STATEMENT OF ENVIRONMENTAL EFFECTS

Prepared for:

Charles Sturt University

Development:

Proposed Health Services Education Facility (Bathurst Community Engagement and Wellness Precinct)

Address:

353 Panorama Avenue, Bathurst

Date:

30 August 2012

adtp Anthony Daintith TOWN PLANNING

ABN 46 121 454 153
170 Rankin Street, Bathurst
293 Dalton Street, Orange
PO Box 1975, Orange NSW 2800
P: (02) 63624523
F: (02) 63611906
E: mail@adtp.com.au
W: www.adtp.com.au

DESCRIPTION: **Health Services Education Facility**

CLIENT: **Charles Sturt University**

Anthony Daintith Town Planning Pty Ltd
ABN 46 121 454 153
ACN 121 454 153

Contact: 170 Rankin Street, Bathurst
293 Dalton Street, Orange
M: PO Box 1975, Orange NSW 2800
T: 02 63624523
F: 02 63611906
E: mail@adtp.com.au

QUALITY ASSURANCE

This document has been prepared, checked and released in accordance with the Quality Control Standards established by Anthony Daintith Town Planning.

Version	Date	Description	By
1.0	15/8/2012	Draft	AD
2.0	30/8/2012	Draft 2	AD
3.0	30/8/2012	Approved	AD

This document has been authorised by

Anthony Daintith (Principal)
Date: 30/8/2012

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CONTENTS

1 BACKGROUND

1.1 INTRODUCTION

Charles Sturt University (CSU) has engaged Anthony Daintith Town Planning (ADTP) to prepare a Statement of Environmental Effects (SOEE) to support a Development Application to Bathurst Regional Council, for the development of the health services education facility within the Bathurst Community Engagement and Wellness Precinct at CSU, 353 Panorama Avenue, Bathurst.

The purpose of this document is to:

- Describe the existing environment;
- Outline the proposed development;
- Consider relevant statutory matters; and
- Make conclusions and recommendations for Councils consideration.

The development application consists of the following components:

- Completed DA form;
- Statement of Environmental Effects;
- Site & Architectural Plans by Brewster Hjorth Architects;
- Landscape Concept Plan prepared by Taylor Brammer Landscape Architects
- Stormwater Management Plan by Northrop Engineers
- Traffic Report by TEF Consulting
- Heritage Asset Management Strategy Charles Sturt University, NSW Government Architect's Office

1.2 APPLICANT

The applicant is Charles Sturt University Crown Reserve Trust (Contact person – Maree Neary)

1.3 CSU CROWN RESERVE TRUST

353 Panorama Ave, Bathurst, Lot 236 DP 750357 is within Charles Sturt University Crown Reserve Trust; Reserve Number 590189. The relevant Managing Corporation of this trust is Charles Sturt University. Charles Sturt University (CSU) was formally incorporated on 19 July 1989 under the NSW *Charles Sturt University Act 1989*.

The NSW *Crown Reserve Act 1989* requires that the activities undertaken on the crown land are consistent with the objects of the trust. Part 2.7.3 of NSW *Charles Sturt University Act 1989* states the Object and functions of the university. Of particular relevance for this development:

(a) the University may exercise commercial functions comprising the commercial exploitation or development, for the University's benefit, of any facility, resource or property of the University or in which the University has a right or interest (including, for example, study, research, knowledge and intellectual property and the practical application of study, research, knowledge and intellectual property), whether alone or with others,

(c) the University has such general and ancillary functions as may be necessary or convenient for enabling or assisting the University to promote the object and interests of the University, or as may complement or be incidental to the promotion of the object and interests of the University,

1.4 LANDOWNER CONSENT

353 Panorama Ave, Bathurst, Lot 236 DP 750357 is within Charles Sturt University Crown Reserve Trust; Reserve Number 590189. The relevant Managing Corporation of this trust is Charles Sturt University. The attached DA form has been signed by Charles Sturt University Crown Reserve Trust Trustee, Mr Mark Burback, within his role as CSU Secretary. CSU has also served a copy of the Development Application to the Crown Land Office; 92 Kite Street, Orange NSW 2800.

2 SUBJECT LAND

2.1 LOCATION AND TITLE

The subject land is identified as 353 Panorama Avenue, Bathurst. Refer to **Figures 1 & 2**, which depict the site within the locality.

The Bathurst Campus of Charles Sturt University is located approximately two kilometres south of Bathurst on Panorama Avenue. The campus is bound to the north by Research Station Drive, and to the east by Panorama Avenue.

The existing campus buildings which vary in age are spread across a large area. The campus buildings are accessed via Village Drive and several minor roads.

The Campus Masterplan allows for a Community Engagement and Wellness Precinct inclusive of the new Community Allied Health Clinic is to be located adjacent the existing Dentistry Facility towards the east of the Campus. Locating the Clinic within this new Precinct will formalise the east of the Campus as the public area for clinical treatment, ensuring the additional traffic and pedestrian load will not impact on the greater campus and student areas.

The land title description is as per **Table 1**.

Table 1: Lot Details

Lot	Deposited Plan
236	750357

2.2 GENERAL SITE DESCRIPTION

The site is adjacent to the entrance of the CSU Bathurst Campus and is located to the north of the existing Dentistry Clinic.

The site of the proposed buildings slopes gently west from Panorama Avenue down to towards the Rugby Union oval.

There are no watercourses traversing the site of the proposed development.

For the proposal, a total of 28 trees will require removal. Three of the trees are significant eucalyptus trees located within close proximity for the road extension to the new car park area. The other additional 25 trees are small in nature.

Photos 1-4 provide a visual representation of the property.

Figure 1: Locality Plan

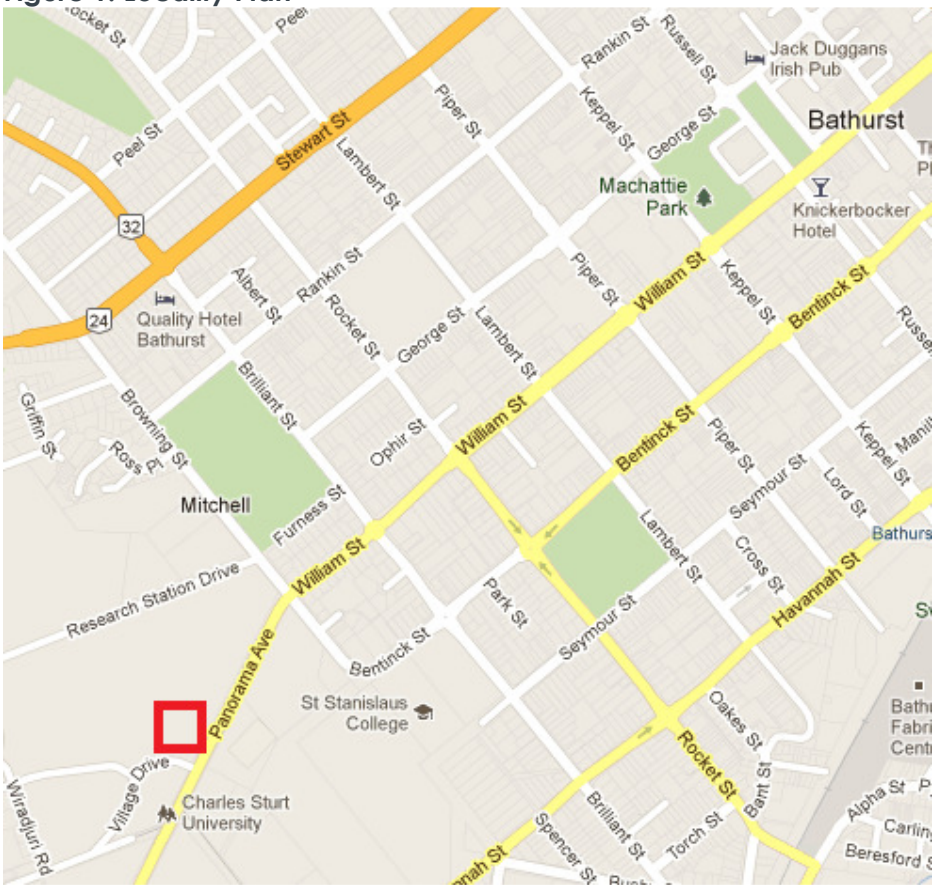

Figure 2: Aerial Photo

Please note that the latest aerial photo does not include the recently constructed Dental and Oral Health Clinic.

Photo 1: Entrance to CSU

Photo 2: Intersection

Photo 3: Existing Dental Clinic

Photo 4: Subject site of proposed development

3 PROPOSAL

The proposal seeks development consent for the development of a health services facility within the "Community Engagement and Wellness Precinct".

Brewster Hjorth Architects (BHA) has undertaken a precinct plan of an overall "Community Engagement and Wellness" precinct on the CSU Bathurst campus. The precinct was outlined by a HHF funding application to include four stages:

Stage 01: Dentistry Clinic (Currently Built and Operational)

Stage 02: Community Allied Health Clinic (CAHC) – delivering a range of student led services to the community. Funding provided through Health Workforce Australia.

Stage 03: An Inter professional Primary Health Clinic (IPHC) – developed by CSU and leased to a private medical practice to delivery primary health services to individuals and families. To be combined in into a single Primary Health care building with Stage 02. The plan for Stage 03 incorporates ancillary spaces for a cafe, small retailer and children's playground to make the site a social and wellness focussed space, as well as a health and medical precinct. The retail components will be developed and sub-let by the University.

Stage 04: The construction of a Surgical and Medical Hospital to be operated by a private provider (subject to a future development application).

This development application includes only **Stages 02 and 03**.

Health Precinct

The proposed new facility forms the next stage of the Health Precinct which was commenced with the construction of the Dentistry Clinic. The new building will be sited north of the existing dentistry building.

Careful consideration of the topography, and how the new building will create a health precinct and to enhance connection to the existing Dentistry Clinic was undertaken in the design of the buildings placement. The position also establishes a prominent and clearly identifiable new facility. This will allow it to connect with the existing facilities but also create a central focus to the health precinct.

This will allow the new building as the centre of the precinct to have a main entrance to the north. This location allows the Inter professional health clinic

address a common address with future Day Surgery, and maintain a secondary entrance which connects to the south to dentistry. The design of the entrances and main lobby space will ensure these connects are established both in planning and architectural form.

It is proposed to locate a new car park to the north of the new building. This car park will be designed so that it can be extended to cater for future day surgery facility. The existing access road will be extended to the north to connect the new car park.

The new facility will enable the placement of students and researchers to better engage with regional and rural patients, health and allied health practitioners, and to attract the students who are most likely to return to rural and regional practice, to support the sustainability and growth of need for allied health practitioners in regional and rural Australia.

The University's objective is to develop an operational model which will provide medical, nursing and allied health services in an integrated environment, which develops effective inter-professional health teams. The services will not only focus on treating unwell patients but importantly will emphasis wellness and preventative health in order to reduce illness.

The lack of physical proximity between health professionals impedes the development of effective inter professional teams. Fragmentation of health practice also limits the capacity to develop inter professional clinical practice opportunities that will prepare the next generation of health students for practice in rural and remote Australia. There is therefore a need to develop stronger linkages between primary health care providers and specialist services in regional areas to deliver higher quality integrated care.

The University's objective is to develop a health precinct that aims to address three interrelated challenges:

- Horizontal integration of primary health care services in the Bathurst Region;
- Vertical integration between primary health and hospital services and the seamless movement of patients between the systems; and
- Preparation of the next generation of health care professionals for rural and regional Australia.

The project will address these challenges in rural health system by:

- Improving the convenience and accessibility of a broad range of health and wellness services in Bathurst and surrounding rural communities;
- Enhancing community health capacity through better integration of primary health services;

- Improving team based management of chronic disease and complex care needs;
- Providing timely and quality acute health care services;
- Improving integration of primary, specialist and surgical services;
- Expanding clinical education and training opportunities in an inter-professional practice context;
- Developing models through research into inter-professional practice and care adaptable to the needs of rural and remote communities and disseminate knowledge and expertise to the professional health community.

The Facility

The proposed development is a total of 2320 m^2 in area. The clinical components of the project include:

- 9 allied health clinics to be used by University students treating patients in the fields of physiotherapy, podiatry, rehabilitation, Nursing, Occupational Therapy, Sports Science and human movement.
- 2 group rooms for University students treating patients in the fields of Psychology, Speech Pathology, Nutrition and Dietetics.
- Women's Wellness Clinic for University Nursing and Midwifery students specializing in Women's Health issues to treat patients.
- 4 allied health clinics for the use of a private physiotherapy provider.
- Specialist rooms including testing clinic, Biomechanics clinic, client kitchen and gym to be used by students and professional clinicians treating patients in the facility.
- 8 GP clinics for doctors to treat patients.

These clinics will be served by a range of clinical support spaces including, sterilisation, clean utility, dirty utility, consumerable stores and the like.

The proposed facility includes a multi-purpose room for community health education, to allow the facility to run programs for patients to develop an integrated wellness approach to their health.

A Simulation Suite is also proposed, this space provides simulation training for students in clinical operations and procedures outside the patient clinics. This facility is required to supplement aging facilities currently located on the campus to provide the required training to supplement clinical placement.

It is also proposed to include 2 small retail tenancies as part of the development primarily to serve the patients of the new health facility and adjacent dental clinic. It is intended one of the retail facilities will be a wellness café.

The University Clinic will operate generally between 9am and 5pm. The Physiotherapist and General Practitioners will have normal operating hours of 8am to 6pm.

The University will run group programs out of hours as required; these will not be every day.

The major use of the facility will be between 9am and 5pm Monday to Friday.

The building plan

One of the projects primary objectives is to create a integrated health care facility. This objective has driven the development of the planning of the proposed building.

To achieve this objective it has been decided by the University not to separate the GP clinic, private physiotherapy practice, women's wellness centre and University allied health clinics into separate tenancies within a building, but to integrate them together as a single facility, where professionals can actively work together to address clients needs.

A clear division of functional spaces has been developed to organise the proposed facility. All the clinical spaces have been grouped together as a clinical wing to the building. The non clinical areas, including, back of house offices, multi purpose, simulation teaching and retail have been grouped together as a non clinical wing. These two wings are connected via the lobby and waiting area for the facility.

The retail facilities have been located on the northern face of the non clinical wing. This location maximises their exposure and flexibility as well as allowing them to be connected to other internal areas.

The circulation and flow paths through facility will be of primary importance in establishing good operational flows. This has been considered in the design, with the clinical wing being designed around a "racecourse" corridor with clinics located around outside edge and clinical support spaces in the centre. The flow of staff and patients has been carefully accessed and reviewed with the users to achieve the best flows and relationships between proposed facilities.

In developing the building planning an assessment of inward flows for deliveries and outward flows for waste has been undertaken. This has allowed a robust services and waste strategy to be developed and work-shopped thorough with the users.

Architectural Form

The design of the building form for the proposed building was developed with consideration for the specifics of the site and functional and operational requirements. These considerations have governed the architectural proposal shaped the architectural form of the design.

The buildings main foyer has been designed as a higher form connecting the lower forms of the clinical and non-clinical wings of the building. This form will act as visual "beacon" identifying the main entrance of the new facility on approach to the facility. The form of this element has been designed to be higher on the main entry or northern side and pitching down to the southern secondary entrance which is aligned with the entry of the existing dentistry building. The lobby waiting area has been located on the site directly north of the entry to dentistry, this creates a clear connection between the two facilities. This will be reinforced by an access path between the two neighbouring buildings and will ensure the creation of an integrated precinct.

The architectural expression of the proposed building's form is a direct expression of the buildings internal workings and planning strategy. The three identifiable forms represent the three distinct functions of the proposed Building. This being the clinic area, the non-clinical area, and the main entry foyer area being the thread that ties these two wings together.

Through the juxtaposition of the high form of the central space filled with light and made interesting through the raked ceiling sweeping down to lead you to existing dentistry building beyond nestled between its two more robust wings. The form of the clinic and the support wings of the proposed Building draws from the site with their large skillion roof and eaves gutter which allow the building to shed water easily as well as gives the building a distinct angular form sloping up to meet the central atrium.

The building's facades of corrugated metal sheet are reminiscent of the rural sheds that surround the Bathurst landscape. The playful angling of the metal sheeting and the articulation of the fenestration along the face of the proposed building add a playful character to its facades. At the same time has a simple repetitive rhythm that allows for minimal extent of glazed windows assisting in reducing the thermal loss in cold winter season. This in return helps in promoting simple construction method as well as keeping the construction cost low.

The recessed facade is expressed by the use of angled soffits and blades along the east and western facades. These assist in breaking the scale of the form, creating the perception of a series of portals along the otherwise long eastern and western facades. These portals and blades are also used to help support gutters and accommodate roof downpipes. The angular recesses also serve the dual purpose, providing sunshading as well as creating the

buildings distinct architectural language, which relates to the existing buildings on site and in turn giving the proposed new Building an identity of its own.

4 TOWN PLANNING CONSIDERATIONS

In determining the application, Council must take into consideration the relevant matters under Section 79C (1) of the *Environmental Planning and Assessment Act, 1979*.

79C Evaluation

(1) Matters for consideration—general

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

(i) any environmental planning instrument, and
(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the draft instrument has been deferred indefinitely or has not been approved), and
(iii) any development control plan, and
(iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and
(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph),
(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979),

that apply to the land to which the development application relates;

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality;

(c) the suitability of the site for the development;

(d) any submissions made in accordance with this Act or the regulations; and

(e) the public interest.

SECTION 79(C) ASSESSMENT

(a)(i) The provisions of any environmental planning instrument

LOCAL ENVIRONMENTAL PLANS

BATHURST REGIONAL (INTERIM) LOCAL ENVIRONMENTAL PLAN 2005

Zoning

The subject land is zoned 5(a) Special Uses (Public Purposes) under the provisions of the LEP.

Permissibility

A "health services facility" is permissible on the subject land pursuant to Clause 57(1) of *State Environmental Planning Policy (Infrastructure) 2007*. It is noted that the proposal could also be defined as a public facility or building which is also permissible in the zone.

Applicable LEP Clauses

6 Zoning control table

Zone No 5 (a) Special Uses—Public Purposes Zone

1 Objectives of zone

The objectives of the zone are as follows:

(a) to identify land that may be used for a particular public purpose, whether by a government or non-government body,

(b) to provide for the cultural and social needs of the community.

2 Without development consent

Nil.

3 Only with development consent

Development for the purpose of:

advertisements (displayed in conjunction with a permissible use and situated on the land on which that use is conducted), child care centres, community buildings, drainage, entertainment facilities, public facilities or buildings, recreation facilities or areas, roads, technology businesses, utility installations (other than gas holders or generating works).

4 Prohibited

Any development not included in Item 2 or 3.

Comment

As discussed above, the proposed development (health services facility) is permissible subject to the consent of Council via the lodgement of a Development Application.

The following comments are made in relation to the zone objectives:

- The development will provide a service for which there is a demand for in the locality.
- The development will meet the social needs of the community by providing services for the surrounding community.

As detailed throughout this report, the proposed development can generally be shown to be consistent with the relevant objectives of the zone.

12 Mount Panorama environs

(1) This clause applies to the land identified on the land use map by red hatching and the words "50dBA Noise Contour".

(2) Despite any other provision of this plan, the only development for residential purposes that may be carried out on the land to which this clause applies is development that could have been carried out on that land under Bathurst Local Environmental Plan 1997 as in force immediately before the appointed day.

Comment

The land is affected by the 50dBA Noise Contour – however there is no residential component proposed as part of this development application.

STATE ENVIRONMENTAL PLANNING POLICYS

STATE ENVIRONMENTAL PLANNING POLICY NO 55—REMEDIATION OF LAND

Council must consider Clause 7 of the SEPP when determining a Development Application:

7 Contamination and remediation to be considered in determining development application

(1) A consent authority must not consent to the carrying out of any development on land unless:

(a) it has considered whether the land is contaminated, and

(b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and

(c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose.

Comment

The potential for contamination appears minimal. In terms of potential soil contamination, the subject land has been evaluated for:

- Evidence of previous mining activity;
- Evidence of existing and previous dip sites and other associated infrastructure;
- Evidence of orcharding or any other horticultural activities; and
- Vegetative and other features which could indicate possible soil contamination.

It is noted that there was no signs of contamination found during the construction of the adjacent Dentistry facility.

Accordingly, it is recommended that a detailed investigation is not necessary or warranted in this instance.

STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007

Pursuant to Clause 56 of the SEPP, the proposed development is best defined as a "health services facility". The equivalent zone is SP2 Infrastructure.

56 Definitions

In this Division:

health services facility *means a facility used to provide medical or other services relating to the maintenance or improvement of the health, or the restoration to health, of persons or the prevention of disease in or treatment of injury to persons, and includes the following:*

(a) day surgeries and medical centres,
(b) community health service facilities,
(c) health consulting rooms,
(d) facilities for the transport of patients, including helipads and ambulance facilities,
(e) hospitals.

prescribed zone means any of the following land use zones or a land use zone that is equivalent to any of those zones:

(a) RU4 Rural Small Holdings,
(b) RU5 Village,
(c) RU6 Transition,
(d) R1 General Residential,

(e) R3 Medium Density Residential,
(f) R4 High Density Residential,
(g) R5 Large Lot Residential,
(h) B2 Local Centre,
(i) B3 Commercial Core,
(j) B4 Mixed Use,
(k) B5 Business Development,
(l) B6 Enterprise Corridor,
(m) B7 Business Park,
(m1) B8 Metropolitan Centre,
(n) SP1 Special Activities,
(o) SP2 Infrastructure.

57 Development permitted with consent

(1) Development for the purpose of health services facilities may be carried out by any person with consent on land in a prescribed zone.

(2) Development for any of the following purposes may be carried out by or on behalf of a public authority with consent on State land that is in a land use zone identified by another environmental planning instrument as a "special use" zone for a health services facility:

(a) biotechnology research or development industries,

(b) business premises or retail facilities to cater for patients, staff or visitors,

(c) multi dwelling housing.

(3) Consent must not be granted for development of a kind referred to in subclause (2) unless the consent authority is satisfied that the Director-General has certified in a site compatibility certificate that, in the Director-General's opinion, the development is compatible with the surrounding land uses.

(4) Nothing in this clause:

(a) prevents a consent authority from:

(i) granting consent for development on a site by reference to site and design features that are more stringent than those identified in a site compatibility certificate for the same site, or
(ii) refusing to grant consent for development by reference to the consent authority's own assessment of the compatibility of the development with the surrounding land uses, or

(b) otherwise limits the matters to which a consent authority may have regard in determining a development application for development of a kind referred to in subclause (2).

Comment

A health service facility may be carried out with consent in a prescribed zone.

(a)(ii) Any draft environmental planning instrument

Nil

(a)(iii) Any development control plan

BATHURST REGIONAL (INTERIM) DEVELOPMENT CONTROL PLAN 2011

Pursuant to the car parking chapter of the DCP, the car parking rate for medical centres is 1 space per 50m^2. Based on a GFA calculation, there is a requirement to provide 47 car spaces (based on 2351m^2). If the ancillary areas (plant, waste, store and services areas) are excluded, the gross personnel and public usable areas to 1975m^2, thus satisfying the 40 car spaces that is currently on the plans. In addition, there is a large amount of overflow parking that is available via the existing car park to the south, on street car parking along Panorama Ave and throughout the University Campus.

Chapter 4 (Impacts of the proposed development) of the report prepared by TEF Consulting has been engaged to review the parking requirements for the development (the full report forms part of the development application).

Section 4.1 of the Traffic report concludes that the total estimated actual parking demand as follows:

43 x 0.85 = 36.6, say **37 parking spaces**

Accordingly, it is considered that there is a satisfactory amount of car parking provided to meet the requirements of the development.

(a)(iiia) Any Planning Agreements

There are no known planning agreements affecting the property.

(a)(iv) Any matters prescribed by the regulations:

Government Coastal Policy

Not applicable to Bathurst LGA.

Building Demolition

Not applicable.

Upgrading of Buildings

Not applicable.

Fire Safety

The building will be constructed to comply with all relevant fire safety provisions of the BCA.

Temporary Structures

Not applicable to this proposal.

Deferred Commencement Consent

Not applicable to this proposal.

Modification or Surrender of Development Consent or Existing Use

Not applicable.

Ancillary Development

Not applicable to this proposal.

BASIX

Not applicable to this proposal.

(b) The likely impacts of the development:

CONTEXT AND SETTING

The subject site is located within the CSU Bathurst Campus. The Department of Lands is located across Panorama Avenue and there is residential housing on the northern side of Browning Street. The development will be located to the immediate north of the recently developed Dental and Oral Health Clinic.

The proposal is considered compatible with the surrounding area and will have minimal impact in regards to:

- Impacts on adjacent properties and land uses; and
- Interruptions of important views and vistas.

The proposal is within the context of the locality and Council's current planning provisions.

The proposed building is situated within an "open space" setting, near the existing Dentistry building suited to this context. It is also located opposite the University rugby and sporting fields.

In light of this, the design of the proposal has been adopted to suit the context of its location within the setting of a Community Engagement and Wellness Precinct, and respecting the nature of the adjoining Dentistry building aesthetic.

The building is a modern design, in the context of its location, and its bulk and scale has been designed to suit the open space setting surrounding the site, with the use of a glazed entry and foyer the building footprint and materials and finishes are suited to the open nature of the site.

The building has been designed to create a main entry to the north. This entry faces the proposed car park for the facility.

Landscaping is proposed adjacent providing a communal space whilst softening the facility set down area and appearance from the car park.

Overall it is considered the proposed design results in an appropriate balance between the context of the setting in which it is located and the adjacent existing Dentistry building.

ACCESS AND TRANSPORT

Following is an assessment of the access and traffic generation aspects of the proposal.

Access

Access to the site will continue as per current practice. Vehicles will enter the CSU Campus at the main entrance off Panorama Avenue, travel along the internal road, turn right into the recently constructed asphalt road past the Dental and Oral Health Clinic. The internal road will then be extended to service the new development and proposed car park (refer to the site plan).

The internal manoeuvring areas will be constructed in asphalt with concrete kerb (and will be appropriately drained).

Transport

The development will generate additional traffic, however it is considered that the existing road system is more than adequate to cater for the additional traffic generation from the development without the need for any upgrading works.

As part of future development on the site, it is proposed that a roundabout will be installed at the internal first intersection of the Campus and that the access road servicing the proposed development will be extended to meet Research Station Drive.

Car Parking

Parking is provided in designated car parking areas only. All internal roads are narrow and do not provide opportunities for kerbside/edge parking.

According to a traffic study carried out in March 2011, there are approximately 50 kerbside parking spaces are available in Panorama Avenue to the north of the CSU entry driveway. These spaces are sometimes used by CSU students and staff, but mostly by staff from the Land Information Centre located on the eastern side of Panorama Avenue.

There will be a new car park construction to the north of the proposed development. 40 spaces have been provided and two accessible spaces (refer to DCP discussion).

The existing dentistry clinic is equipped with a separate car park. This car park contains a total of 25 car spaces and two accessible spaces. Access will be provided from this car parking facility to the proposed clinic.

Refer to the DCP analysis for further information and the TEF Consulting report that provides an analysis of the parking requirements – the report concludes that the development requires 37 car parking spaces.

Loading Arrangements

It is intended to transform an existing gas bottle enclosure (which will be decommissioned with a move to natural gas) at the dentistry building into a bin handling area.

The proposed development will receive deliveries and will require waste removal. There is not a dedicated loading dock for these

deliveries. The University currently collects bins outside the dental clinics operating hours; it is intended to continue this practice for the combined precinct.

It is proposed that the new facility will manage the deliveries and waste removal as part of their campus operations.

Public Transport

The subject site has a regular public bus service (route 526) and is run by Jones Bros from the Bathurst CBD and the use of this bus service is currently very low.

Bicycle

The Campus is located 2km south of the Bathurst CBD, a 10 minute trip by bicycle. Cycling is a viable travel mode for CSU and is encouraged. The proposal incorporates 6 bicycle parks.

PUBLIC DOMAIN

It is considered that the development will have a negligible impact on the public domain in terms of:

- Public recreational opportunities in the locality;
- Amount, location, design, use and management of public spaces in and around the development; and
- Pedestrian linkages and access between the development and public areas.

UTILITIES & SERVICES

Power supply

It has been confirmed that the capacity of the existing substation adjacent to the Dentistry facility has the spare capacity to cater for this development.

It is proposed that all internal spaces will be air-conditioned. The proposed air conditioning will be supplemented with a mixed mode system allowing for natural cross ventilation when external weather conditions allow in the staff and student areas.

It is proposed that all main corridors and clinical areas will be fully air conditioned due to the nature of their usage and infection control protocols.

Communications

Existing telephone and data system will be extended and augmented as part of the new development. It is understood that there is sufficient capacity for the proposed development.

Lighting Services

The proposed facility will include energy efficient lighting design to minimise power consumption by the University.

Water

It is understood that the existing reticulated water system has sufficient capacity to handle the additional loading from the proposed development based on the advice of the consulting hydraulic engineer.

Fire Hydrant

It is understood that the existing fire hydrant system has sufficient capacity to handle the additional loading from the proposed development.

Hose Reel System

A hose reel system shall be provided in accordance with the BCA and AS 2441.

Sewerage

It is understood that the existing onsite drainage system has sufficient capacity to handle the additional loading from the proposed clinic. The sanitary drainage collected from the proposed clinic shall connect into an existing Campus sewer main.

Gas

A gas service will be provided to the development in consultation with the service provider.

Stormwater

The stormwater lines will be installed to cater for the proposed clinic. Storm water is proposed to drain into the existing stormwater system adjacent to the western side of the site.

Refer to the stormwater management drawing prepared by the engineer for greater detail.

HERITAGE

There are a number of heritage items on the site within the older part of the Campus – these are well removed from the proposed development. It is therefore considered that no items of potential heritage significance are expected to be impacted by this proposal.

The following figure identifies the heritage items on the CSU Bathurst Campus (sourced from Charles Sturt University - Heritage Asset Management Strategy).

BATHURST CAMPUS

Name	Address	Photos
8. Former WWII Buildings	C4: Ordnance Building W9: Media Centre S16: Printery E1: Gymnasium *Only the Ordnance building is listed on the Bathurst Regional LEP*	 C4: Ordnance Building
9. Former Teacher's College & Bathurst Experimental Farm Buildings	N3: Ponton Theatre N4: Heffron Building N5: Cunningham House N6 & N8: Offices N9: Founders Cottage S2: Chapel *All of the above buildings are listed on the Bathurst Regional LEP*	 N3: Pontoon Theatre

Although it is considered that no items of potential heritage significance would be impacted by this proposal, nevertheless the following general recommendations for heritage management are made:

- All persons responsible for the management of any works on site should ensure that all staff, contractors and others involved in construction or maintenance related activities are made aware of the statutory legislation protecting sites and places of significance; and
- All staff should also be made aware that, if an object is found, all works shall cease and the procedures under the NPM Aboriginal Heritage Management Plan should be followed. No further work should commence until after any subsequent recommendations or requirements have been appropriately implemented.

FLORA AND FAUNA

For the proposal, a total of 28 trees will require removal. Three of the trees are significant eucalyptus trees located within close proximity for the road extension to the new carpark area.

The additional 25 trees are small in nature and it is the consulting Landscape Architects professional opinion that no adverse effects upon the existing flora and fauna will result from the removal of these trees and the proposed design.

The client has proposed significant amounts of offset vegetation and trees for this Stage of the precinct design and the future design stages will include further extensive plantings of additional trees and garden beds.

The Landscape Architect is in support of the removal of the three significant trees and the additional 25 minor trees as their quality is not significant, and it would be advantageous for the proposed design.

The land does not have any critical habitat, threatened species, populations or ecological communities or their habitats.

ENERGY

All spaces have been designed to comply with Section J of the Building Code of Australia, enhanced energy efficiency is being incorporated as standard.

As discussed, all functional spaces of the proposed development will be air conditioned.

To ensure the energy efficient operation of the air-conditioning systems, the construction of the proposed building will incorporate methods of reducing thermal loads on the building interiors, these include:

- Full insulation to walls
- Full insulation to roofs
- Full insulation to slab edges
- Creating air movement within the roof construction to channel out radiated heat
- Sun-shading to window openings
- Selection of glazing with good thermal performance

The design where capable will have openable windows allowing natural ventilation and reduce the need to run air-conditioning when outside conditions are appropriate.

In non-critical areas, lighting shall implement intelligent controls such as timers, movement sensors and the like.

The client aims for the design to be benchmarked against a 5 green star rated building.

AMENITY

The proposed development is considered to be compatible with the existing and likely future character and amenity of the mixed use locality.

There will be no impact from dust generation due to the sealing of the driveway areas. All lighting will be baffled to ensure that there is no light spillage.

There are no issues in relation to privacy and overshadowing as part of the proposal.

It is noted that the site is located within the University and adjacent to Panorama Avenue which receives a significant amount of traffic already.

There have been no issues identified in relation to the supply of water and the disposal of sewage and stormwater.

Due to the nature of the proposal, issues surrounding energy efficiency and waste management are not significant.

NOISE AND VIBRATION

Construction

There are no negative impacts identified with respect to noise and vibration as a result of the construction of the development.

To mitigate any impacts on the surrounding neighbours it is proposed that all works will be undertaken in strict compliance with Council conditions. Construction activities would be undertaken at the times identified by Council.

All construction machinery would be fitted with appropriate muffling devices to limit noise generation during construction. The construction period would be for a limited period, and thus any impacts would be limited to that time frame.

There would already be noise impacts on the site as a result of the university operations undertaken.

The plant and equipment likely to be used during construction activities are listed below:

- Backhoes
- Concrete trucks
- Compactors
- Dump trucks
- Excavators
- Light vehicles
- Pad foot rollers
- Loaders
- Mobile cranes
- Various hand held equipment, e.g. grinders, arc welders etc.

Operational

There are no negative impacts identified during operation of the clinic facility. The only possible impact will be via traffic noise, but this will be limited to light vehicles and buses on an irregular basis (this would be a very small percentage of total campus vehicle generation).

Conclusion

No specific noise mitigation measures are required for this proposal.

AIR QUALITY

Due to the nature of the proposal it is considered that it would not have any potential for air quality impacts.

Although considered to be insignificant, any potential air quality impacts from this proposal may be appropriately managed through the implementation of the following management measures:

- Dust mitigation using water cart or other appropriate methods during construction, as required; and
- No onsite equipment should be left running when not specifically required.

NATURAL HAZARDS

It is considered that the land is not impacted upon by land subsidence, bushfire or flooding.

SOILS

Top soil will be stripped, stored and reused in the proposed landscaping.

The Civil Engineer has designed earthworks so that all the excavated material will be used as part of forming car parking, roadway and external levels. Some imported engineering fill will be required under the new building.

It is considered that the development will have a negligible impact on soil conservation.

There are no known soil qualities (erodibility, permeability, expansion/contraction, fertility/productivity, salinity, acidity) that have had any impact on the design of the development.

The subject land is not known for any instability such as subsidence, slip and mass movement.

Obviously there will be the need to move soil to facilitate the construction of the building. As the land is gently sloping, the movement of soil will be minimised where possible. Erosion and sediment control measures will need to be installed prior to the commencement of earth works and will need to be maintained throughout until the site is recovered, in accordance with the Council guidelines.

WASTE

There will be limited waste generated by the facility once it is fully operational. The facility will be serviced under CSU's existing waste collection contract.

Any soils that need to be cleared from the site would remain on-site for use in site rehabilitation or other beneficial use (no soils to be removed).

General construction waste would be appropriately contained onsite and separated for either recycling or disposal at an appropriately licensed landfill site.

POTENTIAL CONTAMINATION

There are no signs of potential contamination on the site of the proposed clinic facility. It is considered that a preliminary contamination assessment is not warranted in this instance (see previous discussion of SEPP 55).

It is understood that there are no records of contamination on the site of the proposed development.

The site was originally a former golf course and has not been utilised for any industrial operations. There is no direct evidence that the subject land has ever been used for any potentially contaminating agricultural or industrial activity.

Any material excavated as a result of the proposed construction activities would not be removed offsite, the material excavated as part of this proposal would be reused within the campus area where possible.

It is considered that the construction of the proposed development will not create significant impacts in terms of land contamination. Accordingly, no mitigation measures are proposed.

There would not be any significant use of hazardous substances or dangerous goods during construction of the proposed development site.

All contractors should be required to develop and implement an appropriate Occupational Health and Safety Plan to apply to all their proposed activities or comply with CSU procedures and management practices. Any fuels or oils stored on-site during construction/operation would be contained within an appropriately bunded area in accordance with the relevant storage guidelines contained in Australian Standard AS1940 for the Storage and Handling of Flammable and Combustible Liquids.

SAFETY, SECURITY & CRIME PREVENTION

Crime prevention through environmental design (CPTED) seeks to influence the design of buildings and places by:

- increasing the perception of risk to criminals by increasing the possibility of detection, challenge and capture
- increasing the effort required to commit crime by increasing the time, energy or resources which need to be expended
- reducing the potential rewards of crime by minimising, removing or concealing 'crime benefits'
- removing conditions that create confusion about required norms of behaviour

There are four principles that need to be used in the assessment of development applications to minimise the opportunity for crime:

- Surveillance
- Access control
- Territorial reinforcement
- Space management

The following comments are made in relation to the CPTED principles:

- The development is located within the existing CSU Campus where there are a large number of security checks in place already.
- Effective lighting of external spaces will be provided.
- Landscaping does not provide offenders with a place to hide or entrap victims
- Building and footpath locations have been designed to channel and group pedestrians into target areas.
- There are no areas within the site that are considered to be high-risk areas
- The proposal has been designed with clear transitions and boundaries between public and private space.
- Space management strategies include site cleanliness, the replacement of burned out pedestrian and car park lighting and the removal or refurbishment of decayed physical elements.

During the construction phase, appropriate site fencing will be erected along with any other measures recommended by NSW Work Cover and Bathurst Regional Council. In line with OH & S requirements, policies and procedures, a suitable fence will be erected around the entire perimeter of the site for the duration of its construction.

ACCESSIBILITY

The proposed development has been designed to cater for clients and staff with disabilities. Compliance with accessibility standards including the "premises code" has been incorporated into the proposed facilities. This includes:

- 2 accessible parking spaces
- external pathways from car park to proposed building and from proposed building to existing dental clinic are designed with maximum 1 in 20 grade.
- All internal circulation spaces have been designed to comply with premises code requirements
- Special provision has been made for clients requiring bariatric access and facilities
- Provision of two accessible toilets in public waiting area

- Provision of accessible toilet and shower to allied health clinics
- Provision of accessible toilet to GP Clinics

In general, the development has accessible paths of travel that are continuous throughout. The proposed design has demonstrated an appropriate degree of accessibility. The plans indicate that compliance with statutory requirements, pertaining to site access, after hours access, common area access and accessible sanitary facilities, can be readily achieved.

VISUAL IMPACT

The visual impact of the development from public places and from neighbouring lands is an important consideration in the planning of the proposed development.

The architectural scale, visual bulk and colour of the buildings will be consistent with that of the surrounding buildings. No significant impacts to the local visual environment are reasonably anticipated as the site is not located on a visually prominent ridgeline and nor would it otherwise detract from the "particular scenic value" of the site in question.

SOCIAL & ECONOMIC IMPACTS IN THE LOCALITY

The proposed development will have a positive social impact enhancing the civic health facilities provided in the Bathurst community and ensure the viability of the Clinic in the future.

It is anticipated that the proposed development will have positive economic impacts once completed, on support and supply services within Bathurst.

The construction period will also have positive impacts with employment of local trades people to carry out the construction work, and supply of some materials from local businesses.

The proposed development will result in significant public benefit for the community, including a number of positive economic and social impacts for the area:

- The proposal will result in additional employment for the local economy, both during the construction of the proposal, and its operation.
- The Clinic will provide better facilities for persons who require health treatments and consultation.
- The improved appearance of the site, including a new built form with significant landscaping with benefit both surrounding commercial facilities and provide a better outlook.
- Overall the proposal will result in greater patronage at the site.

The development will have a positive impact on the health and safety of the occupants in terms of:

- Lighting, ventilation and insulation;
- Building fire risk;
- Building materials and finishes;
- Access and facilities; and
- Compliance with the NCC.

There will be significant positive social and economic impacts of the health education and services that the building will be generating to Bathurst and surrounding areas.

CONSTRUCTION

Construction impacts are not anticipated to have an adverse impact on the locality. Works would occur during daytime hours, thus not impacting on the local amenity. The site would have temporary containment fencing erected and signage to warn and exclude the public from entering the site during the construction phase.

Erosion and sedimentation control measures would be implemented during construction to minimise any erosion and sedimentation at the site.

All waste generated during construction would be taken and disposed of at Council's Waste Disposal Facility.

Construction activities would be tailored to minimise the impact on site, with all disturbed areas rehabilitated as soon as practical. All construction machinery would be fitted with appropriate muffling devices to limit noise generation during construction. The construction period would be for a limited period, and thus any impacts would be limited to that time frame.

CUMULATIVE IMPACTS

It is considered there will be no negative cumulative impacts as a result of the proposed development.

(c) Suitability of the site for the development

Does the proposal fit in the locality?

- There are no constraints posed by surrounding development to render the proposal prohibitive;
- It is considered that the proposal will not create any unmanageable access or transport concerns in the locality;
- No impact on public spaces will eventuate as a result of the proposal proceeding;
- Minor upgrading to services may be required;
- There are no issues identified in relation to air quality and microclimate; and
- There are no identified surrounding hazardous land uses or activities.

Are the site attributes conducive to development?

It is considered that the site is conducive to the development based on the following:

- The site is affected by any natural hazards;
- There are no heritage considerations (the site is well removed from the existing heritage items within the main part of the Campus);
- There is no known soil characteristics that would render the proposal prohibitive; and
- There are no known flora and fauna considerations that will have an impact on the proposal.

(d) Any submissions

It is understood that the application may be notified to advertised and adjoining neighbours.

(e) The public interest

The proposed development is considered to be only of minor interest to the wider public due to the relatively localised nature of potential impacts. It is believed that by the imposition of appropriate conditions of consent and the safeguards discussed in this report, potential impacts would be modest.

5. CONCLUSION

This report includes an analysis of the existing environment, details of the proposed development and consideration of applicable statutory requirements.

Based upon the investigations of the proposal it can be concluded that:

- The impacts upon or by surrounding development will not be altered significantly as a result of the development proceeding;
- The topography of the site can accommodate the proposal;
- The road system is capable of sustaining the additional traffic loading without upgrading;
- The proposal represents an appropriate expansion to the Charles Sturt University Bathurst Community Engagement and Wellness Precinct;
- The proposed development will ultimately have a positive environmental impact enhancing the educational and community uses and university facilities;
- There will be significant positive social and economic impacts of the health education and services that the building will be generating to Bathurst and surrounding areas.
- All available services are ready for connection; and
- The proposal is generally consistent with the objectives and provisions of Councils relevant planning documents.

The proposal is considered to be acceptable in terms of Section 79C of the *Environmental Planning and Assessment Act 1979* (as amended) and potential impacts are expected to be minor.

Accordingly, it is recommended that the Development Application be approved subject to appropriate standard conditions.

TRAFFIC, ENVIRONMENTAL & FORENSIC ENGINEERS
TEF CONSULTING

PO Box 215 Bondi NSW 2026
Phone (02) 9332 2024 / (02) 9523 9212
Fax (02) 9332 2022
Mobile 0414 978 067 / 0414 554 523
e-mail o.s@tefconsult.com.au / s.s@tefconsult.com.au
www http://tefconsult.com.au

A TRAFFIC AND PARKING

IMPACT ASSESSMENT

OF THE PROPOSED
COMMUNITY ENGAGEMENT AND WELLNESS PRECINCT

AT THE CHARLES STURT UNIVERSITY

BATHURST CAMPUS

Prepared for

CSU (Bathurst)

By

O.I. Sannikov

TEF Consulting

Report Document Control

Title	A TRAFFIC AND PARKING IMPACT ASSESSMENT OF THE PROPOSED COMMUNITY ENGAGEMENT AND WELLNESS PRECINCT AT THE CHARLES STURT UNIVERSITY, BATHURST CAMPUS
Date	31 August 2012
Author(s)	O.I. Sannikov
Client	CSU (Bathurst)
Job No.	12037
Quality Control Reviewer	S.E. Samuels
Keywords	Traffic/ parking/ impact/clinic / Charles Sturt University/Panorama Drive/ Bathurst
Disclaimer	**This report is believed to be true and correct at the time of writing. It is based on the information and data provided by the client and other relevant organisations during preparation. TEF Consulting does not accept any contractual, tortuous or other form of liability for any consequences arising from its use. People using the information in the report should apply and rely on their own skill and judgement to a particular issue they are considering.**

Contents Table

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1 INTRODUCTION

Report title	A traffic and parking impact assessment for the proposed Community Engagement and Wellness Precinct at the Charles Sturt University, Panorama Avenue, Bathurst Campus.
Report purpose	Analysis of traffic and parking impacts of the proposed Community Engagement and Wellness Precinct (CEWP)
Client	Charles Sturt University (Bathurst Campus)
Background information used for preparation of the present report	• plans of the proposed development prepared by Brewster Hjorth Architects • information collected and analysis undertaken by TEF Consulting (TEF Consulting) for other development proposals on CSU site and for the CSU (Bathurst) Campus • other documentation - refer to **Section 6 References** of the present report.
Consultation	• CSU (Bathurst) • Brewster Hjorth Architects Assistance of these organisations is greatly appreciated.

2 EXISTING TRAFFIC AND PARKING SITUATION

2.1 Site characteristics and on-street car parking

Basis for analysis

- Analysis of information about the proposed development on the subject site
- Results of a site inspection (for the CSU Bathurst Campus Study in March 2011)
- Intersection turning volume counts (for the CSU Bathurst Campus Study in March 2011)

Site

- Panorama Avenue, Bathurst NSW 2795
- Refer to **Figure 1** for the proposed CEWP location on CSU Campus.

Current land use

- vacant

Existing vehicular and pedestrian access

- None
- New access road is proposed
  - extension of the existing road leading to a dental clinic
- New footpath is proposed
  - extension of the existing footpath leading to a dental clinic

Car parking availability

- On Campus generally
  - parking is permitted in designated car parking areas only, no parking on roads
  - high parking demand during teaching semesters (based on TEF Consulting report for CSU Bathurst Campus Study), nearing capacity (89% occupancy at peak periods)
  - existing parking areas (except dental clinic) are too distant from the proposed CEWP to be used
- Dental clinic
  - no parking restrictions
  - varying parking demand
    - some spare capacity available depending on the building occupancy at various time periods

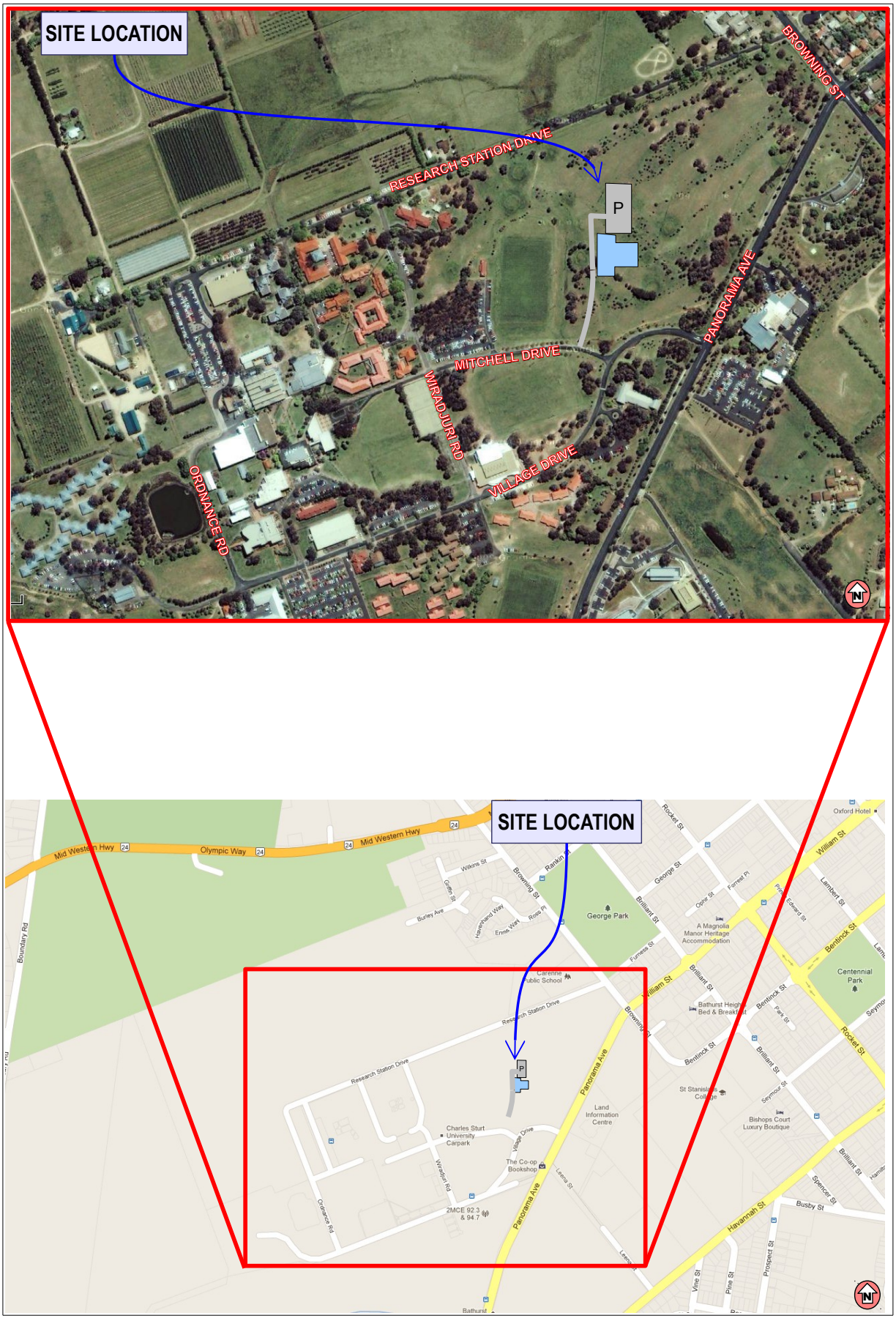


Figure 1. Site location.

2.2 Traffic conditions

Characteristics of surrounding roads and access locations

Refer to **Figure 2**.

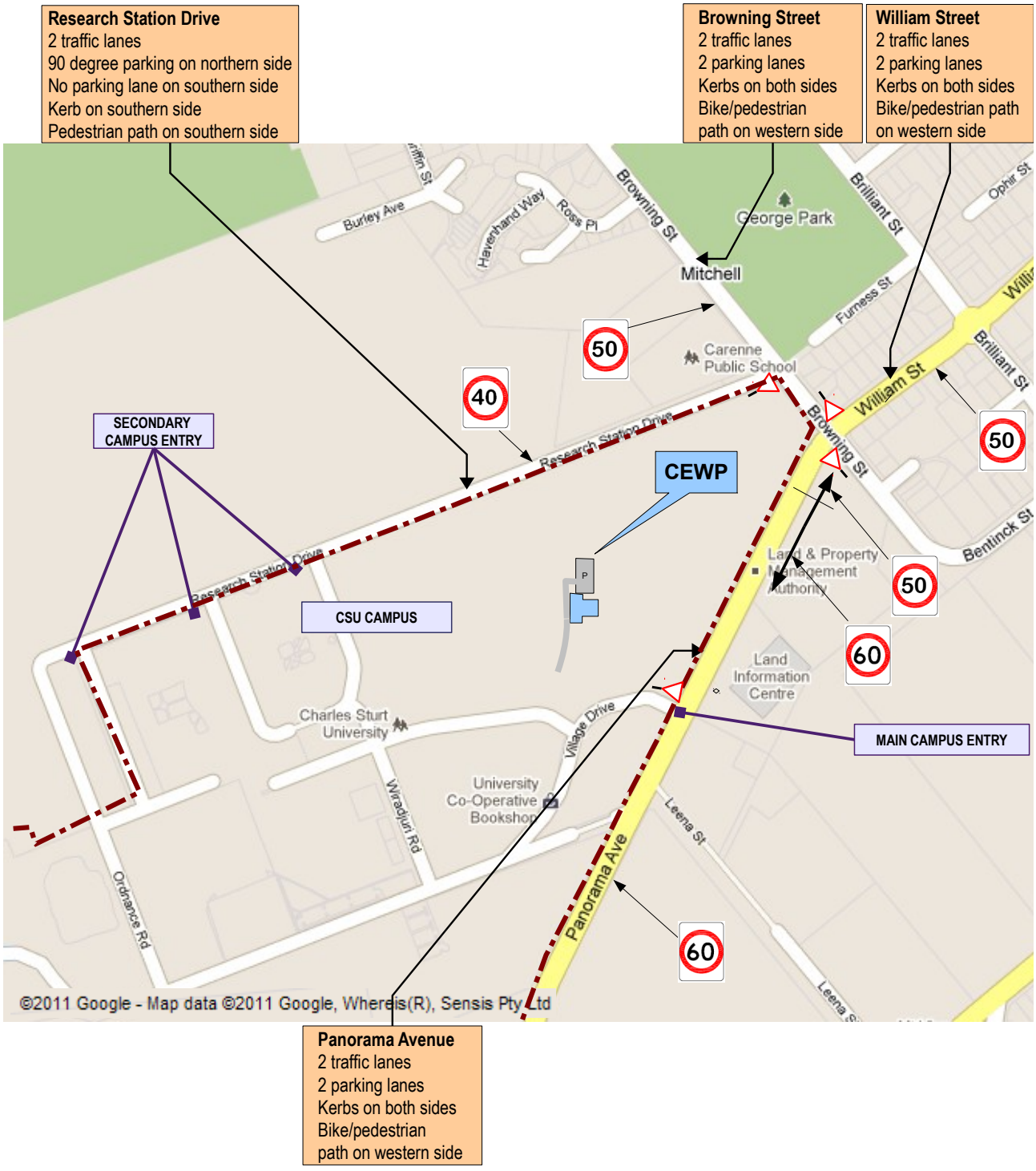


Figure 2. Road and access characteristics.

Intersection traffic volume counts	Source	TEF Consulting report for CSU Bathurst Campus Study2011 • refer to **Figure 3**
	Validity	• The area has been developed with the current land uses for a long time and is stable. • The intersection traffic volumes are expected to be currently the same or very similar to those reported in CSU Bathurst Campus Study
Intersection operation	Source	TEF Consulting report for CSU Bathurst Campus Study 2011 • refer to **Table 2.1**
	Results of assessment	• The results indicate that all intersections currently operate at a good Level of Service with substantial spare capacity and minimal queueing • Modelling has not identified reported issues with long delays and queuing for exiting vehicles at the main campus entry.

Table 2.1. Intersection operation characteristics - existing situation (source – TEF Consulting 2011).

Intersection	Existing traffic volumes											
	AM						PM					
	AVD	LOS	Longest queue (m) on				AVD	LOS	Longest queue, m, on			
Panorama Ave - CSU Entry	8.1	A	11	PA	WB	R	8.0	A	5	PA	WB	R
Panorama Ave - Browning St	17.5	B	6	BS	SB	R	12.9	A	3	PA	SB	L
Browning St - Research Station Dr AM	7.7	A	4	BS	SB	R	7.5	A	4	RSD	EB	R

PA	Panorama Avenue		
CSU	CSU Main Entry		
BS	Browning Street		
RSD	Research Station Drive		
NB	Northbound	L	Left turn
WB	Westbound	T	Through
SB	Southbound	R	Right turn
EB	Eastbound		

Level of service criteria for intersections		
Level of Service	**Average Delay per Vehicle (secs/veh)**	**Give Way & Stop Signs**
A	< 14	Good operation
B	15 to 28	Acceptable delays & spare capacity
C	29 to 42	Satisfactory, but accident study required
D	43 to 56	Near capacity & accident study required
E	57 to 70	At capacity, requires other control mode

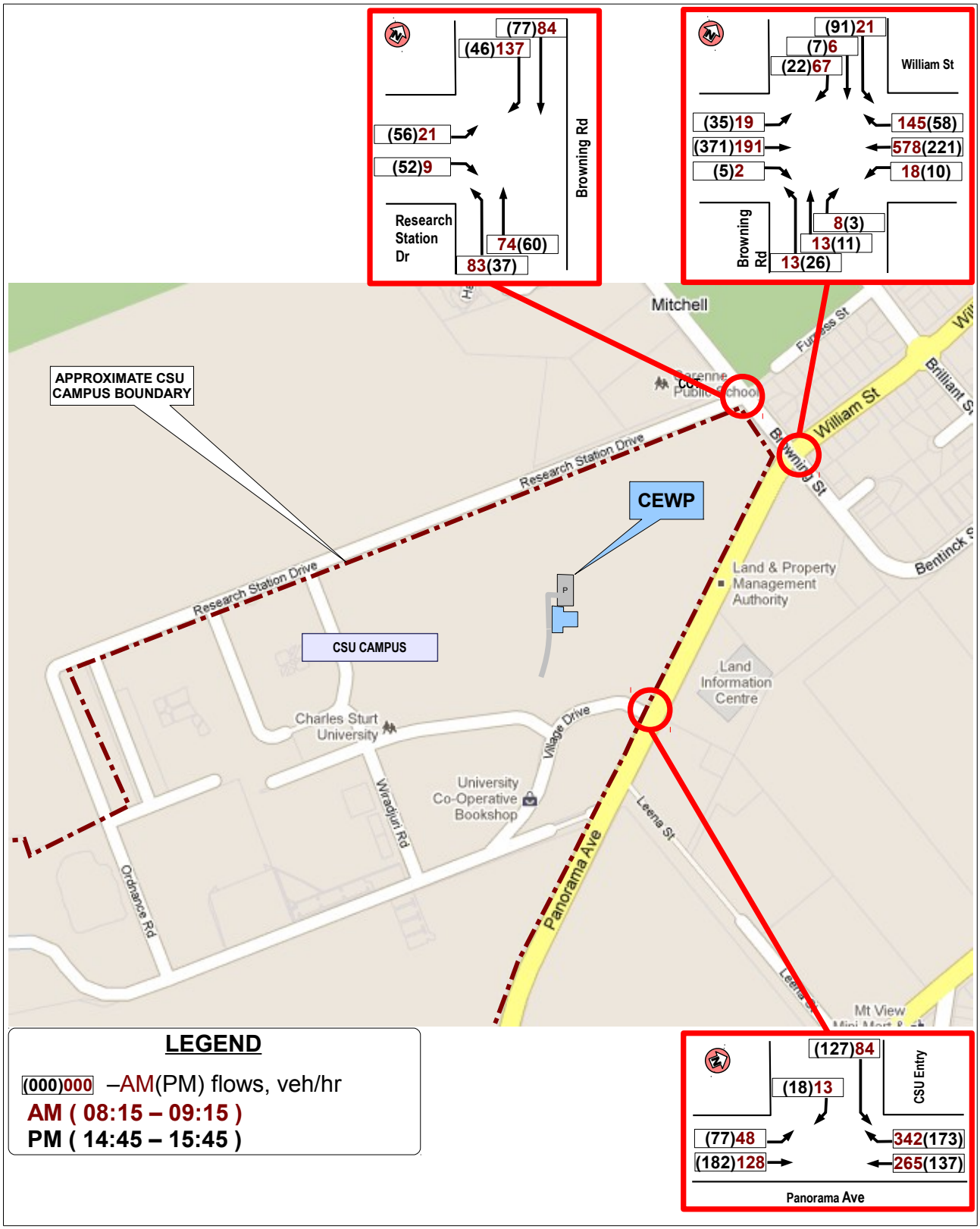
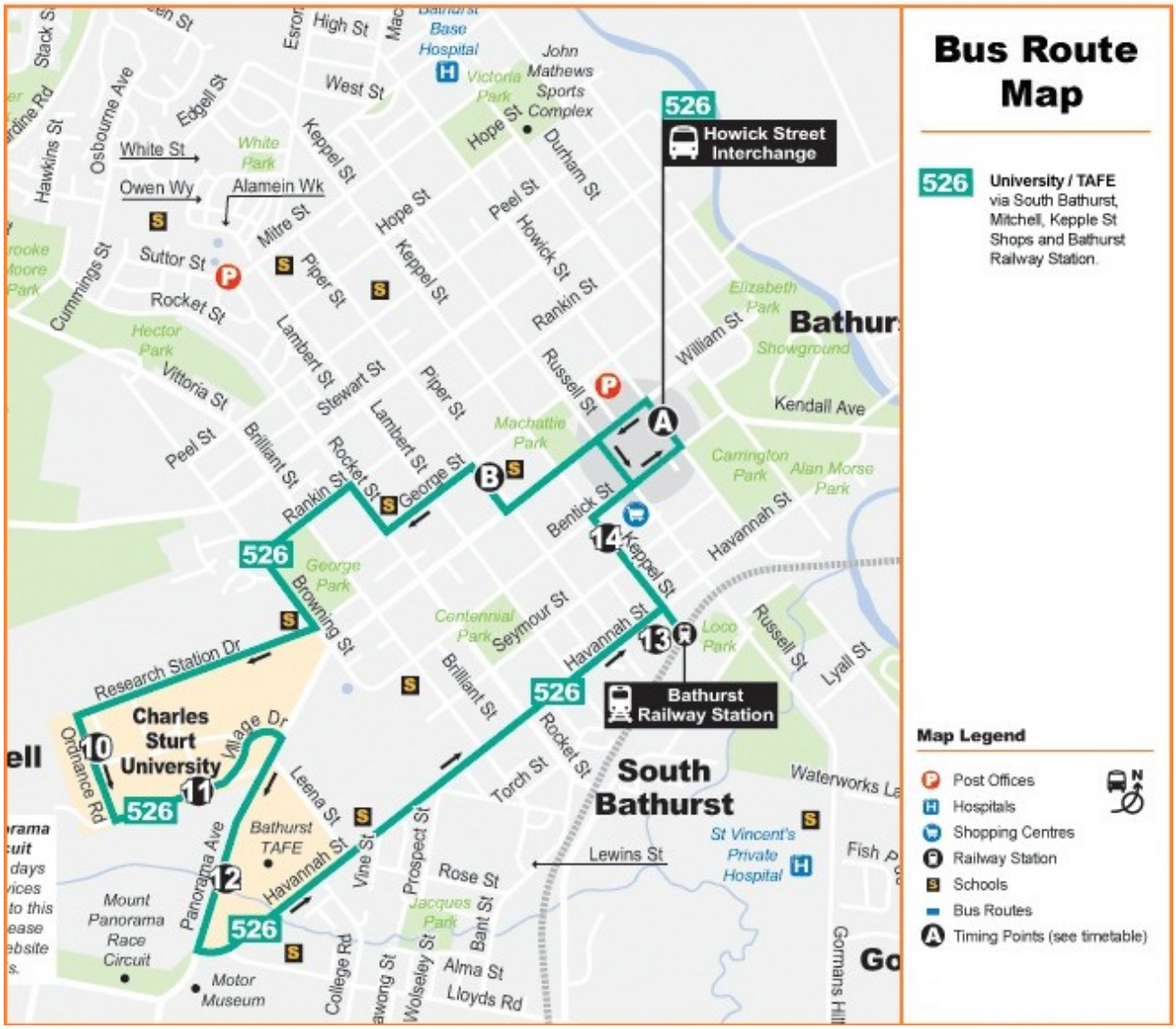


Figure 3. Results of traffic counts (source – TEF Consulting 2011).

2.3 Travel modes other than private car

Bus	• A regular public bus service (route 526) is run by Jones Bros from the Bathurst City centre. The timetable of route 526 is shown in **Figure 4**. • The use of bus services is very low; observations on a typical busy day have indicated less than 10 passengers boarding and alighting the buses at all stops during business hours. • The existing bus stops are substandard, having no shelter
Train	• There are no train services near CSU Campus.
Bicycle	• CSU Campus is located some 2 km south of the Bathurst City Centre, a 10 minute trip by bicycle. • The site topography allows for convenient bicycle connections in most areas. • Good quality bicycle/pedestrian shared paths are provided along some roads in Bathurst; a draft Bathurst Community Access and Cycling Plan has been prepared by Council in February 2011 - refer to **Appendix A**. • Cycling is a viable travel mode for CSU Campus and shall be encouraged.
Walking	• Walking as a travel mode to/from the Campus is not an attractive alternative to driving or cycling for most non-resident students, except those living in Bathurst close to CSU. • Within the Campus grounds all buildings and car parking areas are located within convenient walking distances. Walking is the primary means of travel within the Campus. • Most footpaths are not covered. • The site topography allows for convenient pedestrian connections in most areas.



Route 526

(Old MM1 Service)

University / TAFE

via South Bathurst, Mitchell, Keppel St Shops and Bathurst Railway Station

Look for Route Number.	Monday to Friday										Saturdays		
	am	am	am	am	pm	pm	pm	pm	pm	pm	am	am	pm
	526	526	526	526	526	526	526	526	526	526	526	526	526
A Howick St Interchange	8.25	9.25	10.25	11.25	12.25	1.25	2.25	3.25	4.25	5.25	9.25	11.25	2.25
B Panthers/Metro 5 Cinema	8.28	9.28	10.28	11.28	12.28	1.28	2.28	3.28	4.28	5.28	9.28	11.28	2.28
10 University Library	8.34	9.34	10.34	11.34	12.34	1.34	2.34	3.34	4.34	5.34	9.34	11.34	2.34
11 University Shop	8.35	9.35	10.35	11.35	12.35	1.35	2.35	3.35	4.35	5.35	9.35	11.35	2.35
12 Bathurst TAFE	8.37	9.37	10.37	11.37	12.37	1.37	2.37	3.37	4.37	5.37	9.37	11.37	2.37
13 Bathurst Railway Station	8.40	9.40	10.40	11.40	12.40	1.40	2.40	3.40	4.40	5.40	9.40	11.40	2.40
14 Keppel St Shops/City Library	8.42	9.42	10.42	11.42	12.42	1.42	2.42	3.42	4.42	5.42	9.42	11.42	2.42
A Howick St Interchange	8.44	9.44	10.44	11.44	12.44	1.44	2.44	3.44	4.44	5.44	9.48	11.48	2.48

Figure 4. Bus service near the development site

(Source: http://www.buslinesgroup.com.au/bathurst/public_timetables.php).

3 PROPOSED DEVELOPMENT

Development components

The present proposal incorporates the following facilities.

- GP clinics 206 m^2 / 8 rooms plus a treatment room
- Physiotherapy (private) clinics 77 m^2 / 4 rooms
- Allied Health clinics (teaching facility) 177 m^2 / 9 rooms
- Testing, gym and biomechanics 145 m^2
- Manager offices & workstations 92 m^2
- Women's Wellness Centre 22 m^2 / one room
- Retail space (possibly a café) 100 m^2
- Simulation/education suite 81 m^2
- Multi-purpose room 82 m^2
- Group rooms 27 m^2 / 2 rooms
- An open off-street car parking area
    - 42 car parking spaces
        - including 2 spaces for people with disabilities

Details of the proposed development are depicted on the drawings prepared by Brewster Hjorth Architects, submitted separately.

Details of proposed operation

- The operating hours for the University clinics will be generally 9 am to 5 pm on weekdays.
- There will be some group sessions for patients out of hours but these will not happen on a daily basis but will be irregular.
    - GP clinics
        - typically 6 doctors + 1 nurse + 1 receptionist at any one time
        - treatment room is associated with GP clinics where a patient will go for a minor procedure when visiting the GP
        - will most likely run longer hours than 9 to 5
    - Physiotherapy clinics
        - typically 2 physiotherapists + 1 receptionist at any one time
        - will most likely run longer hours than 9 to 5
    - Allied Health clinics
        - will be used by students studying Physiotherapy, Podiatry, Nursing, Rehabilitation, and Sports science
        - students and teaching staff are already on campus
        - there will be outside patients, however due to the nature of the facility their number and the turnover will be very low, with no patients waiting
        - 3 clinical staff and 2 reception
    - Testing, gym and biomechanics
        - will be used by the same students and patients already accounted for in Allied Health Clinics
        - students and teaching staff are already on campus

Details of proposed operation (continued)

- Manager offices & workstations
  - some of these will be used by clinicians and technical/administration staff already accounted for in GP, physiotherapy and Allied health clinics
- Women's Wellness Centre
  - will be used by students in Nursing and midwifery seeing patients
  - students and teaching staff are already on campus
- Retail space
  - unlikely to attract outside customers, will be used by CSU staff/students/patients already on Campus
- Simulation/education suite
  - students and staff already on Campus
- Multi-purpose room
  - students and staff already on Campus
- Group rooms
  - Ad-hoc use by students of Psychology, Speech pathology, Nutrition and Dietetics already on Campus and mostly outside busy hours

- It is evident that the proposed operation is a combination of facilities
  - facilities that will generate additional parking demand and traffic
  - facilities that will not generate additional parking demand and traffic due to their population already being on Campus
- Refer to **Figures 5a** and **5b** for a plan of facilities with regard to traffic/parking generation.

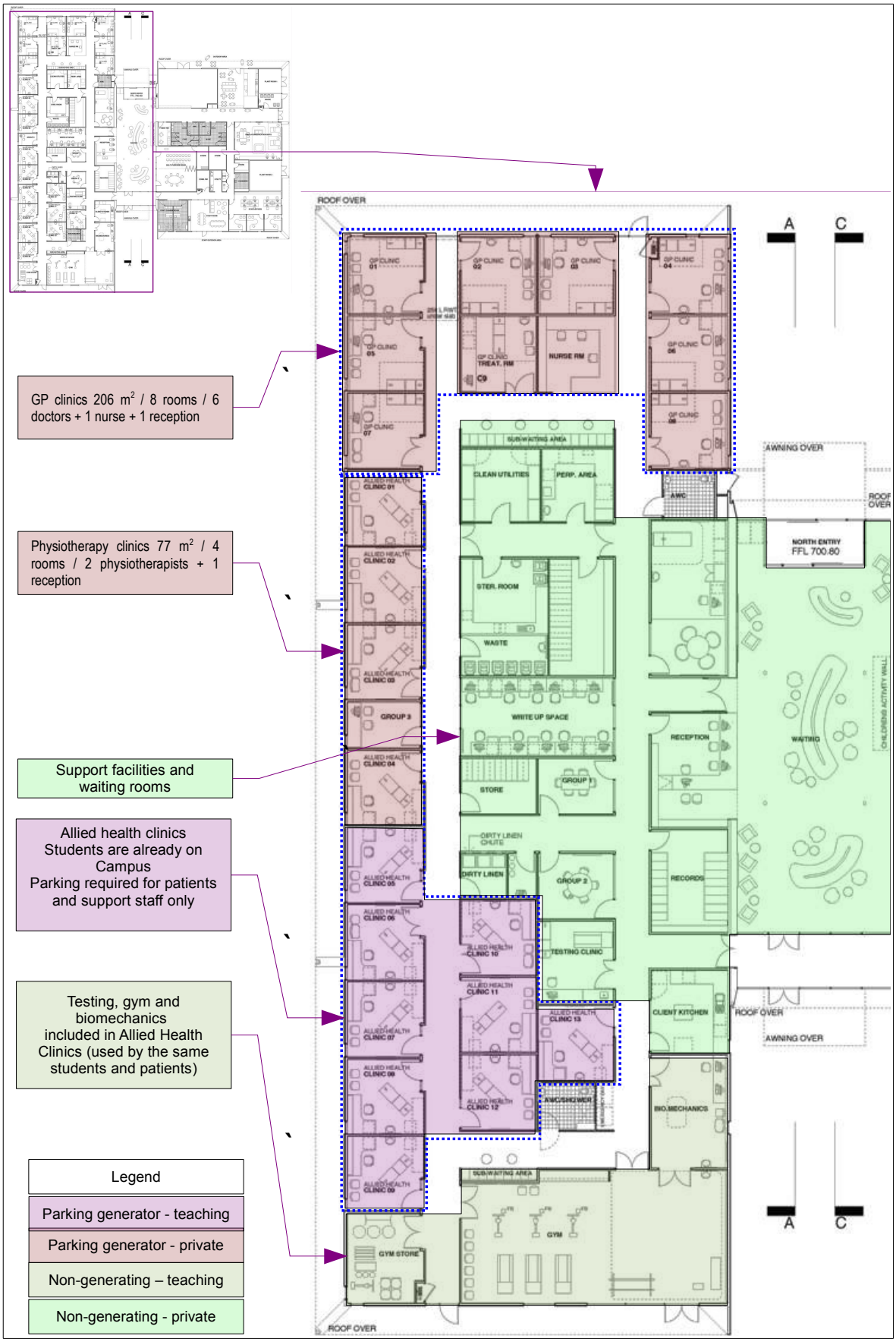


Figure 5a. Description of of proposed facilities with regard to their traffic and parking generation.

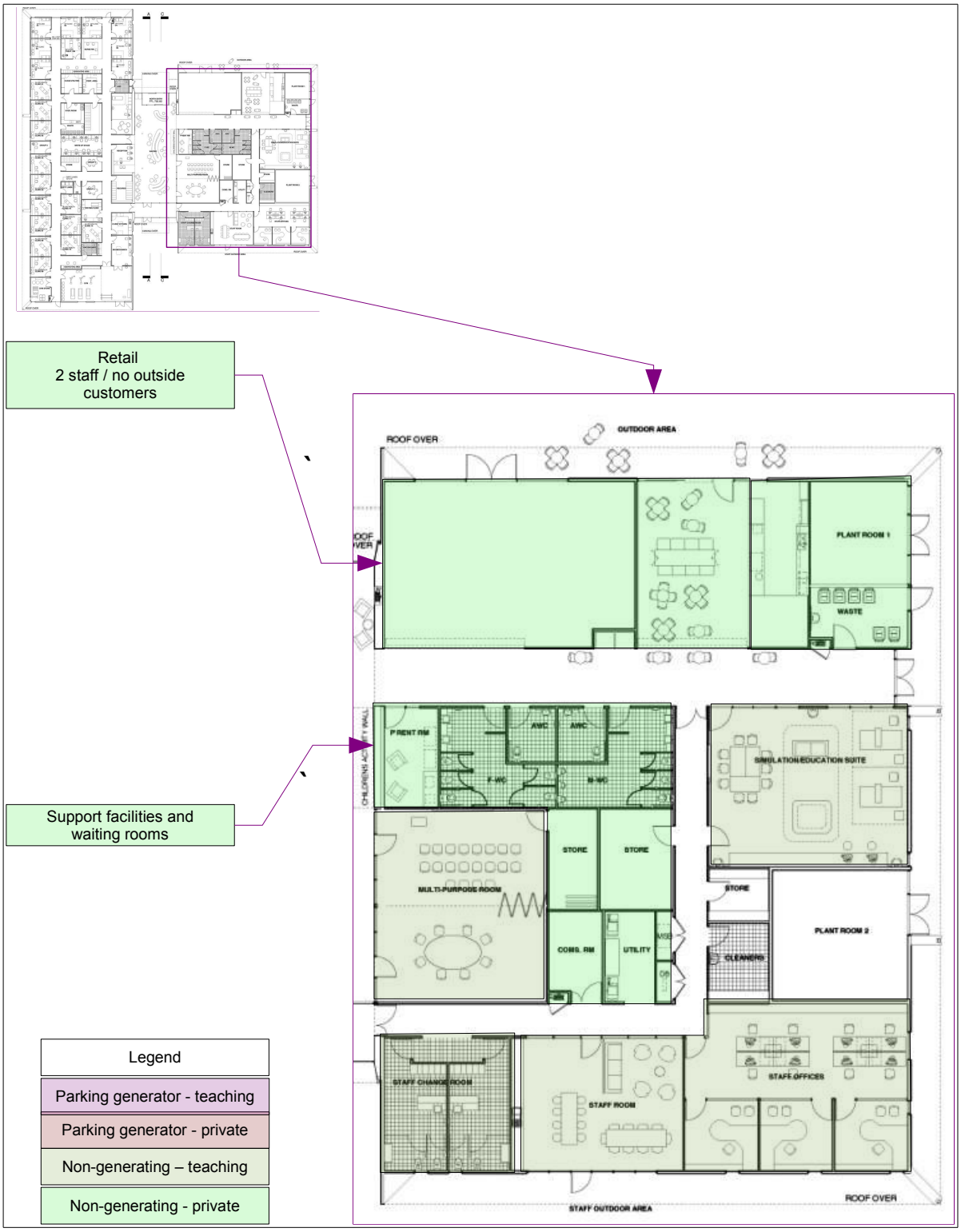


Figure 5b. Description of of proposed facilities with regard to their traffic and parking generation.

4 IMPACTS OF THE PROPOSED DEVELOPMENT

4.1 Parking requirements

Planning control document

Bathurst Regional (Interim) Development Control Plan 2011 (DCP 2011)

- Incorporating Amendment No. 1, Amendment No. 2 and Amendment No. 3
  - Adopted: 16 May 2012
  - Effective Date: 19 May 2012

Requirements of DCP 2011

Requirement of DCP 2011

Section 14.3 Car Parking – Development Standards

- **DCP rates**

Development type	Car parking	Bicycle parking
Medical centre / veterinary hospital / health consulting rooms (applies to proposed GP / surgery and private allied health clinics)	1 space per 50 m^2	1/8 practitioners for employees plus 1 per 4 practitioners for customers/students
Educational establishment	1 space per 2 employees plus 1 space per 5 students	1 space per 20 employees plus 1 space per 20 full-time students
Retail	1 space per 50 m^2	1 per 600 m^2 for employees plus 1 per 500 m^2 for customers if the floor area exceeds 1,000 m^2

- **Calculated required provision**

Development type	Number of spaces	
	Car parking	Bicycle parking
GP clinics	4.1	3
206 m^2 / 8 rooms / 6 doctors + 1 nurse + 1 reception (*health consulting rooms as per DCP*)		
Physiotherapy clinics	1.5	1
77 m^2 / 4 rooms / 2 physiotherapists + 1 reception (*health consulting rooms as per DCP*)		
Allied Health clinics		
3 clinical staff and 2 reception	2.5	1
177 m^2	1.8	
(*50% educational establishment as per DCP / 50% health consulting rooms as per DCP*)		
Testing, gym and biomechanics	0	0
included in Allied Health Clinics (used by the same students and patients)		
Manager offices & workstations	2.5 to 3.0	0.25
5 to 6 staff		
(*educational establishment as per DCP*)		

Requirements of DCP 2011 (continued)

Requirement of DCP 2011		
Development type	**Number of spaces**	
	Car parking	**Bicycle parking**
Women's Welness Centre no staff and students already on campus 22 m^2	0.4	0
Retail space unlikely to attract outside customers, will be used by CSU staff/students/patients already on Campus 2 staff	1	0
Simulation/education suite students and staff already on Campus	0	0
Multi-purpose room students and staff already on Campus	0	0
Group rooms Ad-hoc use by students already on Campus and mostly outside busy hours	0	0
Total	**13.8 to 14.3** **say 14**	**5.25** **say 6**

- **Actual demand based on travel mode split**
  - Car travel mode share
    - 85% for staff (and assume patients)
    - 85% for resident students
    - assume same 85% for patients
  - Number of additional people

Based on CSU Bathurst Campus Study

Facility	**Staff / students**	**Patients**
GP clinics	8	9
Physiotherapy clinics	3	3
Allied Health clinics	5	6
Testing, gym and biomechanics	0	0
Manager offices & workstations	6	0
Women's Welness Centre	0	1
Retail space	2	0
Simulation/education suite	0	0
Multi-purpose room	0	0
Group rooms	0	0
Total		**43**

Total estimated actual parking demand

- 43 x 0.85 = 36.6, say **37 parking spaces**

Design checks	***Requirement***	***Compliance***
	Compliance with	• Complies
	• AS/NZS 2890.1:2004: Off Street Car Parking.	• Manoeuvrability checks have been carried out using AutoTrack v.10.0 vehicle swept path modelling software and have been found satisfactory • Refer to **Appendix B**.
	• AS/NZS 2890.6:2009 Part 6: Off-street parking for people with disabilities	• Complies

4.2 Parking impacts

Parking impacts	• The proposed number of off-street car parking spaces fully complies with and exceeds the requirements of DCP 2011. • The proposed number of off-street car parking spaces exceeds the estimated actual parking needs of CEWP during busy periods.
Conclusion	• The proposed car parking provision is satisfactory. • There will be no negative impact on Campus and on -street parking availability.

4.3 Traffic impacts

Traffic generation

- Base traffic generation rates: RTA (2002) Guide to Traffic Generating Developments
  - Extended hours medical centres
    - no average rates given, comparison with similar sites is recommended
    - two site have been chosen from the RTA (2002) Guide data
      - similar floor areas 525 and 557 m^2 compared with approximately 480 m^2 of traffic generating areas at CWEP
      - calculated maximum peak hour generation rate 35 to 40 trips per hour
        - assumed 80% in peak direction of travel

- Additional traffic generation
  - Estimated maximum peak hour traffic generation for CWEP
    - AM peak
      - 28 to 32 trips in
      - 7 to 8 trips out
    - PM peak
      - 7 to 8 trips in
      - 28 to 32 trips out

Intersection operation

- Analysis conducted in the course of the CSU Bathurst Campus Traffic and Parking Study (TEF Consulting 2011) indicated that the intersections of Panorama Rd/CSU entry and Browning St/Research Station Drive would continue to operate at a good Level of Service and spare capacity with CSU traffic increased by 100%.
- The estimated traffic generation from CEWP is substantially less than 100% increase and therefore the operation of the intersections will not be adversely affected.

Results of the assessment

- There will be no negative impacts on the operation of intersections and street capacity.
- The proposed development is supported on traffic grounds.

5 SUMMARY AND CONCLUSIONS

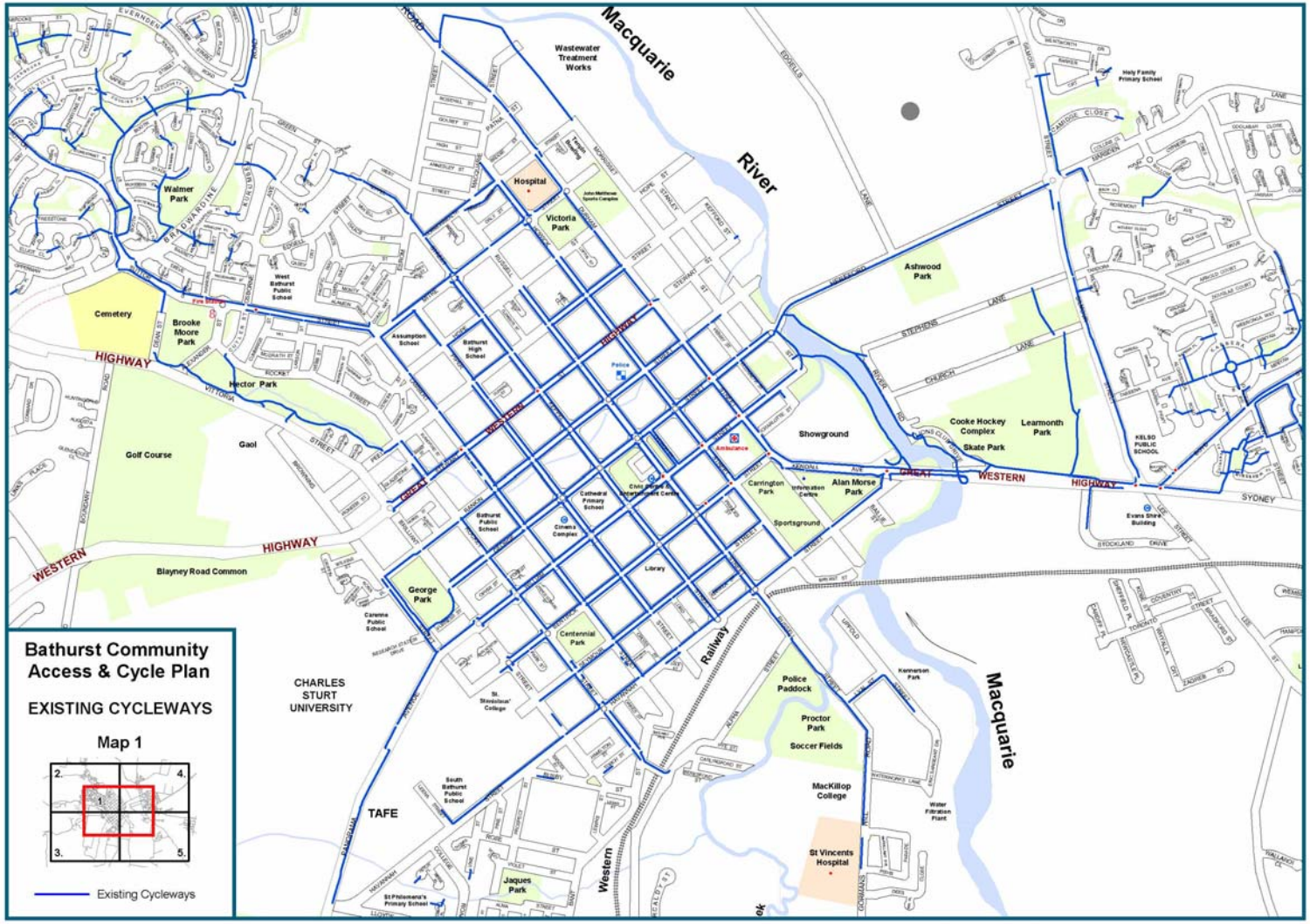
Proposal	• Community Engagement and Wellness Precinct (CEWP) comprising private and teaching clinics and ancillary uses.
Car parking provision	• A total of 42 car parking spaces ◦ including 2 spaces for people with disabilities
Car parking requirements	• 14 car parking spaces based on Council's DCP • 37 car parking spaces based on estimated actual maximum demand
Parking impacts	• The proposal fully complies with and exceeds Council's requirements. • The proposed number of car parking spaces exceeds the estimated maximum parking needs. • Design of the proposed car parking areas complies with the relevant standards. • There will be no negative impact on Campus or on-street car parking availability.
Traffic impacts	• The proposed development will generate little additional traffic and will not affect the existing traffic conditions.
Conclusion	The proposal is supported on traffic and parking grounds.

6 REFERENCES

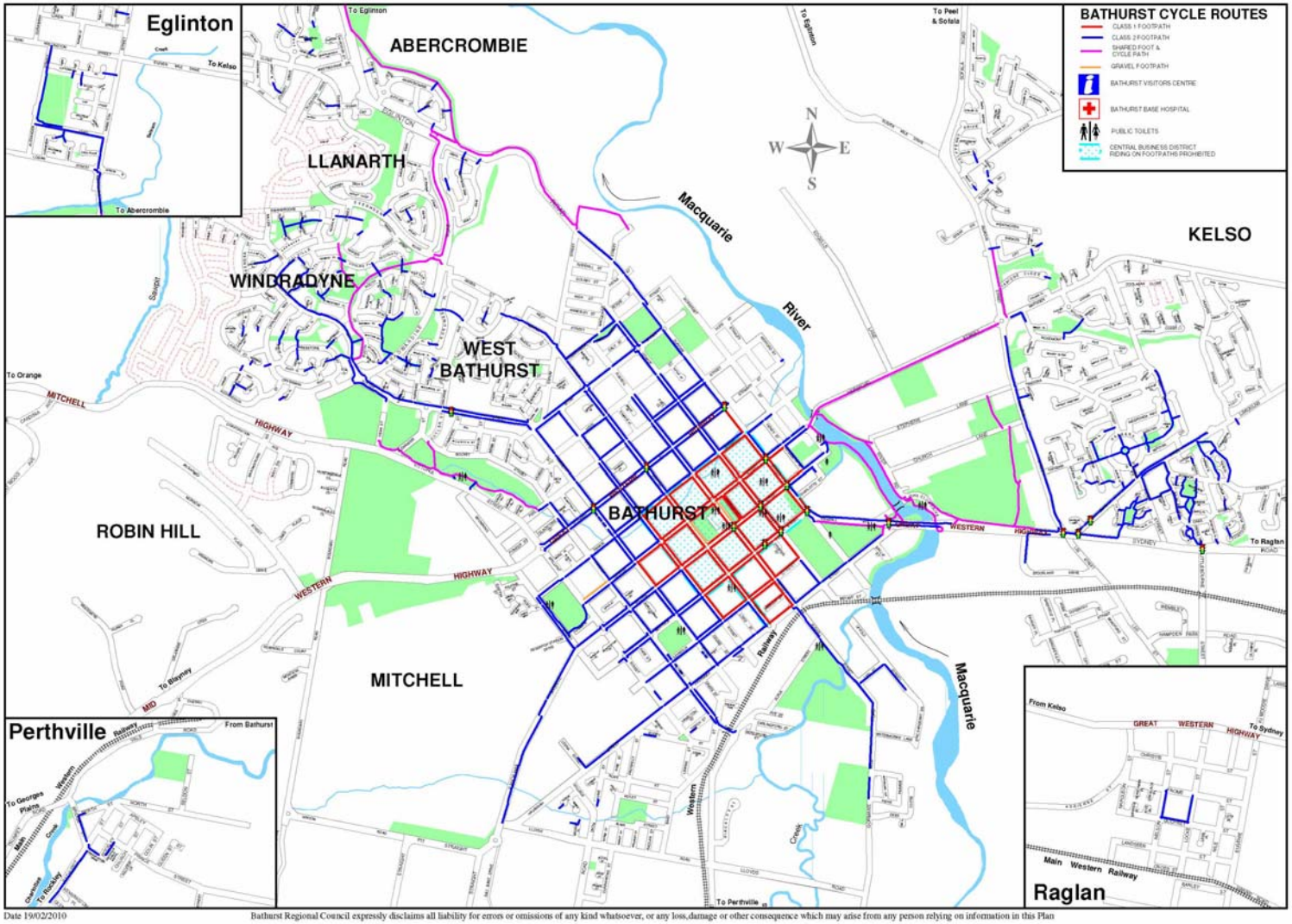
- RTA (2002). Guide to traffic generating developments: Issue 2.2. RTA, Sydney, NSW.
- Australian Standard 2890.1 – Parking facilities: Part 1 – Off street parking. Australian Standards Association, Sydney, NSW.
- Australian/New Zealand Standard 2890.6-2009 Parking facilities - Off-street parking for people with disabilities.
- TEF Consulting (2011) A traffic and parking study for the Charles Sturt University Bathurst Campus.
- Bathurst Regional (Interim) Development Control Plan 2011
- SAVOY COMPUTING (2006). User Manual for AutoTrack 8. Vehicle Swept Path Analysis. Savoy Computing Services Limited, Kent, England.

Appendix A.
Draft Bathurst Community Access and Cycling Plan

Map 1 Existing cycleways and on-road routes

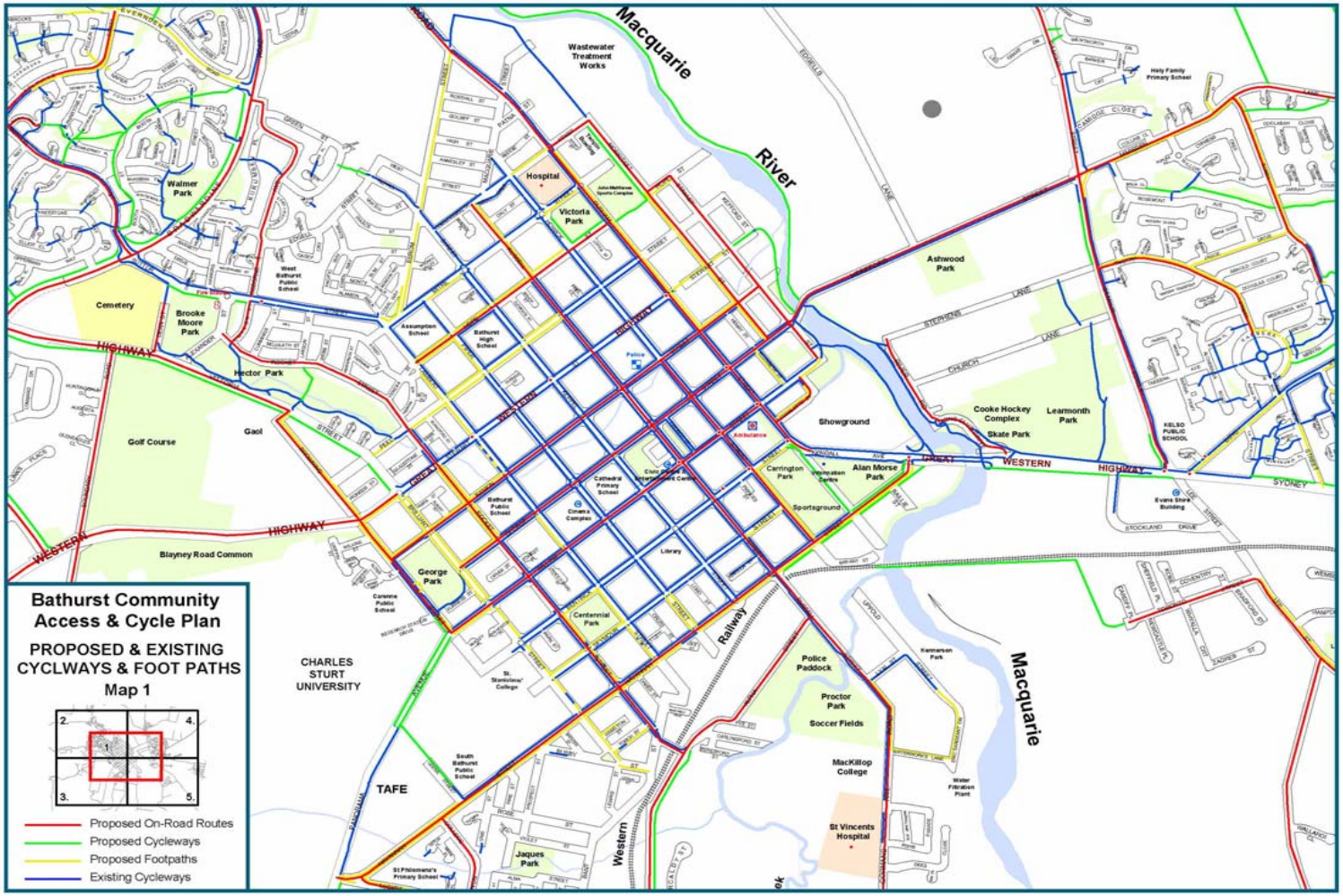


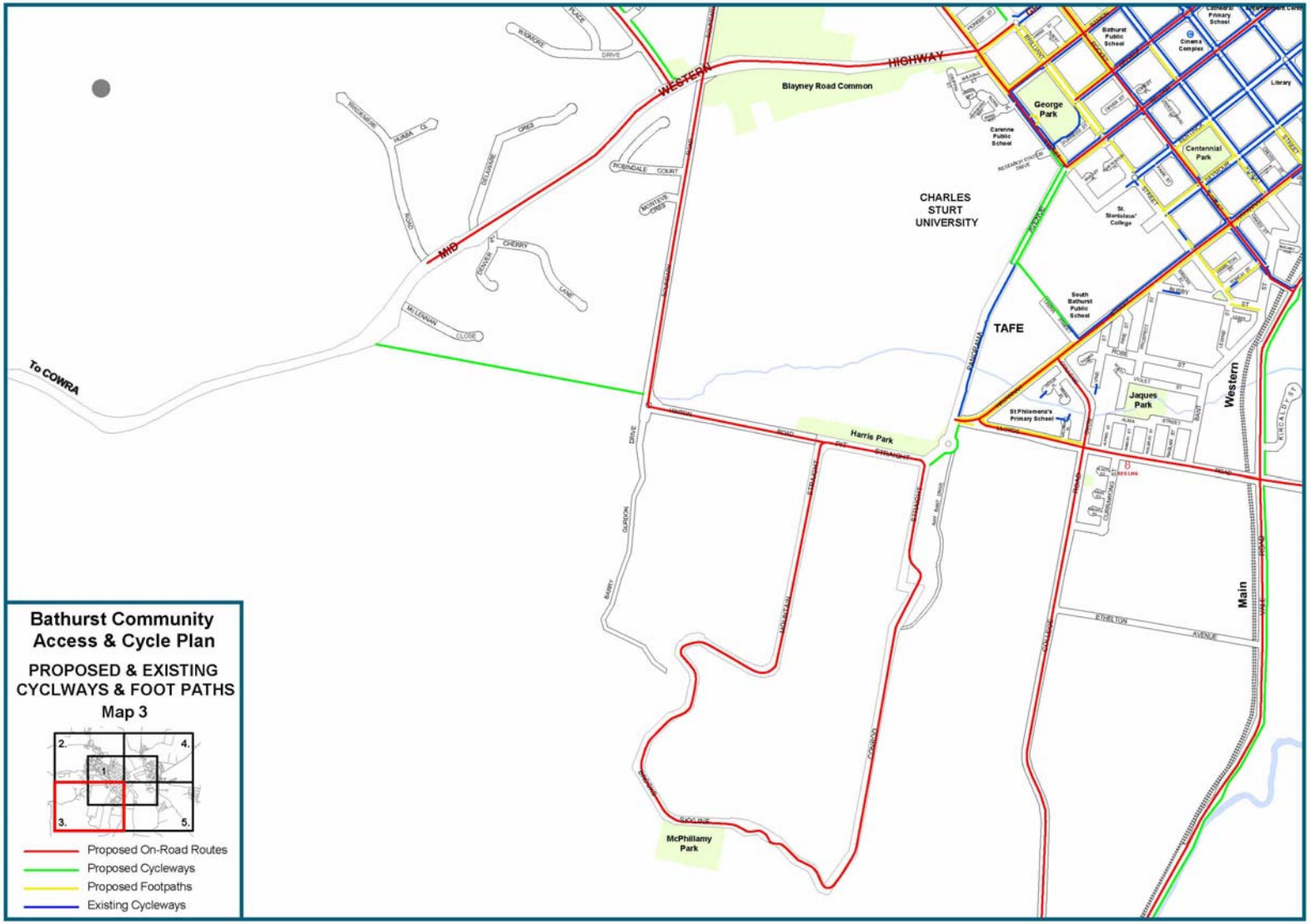
Map 2 Existing footpath network



Date 19/02/2010 Bathurst Regional Council expressly disclaims all liability for errors or omissions of any kind whatsoever, or any loss,damage or other consequence which may arise from any person relying on information in this Plan

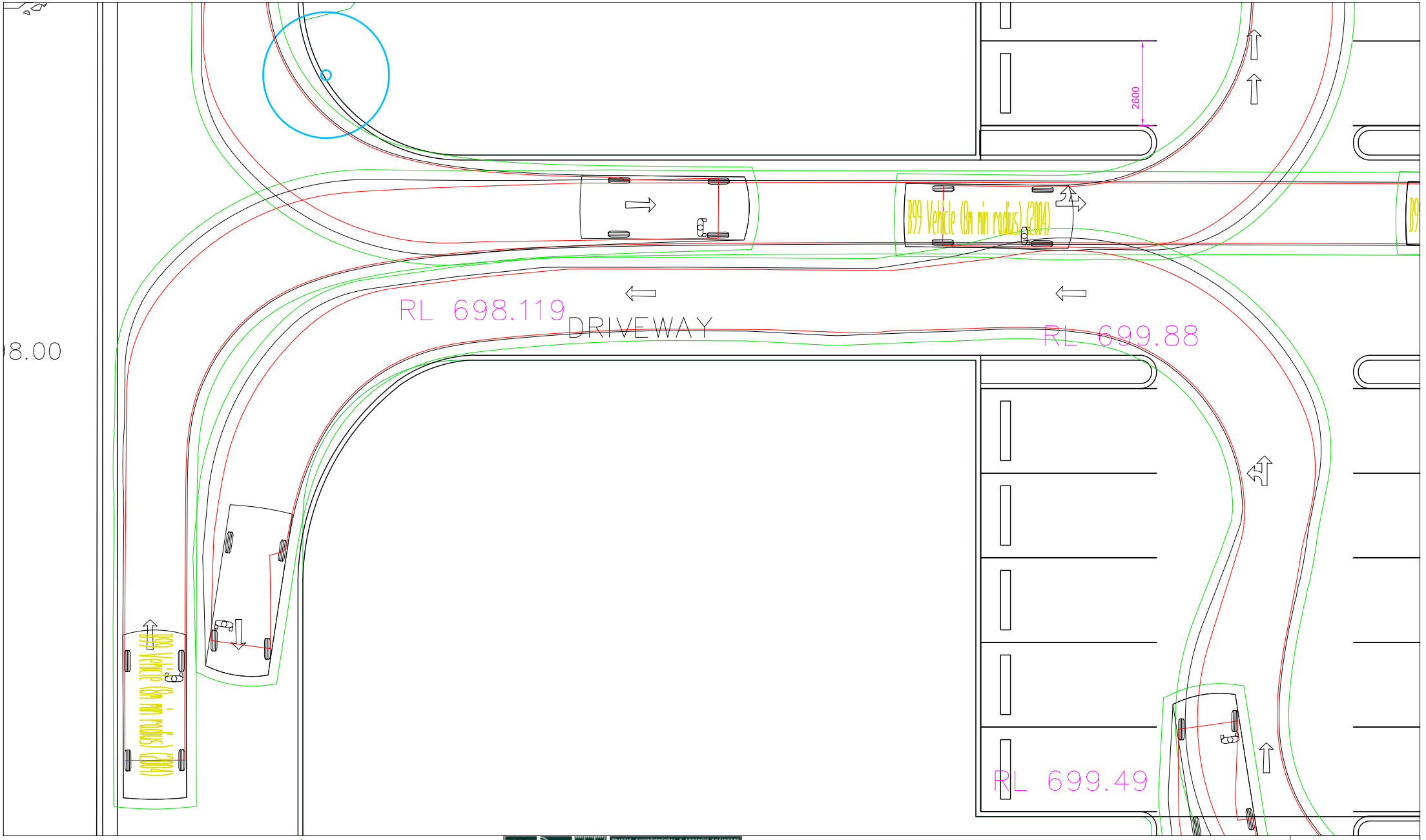
Map 3 Proposed footpath, cycleway and on-road network. (Incorporates the existing network and proposed works)




Bathurst Community Access & Cycle Plan
PROPOSED & EXISTING CYCLWAYS & FOOT PATHS
Map 3
2.
4.
1.
3.
5.
Proposed On-Road Routes
Proposed Cycleways
Proposed Footpaths
Existing Cycleways
To COWRA
WESTERN
HIGHWAY
MID
Blayney Road Common
George Park
Centennial Park
CHARLES STURT UNIVERSITY
TAFE
Harris Park
Jaques Park
McPhillamy Park
Western
Main
ETHELTON AVENUE

Appendix B.

Design checks and vehicle manoeuvring diagrams.



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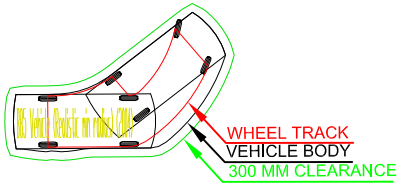


TRAFFIC, ENVIRONMENTAL & FORENSIC ENGINEERS
CONSULTING

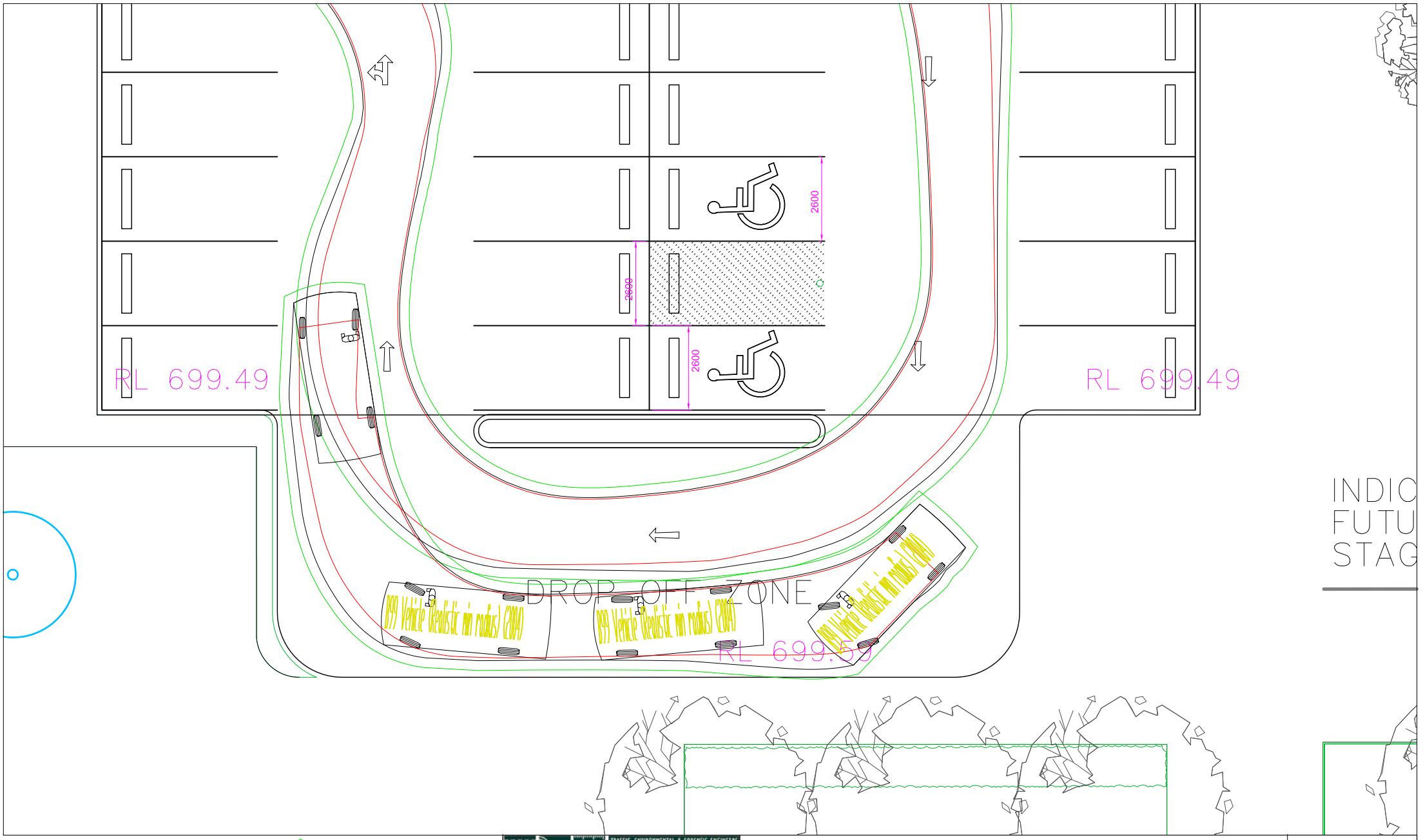
COMMUNITY ENGAGEMENT AND WELLNESS PRECINCT
CHARLES STURT UNIVERSITY BATHURST CAMPUS

SCALE 1:150 @ A4
SHEET 01 of 02

JOB 12037 | 30/08/2012

Client:
Charles Sturt University

DESIGN CHECKS
VEHICLE MANOEUVRING
B99 VEHICLE R8M



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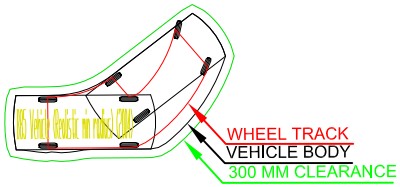

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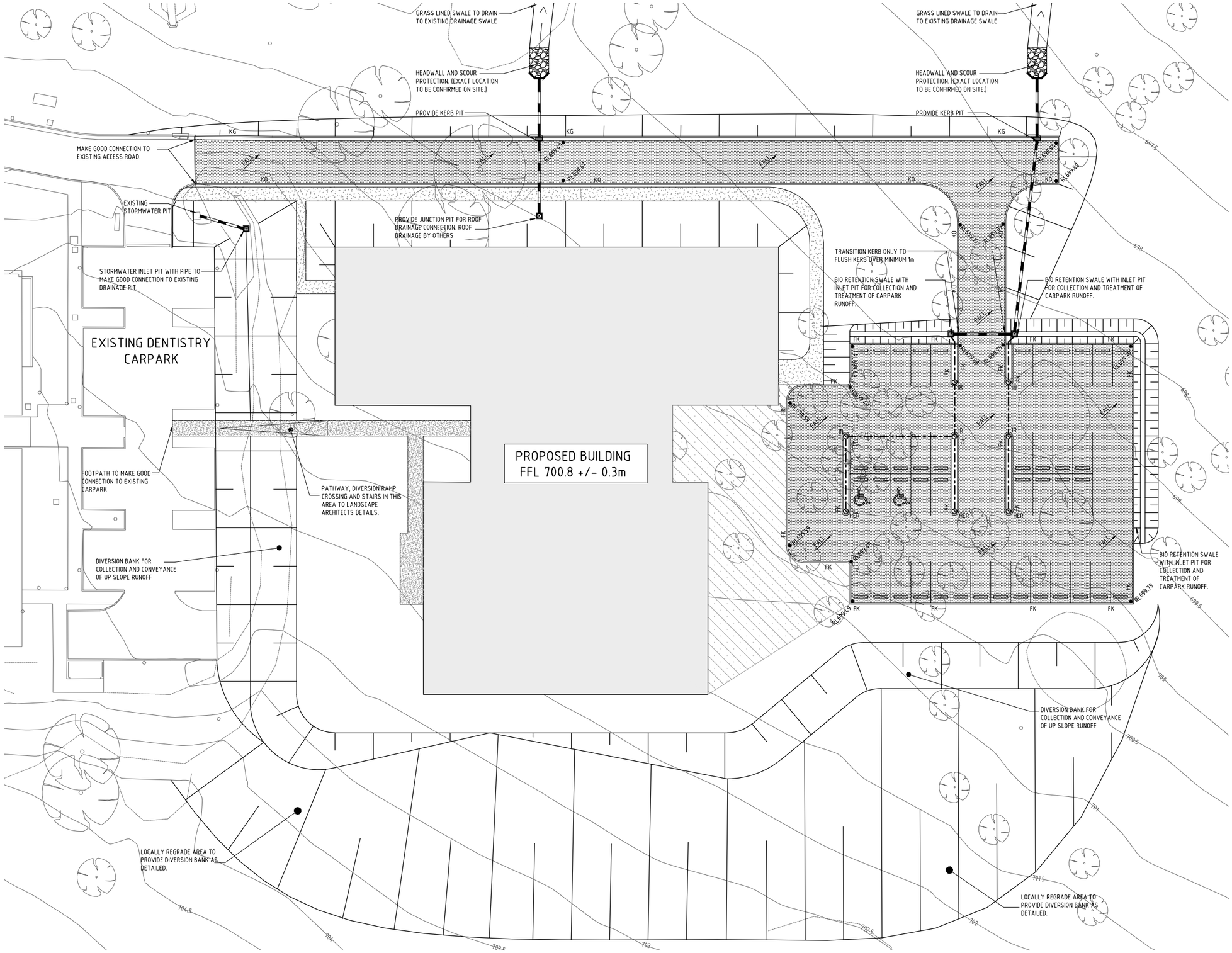

GENERAL NOTES

1. DETAILED DRAINAGE DESIGN TO BE UNDERTAKEN AT CC STAGE AND BE IN ACCORDANCE WITH AS3500.3 PLUMBING AND DRAINAGE AND BATHURST CITY COUNCIL STANDARDS.
2. DETAILED PAVEMENT DESIGN TO BE UNDERTAKEN AT CC STAGE WITH REFERENCE TO GROUND CONDITIONS AND GEOTECHNICAL REPORT.
3. DRAINAGE TO ALLOW FOR UPSTREAM RUNOFF TO BE DIVERTED AROUND SITE TOWARD EXISTING SWALE AS SHOWN.
4. STORMWATER TREATMENT MEASURES TO CONSIST OF BIO-RETENTION SWALES FOR TREATMENT OF CARPARK RUNOFF AS SHOWN AND TO BE DESIGNED TO MEET GREENSTAR REQUIREMENTS FOR EMI 5. FINAL DETAIL DESIGN TO BE UNDERTAKEN AT CC STAGE.
5. REFER TO LANDSCAPE ARCHITECTS PLANS FOR ALL EXTERNAL SURFACE TREATMENTS.
6. ALL LEVELS SHOWN +/- 300. FINAL LEVELS TO BE CONFIRMED AT DETAILED DESIGN PHASE.
7. DETAILED CAR PARK DESIGN IN ACCORDANCE WITH AS2890.1.

LEGEND

- KG — DENOTES CONCRETE KERB & GUTTER
- KO — DENOTES CONCRETE KERB ONLY
- FK — DENOTES CONCRETE FLUSH KERB
- DENOTES STORMWATER DRAINAGE PIPE
- DENOTES KERB INLET PIT
- DENOTES STORMWATER INLET PIT
- DENOTES HEADWALL AND SCOUR PROTECTION
- DENOTES SUBSOIL DRAINAGE LINE
- IR — DENOTES SUBSOIL DRAINAGE INTERMEDIATE RISER
- HER — DENOTES SUBSOIL DRAINAGE HIGH END RISER.
- RL700.20 — DENOTES PROPOSED FINISHED SURFACE LEVEL (+/- 0.3m)
- FALL — DENOTES NOMINAL SURFACE FALL DIRECTION
- DENOTES EXTENT OF NEW ASPHALT PAVEMENT
- DENOTES EXTENT OF NEW FOOTPATH. REFER LANDSCAPE ARCHITECTS PLANS FOR EXACT LOCATION AND COMPOSITION.
- DENOTES REFER TO ARCHITECTS PLANS FOR SURFACE TREATMENTS IN THIS AREA.

PRELIMINARY ONLY

MAY BE AMENDED SUBJECT TO DETAILED CONSTRUCTION DESIGN.

ISSUE FOR DEVELOPMENT APPLICATION

DRAWN M.J.DUKES DESIGNED M.WALTER JOB MANAGER VERIFIER

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
1	ISSUED DEVELOPMENT APPLICATION	M.J.D		M.W.	22.08.12

CLIENT
CHARLES STURT UNIVERSITY

DRAWING NOT TO BE USED FOR CONSTRUCTION UNLESS VERIFICATION SIGNATURE HAS BEEN ADDED

ARCHITECT
brewster hjorth architects

ALL SETOUT TO ARCHITECT'S DRAWINGS, DIMENSIONS TO BE VERIFIED WITH THE ARCHITECT AND ON SITE BEFORE MAKING SHOP DRAWINGS OR COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY.

0 2.5 5.0 7.5 10.0 12.5m SCALE 1:250 @ A1

0 2.5 5.0 7.5 10.0 12.5m SCALE 1:500 @ A3

NORTHROP
Sydney
The Grafton Bond Store
60 Hickson Road,
Sydney, N.S.W. 2000
Ph (02) 9241 4188
Fax (02) 9241 4324
P.O. Box H171
Australia Square, N.S.W. 1215
Email sydney@northrop.com.au
ABN 81 094 433 100

PROJECT
CHARLES STURT UNIVERSITY
CAH AND IPHC BUILDINGS
BATHURST CAMPUS, PANORAMA AVE
BATHURST NSW 2795

DRAWING TITLE
CONCEPT STORMWATER MANAGEMENT PLAN

JOB NUMBER **11767**

DRAWING NUMBER **DA01**

REVISION **1**

DRAWING SHEET SIZE = A1