARY LEG (ie BREWERY STREET)
- STORMWATER BASINS
- PERIMETER SWALE

POTENTIAL DEVELOPMENT

- RESIDENTIAL LOTS
- PUBLIC RECREATION AREAS
- STORMWATER BASINS
- DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS
- 63.43ha — AREA OF POTENTIAL RESIDENTIAL DEVELOPMENT

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\4C\REF_OVER\6148_Inverell Council - Non-Residential Areas\21. Planning\6148P_SITES.dwg - A1(L)-Hybrid-Subdiv\EXS11, 16 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4064
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.06.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

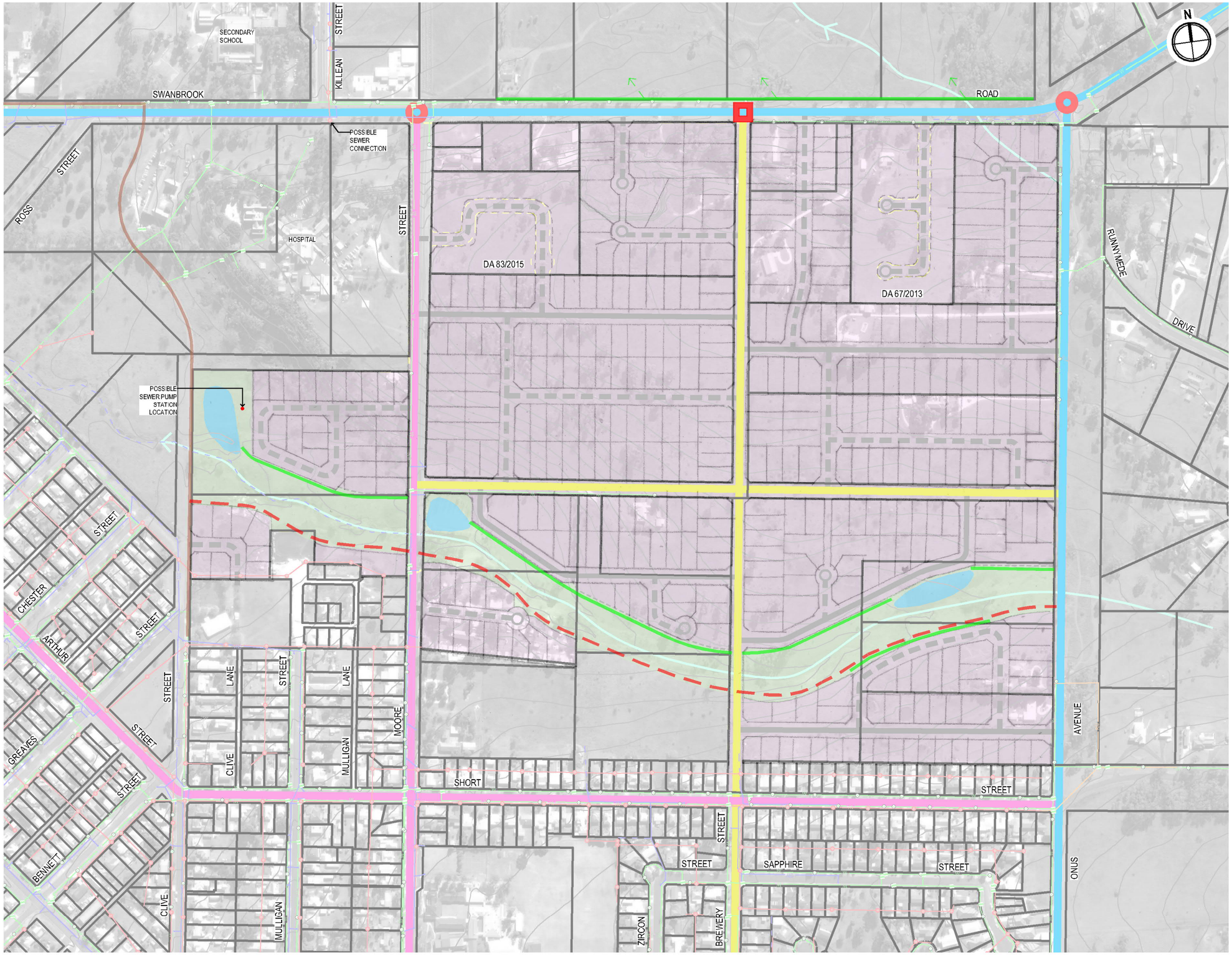
DRAWING TITLE: EXHIBIT 14 - INDICATIVE SUBDIVISION - NEW RESIDENTIAL AREA 1

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 14 | D |




## LEGEND

- SITE
- CADASTRE
- CONTOURS ( 2m INTERVAL)
- SEWER
- SEWER RISING MAIN
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)
- EXISTING CYCLEWAY/FOOTWAY
- PROPOSED CYCLEWAY
- GRAVEL MAINTENANCE TRACK
- POTENTIAL INTERSECTION TREATMENT
  - SHORT TERM CHANNELISED
  - LONGER TERM ROUNDABOUT OR SIGNALS
- POTENTIAL INTERSECTION TREATMENT
  - CHANNELISED AND/OR RESTRICTION OF RIGHT HAND TURNS OUT OF SECONDARY LEG (ie BREWERY STREET)
- STORMWATER BASINS
- PERIMETER SWALE

POTENTIAL DEVELOPMENT

- RESIDENTIAL LOTS
- PUBLIC RECREATION AREAS
- STORMWATER BASINS

DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS

62.20ha — AREA OF POTENTIAL RESIDENTIAL DEVELOPMENT

## NOTE REGARDING SUBDIVISION LAYOUT

IT IS NOTED THAT THE SUBDIVISION LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.
ANY SUBDIVISION LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

KKC REF: C6148_Inverell Council - New Residential Areas\C1_Planning\6148P_SITES.dwg - A1LL Indic Subdiv EASTZ, 16 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD
SCALE: 1:2500 @ A1 (1:5000 @ A3)
0 — 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

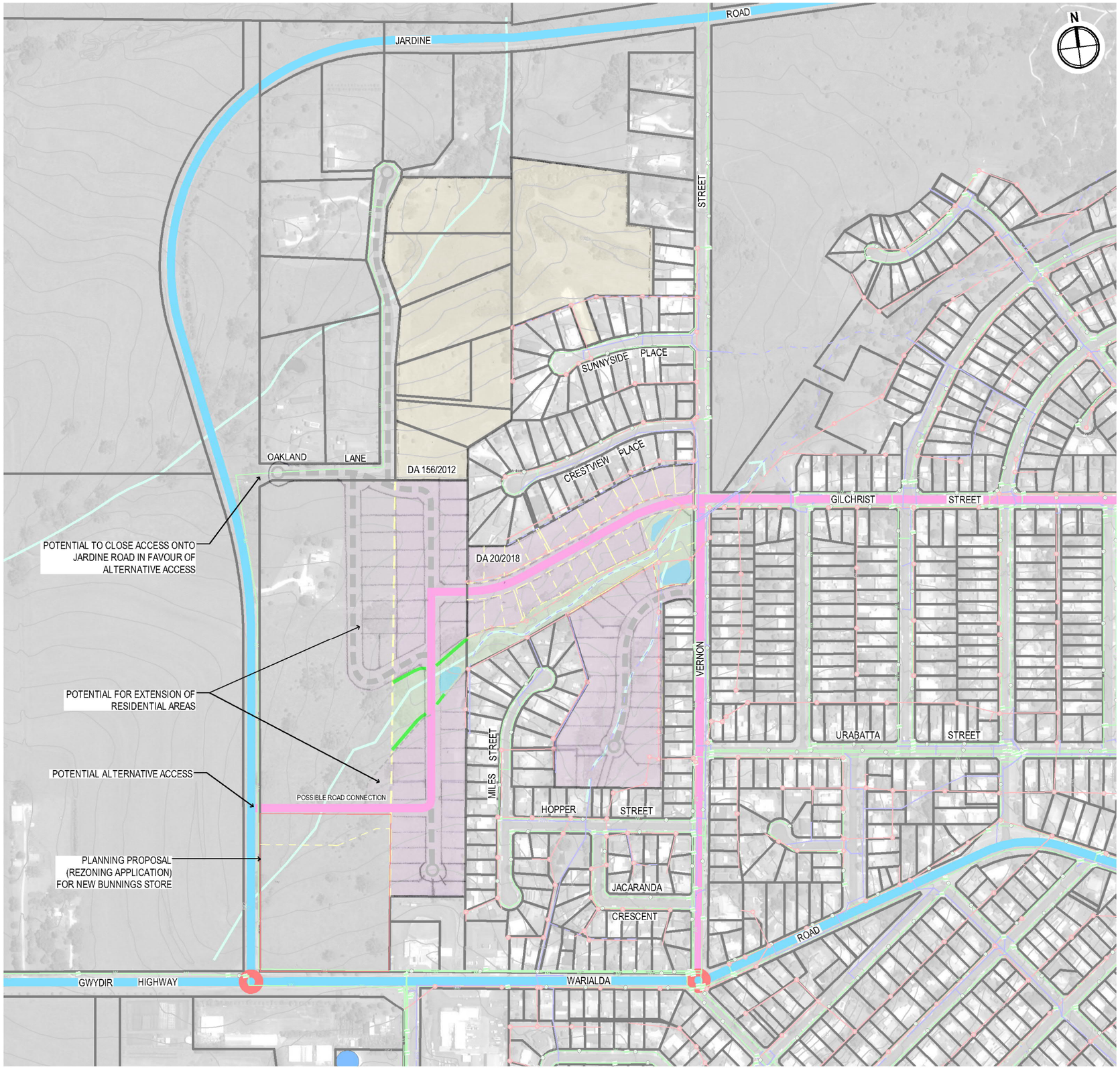
DRAWING TITLE: EXHIBIT 15 - INDICATIVE SUBDIVISION - NEW RESIDENTIAL AREA 2

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 15 | D |




## LEGEND

- SITE
- CADASTRE
- CONTOURS ( 2m INTERVAL)
- SEWER
- SEWER MANHOLE
- STORMWATER
- STORMWATER SURFACE DRAIN
- WATER STORAGE RESERVOIR
- WATERMAIN
- WATER HYDRANT
- WATER STOP VALVE
- ARTERIAL ROAD
- BUS STREET
- ACCESS STREET (INDICATIVE ALIGNMENT)
- GRAVEL MAINTENANCE TRACK
- POTENTIAL INTERSECTION TREATMENT
  - SHORT TERM CHANNELISED
  - LONGER TERM ROUNDABOUT OR SIGNALS
- STORMWATER BASINS
- PERIMETER SWALE

POTENTIAL DEVELOPMENT

- RESIDENTIAL LOTS
- FUTURE DEVELOPMENT - ADJACENT SITE
- LARGER LOTS
- PUBLIC RECREATION AREAS
- STORMWATER BASINS

DA 88/2013 — SITE OF CURRENT OR PENDING APPROVALS

9.23ha — AREA OF POTENTIAL RESIDENTIAL DEVELOPMENT

1.65ha — AREA OF POTENTIAL EXPANSION TO RESIDENTIAL DEVELOPMENT

## NOTE REGARDING SUBDIVISION LAYOUT

IT IS NOTED THAT THE SUBDIVISION LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.
ANY SUBDIVISION LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\C REF: C16146_Inverell Cncil - New Residential Areas\21_Planning\6148P_SITES.dwg - ATILI-Hdc-Sadly\TEST 3, 16 Sep 2021, angsjac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4064
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 — 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

DRAWING TITLE: EXHIBIT 16 - INDICATIVE SUBDIVISION - NEW RESIDENTIAL AREA 3

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 16 | D |

- Smaller watercourses – Smaller watercourses within the New Residential Areas have the potential to be piped, however detailed stormwater analysis will be required by individual developers to confirm appropriate management. By way of example, a tributary of a main watercourse in Area 3 (extending north from Hopper Street) has a relatively small catchment which, it is considered, may have the potential to be carried in a piped system. A detailed stormwater management report and plan should accompany any application seeking to develop this portion of the New Residential Area.

Inverell Shire Council's Development Control Plan (DCP) (Sections 2.10 and 3.14) provides the objectives for the design of stormwater drainage for subdivision development, being:

- To responsibly manage the collection and disposal of stormwater from development;
- To protect the quality of receiving waters; and
- To ensure stormwater from development does not adversely impact on adjoining lands.

The Macintyre River has been considered as the receiving waters for all New Residential Areas. Council's technical staff have provided advice that the catchment for Lake Inverell (located immediately upstream of the Inverell township) is approximately 600km², with a commensurate time of concentration for that catchment of approximately 6 hours. Lake Inverell is expected therefore to provide some attenuation to flood peaks downstream. Consideration should, however, be given to the provision of detention basins in new development to ensure that peak flows at the point of discharge to the Macintyre River do not coincide with the peak of the greater catchment.
The extended time of water concentration for the greater catchment provides the opportunity to adopt the Macintyre River as the ultimate point of discharge for all development areas.

The three (3) New Residential Areas are located at various locations within the Macintyre River catchment. Each New Residential Area has been considered below, including the broad stormwater management approach recommended:

<u>New Residential Area 1</u>

- Located in the lower reaches of the Macintyre River Catchment, immediately adjacent to the river.

- Consists of three (3) sub-catchments, between ridgelines extending northeast to southwest, being northern, central and southern.

- Northern Sub-catchment

  Stormwater Detention - Not required due to its location immediately adjacent the Macintyre River.

  Water Quality - Sediment control devices such as Gross Pollutant Traps and Grassed Swales along Moore Street.

- Central Sub-catchment

  Stormwater Detention - Detention basins to be constructed along the existing drainage line as shown within the Structure Plan – refer to Exhibits 14 – Indicative Subdivision – New Residential Area 1. Basins to be dedicated to Council as drainage reserves. Detention to match future runoff flows to existing. Construction of the basins may be staged to be enlarged as development proceeds.

  Water Quality - Retention of the existing natural drainage line to minimise sediment transport. Utilisation of detention basins to capture sediment. Construct grassed swales along Moore Street to direct outflows to the existing junction with Macintyre River.

- Southern Sub-catchment

  Stormwater Detention - Not required due to its location immediately adjacent the Macintyre River.

  Water Quality - Sediment control devices such as Gross Pollutant Traps and grassed swales along the proposed perimeter road. Discharge points to the Macintyre River within formalised structures to be limited to minimise the potential for scour and erosion of the riverbanks. Opportunities should be explored to utilise the existing concrete spillway downstream of Lake Inverell as a point of discharge for stormwater runoff from Lake Inverell Drive.

<u>New Residential Area 2</u>

- Located in the middle reaches of the Macintyre River Catchment, with runoff from this catchment flowing north-westerly via existing swales and concrete drains within an existing industrial development and discharging to the Macintyre River north of Ring and Brisset Streets.

- Consists of two (2) sub-catchments, between ridgelines extending east to west. The catchments are designated as northern and southern, with the smaller northern catchment approximately one-quarter the area of the southern catchment.

- Northern Sub-Catchment

  Stormwater Detention - Not required because no downstream infrastructure is affected. Drainage from this catchment is to be directed to existing drainage lines north of Swanbrook Road.

  Stormwater Quality - Sediment control devices such as end-of-line Gross Pollutant Traps if required (dependant on size of catchment and expected land use).

- Southern Sub-Catchment

  Detention basins to be constructed along the existing drainage line, generally as shown within the Structure Plan – refer to Exhibits 15 – Indicative Subdivision – New Residential Area 2. Basins to be dedicated to Council as drainage reserves. Detention to be provided to match future runoff flows to existing. Construction of the basins may be staged to be enlarged as development proceeds.

  Water Quality - Retention of the existing natural drainage line to minimise sediment transport. Utilisation of detention basins to capture sediment. Construct grassed swales along perimeter roads adjoining drainage swale to capture sediment and/or direct flows to the detention basins and/or points of discharge within the drainage line.

<u>New Residential Area 3</u>

- Located within the upper reaches of the Macintyre River Catchment. Runoff from this catchment flows in a north-easterly direction via existing natural watercourse before discharging to the Macintyre River west of Edward Street.

- The Area is located within a single sub-catchment.

- Sub-catchment

  Detention basins to be constructed along the existing drainage line, generally as shown within the Structure Plan – refer to Exhibits 16 – Indicative Subdivision – New Residential

Area 3. Basins to be dedicated to Council as drainage reserves. Detention to be provided to match future runoff flows to existing. Construction of the basins may be staged to be enlarged as development proceeds.

Water Quality - Retention of the existing natural drainage line to minimise sediment transport. Utilisation of detention basins to capture sediment.

Stormwater infrastructure has been specified at a preliminary catchment level assessment (to inform the broad stormwater and open space guidelines) that underpin the Structure Plans. Nevertheless, stormwater management needs to be carefully considered as part of all individual development proposals, particularly in terms of:

- Conveyance of stormwater (i.e. pits, pipes, swales etc).
- Demonstration of a Lawful Point of Discharge for each proposal.
- Detention of stormwater where required/desirable.
- Water quality treatment of stormwater, particularly for sediment and gross pollutants; and
- The need for temporary detention basins and easements, as it relates to out-of-sequencing development – refer also to Section 4.8 Sequencing of Development.

## 4.6 Sewer and Water

Trunk sewer and water servicing network plans have been prepared for each of the New Residential Areas – refer to Exhibits 17, 18, 19 – Servicing Plan – New Residential Development Area 1, 2 and 3, respectively.

These servicing plans have been based on the indicative subdivision layouts prepared for each New Residential Area. Like the indicative subdivision layouts the servicing plan are not prescriptive, rather they are intended to provide landholders with a guide to what may be possible for the development of individual land parcels.

The concept layout for the sewer reticulation network prepared for each New Residential Area has considered the likely extent of the sewer catchments for each of the existing sewer pump stations and has determined the need for, and the location of possible proposed sewer pump stations to service the developments.

The development of the water and sewer reticulation network has assumed that network trunk main upgrades will proceed in conjunction with the new development areas, funded via development contributions, contribution offsets, works-in-kind arrangements or other agreements with Council.

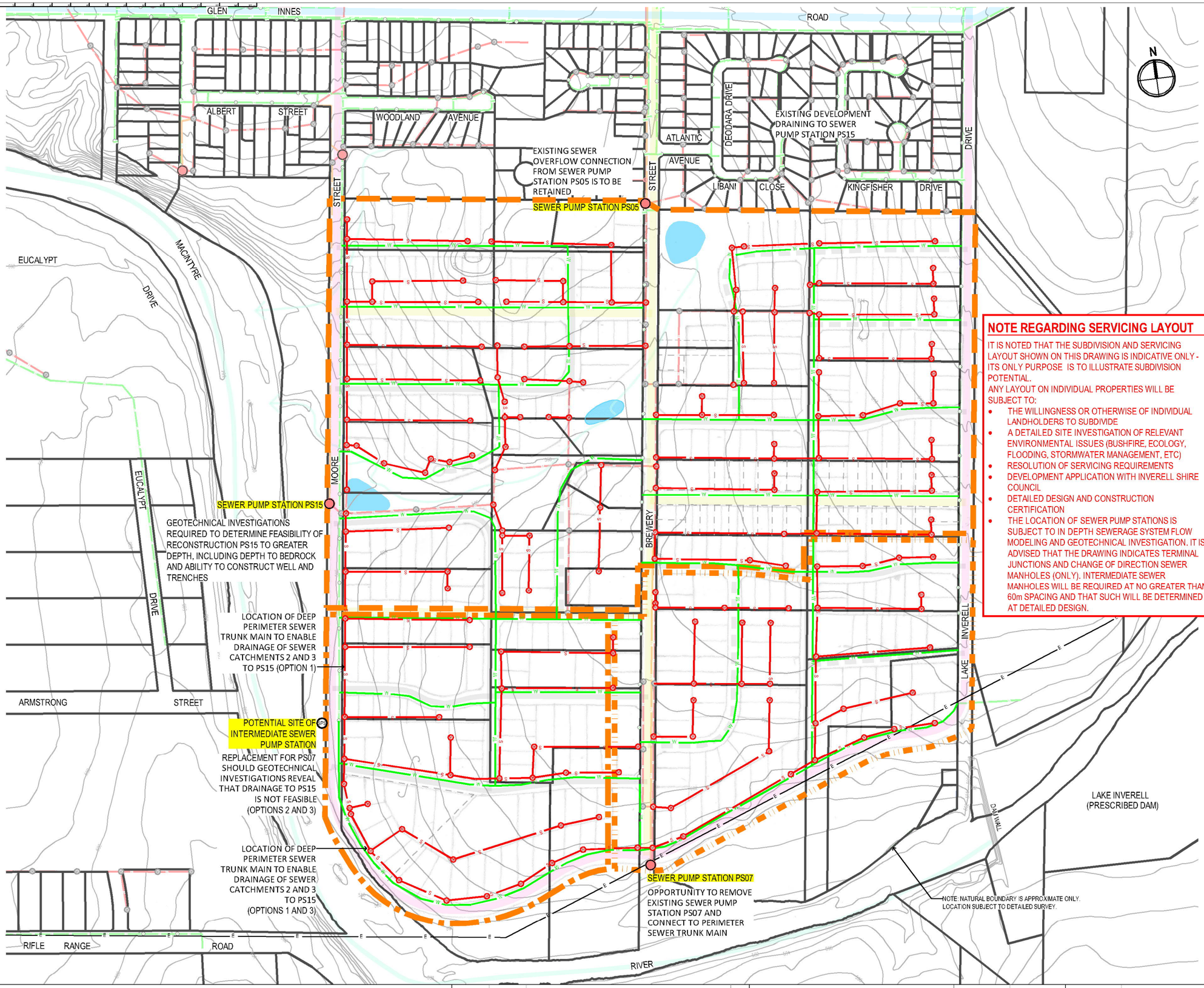
For both sewer and water servicing the development of individual allotments may require out-of-sequence construction. Where out-of-sequence services construction is required co-ordination between neighbouring landowners and Council regarding access across property (potentially via easements) and contribution offsets or other funding mechanisms (to offset the up-front construction costs incurred by the first developer) may be required.

In all cases, the manner and economic feasibility of lead-in works is a matter for each individual landowner to resolve in the servicing of their development.

In the development of the servicing plans for each New Residential Area the following assumptions have been made:

- The servicing network plans have assumed indicative subdivision plan layouts, which are subject to their own assumptions and detailed investigations. The servicing network plans are therefore, similarly, indicative only.

- Indicative sewer layouts have tried to limit wherever possible the need for additional pump stations, or alternatively, where new pump stations are required, to provide as a




## NOTE REGARDING SERVICING LAYOUT

IT IS NOTED THAT THE SUBDIVISION AND SERVICING LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.

ANY LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION
- THE LOCATION OF SEWER PUMP STATIONS IS SUBJECT TO IN DEPTH SEWERAGE SYSTEM FLOW MODELING AND GEOTECHNICAL INVESTIGATION. IT IS ADVISED THAT THE DRAWING INDICATES TERMINAL JUNCTIONS AND CHANGE OF DIRECTION SEWER MANHOLES (ONLY). INTERMEDIATE SEWER MANHOLES WILL BE REQUIRED AT NO GREATER THAN 60m SPACING AND THAT SUCH WILL BE DETERMINED AT DETAILED DESIGN.

## LEGEND

- SITE
- SITE (NATURAL BOUNDARY)
- CADASTRE
- CONTOURS ( 2m INTERVAL)

EXISTING SERVICES

- OVERHEAD ELECTRICITY - MAJOR SUPPLY LINE
- SEWER, MANHOLE AND SEWER PUMPING STATION
- SEWER RISING MAIN
- WATERMAIN, HYDRANT AND STOP VALVE

PROPOSED SERVICES

- PROPOSED SEWER AND SEWER MANHOLE
- PROPOSED WATERMAIN
- PROPOSED SEWER PUMPING STATION
- SEWER CATCHMENT 1 — EXTENT OF DEVELOPMENT AREA CAPABLE OF DRAINING TO SEWER PUMP STATION PS15 UNDER GRAVITY
- SEWER CATCHMENT 2 — EXTENT OF DEVELOPMENT AREA CAPABLE OF DRAINING TO SEWER PUMP STATION PS07 UNDER GRAVITY
- SEWER CATCHMENT 3 — EXTENT OF DEVELOPMENT REQUIRING ADDITIONAL INVESTIGATION WORKS TO DRAIN UNDER GRAVITY. GEOTECHNICAL INVESTIGATIONS TO DETERMINE DEPTH TO BEDROCK AND FEASIBILITY OF RECONSTRUCTING PS15 TO A GREATER DEPTH ALONG WITH DEEP SEWER MAINS.

ADDITIONAL WORKS MAY INVOLVE ONE OF THE FOLLOWING OPTIONS:-

OPTION 1 - AUGMENTATION OF EXISTING PS15
- AUGMENTATION AND/OR REPLACEMENT OF EXISTING PS15 TO A GREATER DEPTH
- CONSTRUCTION OF DEEP PERIMETER SEWER TRUNK MAIN AROUND THE SOUTH WEST PERIMETER OF DEVELOPMENT AREA 1.
- CONNECTION OF DEEP PERIMETER SEWER TRUNK MAIN TO RECEIVING MANHOLE TO ENABLE DECOMMISSIONING OF PS07

OPTION 2 - NEW PUMP STATION
- CONSTRUCTION OF NEW PUMP STATION ADJACENT TO ARMSTRONG STREET

OPTION 3 - REPLACEMENT PUMP STATION AND DECOMMISSIONING OF PS07
- CONSTRUCTION OF NEW PUMP STATION ADJACENT TO ARMSTRONG STREET
- CONNECTION OF PERIMETER SEWER TRUNK MAIN TO RECEIVING MANHOLE TO ENABLE DECOMMISSIONING OF PS07

- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)

## NOTE ON WATERMAINS

PROPOSED WATERMAINS HAVE BEEN SHOWN ON ONE SIDE OF THE ROAD WITH WATER SERVICES UNDER THE ROAD TO SERVICE ADJOINING PROPERTIES. CLARIFICATION WILL NEED TO BE SOUGHT FROM INVERELL SHIRE COUNCIL AS TO WHETHER WATERMAINS ARE NEEDED TO BE DUPLICATED ON BOTH SIDES OF ALL ROADS

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\6148P_OX6148_Inverell Council - New Residential Areas\21_Planning\6148P_SITES.dwg - A1(L)-Servicing EASTT 1.25- Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

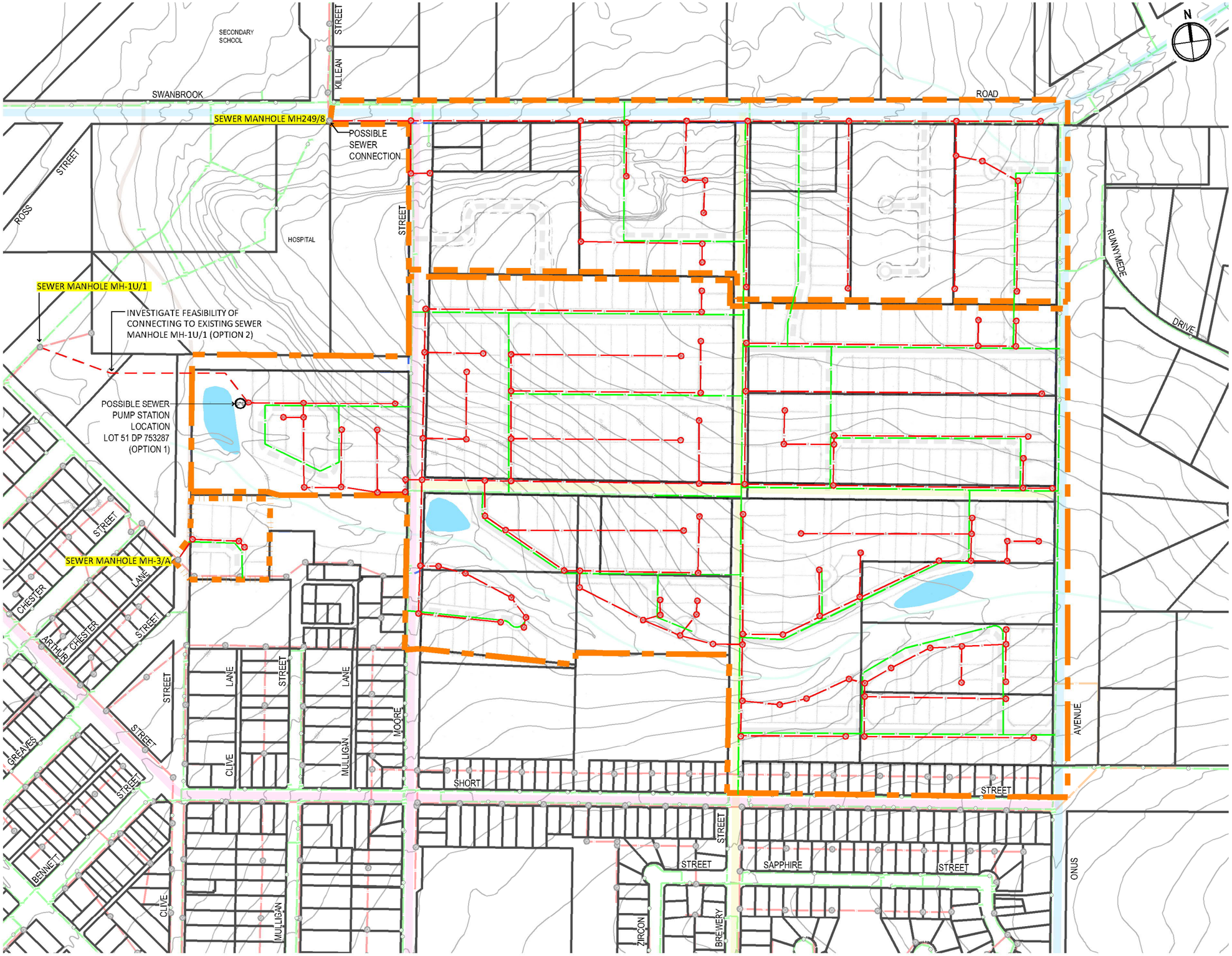
0 125 250

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

| | | | | |
|---|---|---|---|---|
| DRAWING TITLE: | EXHIBIT 17 - SERVICING PLAN - NEW RESIDENTIAL AREA 1 | | | A1 |
| PROJECT: | STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS | | | |
| CLIENT: | INVERELL SHIRE COUNCIL | DRAWING NO: | SHEET: | REVISION: |
| | | 6148P_SITES | 17 | D |




## LEGEND

- SITE
- CADASTRE
- CONTOURS ( 2m INTERVAL)

EXISTING SERVICES

- SEWER AND SEWER MANHOLE
- SEWER RISING MAIN
- WATERMAIN, HYDRANT AND STOP VALVE

PROPOSED SERVICES

- PROPOSED SEWER AND SEWER MANHOLE
- PROPOSED WATERMAIN
- PROPOSED SEWER PUMPING STATION
- SEWER CATCHMENT 1 EXTENT OF DEVELOPMENT AREA CAPABLE OF DRAINING TO EXISTING SEWER MANHOLE MH249/8 LOCATED AT THE INTERSECTION OF SWANBROOK ROAD AND KILLEAN STREET UNDER GRAVITY
- SEWER CATCHMENT 2 EXTENT OF DEVELOPMENT AREA CAPABLE OF DRAINING TO EXISTING SEWER MANHOLE MH-3/A LOCATED AT CHESTER LANE UNDER GRAVITY
- SEWER CATCHMENT 3 EXTENT OF DEVELOPMENT AREA CAPABLE OF DRAINING TO PROPOSED FUTURE SEWER PUMP STATION LOCATED WITHIN LOT 51 DP 753287 (OPTION 1) or SEWER MANHOLE MH-1U/1 WITHIN LOT 291 DP753287 (OPTION 2)
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)

## NOTE ON WATERMAINS

PROPOSED WATERMAINS HAVE BEEN SHOWN ON ONE SIDE OF THE ROAD WITH WATER SERVICES UNDER THE ROAD TO SERVICE ADJOINING PROPERTIES. CLARIFICATION WILL NEED TO BE SOUGHT FROM INVERELL SHIRE COUNCIL AS TO WHETHER WATERMAINS ARE NEEDED TO BE DUPLICATED ON BOTH SIDES OF ALL ROADS

## NOTE REGARDING SERVICING LAYOUT

IT IS NOTED THAT THE SUBDIVISION AND SERVICING LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.

ANY LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION
- THE LOCATION OF SEWER PUMP STATIONS IS SUBJECT TO IN DEPTH SEWERAGE SYSTEM FLOW MODELING AND GEOTECHNICAL INVESTIGATION. IT IS ADVISED THAT THE DRAWING INDICATES TERMINAL JUNCTIONS AND CHANGE OF DIRECTION SEWER MANHOLES (ONLY). INTERMEDIATE SEWER MANHOLES WILL BE REQUIRED AT NO GREATER THAN 60m SPACING AND THAT SUCH WILL BE DETERMINED AT DETAILED DESIGN.

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\C:\REF_OVER\6148_Inverell Council - New Residential Areas\21. Planning\6148P_SITES.dwg - A1(Lj-Servicing FAST 2.16- Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4064
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.06.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

| | | | | |
|---|---|---|---|---|
| DRAWING TITLE: | EXHIBIT 18 - SERVICING PLAN - NEW RESIDENTIAL AREA 2 | | | A1 |
| PROJECT: | STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS | | | |
| CLIENT: | INVERELL SHIRE COUNCIL | DRAWING NO: | SHEET: | REVISION: |
| | | 6148P_SITES | 18 | D |


## LEGEND

- SITE
- CADASTRE
- CONTOURS ( 2m INTERVAL)

EXISTING SERVICES

- SEWER AND SEWER MANHOLE
- WATERMAIN, HYDRANT AND STOP VALVE

PROPOSED SERVICES

- PROPOSED SEWER AND SEWER MANHOLE
- PROPOSED WATERMAIN
- SEWER CATCHMENT 1 EXTENT OF DEVELOPMENT AREA CAPABLE OF DRAINING TO EXISTING SEWER MANHOLE MH-X72/5 LOCATED WITHIN LOT 31 DP876448 UNDER GRAVITY
- SEWER CATCHMENT 2 EXTENT OF DEVELOPMENT AREA CAPABLE OF DRAINING TO EXISTING SEWER MANHOLE MH-164/4 WITHIN LOT 31 DP876448 UNDER GRAVITY
- ARTERIAL ROAD
- BUS STREET
- ACCESS STREET (INDICATIVE ALIGNMENT)

## NOTE ON WATERMAINS

PROPOSED WATERMAINS HAVE BEEN SHOWN ON ONE SIDE OF THE ROAD WITH WATER SERVICES UNDER THE ROAD TO SERVICE ADJOINING PROPERTIES. CLARIFICATION WILL NEED TO BE SOUGHT FROM INVERELL SHIRE COUNCIL AS TO WHETHER WATERMAINS ARE NEEDED TO BE DUPLICATED ON BOTH SIDES OF ALL ROADS

## NOTE REGARDING SERVICING LAYOUT

IT IS NOTED THAT THE SUBDIVISION AND SERVICING LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.

ANY LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION
- THE LOCATION OF SEWER PUMP STATIONS IS SUBJECT TO IN DEPTH SEWERAGE SYSTEM FLOW MODELING AND GEOTECHNICAL INVESTIGATION. IT IS ADVISED THAT THE DRAWING INDICATES TERMINAL JUNCTIONS AND CHANGE OF DIRECTION SEWER MANHOLES (ONLY). INTERMEDIATE SEWER MANHOLES WILL BE REQUIRED AT NO GREATER THAN 60m SPACING AND THAT SUCH WILL BE DETERMINED AT DETAILED DESIGN.

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\C-REF-DR\146_Inverell Council - New Residential Areas\21_Planning\6148P_SITES.dwg - A1EJ-Servicing\MEST 3.16- Sep 2021, angusac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 — 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

DRAWING TITLE: EXHIBIT 19 - SERVICING PLAN - NEW RESIDENTIAL AREA 3

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 19 | D |

replacement to existing installations in order to eliminate the need for small, isolated sewer catchments.

- The nature of prevailing ground profiles generally makes it difficult to achieve deep sewer wells and pipes. Detailed geotechnical investigations and cost/benefits analysis should be undertaken to determine the most efficient and cost effective means to service new development.

- The sewer servicing concept layout has been developed in order to minimise the co-ordination required with downstream landholders, as well as providing for an efficient network layout. The layout however, should not be considered prescriptive in nature, but instead be subject to negotiations between landholders and Council to ensure that development of each New Residential Area progresses in an orderly manner.

- Wherever possible each individual (existing) allotment has been provided with a single point of connection to the downstream sewer network. This is to minimise requirements for the construction of lead in infrastructure where out-of-sequence development is possible.

## 4.7 Heritage and Place Making

Aboriginal Heritage Information Management System (AHIMS) searches did not identify any items of Aboriginal Heritage within the New Residential Areas.

The property containing the Old Brewery on the southern end of Brewery Street (Lot 4 DP233354, 2 Brewery Street) in Area 1 is identified within the Inverell LEP 2012 as a local item of heritage significance (item 1081).

Given the location of the old brewery building close to the DCFDB flood level line (refer to **Section 3.1.4**) the potential exists to contain the building in open space between the Macintyre River and a future ring/perimeter road, and further, to consider the potential for an adaptive reuse of the building befitting of its public/open space setting. However, it is recognised that the current landowner of the Old Brewery site raised concern during the stakeholder feedback process about the dilapidated status of the Old Brewery. It is recommended, therefore, that further investigations be undertaken on the Old Brewery site before any determination is made regarding the adaptive reuse or continued recognition of the Old Brewery as a local item of heritage significance.

## 4.8 Sequencing of Development

Development within each of the New Residential Areas will occur over an extended period of time. In this regard, at the current low levels of new residential land release (currently approximately twelve new lots per year), the New Residential Areas will likely provide for at least the next fifty (50) years, even given an acceleration of development activity. (refer also to **Section 4.4**)

The development of land within each Area will be dependent on the following factors:

1. The market need for new residential development;
2. Individual landholder aspirations; and
3. The proximity of infrastructure and the physical and financial constraints relating to lead in works.

Structure Planning cannot predict 1 and 2 above, however the broad sequencing of development within each New Residential Area can be broadly envisioned by considering the logical sequencing of services and road construction – the most influential being sewer and road infrastructure, and to a lesser degree water supply and stormwater drainage.

Potential development sequencing plans have been prepared for each of the New Residential Areas – refer to Exhibits 20, 21 and 22 – Sequencing Plan – New Residential Area 1, 2 and 3, respectively.

Development sequencing has considered the following:

- The location and capacity of existing infrastructure;
- The logical sequencing of road and trunk service construction; and
- The location of individual properties within the context of the above existing infrastructure and sequencing and stormwater catchments.

In determining the sequencing for the New Residential Areas, the ability to develop each individual allotment was considered and classified according to the following:

1. Short Term Development (minimal co-ordination required)
   Allotment is able to be serviced and provided with access with minimal co-ordination with neighbouring landowners or with Council.

2. Medium Term Development (some co-ordination required)
   Co-ordination with a single adjoining landholder and/or Council where the construction of lead-in works or specific infrastructure (such as a sewer pump station) within that adjoining property will be required, or, alternatively, development proceeds after the development of the adjoining parcel or downstream infrastructure has been constructed.

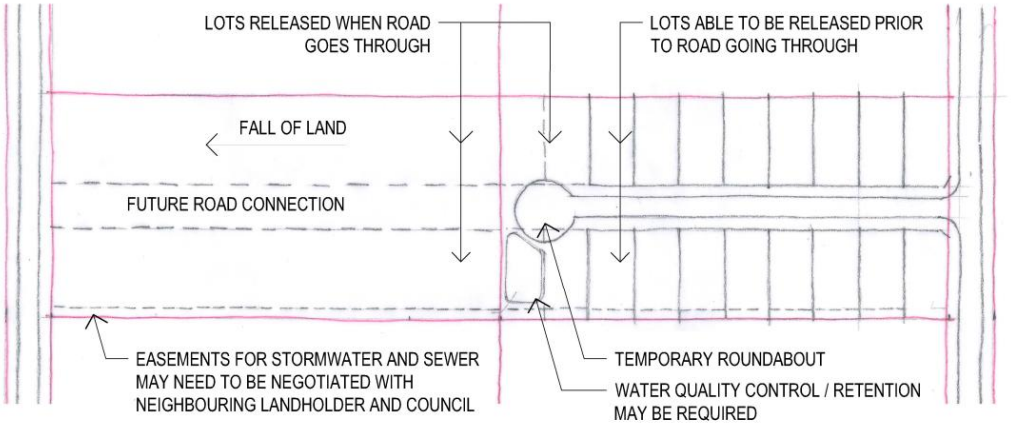
3. Longer Term Development (substantial co-ordination required)
   Co-ordination with multiple adjoining landholders and/or Council where the construction of lead-in works within adjoining properties will be required, or alternatively, only proceed after the development of those enabling land parcels or downstream infrastructure has been constructed.

It is noted that the sequencing plans provided are, like the indicative subdivision plans and services plans, illustrative only, and subject to a wide range of factors which require detailed examination as part of the preparation of any individual development proposal. It should also be noted that the classification of an individual landholding as medium or longer term development should not be considered a prohibition on the out-of-sequence development of that parcel.

### Out-of-sequence development

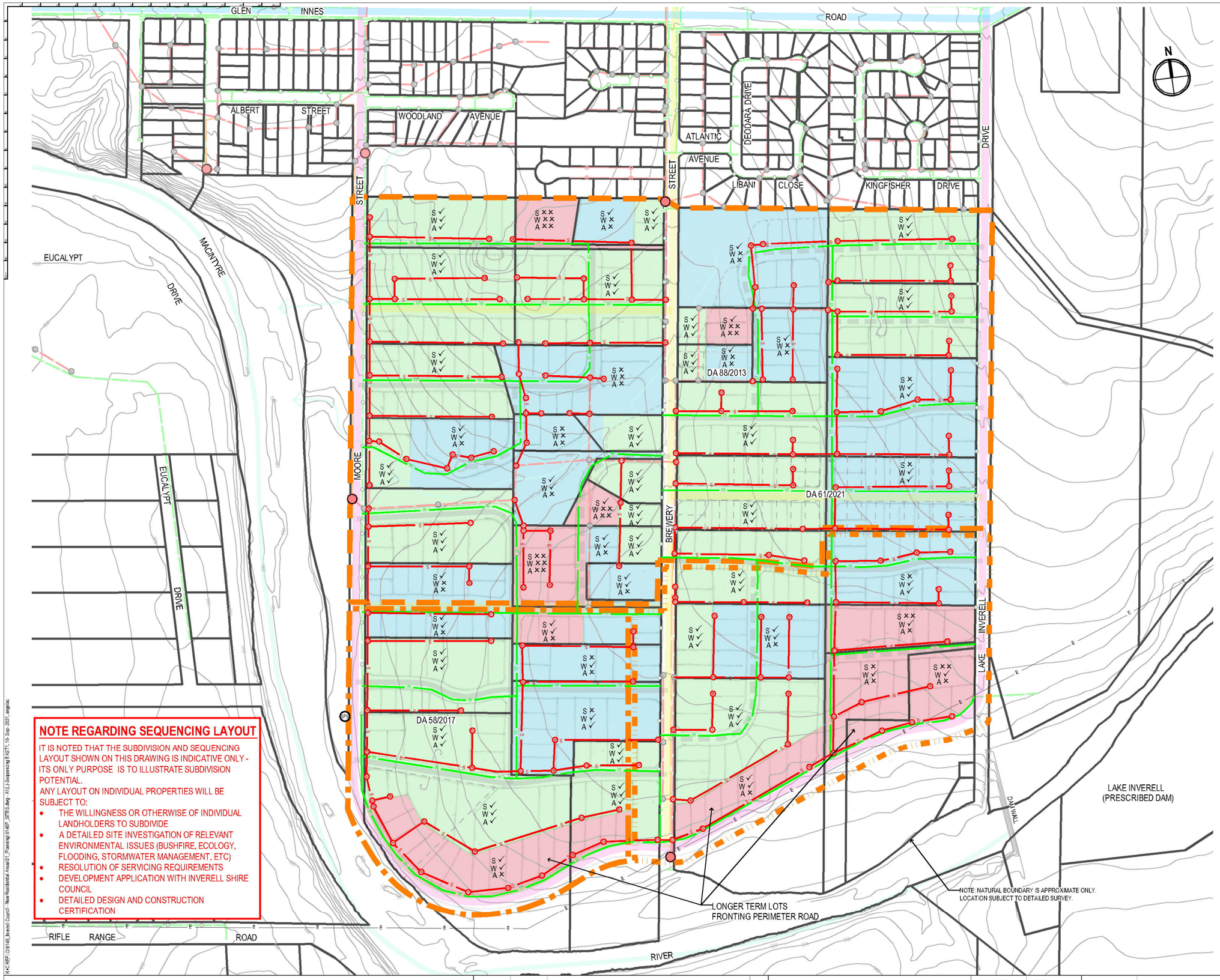
Out-of-sequence development may occur where the developer can demonstrate that appropriate agreements can be reached with neighbouring landholders and Council to enable stormwater management and servicing through the provision of suitable lead-in infrastructure.

For instance, an individual landholder may wish to develop their property ahead of an adjoining landholder who does not. In this instance the potential exists to facilitate development through the negotiation of easements for access, stormwater and services with neighbouring landholders and Council. By way of example an indicative Development Phasing Plan is provided hereunder.




**INDICATIVE DEVELOPMENT PHASING - DIAGRAMMATIC ONLY (NTS)**

The above instance can only be achieved however, if the cost of providing lead in infrastructure is not prohibitive. In this regard, it is noted that Council has limited ability to fund significant lead in infrastructure, even with mechanisms including development contributions, contribution offsets and works-in-kind arrangements. It is the responsibility of each landholder to determine the economic feasibility of the up-front provision of services should out-of-sequence development be desired.




## LEGEND

- SITE
- SITE (NATURAL BOUNDARY)
- CADASTRE
- CONTOURS ( 2m INTERVAL)

**EXISTING SERVICES**

- OVERHEAD ELECTRICITY - MAJOR SUPPLY LINE
- SEWER, MANHOLE AND SEWER PUMPING STATION
- SEWER RISING MAIN
- WATERMAIN, HYDRANT AND STOP VALVE

**PROPOSED SERVICES**

- PROPOSED SEWER AND SEWER MANHOLE
- PROPOSED WATERMAIN
- PROPOSED SEWER PUMPING STATION CATCHMENT 1
- PROPOSED SEWER PUMPING STATION CATCHMENT 2
- PROPOSED SEWER PUMPING STATION CATCHMENT 3
- PROPOSED SEWER PUMPING STATION

**INDICATIVE DEVELOPMENT SEQUENCING**

- SHORT TERM - SERVICES AND ACCESS AVAILABLE
- MEDIUM TERM - SOME COORDINATION WITH ADJOINING LANDOWNERS REGARDING SERVICES AND ACCESS
- LONGER TERM - SUBSTANTIAL COORDINATION WITH ADJOINING LANDOWNERS REGARDING SERVICES AND ACCESS
- S ✓ — SEWER - AVAILABLE
- S × S ×× — SEWER - COORDINATION WITH ADJOINING LANDOWNER/S REQUIRED
- W ✓ — WATER - AVAILABLE
- W × W ×× — WATER - COORDINATION WITH ADJOINING LANDOWNER/S REQUIRED
- A ✓ — ACCESS - AVAILABLE
- A × A ×× — ACCESS - COORDINATION WITH ADJOINING LANDOWNER/S AND /OR COUNCIL REQUIRED
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)
- GRAVEL MAINTENANCE TRACK

## NOTE REGARDING SEQUENCING LAYOUT

IT IS NOTED THAT THE SUBDIVISION AND SEQUENCING LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.

ANY LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K:\C-REF\6148_Inverell Council - New Residential Areas\21_Planning\6148P_SITES.dwg - A1LI-Sequencing Exh\T1, 18 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL


King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au


| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD
SCALE: 1:2500 @ A1 (1:5000 @ A3)

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

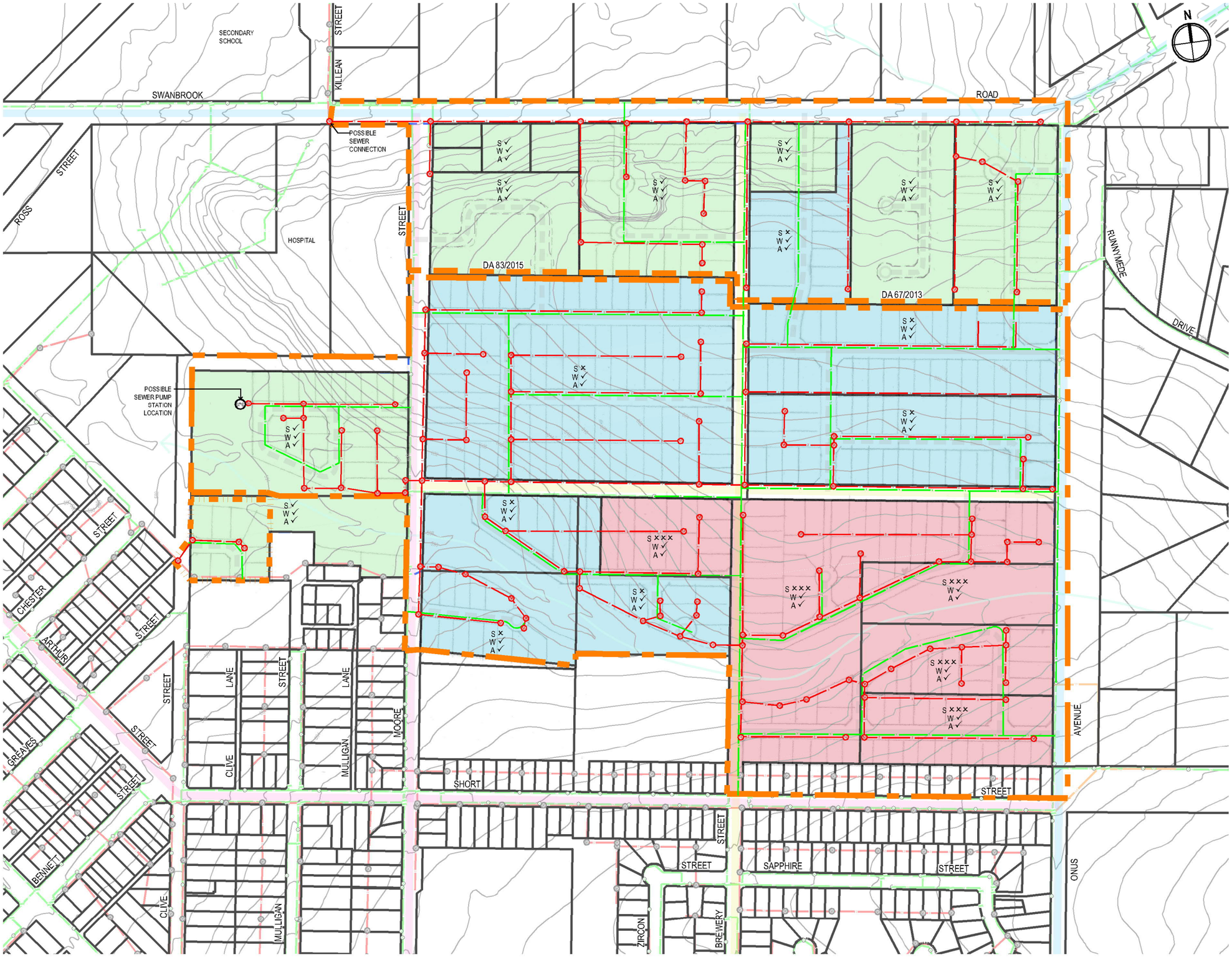
DRAWING TITLE: EXHIBIT 20 - SEQUENCING PLAN - NEW RESIDENTIAL AREA 1

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 20 | D |




## LEGEND

SITE

CADASTRE

CONTOURS ( 2m INTERVAL)

EXISTING SERVICES

SEWER AND SEWER MANHOLE

SEWER RISING MAIN

WATERMAIN, HYDRANT AND STOP VALVE

PROPOSED SERVICES

PROPOSED SEWER AND SEWER MANHOLE

PROPOSED WATERMAIN

PROPOSED SEWER PUMPING STATION CATCHMENT 1

PROPOSED SEWER PUMPING STATION CATCHMENT 2

PROPOSED SEWER PUMPING STATION CATCHMENT 3

PROPOSED SEWER PUMPING STATION

INDICATIVE DEVELOPMENT SEQUENCING

SHORT TERM - SERVICES AND ACCESS AVAILABLE

MEDIUM TERM - SOME COORDINATION WITH ADJOINING LANDOWNERS REGARDING SERVICES AND ACCESS

LONGER TERM - SUBSTANTIAL COORDINATION WITH ADJOINING LANDOWNERS REGARDING SERVICES AND ACCESS

S ✓ SEWER - AVAILABLE

S ✕ S ✕✕✕ SEWER - COORDINATION WITH ADJOINING LANDOWNER/S REQUIRED

W ✓ WATER - AVAILABLE

A ✓ ACCESS - AVAILABLE

ARTERIAL ROAD

BUS STREET

CONNECTOR STREET

ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)

ACCESS STREET (INDICATIVE ALIGNMENT)

GRAVEL MAINTENANCE TRACK

## NOTE REGARDING SEQUENCING LAYOUT

IT IS NOTED THAT THE SUBDIVISION AND SEQUENCING LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.

ANY LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

KC REF: 2/6148_Inverell Council - New Residential Areas\01_Planning\6148P_SITES.dwg - A1(L) - Sequencing\FASTZ 15 - Sep - 2021 - angelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: PO Box 243 Port Macquarie NSW 2444
T: 02 6586 2555
F: 02 6583 4084
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY LTD, IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

DRAWING TITLE: EXHIBIT 21 - SEQUENCING PLAN - NEW RESIDENTIAL AREA 2

A1

PROJECT: STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS

CLIENT: INVERELL SHIRE COUNCIL

| DRAWING NO: | SHEET: | REVISION: |
|---|---|---|
| 6148P_SITES | 21 | D |


## LEGEND

- SITE
- CADASTRE
- CONTOURS ( 2m INTERVAL)

**EXISTING SERVICES**

- SEWER AND SEWER MANHOLE
- WATERMAIN, HYDRANT AND STOP VALVE

**PROPOSED SERVICES**

- PROPOSED SEWER AND SEWER MANHOLE
- PROPOSED WATERMAIN
- PROPOSED SEWER PUMPING STATION CATCHMENT 1
- PROPOSED SEWER PUMPING STATION CATCHMENT 2

**INDICATIVE DEVELOPMENT SEQUENCING**

- SHORT TERM - SERVICES AND ACCESS AVAILABLE
- LONGER TERM - SUBSTANTIAL COORDINATION WITH ADJOINING LANDOWNERS REGARDING SERVICES AND ACCESS
- S ✓ SEWER - AVAILABLE
- W ✓ WATER - AVAILABLE
- A ✓ ACCESS - AVAILABLE
- ARTERIAL ROAD
- BUS STREET
- CONNECTOR STREET
- ACCESS STREET WITH CROSS BLOCK CONNECTION (INDICATIVE ALIGNMENT)
- ACCESS STREET (INDICATIVE ALIGNMENT)
- GRAVEL MAINTENANCE TRACK

## NOTE REGARDING SEQUENCING LAYOUT

IT IS NOTED THAT THE SUBDIVISION AND SEQUENCING LAYOUT SHOWN ON THIS DRAWING IS INDICATIVE ONLY - ITS ONLY PURPOSE IS TO ILLUSTRATE SUBDIVISION POTENTIAL.

ANY LAYOUT ON INDIVIDUAL PROPERTIES WILL BE SUBJECT TO:

- THE WILLINGNESS OR OTHERWISE OF INDIVIDUAL LANDHOLDERS TO SUBDIVIDE
- A DETAILED SITE INVESTIGATION OF RELEVANT ENVIRONMENTAL ISSUES (BUSHFIRE, ECOLOGY, FLOODING, STORMWATER MANAGEMENT, ETC)
- RESOLUTION OF SERVICING REQUIREMENTS
- DEVELOPMENT APPLICATION WITH INVERELL SHIRE COUNCIL
- DETAILED DESIGN AND CONSTRUCTION CERTIFICATION

## CAUTION

1. THIS PLAN HAS BEEN PREPARED FROM COUNCIL SUPPLIED GIS MAPPING INFORMATION. IT IS SUITABLE ONLY FOR THE PURPOSE OF BROAD AREA SITE ANALYSIS AND STRUCTURE PLANNING. ALL SITE ANALYSIS AND PROPOSALS ARE SUBJECT TO DETAILED SITE SURVEY AND PLANNING ASSESSMENT AND DEVELOPMENT APPROVAL PROCESSES.
2. THE COORDINATES ADOPTED ARE MGA ZONE 56 COORDINATES AND GRID DISTANCES.

K+C REF: D:\6148_Inverell Cncl - New Residential Areas\21_Planning\6148P_SITES.dwg - A1LJ-Sequencing\RESTS, 16 Sep 2021, angelac

Inverell Shire Council

KING + CAMPBELL

King & Campbell Pty Ltd
www.kingcampbell.com.au
A: P.O. Box 243 Port Macquarie NSW 2444
T: 02 6583 2555
F: 02 6583 4084
E: info@kingcampbell.com.au

| REV. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| A | 25.01.2019 | ISSUED FOR REVIEW | AJC |
| B | 28.03.2019 | ISSUED FOR CLIENT REVIEW | AJC |
| C | 12.08.2021 | ISSUE FOR FINAL DRAFT | AJC |
| D | 16.09.2021 | ISSUE FOR FINAL DRAFT | AJC |

DATUM: AHD

SCALE: 1:2500 @ A1 (1:5000 @ A3)

0 — 125.0

NOTE: DO NOT SCALE OFF DRAWINGS. USE FIGURED DIMENSIONS ONLY. REPORT ANY DISCREPANCIES TO THE AUTHOR. THIS DRAWING, BEING THE PROPERTY OF KING & CAMPBELL PTY. LTD., IS PROTECTED BY COPYRIGHT AND MUST NOT BE USED, REPRODUCED OR COPIED WHOLLY, OR IN PART WITHOUT THE WRITTEN PERMISSION OF KING & CAMPBELL PTY. LTD.



| | |
|---|---|
| PROJECT NO: | 6148 |
| DA NO.: | - |
| DESIGNED BY: | DAT |
| DRAWN BY: | AJC |
| CHECKED BY: | DAT |
| DATE CREATED: | APRIL 2018 |

| | | | | |
|---|---|---|---|---|
| DRAWING TITLE: | EXHIBIT 22 - SEQUENCING PLAN - NEW RESIDENTIAL AREA 3 | | | A1 |
| PROJECT: | STRUCTURE PLANS FOR NEW RESIDENTIAL AREAS | | | |
| CLIENT: | INVERELL SHIRE COUNCIL | DRAWING NO: | SHEET: | REVISION: |
| | | 6148P_SITES | 22 | D |

# Section 5: Next Steps

The adoption of this Structure Plan by Council at an Ordinary Council Meeting is considered a significant step towards the development of the three (3) identified New Residential Areas.

It is recognised that the New Residential Areas represent significant development potential for Inverell. The Structure Plan provides the framework for this development to occur. However, to ensure that the Structure Plan achieves its vision of 'providing for a well-planned urban community' a number of 'next steps', are required before development can proceed. These 'next steps' include amending a number of existing Council Policies and documents and additional assessment, including:

- The Inverell Development Control Plan 2013 be amended to recognise this Structure Plan and further expand on any relevant development controls particular to each of the New Residential Areas.

- The Inverell Shire Council Section 94 Contribution Plan (amended 2003) be amended to include the New Residential Areas and provide a mechanism to levy development for the costs associated with the required road and infrastructure upgrades.

- The Development Servicing Plan (DSP) No. 1 (August 2005) be amended to recognise the New Residential Areas as well as the significant infrastructure required to service the areas (see below).

- The preparation of a "Future Urban Traffic Analysis and Assessment".

As part of the development of the Structure Plan it has been identified that new and/or upgraded transport infrastructure will be required to service the growth in the New Residential Areas and the town generally, the costs of which will be significant and cannot be fully borne by Council. Accordingly, it is considered that development occurring within the New Residential Areas must contribute to the necessary future infrastructure upgrades as well as any facilities required by the community to service future development.

Road and cycleway network improvements, many being beyond the immediate bounds of the New Residential Areas, will likely be required, partly as a result of the development within the New Areas and partly as a result of the general growth of Inverell. Based on preliminary investigations undertaken as a part of the preparation of this Structure Plan, the following future road network improvements are considered likely to be required (refer also to **Section 4.3.2** Street Network):

- Intersection of Moore Street and the Gwydir Highway.
- Intersection of Brewery Street and the Gwydir Highway.
- Intersection of Lake Inverell Drive and the Gwydir Highway.
- Intersection of Onus Avenue and the Gwydir Highway.
- Intersection of Moore Street and Swanbrook Road.
- Intersection of Vernon Street and the Gwydir Highway.
- Perimeter Road linking the ends of Lake Inverell Drive, Brewery Street and Moore Street.
- Future Onus Avenue arterial road link.
- Cycleways along perimeter roads and open space corridors, and a cycleway link across the Macintyre River.