



Transport
Roads & Maritime
Services

ADDITIONAL CROSSING OF THE CLARENCE RIVER AT GRAFTON

Appendix G – Technical Paper:
Non-Aboriginal heritage assessment

AUGUST 2014

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Abbreviations

AHD	Australian Height Datum
ANSDB	Australian National Shipwreck Database
ARTC	Australian Rail Track Corporation
c.	circa
CHL	Commonwealth Heritage List
CVLEP	Clarence Valley Local Environmental Management Plan
DGRs	Director General's Requirements
DP&E	Department of Planning and Environment (former Department of Planning and Infrastructure)
DP	Deposited Plan
EIS	Environmental Impact Statement
LEP	Local Environmental Plan
LGA	Local Government Area
m	metre
mm	millimetre
NCREP	North Coast Regional Environmental Plan
NRE	National Register of Estate
NHL	National Heritage List
NT	National Trust
REP	Regional Environmental Plan
SoHI	Statement of Heritage Impact
OEH	Office of Environment and Heritage, Department of Premier and Cabinet
SHI	State Heritage Inventory
SHR	State Heritage Register
SSI	State Significant Infrastructure

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Executive Summary

Roads and Maritime Services (Roads and Maritime) is seeking approval for an additional crossing of the Clarence River at Grafton to address short-term and long-term transport needs. Arup (on behalf of Roads and Maritime) has engaged Biosis Pty Ltd to undertake a non-Aboriginal heritage assessment. The non-Aboriginal heritage assessment will form part of an environmental impact statement (EIS) which is being prepared as part of a State Significant Infrastructure project (SSI).

The project area is associated with 76 heritage items, including one shipwreck (SS *Induna*- FMW29), and two conservation areas (Grafton Conservation Area -C3 and South Grafton Conservation Area -C7). Three of the heritage items are of state significance; these are the Clarence Rail and Road Bridge (CZB36), South Grafton Railway Precinct (CZB37) and "Arcola" (FMW27). The remaining 73 heritage items are of local significance.

Archaeological investigations were undertaken to characterise the nature of archaeological remains associated with the construction areas for the Grafton Road and Rail Bridge (CZB36). These investigations consisted of two mechanically excavated trenches which concluded that substantial archaeological remains from the 1930s workshops used to erect the spans for the Clarence River Bridge are unlikely to occur within the project area. The physical archaeological investigation did identify the remains from more recent buildings and numerous railway related artefacts. Consequently, the archaeological potential for CZB36 has been reduced to moderate with low research potential.

A maritime archaeological assessment was undertaken by Comber Consultants for the project. This included remote sensing and a visual inspection of portions of the Clarence River associated with the project Area. The investigation concluded that with the exception of the SS *Induna* (FMW29), no maritime archaeological features identified through remote sensing and the visual inspection was considered to be relics or heritage items.

The project area contains or is adjacent to 76 heritage items, including two conservation areas. The most significant impacts will be to the Grafton Conservation Area (C3) which is traversed by the Construction works zone boundary and contains a total of 36 heritage items. Impacts within the Construction works zone boundary include:

- Direct total impacts to 10 heritage items where option for retention have been considered but are not feasible. These impacts (historical and aesthetic) can be partially mitigated by archival recording, the preparation of an interpretation plan for the whole site and relocation of one heritage item.
- Direct partial impacts to 7 heritage items can be mitigated through archival recording.

The Flood mitigation works impacts the Grafton Conservation Area (C3) and the South Grafton Conservation Area (C7) to a limited degree. At present, impacts to the 39 heritage items traversed, adjacent to or within the flood mitigation works are minimal and negligible and are unlikely to impact upon the value of these items. The precise form of the flood mitigation works is currently unknown and will be determined during the detailed design phase. Impacts to heritage items should be considered throughout the detailed design phase. Should whole sections of levee require replacement, then impacts to areas with moderate to high archaeological potential and research potential should be avoided. Where impacts are unavoidable a program of archaeological monitoring should be undertaken in conjunction with the construction program with the aim of recording any archaeological material should it be encountered. This will need to be coordinated in a manner which does not impact upon the flood defenses of Grafton and South Grafton.

The Grafton Rail and Road Bridge (CZB36) will not be altered or directly impacted by the project. The project would serve to enhance the heritage significance of the existing bridge through reducing wear and tear on the bridge's fabric by reducing traffic volumes. The location of the new bridge would provide a new vantage point from which to view the Grafton Rail and Road Bridge. The concept design and design parameters for the new bridge require that it respects and responds to the presence and form of the original bridge in a complementary manner. Views to and from the heritage item from the riverbanks will be interrupted and therefore a program of archival recording to record these is proposed.

These recommendations have been formulated to respond to client requirements and the significance of the site. They are guided by the NSW Heritage Manual (and subsequent guidelines) and Australia ICOMOS *Burra Charter* with the aim of doing as much as necessary to care for the place and make it useable whilst reducing actions which will reduce cultural significance.¹

Recommendation 1 Prepare an archival record prior to impact and at the completion of the project

Archival recording is recommended for 22 heritage items including CZB10, CZB11, CZB13, CZB16, CZB17, CZB18, CZB19, CZB20 & 21, CZB24, CZB25, CZB26, CZB27, CZB28, CZB29, CZB30, CZB31, CZB32, CZB33, CZB34, CZB35, CZB36 and CZB37. Furthermore, archival recording of the portions of Pound Street within the Grafton Conservation Area (C3) should be completed.

The archival records should record the process of development and alterations to heritage values. A program of archival recording should be completed prior to impacts and at the completion of the project. All archival recording should be completed in accordance with the Heritage Branch guidelines *How to Prepare Archival Records for Heritage Items* and *Photographic Recording of Heritage Items Using Film or Digital Capture* (Heritage Office 2001, revised 2004, 2006).

Recommendation 2 Noise mitigation architectural treatment on heritage items

Based on the concept design detailed in the EIS, it is anticipated that the project could result in noise exceedances for CWZ10, CWZ11, CWZ15, CWZ22, CWZ23, CWZ24, CWZ29 and CWZ34 that could potentially require architectural noise treatment at the property. Should the detailed design identify that houses with heritage significance be required, Architectural noise treatments would be undertaken in a sympathetic manner as to minimise impact upon the significance of the heritage item.

Recommendation 3 Relocation of heritage items

Following its archival recording, the King George V Plaque (CZB19) should be relocated to a safe location by the construction contractor and later reinstated on the new section of viaduct at Pound Street following its completion.

Recommendation 4 'No go' areas and temporary fencing during construction

Temporary exclusion areas ('No go') areas should be established around heritage items, CZB07, FMW29 and FMW34. For CZB07 and FMW34 No-Go areas should be established at an appropriate distance to protect the heritage values of the heritage items but allow construction to proceed unhindered.

In relation to FMW29, the SS Induna, both terrestrial and maritime temporary exclusions areas should be established during construction to exclude the entry of vehicles or equipment associated with construction. The perimeter should be placed on the existing property boundary to the south of the SS Induna. A maritime exclusion area (to be in accordance with Maritime and navigational requirements) should be placed 15 metres from the shipwreck to remind workboats to not enter this area. Terrestrial works in the vicinity of the wreck should consider the stability of the wreck and be undertaken in a manner which ensures that heavy machinery does not impact upon the river bank or the wreck.

'No go' areas should be marked on all construction plans and incorporated into inductions / tool box talks with contractors undertaking work within the vicinity.

¹ "The Burra Charter 1999", the Australia ICOMOS Charter of Places of Cultural Significance.

Recommendation 5 Heritage values to be considered as part of the flood mitigation works

The proposed flood mitigation works consists of raising section of the level of the existing levee system to maintain flood immunity. The design of the flood mitigation would be undertaken at detailed design stage, but impacts to heritage items and areas of archaeological potential are expected to consist of minor alterations and additions to the existing levee. Any construction and clearance activities within or adjacent to the curtilage of heritage items should be sympathetic as to minimise the removal of or impact to associated heritage values.

Recommendation 6 Archaeological monitoring (if required)

The analysis for this report has determined the flood mitigation works traverse areas of moderate and high potential for the survival of archaeological resources of local significance. Depending on the level of impact and the form of the proposed works monitoring of these moderate and high archaeologically sensitive areas will be required. No monitoring is required for sites with low archaeological significance.

Monitoring is proposed as it is not appropriate to undertake archaeological testing and salvage within or adjacent to the existing flood levee. This is due to the risks associated with compromising the flood protection measures around Grafton. An archaeological excavation program would expose properties within Grafton to an unacceptable level of risk and therefore is not appropriate in this instance.

An archaeological monitoring program would be developed as part of the Heritage Management Sub-Plan developed for the project. The monitoring program would provide the following details:

- Description of the proposed works, including level of disturbance and consideration of previous levee construction activities and how this relates to the impacts from the works.
- Details of involvement of suitably qualified archaeologist for all initial ground disturbance works which may impact upon archaeological deposits.
- Process to be followed should any heritage items be identified during monitoring period.

Recommendation 7 Prepare an interpretation plan for the project

The project will have a significant impact on individual heritage items and heritage values associated with the Grafton Conservation Area (C3). A heritage interpretation plan should be prepared to provide opportunities to enhance understanding and appreciation of the heritage items, values and themes associated with Grafton. In particular, the interpretation plan should identify heritage items which are to be removed and provide opportunities for compensating for these losses. This may include incorporating elements such as formalised heritage walks and programs of tree planting into the landscaping and planning of the project.

Recommendation 8 Discovery of Unanticipated Non-Aboriginal Objects and/or Human Remains

In the event that unanticipated Non-Aboriginal heritage items or skeletal remains are encountered the *Roads and Maritime Services Standard Management Procedure for Unexpected Archaeological Finds* (2012) will be implemented.

The management recommendations presented within this document are based upon the findings of a comprehensive investigation of documentary sources, built fabric, terrestrial and maritime archaeological sites. These investigations have informed the assessment of significance and impacts for all identified heritage items within the vicinity of the project area. The management recommendations have been formulated based upon the NSW Heritage Manual (and subsequent guidelines) and the ICOMOS Burra Charter. The recommendations detail measures to preserve and enhance heritage items where possible. Where impacts are unavoidable this document processes for minimising the losses to archaeological knowledge.

Recommendation 9 Consideration of heritage in Urban Design principles

Heritage considerations will be incorporated into the Urban Design and Landscape objectives developed for the project. These features will be refined further during detailed design development for the project.

1 Introduction

1.1 Project background

Roads and Maritime is seeking approval for an additional crossing of the Clarence River at Grafton to address short-term and long-term transport needs. Arup (on behalf of Roads and Maritime) has engaged Biosis Pty Ltd to undertake a non-Aboriginal heritage assessment. This non-Aboriginal assessment will form part of an environmental impact statement (EIS) report which is being prepared as part of a State Significant Infrastructure (SSI) project (Application No: SSI 13_6103).

Planning for an additional crossing of the Clarence River at Grafton was initially funded by the NSW Government, starting in 2002. Investigations were deferred in September 2005 and restarted in 2009. In December 2010 Roads and Maritime (formerly the Roads and Traffic Authority (RTA)) announced a revised approach to engage more effectively with the community and stakeholders in identifying a preferred route for an additional crossing. A community update issued in December 2010 identified 13 preliminary route options and invited community comment via a postal survey. Subsequent phone and business surveys were also carried out. This generated 41 route options that were to be considered.

In June 2011 Roads and Maritime published the Feasibility Assessment Report which described the assessment completed for the 41 route options. Of the 41, twenty-five preliminary route options in five corridors were progressed for engineering and environmental investigation. In January 2012 six of these route options were announced for further investigation. The short-listed options and short-listing process are documented in the Preliminary Route Options Report – Final (RMS, January 2012).

Design refinements and further field and technical investigations were completed on the six route options. These were documented in the Route Options Development Report (RMS, September 2012). The six route options were subject to an assessment process in October and November 2012 to identify a recommended preferred location for an additional crossing of the Clarence River at Grafton. The assessment process was based on community feedback, technical investigations, the outcomes of a value management workshop, and Roads and Maritime review of the options. The process initially identified Option E and Option C for further consideration. Further comparative assessment resulted in Option C as the recommended preferred option. The assessment process and the resulting recommended preferred option are documented in the Recommended Preferred Option Report (RMS, December 2012).

In April 2013, the Minister for Roads and Ports announced Option C as the preferred option for an additional crossing of the Clarence River at Grafton. The preferred option consists of a new road link between the Pacific Highway, South Grafton, and Pound Street, Grafton, with a new road bridge constructed across the Clarence River downstream of the existing combined road and rail bridge. The preliminary concept design was prepared and placed on display for community comment in November 2013. Detailed designs for the project are yet to be finalised.

This report documents the assessment of non-Aboriginal heritage within the project area. This includes a concise summary of background research carried out to determine the historical and archaeological context of the project area. The built heritage, archaeological and maritime assessments have been completed to assess the physical fabric within the project area. This report provides statements of significance and impact to identified heritage values and proposed management and mitigation measures for the completion of the project.

1.2 Project area

The project area is located in Grafton and South Grafton in the Clarence Valley Council, local government area (LGA), on the NSW Mid North Coast; about 610 km north of Sydney (see Figure 1 and Figure 2). The project area can be divided into the following areas, which assist in delineating between the main components of the project and their location:

- Construction works zone boundary (CZB): encompasses the area associated with the new bridge and upgrades to the road network in Grafton and South Grafton.
- Ancillary facilities: which include the South Grafton ancillary site in South Grafton, the Pound Street ancillary site in Grafton and various stockpiling areas along the sections of the levee to be raised in Grafton and South Grafton.
- Construction zone boundary along the proposed flood mitigation works (FMW): comprise the sections of the levee to be raised in Grafton and South Grafton.

Due to the complexity of the heritage values within Grafton and South Grafton, this report has used these terms to orientate the discussion of heritage values for the project.

1.3 Project description

The main components of the Grafton Bridge project are:

- Construction of a new bridge over the Clarence River about 70 metres downstream (east) of the existing road and rail bridge, comprising two traffic lanes
- Construction of a new road to link the new bridge with Iolanthe Street in South Grafton
- Construction of a new road to link the new bridge with Pound Street in Grafton
- An approach viaduct, about 64 metres long, on the South Grafton side of the Clarence River and 29 metres long on the Grafton side.
- Upgrades to the road network in South Grafton to connect the new bridge to the existing road network, including:
 - Widening Iolanthe Street to four lanes
 - Widening the Gwydir Highway to four lanes between Bent Street and the Pacific Highway
 - Realigning the existing Pacific Highway to join Iolanthe Street near Through Street
 - Providing a new roundabout at the intersection of the Pacific Highway and Gwydir Highway
 - Providing a new roundabout at the intersection of Through Street and Iolanthe Street
 - Limiting Spring Street and the Old Pacific Highway to left in and left out only where they meet Iolanthe Street
 - Realigning Butters Lane
- Upgrades to the road network in Grafton to connect the new bridge to the existing road network, including:
 - Widening Pound Street to four lanes between Villiers Street and the approach to the new bridge
 - Providing traffic signals at the intersection at Pound Street and Clarence Street
 - Closing Kent Street where it is crossed by the bridge approach road
 - Realigning and lowering Greaves Street beneath the new bridge

-
- Realigning Bridge Street to join directly to the southern part of Pound Street (east of the new bridge approach). There would be no direct connection between Pound Street south and the new bridge approach
 - Widening Clarence Street to provide formal car park spaces
 - Minor modifications to the existing Dobie Street and Villiers Street roundabout.
- Replacement of the existing three span concrete arch rail viaduct which crosses Pound Street in Grafton with a single span steel truss bridge
 - Construction of a pedestrian and cycle path to provide connectivity between Grafton, South Grafton and the new bridge
 - Provision of two signalised pedestrian crossings in South Grafton to improve safety for pedestrians crossing Iolanthe Street and Gwydir Highway
 - Construction of new pedestrian links to connect the new bridge with the existing bridge
 - Provision of designated car park spaces in Pound Street and Clarence Street, including some off street parking, to maintain a similar number of existing car park spaces currently available in those two street
 - Flood mitigation works, which include raising the height of sections of the existing levee upstream from the new bridge in Grafton and South Grafton
 - Construction of a stormwater detention basin and pump station in Grafton to manage local flooding
 - Public utilities adjustment
 - Ancillary facilities required for the construction of the project, including some or all of the following: site compounds, concrete batching plant, pre-cast facilities, and stockpile areas for materials and temporary storage of spoil and mulch.

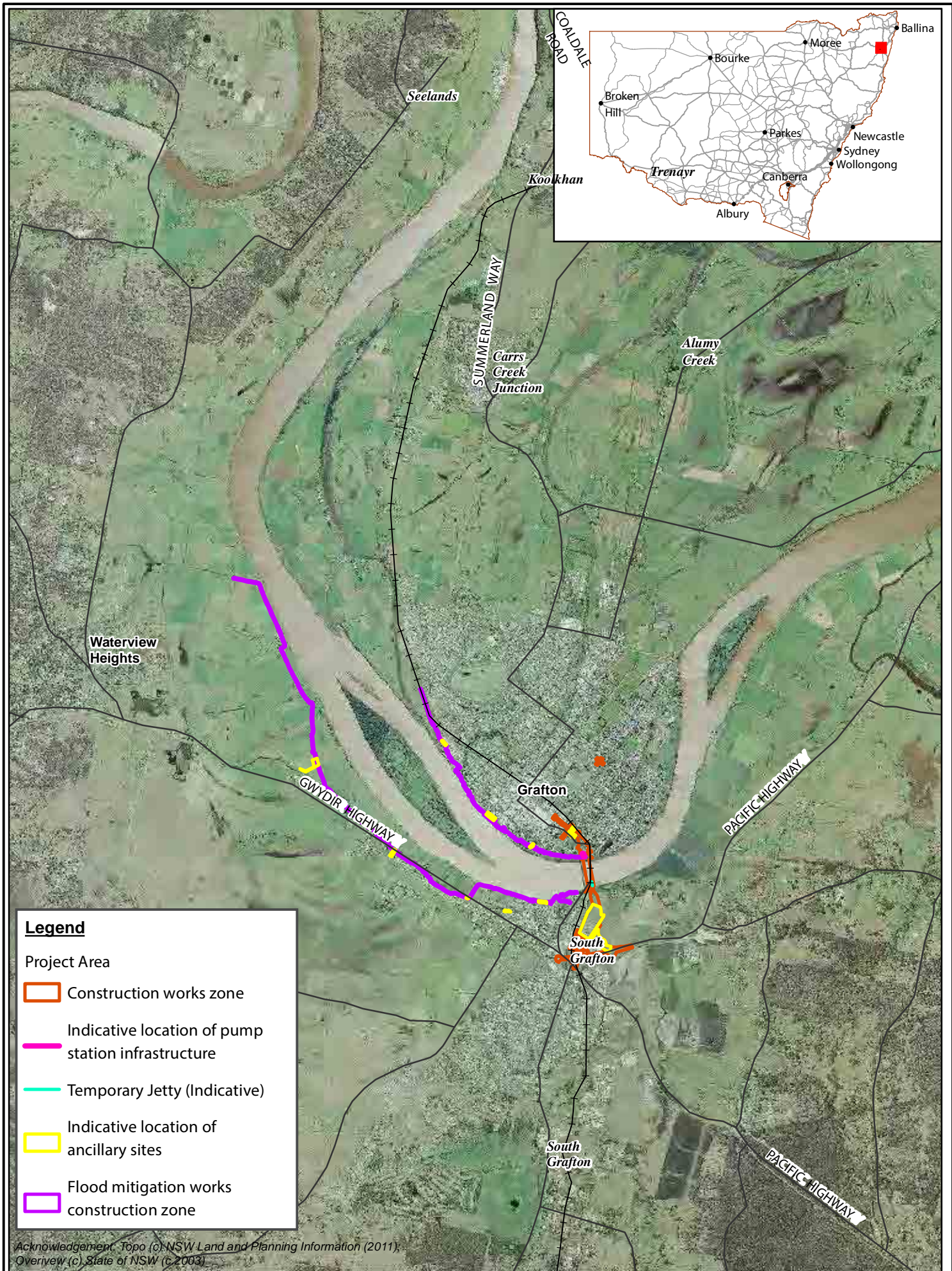
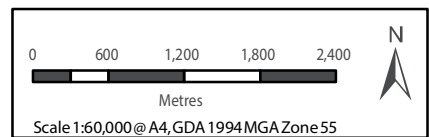


Figure 1: Location of the Project Area



Biosis Pty Ltd
Ballarat, Brisbane, Canberra, Melbourne,
Sydney, Wangaratta & Wollongong

Matter: 16255
Date: 06 May 2014,
Checked by: A JB, Drawn by: JMS, Last edited by: jshepherd
Location: P:\16200s\16255\Mapping\



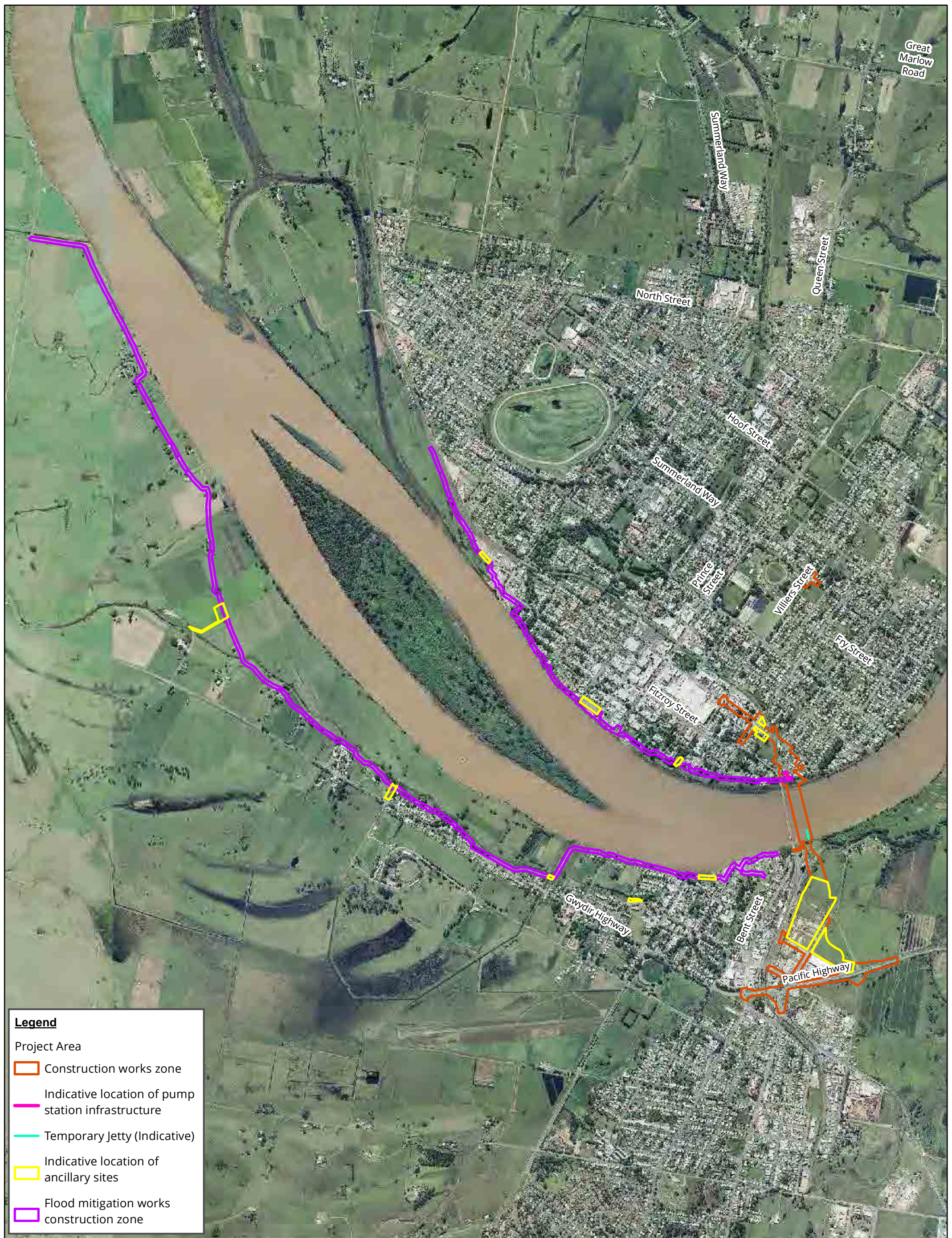


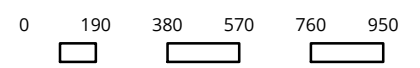
Figure 2: Overview of the Project Area



Ballarat, Brisbane, Canberra, Melbourne, Sydney, Wangaratta & Wollongong

Acknowledgements: Imagery provided by Arup Pty Ltd

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Scale 1:20,000 @ A3
 Coordinate System: GDA 1994 MGA Zone 56



1.4 Planning approvals

The Grafton Bridge project will be assessed against Part 5.1 of the *Environmental Planning and Assessment Act 1979* NSW (EP&A Act) as a State Significant Infrastructure (SSI) project. Relevant legislation and planning instruments that will inform this assessment include:

- *State Environmental Planning Policy (State and Regional Development) 2011*
- *Environmental Planning and Assessment Regulation 2000*
- *NSW Heritage Act 1977* (NSW)
- *Clarence Valley Local Environmental Plan 2011*.

Director General's Requirements (DGRs) for the project were issued on 3 October 2013 (SSI Application 13-6103) and detailed requirements for an environmental impact statement (EIS). The DGRs identified heritage as a key issue for the EIS to address and presented the following requirements specific to non-Aboriginal heritage investigations:

- *An assessment of impacts to State and local historic heritage (including heritage items, and maritime and terrestrial archaeology), in particular, impacts on the Grafton Bridge, should be assessed. Where impacts to State or locally significant historic heritage items are identified, the assessment shall:*
 - *outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the guidelines in the NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1996)*
 - *be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations and maritime surveys are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria)*
 - *include a statement of heritage impact for all heritage items (including significance assessment)*
 - *consider impacts from vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment*
 - *develop an appropriate archaeological assessment methodology, including research design, in consultation with the Department and the Heritage Council of New South Wales, to guide physical archaeological test excavations (terrestrial and maritime) and include the results of these excavations.*

In accordance with the DGRs, this document provides an assessment of impacts to non-Aboriginal heritage values including a statement of heritage impact for all heritage items as well as management and mitigation measures.

1.5 Report methodology

1.5.1 Approach

This report was prepared in accordance with current heritage guidelines including *Assessing Heritage Significance* (NSW Heritage Office 2001), *Assessing Significance for Historical Archaeological Sites and "Relics"* (Heritage Branch, Dept. of Planning 2009) and *Burra Charter* (Australia ICOMOS Inc. 1999).

This report provides an archaeological assessment to identify whether archaeological remains exist within the project area; and assesses the significance of the proposed impact to archaeological and built structures in order determine the most appropriate management strategy.

1.5.2 Assessment objectives

The major objectives of the assessment can be summarised as follows:

- To identify and assess the potential archaeological resource of the project area. The study aims to achieve this objective by:
 - Providing a brief summary of the principle historical influences that have contributed to creating the present – day built environment of the project area using recourses already available and some limited new research
 - Identifying sites and features within the project area which are already recognised for their cultural heritage value through statutory and non – statutory heritage listings
 - Identifying the cultural heritage significance of sites and features within the project area which are not recognised through statutory heritage listings
 - Identifying known or potential archaeological sites within the project area.
- To assess the impact of the proposed works on the cultural heritage significance of the project area
- To recommend measures to avoid or mitigate any negative impacts on the cultural heritage significance of the project area.

1.5.3 Consultation with regulatory bodies

As part of the DGRs issued for the project there is a requirement for consultation to be carried out with Department of Planning and Environment (DP&E), Office of Environment and Heritage (including Heritage Division) and the Heritage Council of NSW during the preparation of the environmental impact statement. Table 1 details the consultation that has been completed during the preparation of this assessment.

Table 1: Consultation with regulatory bodies.

Milestone	Medium	Detail of communications	Summary of outcomes
Presentation of proposed project, feedback on draft research design for terrestrial archaeological investigations.	Email, meeting	<p>Emailed draft research design Roads and Maritime and Heritage Division on 7 November 2013.</p> <p>Meeting held on 20 November 2013 at 3 Marist Place, Parramatta to discuss project and proposed research design attended by project team consultants, DP&E and Heritage Division.</p>	<p>Feedback received on draft research design, this was incorporated into an amended research design. This included consideration of broader heritage listings within the project area, revision of the archaeological methodology to focus on larger trenches on the southern bank, with increased justification on the reasoning behind archaeological investigations to be completed.</p>

Milestone	Medium	Detail of communications	Summary of outcomes
Submission of proposed methodology for maritime heritage assessments.	Teleconference, email	Teleconference held between Roads and Maritime and Heritage Division on 3 December 2013. Email correspondence to confirm outcomes.	Inclusion of Ground Penetrating Radar at the same time as Side Scan Sonar in order to identify potential items buried in the river sediment. Desktop assessment to consider dredging history of channel, shipbuilding/timber yards, maritime infrastructure, refuse fields, reclamation activities and impact from potential river scouring on SS <i>Induna</i> .
Revised terrestrial archaeological research design submitted to DP&E and Heritage Division.	Letter	Sent final research design to Office of Environment and Heritage (Heritage Division) for their information	No comments received.
Request to confirm consultation procedure with DP&E, Heritage Division and Heritage Council of NSW	Letter	Letter from Roads and Maritime to Heritage Division on 13 March 2014 seeking confirmation on consultation process for project. Response received from Heritage Division on 26 March 2014.	The letter confirmed consultation to date and requested confirmation from Roads and Maritime on how further consultation was to be carried out, either by formal letter, briefing or meeting.
Confirmation of Consultation and Presentation of Results	Letter	Letter to from Roads and Maritime to Ed Beebe (OEH) dated 19 June 2014 confirming consultation undertaken to date and offering to meet and present the results of the project prior to finalisation.	No response received.

1.5.4 Report structure

This report is structured to meet the environmental assessment requirements for non-Aboriginal heritage for the project as determined by the DP&E. (refer Section 1.4).

Sections 2 to 6 of this report comprise an investigation of the non-Aboriginal cultural heritage significance of the project area through a review of statutory and non-statutory heritage listings, historical research, and analysis of the built environment, archaeology and maritime heritage of the project area. The cultural heritage significance of the project area is analysed and assessed in Section 7.0.

Section 8 relates to managing the non-Aboriginal cultural significance which has been identified, and this is achieved through an understanding of the likely impact of the proposed works on this significance. Recommendations to avoid, mitigate or manage impacts on the non-Aboriginal cultural significance of the project area are made in Section 9.

Technical reports detailing the results of the physical archaeological test investigations and maritime assessment for the project areas are included in Appendix A and B respectively.

1.6 Investigators and contributors

This report has been authored by Alexander Beben (BA Hons, MA), Senior Archaeologist, James McGuinness (BA Hons), Archaeologist (Biosis Pty Ltd), and Dr Iain Stuart (JCIS Consultants). The maritime assessment for this project was completed by David Nutley (BA Hons) of Comber Consultants. This report is based upon documentary research by Peter Woodley, Pamela Kottaras, Louise Doherty, Iain Stuart, Alexander Beben, James McGuinness and Peter Howard.

In accordance with the DGRs this assessment has been undertaken by suitably qualified and experienced heritage consultants. The terrestrial archaeological investigations were directed by Dr Iain Stuart, a recognised excavation director under the NSW Heritage Council's Excavation Director Criteria. Dr Stuart has held excavation permits for state and local significance sites.

1.7 Limitations of the report

This report is based on historical research and field inspections. It is possible that further historical research or the emergence of new historical sources may support different interpretations of the evidence in this report.

The assessment of the flood mitigation works associated with the existing levee's was undertaken as a desktop assessment with limited field investigation from public land due to property access issues. This level of survey was adequate to quantify the heritage values within the flood mitigation works. As the proposed works associated with the flood mitigation works will not be finalised until the detailed design phase, it is only possible to present a limited statement of heritage impact for heritage items and areas of archaeological potential. It should be noted that due to the nature of the project, a proportion of the project area was not accessible and/or not yet identified through earlier design in order to undertake surveys, namely some of the indicative ancillary site locations (see Figure 2). All areas of impact are based on the most recent project area, as provided by Arup on April 2014.

Although this report was completed to best archaeological practice and its conclusions are based on professional opinion, it does not warrant that there is no possibility that additional archaeological material will be located in subsequent works on the site. This is because limitations in historical documentation and archaeological methods make it difficult to accurately predict what is under the ground.

The significance assessment made in this report is a combination of both facts and interpretation of those facts in accordance with a standard set of assessment criteria. It is possible that another professional may interpret the historical facts and physical evidence in a different way.

2 Heritage listings

2.1 Introduction

The project is being assessed as a State Significant Infrastructure (SSI) Project (Project number SSI 13_6103) under Part 5.1 of the *Environmental Planning and Assessment Act 1979*. Statutory heritage listings inform the assessment process. Approval for the project will be made by the Minister for the DP&E who will assess whether the investigation has been conducted in accordance with the Director General's Requirements (DGRs) issued on 3 October 2013.

In NSW cultural heritage is managed in a three-tiered system: National, State and local. Certain sites and items may require management under all three systems or only under one or two. The following discussion aims to outline the various levels of protection afforded to non-Aboriginal heritage within or adjacent to the project area.

2.2 Commonwealth legislation and statutory listings

2.2.1 Environmental Protection and Biodiversity Conservation Act 1999

The *Environmental Protection and Biodiversity Act 1999* (EPBC Act) is the national Act protecting the natural and cultural environment. The EPBC Act is administered by the Department of the Environment. The EPBC Act establishes two heritage lists for the management of the natural and cultural environment:

- The National Heritage List (NHL)

Items listed on the NHL have been assessed to be of outstanding significance and define "critical moments in our development as a nation".²

- The Commonwealth Heritage List (CHL)

Items listed on the CHL are natural and cultural heritage places that are on Commonwealth land, in Commonwealth waters or are owned or managed by the Commonwealth. A place or item on the CHL has been assessed as possessing "significant" heritage value.³

A search of the NHL and CHL resulted in the finding that there are no items on the NHL or CHL within the project area.

2.2.2 Australian National Shipwrecks Database

The Australian National Shipwrecks Database (ANSDB) is an inventory of all known shipwrecks in Australian waters. The ANSDB is administered by the Department of the Environment under the *Historic Shipwrecks Act 1976*. The Act protects all known and yet to be discovered shipwrecks and associated relics older than 75 years and found in Commonwealth waters from the low water mark to 3 nautical miles offshore. NSW has delegated authority to protect shipwrecks in state waters. Listings under the ANSDB are outlined in Table 2.

² "About National Heritage" <http://www.environment.gov.au/heritage/about/national/index.html>

³ "Commonwealth Heritage List Criteria" <http://www.environment.gov.au/heritage/about/commonwealth/criteria.html>

Table 2: Australian National Shipwrecks Database listings in the vicinity of the project area.

Biosis ID ⁴	Heritage item	Location in relation to the project area
FMW28	Hull of SS <i>Induna</i> (Site ID: 1319). Since 1932 the hulk of the iron steamer SS <i>Induna</i> has rested on the bank of the Clarence River at Grafton. Built in Liverpool in 1891, Sir Winston Churchill boarded the vessel for the last leg of his daring escape from Boer captivity in South Africa in 1899. Then a war correspondent, Churchill was captured when his armoured train was overrun and derailed. Collecting the wounded, he disengaged the engine and reversed it up the track, managing to flee until captured by General Botha. Another escape led him to Portuguese East Africa where he sailed with the SS <i>Induna</i> to Durban - and freedom. The vessel ended its long career with the NSW Department of Railways, refitted as a train ferry across the Clarence River. The SS <i>Induna</i> was finally dismantled in 1932. ⁵	Wreck is located on the south bank of the Clarence River west of the Clarence River Bridge. The South Grafton flood mitigation works boundary should be placed along the boundary of the adjacent property.
N/A	Grafton Punt (Site ID: 1611). The <i>Grafton Punt</i> was a wooden lighter which capsized at Grafton, Clarence River, on 11 December 1943. Thirteen deaths occurred as a result of the disaster.	Unknown

2.3 NSW legislation and statutory listings

2.3.1 NSW Heritage Act 1977

The State Heritage Register

The *Heritage Act 1977* established the State Heritage Register (SHR) under Part 3A of the Act. Items that are listed on the SHR have been assessed to be of significance to the state of New South Wales on the basis of one or a number of the criteria published in the *Heritage Manual* (refer to the assessment of significance for details). The Act is administered by the Heritage Division of the Office of Environment and Heritage under delegated authority of the Heritage Council. Change to items listed on the SHR can only be made with approval from the Heritage Council; demolition is generally not permitted.

Relics provision

Approval must be obtained from the Heritage Council of New South Wales prior to excavating any land in NSW where there is a possibility that archaeological relics may be disturbed (Section 140 Permit). An archaeological site listed on the SHR or within an SHR curtilage is protected by Section 56 of the Heritage Act and can only be excavated or disturbed with a Section 60 approval (refer to State Heritage Register above). This protection is negated under approvals under Part 5.1 of the Environmental Planning and Assessment Act, although consultation within the NSW Heritage Council, Heritage Division of the Office of Environment and Heritage and DP&E is required.

The NSW *Heritage Act 1977* currently affords statutory protection to relics of local or state significance that form part of archaeological deposits. Sections 139–145 of the Act prevent the excavation of a relic, except in accordance with a gazetted exception or an excavation permit issued by the Heritage Council of NSW. This protection is extended to

⁴ Biosis ID is an identifier attributed to each heritage item according to its location in relation to the Construction works zone boundary (CZB) or Flood mitigation works (FMW). The number assigned is designated according to the order in which the item sits within either given area from north to south (CZB) or east to west (FMW). Numbers are cross referenced in each section for ease of reading.

⁵ Shipwreck Atlas of New South Wales CZB8

potential relics, that is, unconfirmed but probably existing archaeological sites. Consultation and discussion with the Heritage Branch should begin well before lodging an application for a permit to disturb or destroy a historical archaeological site.

In NSW, the Heritage Branch has delegated authority to protect shipwrecks on the ANSD in state waters.

The *Heritage Act* also provides automatic protection to "relics". The Act defines "relics" as:

- *Any deposit, artefact, object or material evidence that:*
 - (a) *relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and*
 - (b) *is of State or local heritage significance*

Section 139 of the *Heritage Act* states that:

(1) A person must not disturb or excavate any land knowing or having reasonable cause to suspect that the disturbance or excavation will or is likely to result in a relic being discovered, exposed, moved, damaged or destroyed unless the disturbance or excavation is carried out in accordance with an excavation permit.

(2) A person must not disturb or excavate any land on which the person has discovered or exposed a relic except in accordance with an excavation permit.

Section 140 of the *Heritage Act* describes the approval required to disturb or excavate relics. In certain circumstances where impact is negligible or does not affect the overall significance of the item, a permit approval is not required and disturbance or investigation can occur as an exception to the requirement for an excavation permit under Section 139 (4).

A search of the State Heritage Register (SHR) identified the listings identified in Table 3.

Table 3: State Heritage Register listings in the vicinity of the project area.

Biosis ID	Heritage item and curtilage	Location in relation to the project area
FMW24	Arcola - house, stables, garden, fence (SHR No. 1546). The curtilage is defined by the lot and DP associated with the property at 150 Victoria Street.	Located at 150 Victoria Street, the heritage property adjoins the flood mitigation works in Grafton.
CZB36	Grafton Rail and Road Bridge over Clarence River (SHR No.1036). The curtilage is defined on the State Heritage Inventory entry for the item as follows: "The listing boundary for each structure includes the structure, the piers, abutments, embankments and track formation for a distance of 10 metres in all directions from those elements". The extent of the listing to the north and south is not clear however it appears that the listing does not extend beyond the bridge itself, and therefore would not include parts of the rail viaduct north of Bridge Park or the construction site on the south bank.	Spans Clarence River 100 metres west of the proposed additional crossing bridge alignment.
CZB37	Grafton City Railway Station Group (SHR No.1154). The curtilage is not well defined. In the State Heritage Inventory (SHI) entry for the item is as follows: "The listing boundary is an area defined by a line at a distance of 20 metres in all directions from the faces of the refreshment room" and would appear to comprise this building only.	170 metres west of the project area boundary along Bent Street in South Grafton.

Section 170 Heritage and Conservation Registers

Section 170 of the *Heritage Act* requires that culturally significant items or places managed or owned by Government agencies are listed on departmental Heritage and Conservation Register. Information on these registers has been prepared in accordance with Heritage Branch guidelines.

Statutory obligations for archaeological sites that are listed on a Section 170 Register or may exist within the curtilage of an item include notification to the Heritage Council in addition to relic's provision obligations.

Table 4: Section 170 Heritage and Conservation Register listings in the vicinity of the project area.

Biosis ID	Heritage item and curtilage	Location in relation to the project area
FMW10	The former RTA Offices (currently vacated). 31 Victoria Street, Grafton (RTA S.170). The site is composed of a series of interconnected buildings of various styles and periods.	Adjoins the flood mitigation works.
CZB21	Grafton Railway Viaducts (ARTC S.170 Register). The item includes the railway embankment and viaducts through Grafton from the north end of the Clarence River Bridge. Bridges are at the crossing of Clarence, Villiers, Duke, Prince, Queen, Mary and Pound Streets.	The viaduct passes through the project area in Grafton over a distance of 300 metres from Kent Street in the southwest to Clarence Street in the northeast. A component of the project includes replacing a small section of the Grafton railway viaducts where it crosses Pound Street (Refer to Section 1.3).
CZB36	Grafton Rail and Road Bridge (ARTC S.170 Register).	Spans Clarence River 100 metres west of the proposed additional crossing bridge alignment.
CZB37	Grafton City Railway Precinct (ARTC S.170). The item comprises the refreshment room, barracks, former office block, train crew amenities, shed, fuelling shelter, fuel pumphouse and waste compound.	170 metres west of the project area boundary along Bent Street in South Grafton.

2.3.2 Environmental Planning and Assessment Act 1979

The EP&A Act was enacted to encourage the proper consideration and management of impacts of proposed development or land-use changes on the environment (both natural and built) and the community. The Act is administered by DP&E. Instruments and listings under the EP&A Act of primary relevance to heritage are considered further below in relation to the project.

Clarence Valley Local Environmental Plan 2011

The Clarence Valley Local Environmental Plan 2011 (CVLEP 2011) contains schedules of heritage items that are managed by the controls in the instrument. As the project is being completed in accordance with the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP 2007), heritage items listed on the heritage schedule require a statement of heritage impact and notification to Council rather than approval. Relics are still protected by the *Heritage Act* and Aboriginal sites are protected by the *National Parks and Wildlife Act 1979* regardless of their status on an LEP or despite the fact that they are unregistered. Table 5 outlines items listed within Schedule 5 of the CVLEP 2011.

Table 5: CVLEP 2011 heritage items and conservation areas listed in schedule 5 as within or adjacent to the project area.

Biosis ID	Heritage item, conservation area	Location in relation to the project area
Built Item		
FMW01	Dwelling ("Avoca") (Item no. I561)	1 Fitzroy Street, Grafton is traversed by the proposed flood mitigation works.
FMW02	Residence (Item no. I562)	3 Fitzroy Street, Grafton is traversed by the proposed flood mitigation works.
FMW03	Dwelling (Group Value) (Item no. I563)	5 Fitzroy Street, Grafton adjoins is traversed by the proposed flood mitigation works.
FMW04	Dwelling (Group Value) (Item no. I565)	7 Fitzroy Street, Grafton is traversed by the proposed flood mitigation works.
FMW05	Footpath Sign (Item no. I515)	Clarence Street, Grafton is within the proposed flood mitigation works.
FMW06	St Mary's Church (Item no. I805)	7 Victoria Street, Grafton is traversed by the proposed flood mitigation works.
FMW07	Roman Catholic presbytery (Item no. I804)	5 Victoria Street, Grafton adjoins the proposed flood mitigation works.
FMW08	Flats (former St Mary's College) (Item no. I806)	9 Victoria Street is traversed by the proposed flood mitigation works.
FMW09	Convent (Item no. I835)	2 Villiers Street, Grafton is traversed by the proposed flood mitigation works.
FMW10	Offices (Item no. I811)	31 Victoria Street, Grafton is traversed by the proposed flood mitigation works.
FMW11	Dwelling ("McWilliam Lodge") (Item no. I813)	33 Victoria Street, Grafton is traversed by the proposed flood mitigation works.
FMW12	Dwelling and gas lamp "Bishopsholme" (Item no. I815)	35 Victoria Street, Grafton is traversed by the proposed flood mitigation works.
FMW13	The Deanery (Item no. I97)	Duke Street, Grafton is traversed by the proposed flood mitigation works.
FMW14	Memorial Park (Item no. I727)	Prince Street, Grafton is traversed by the proposed Flood mitigation works.
FMW15	Grafton Court House (Item no. I124)	53 Victoria Street, Grafton is traversed by the proposed flood mitigation works.
FMW16	Police Inspector's Residence (Former) (Item no. I194)	1 Duke Street, Grafton is traversed by the proposed flood mitigation works.
FMW18	Dwelling "Itala" (Item no. I754)	1 Queen Street, Grafton is traversed by the proposed flood mitigation works.
FMW20	Dwelling "Fowey" (Item no. I633)	1 Mary Street, Grafton is traversed by the proposed flood mitigation works.
FMW21	Dwelling (Item no. I830)	133 Victoria Street, Grafton is traversed by the proposed flood mitigation works.
FMW22	Dwelling (Item no. I130)	137 Victoria Street, Grafton is traversed by the proposed flood mitigation works.
FMW23	Dwelling (Item No. I833)	146 Victoria Street, Grafton is adjacent to the proposed flood mitigation works.
FMW24	Dwelling ("Arcola"), including house, stables, garden and fence (Item no. I131)	150 Victoria Street, Grafton adjoins the proposed flood mitigation works.
FMW25	Dwelling ("Verona") (Item no. I106).	216 Fitzroy Street, Grafton is traversed by the proposed flood

Biosis ID	Heritage item, conservation area	Location in relation to the project area
		mitigation works.
FMW26	Dwelling (Item no. I600)	222 Fitzroy Street, Grafton is adjacent to the proposed flood mitigation works.
FMW31	Dwelling (Item no. I936)	22 Wharf Street, South Grafton is adjacent to the proposed flood mitigation works.
FMW32	Dwelling (Item no. I931)	75 Through Street, South Grafton is adjacent to the proposed flood mitigation works.
FMW33	Lane Park (Item no. I921)	Through Street, South Grafton is traversed by the proposed flood mitigation works.
FMW34	Water trough, Lane Park (Item no. I922)	75 Through Street, Grafton is within the proposed flood mitigation works.
FMW36	Walker's Marina Hotel (Item no. I370)	90 Through Street, Grafton is adjacent to the proposed flood mitigation works.
FMW37	Dwelling (Item no. I933)	112 Through Street, South Grafton adjoins the proposed flood mitigation works.
FMW38	Dwelling "Dallinga" (Item no. I900)	279 Ryan Street, Grafton is traversed by the proposed flood mitigation works.
CZB01	Dwelling Villiers Street Group 2 (Item no. I848)	129 Villiers Street, border the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB02	Dwelling Villiers Street Group 2 (Item no. I847)	127 Villiers Street, border the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB03	Dwelling Villiers Street Group 2 (Item no. I846)	125 Villiers Street, border the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB04	Dwelling Villiers Street Group 2 (Item no. I845)	123 Villiers Street, border the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB05	Dwelling (Item no. I537)	106 Dobie Street is within the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB06	Dwelling (Item no. I538)	108 Dobie Street is within the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB07	Fisher's Drain (Item no. I535)	Dobie Street, Grafton within the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB08	Showground caretaker's cottage (Item no. I533, I534)	Dobie Street, Grafton borders the construction works zone boundary at the junction of Dobie Street and Villiers Street.
CZB09	Dwelling (I132)	30-32 Villiers Street, Grafton. Adjoins I115 and is situated 40 metres south of the construction works zone boundary.
CZB10	Dwelling ("Ravensford") (Item no. I841)	36 Villiers Street, Grafton, adjoining Item no. I115. Is partially within the western construction works zone boundary on the corner of Villiers and Pound Streets.
CZB11	Former residence "Dunvegan" (Item no. I115)	47 Pound Street, Grafton. Is partially within the western construction works zone boundary along Pound Street and Clarence Street between Villiers Street and Summerland Way.
CZB12	Coronation Plaque (Item no. I516)	Adjoins the eastern construction works zone boundary on Clarence Street, Grafton at northern end of I514.

Biosis ID	Heritage item, conservation area	Location in relation to the project area
CZB13	Street trees— <i>Brachychiton</i> , <i>Ficus</i> or Jacaranda trees over 3 metres in height within the Construction works zone boundary	Two <i>Brachychiton discolor</i> (Lacebark), eight <i>Ficus rubiginosa</i> (Rusty Fig), two <i>Ficus microcarpa var. hillii</i> (Hills Fig) and 25 Jacarandas are present along the length of Pound Street within or in the vicinity of the construction works zone boundary. One Jacaranda on Greaves Street, 1 is found within residences surrounding I616 Glyndon private hospital (former). In South Grafton one Jacaranda is found at the south-western limit of the construction works zone boundary on Ryan Street.
CZB14	Dwelling (Clarence Street residential Group 2) (Item no. I522)	28 Clarence Street, Grafton. Situated 34 metres northeast of the construction works zone boundary on Clarence Street.
CZB15	Dwelling (Clarence Street residential Group 2) (Item no. I520)	26 Clarence Street, Grafton. Situated 34 metres northeast of the construction works zone boundary on Clarence Street.
CZB16	Dwelling (Clarence Street residential Group 1) (Item no. I518)	12 Clarence Street, Grafton. Adjoins the construction works zone boundary near the corner of Clarence Street and Pound Street.
CZB17	Dwelling (Clarence Street residential Group 1) (Item no. 1519)	10 Clarence Street, Grafton. Adjoins the construction works zone boundary near the corner of Clarence Street and Pound Street.
CZB18	Dwelling (Item no. I688)	31 Pound Street, Grafton. Adjoins the construction works zone boundary and is within one of the proposed Construction Compounds.
CZB19	King George V Plaque (Item no. I688)	Within the construction works zone boundary on Pound Street, Grafton. In between I687 & I514.
CZB20 & CZB21	Grafton Railway Viaducts (Items I687, I514)	Two viaduct sections pass through the construction works zone boundary on Pound Street, Grafton over a distance of 300 m, from Kent Street in the southwest (I687) to Clarence Street in the northeast (I514).
CZB22	Dwelling (Kent Street Residential Group 2) (Item no. I627)	26 Kent Street, Grafton. Adjoins the north-eastern construction works zone boundary at the corner of Pound and Kent Streets.
CZB23	Dwelling (Kent Street Residential Group 2) (Item no. I626)	24 Kent Street, Grafton. Adjoins the north-eastern construction works zone boundary at the corner of Pound and Kent Streets.
CZB24	Dwelling (Kent Street Residential Group 2) (Item no. I625)	22 Kent Street, Grafton. Adjoins the north-eastern construction works zone boundary at the corner of Pound and Kent Streets.
CZB25	Dwelling (Kent Street Residential Group 1) (Item no. I621)	12 Kent Street, Grafton. Within the construction works zone boundary on the corner of Kent and Greaves Streets.
CZB26	Dwelling (Kent Street Residential Group 1) (Item no. I622)	14 Kent Street, Grafton. Within the construction works zone boundary on the corner of Kent and Greaves Streets.
CZB27	Dwelling (Kent Street Residential Group 1) (Item no. I623)	16 Kent Street, Grafton. Within the construction works zone boundary on the corner of Kent and Greaves Streets.
CZB28	Dwelling (Kent Street Residential Group 1) (Item no. I624)	18 Kent Street, Grafton. Within the construction works zone boundary on the corner of Kent and Greaves Streets.
CZB29	Residential (item no. I693)	14 Pound Street, Grafton. Situated 30 metres northeast of the construction works zone boundary.
CZB30	Dwelling ("Clarendon") (Item no. I692)	13 Pound Street, Grafton. Adjoins the western construction works zone boundary where Item no. I632 crosses Pound St.
CZB34	Residential (Item no. I690)	1 Pound Street, Grafton. River frontage situated 80 metres east of the construction works zone boundary.
CZB35	Glyndon Private Hospital former (Item no. I616)	4 Greaves Street, Grafton is within the construction works zone boundary between Greaves Street and the Clarence River.
CZB36	Grafton Rail & Road Bridge (Item no. I134)	Spans Clarence River 100 metres west of the proposed additional crossing bridge alignment.

Biosis ID	Heritage item, conservation area	Location in relation to the project area
CZB37	Grafton City Railway Precinct (Item no. I372)	170 metres west of the construction works zone boundary along Bent Street in South Grafton.
Conservation Areas		
C3	Grafton Conservation Area C3	The Grafton portion of the project area is entirely within the Grafton Conservation Area C3. The Grafton flood mitigation works shown in Figure 3 traverse the Clarence River side of the conservation area.
C7	South Grafton Conservation Area C7	The South Grafton portion of the project area borders the South Grafton Conservation Area C7 to the west. The South Grafton flood mitigation works traverse the Clarence River side of the conservation area.
Maritime Item		
FMW28	SS <i>Induna</i> and Bow Memorial (Item No: I133)	Wreck is located on the south bank of the Clarence River west of the Clarence River Bridge. The bow memorial is located in front located in a small grassed area on Riverside Drive in front of the retirement village. The South Grafton flood mitigation works are located 20 metres south of the wreck.

North Coast Regional Environmental Plan 2008

The North Coast Regional Environmental Plan 2008 (NCREP) is a State Environmental Planning Policy that applies to the project area. The NCREP contains three schedules listing heritage conservation areas (Schedule 1), heritage items of State and Regional significance (Schedule 2) and heritage items of Regional significance (Schedule 3). Listings associated with the NCREP are detailed in Table 6.

Table 6: Heritage Items listed in the NCREP as within or adjacent to the project area.

Biosis ID	Heritage Item and Curtilage	Location in relation to the project area
Schedule 1		
C3 & C7	Grafton Conservation Area - Comprises parts of Grafton and South Grafton on both sides of the Clarence River. The boundary of the Grafton portion of the conservation area is bounded by the railway line to the north, the Clarence River to the south and Turf Street to the West. The South Grafton portion of the conservation area is bounded by the Clarence River to the north, Christopher Creek to the east, the Gwydir Highway to the south and Minden Street to the west.	The project area traverses the Grafton Conservation Area at Grafton and South Grafton.
Schedule 2		
CZB36	Grafton Rail and Road Bridge	Spans Clarence River 60-70 metres west of the proposed additional crossing bridge alignment.
FMW24	"Arcola" (comprising house, stables buildings, outside toilet, garden and perimeter fencing)	Adjoins the proposed flood mitigation works in Grafton.
FMW28	The hull of SS <i>Induna</i>	Wreck is located on the south bank of the Clarence River west of the Clarence River Bridge. The South Grafton flood mitigation works are located 20 metres south of the wreck.
Schedule 3		
FMW13	Christ Church Deanery, Duke Street	Is traversed by the proposed flood mitigation works in Grafton.

Biosis ID	Heritage Item and Curtilage	Location in relation to the project area
FMW15	Grafton Courthouse, Victoria Street	Is traversed by the proposed flood mitigation works in Grafton.
FMW16	Former Police Residence, 1 Duke Street	Is traversed by the proposed flood mitigation works in Grafton.
CZB11	"Dunvegan" (two storey former residence), 47 Pound Street	Is partially within the construction works zone boundary.
FMW36	Walker's Marina Hotel, Cnr Skinner and Through Streets	Adjoins the proposed flood mitigation works in South Grafton.

2.4 Non-statutory registers

2.4.1 National Trust of Australia

The National Trust of Australia is a community-based, non-government organisation, committed to promoting and conserving Australia's indigenous, natural and historic heritage through its advocacy work and its custodianship of heritage places and objects. There are no management constraints associated with listing on the NTA Register. Listings associated with the project area are detailed in Table 7.

Table 7: Heritage Items listed by the National Trust as within or adjacent to the project area.

Biosis ID	Heritage item, conservation area	Location in relation to the project area
C3 & C7	Grafton Conservation Area	The project traverses the conservation area in South Grafton and Grafton.
FMW01	"Avoca" 1 Fitzroy Street, Grafton	Listing is traversed by the proposed flood mitigation works at Grafton.
FMW15	Grafton Court House	Listing is traversed by the proposed flood mitigation works at Grafton
FMW15	53 Victoria Street, Grafton	Listing adjoins the proposed flood mitigation works at Grafton.
FMW16	Former Inspector's Police Residence	Listing is traversed by the proposed flood mitigation works at Grafton
FMW20	"Fowey" 1 Mary Street, Grafton	Listing is traversed by the proposed flood mitigation works at Grafton
FMW21	133 Victoria Street, Grafton	Listing is traversed by the proposed flood mitigation works at Grafton
FMW21	133 Victoria Street, Grafton	Listing is traversed by the proposed flood mitigation works at Grafton
FMW22	137 Victoria Street, Grafton	Listing is traversed by the proposed flood mitigation works at Grafton
FMW24	"Arcola" 150 Victoria Street, Grafton	Listing is traversed by the proposed flood mitigation works at Grafton
CZB09	Semi-detached cottages, 30-32 Villiers Street, Grafton	30-32 Villiers Street, Grafton is situated 40 metres south of the construction works zone boundary.
CZB10	36 Villiers Street, Grafton "Ravensford"	36 Villiers Street, Grafton adjoins the western construction works zone boundary on the corner of

Biosis ID	Heritage item, conservation area	Location in relation to the project area
		Villiers and Pound Streets and has a minor corner truncation on the property.
CZB11	47 Pound Street, Grafton, "Dunvegan"	47 Pound Street, Grafton. Is partially within the western construction works zone along Pound Street and Clarence Street between Villiers Street and Summerland Way.
CZB36	Grafton Road and Rail Bridge	Listing is adjacent to the construction works zone boundary.

2.4.2 Register of National Estate

The Register of the National Estate (RNE) was originally established under the Australian Heritage Commission Act 1975 (repealed). The Register of the National Estate was closed in 2007 and is no longer a statutory list. All references to the Register of the National Estate were removed from the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) on 19 February 2012. However, the list remains an archive and an item that was once listed on the RNE may have been transferred to the NHL or the CHL. Listing on the RNE is an indication that the site or item has significance. Listings associated with the RNE are detailed in Table 8.

Table 8: Heritage Items listed in the RNE as within or adjacent to the project area.

Biosis ID	Heritage item and curtilage	Location in relation to the project area
C3 & C7	<p>Grafton Conservation Area (Place ID 3437). The listing states that "Grafton is a fine example of a subtropical mid nineteenth century river port, city and pastoral seat. It contains a fine group of civic and ecclesiastical buildings and many spacious timber houses which display both craftsmanship in detail and the ubiquitous verandah of northern Australia. The magnificent canopies of ficus, jacarandas and camphor laurels provide shade and colour while serving to link the natural and man made features of the city".</p> <p>The listing consists of approximately 400ha, comprising the area bounded by a line commencing on the north bank of the Clarence River on the alignment of the western side of Turf Street, then proceeding northerly to the railway line; then easterly via the northern side of the railway line and the eastern side of the railway bridge to the south bank of the Clarence River; then westerly via that bank to the mouth of Christopher Creek; then southerly via the eastern bank of that creek to the intersection of Beatson and Bligh Streets; then southerly via the eastern side of Bligh Street to Vere Street; then westerly via the southern side of that street and its alignment to Hay Street; then northerly via the western side of that street and its alignment to the southern bank of the Clarence River; then directly to the commencement point.</p>	The project traverses the conservation area in South Grafton and Grafton.
FMW13, FMW15,	<p>The Grafton Civic Group (including the Christ Church group) (Place ID: 3423). The splendid tree plantings, architectural excellence and historic associations make this one of the outstanding civic groups in the State. The Civic Group comprises the following items, some of which are listed individually:</p> <ul style="list-style-type: none"> Christ Church Cathedral, Victoria and Duke Streets (Individual Place ID: 	The Deanery (Place ID: 3426), and Grafton Court House (Place ID: 3434) are traversed by the flood mitigation works area.

Biosis ID	Heritage item and curtilage	Location in relation to the project area
	<p>3431).</p> <ul style="list-style-type: none"> • Christ Church Hall behind cathedral (Individual Place ID: 3424). • Crown Prosecutors Office, corner Duke and Victoria Streets (Individual Place ID: 3432) • Victorian cottage, Duke Street, north of Cathedral west front (Individual Place ID: 3430). • Georgian cottage, Duke Street, north of Cathedral west front (Individual Place ID: 3425). • Deanery (former rectory) between Victoria Street and river (Individual Place ID: 3426). • Former Police Station, corner Victoria and Duke Streets. • Former Courthouse site behind former police station (Individual Place ID: 3433). • Courthouse, Victoria Street (Individual Place ID: 3434). • Post Office, Victoria Street (Individual Place ID: 3435). • Post Office Hotel, 58 Victoria Street (Individual Place ID: 3427). • Foott Law and Company building, 56 Victoria Street (Individual Place ID: 3428). • Fitzgerald building, 54 Victoria Street (Individual Place ID: 3429). 	

2.5 Summary of heritage listings

The summary of heritage listings within or adjacent to the project area and their significance are provided in Table 9 and Figure 3.

Table 9: Summary of heritage listings within or adjacent to the project area

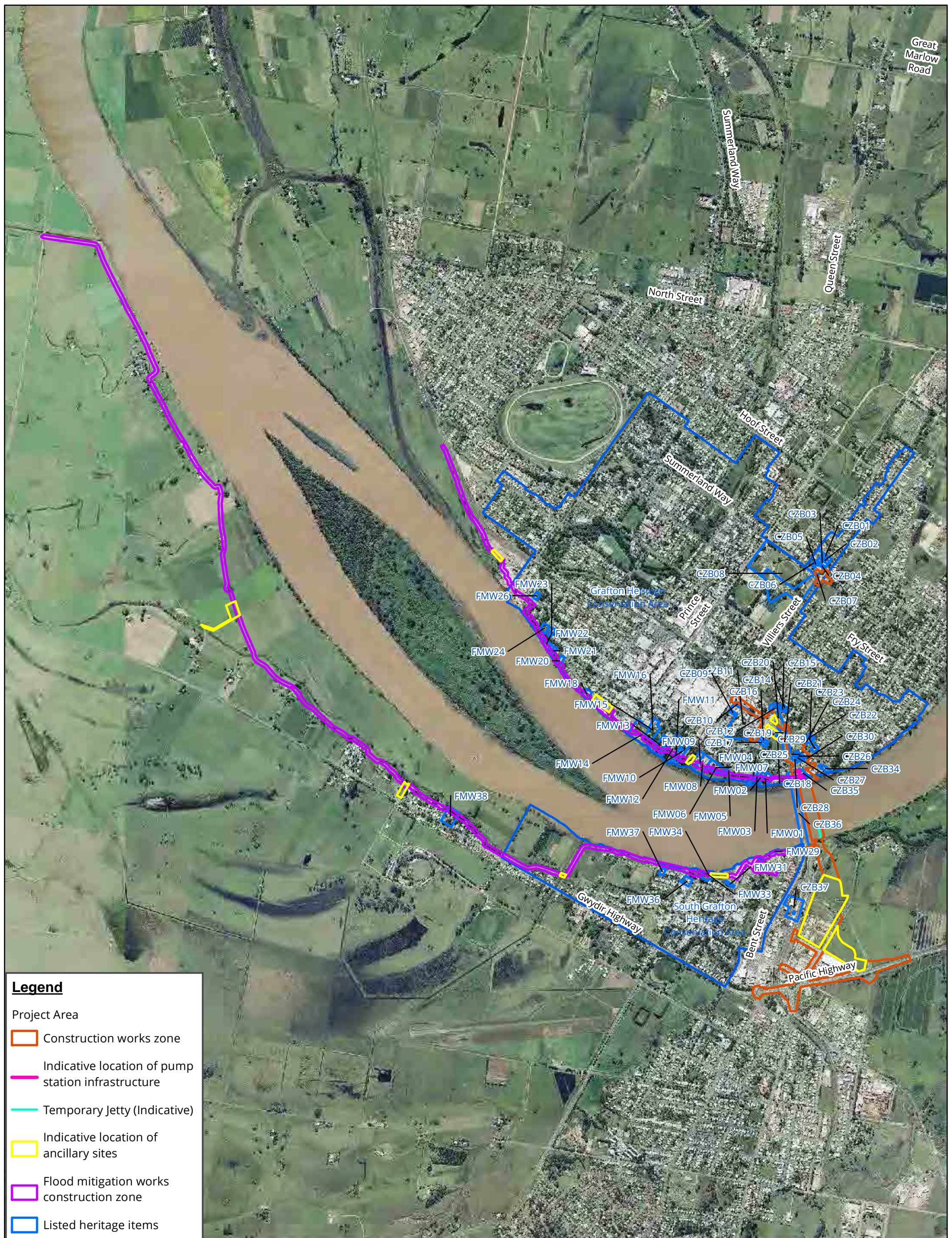
Biosis ID	Item name	CVLEP ID	Item address	Legal description	Listings/references	Heritage Significance
Built items						
FMW01	Dwelling (“Avoca”)	I561	1 Fitzroy Street, GRAFTON.	Lot 1 DP 840332	CVLEP 2011, NCREP, RNE, NT	Local
FMW02	Residence	I562	3 Fitzroy Street, GRAFTON.	Lot 2 DP 840332	CVLEP 2011	Local
FMW03	Dwelling	I563	5 Fitzroy Street, GRAFTON.	Lot 1 DP 1127729	CVLEP 2011	Local
FMW04	Dwelling	I565	7 Fitzroy Street, GRAFTON.	Lot 1 DP 1065647	CVLEP 2011	Local
FMW05	Footpath Sign	I515	Clarence Street, GRAFTON.	Road reserve	CVLEP 2011	Local
FMW06	St Mary’s Church	I805	7 Victoria Street, GRAFTON.	Lot 4 DP 876947	CVLEP 2011	Local
FMW07	Roman Catholic presbytery	I804	5 Victoria Street, GRAFTON.	Lot 4 DP 876947	CVLEP 2011	Local
FMW08	Flats (former St Mary’s College)	I806	9 Victoria Street, GRAFTON.	Lot 3 DP 876947	CVLEP 2011	Local
FMW09	Convent	I835	2 Villiers Street, GRAFTON.	Lots 2 and 3 DP 876947	CVLEP 2011	Local
FMW10	Offices	I811	31 Victoria Street, GRAFTON.	Lot 21 DP 556054	CVLEP 2011, NCREP, S.170	Local
FMW11	Dwelling (“McWilliam Lodge”)	I813	33 Victoria Street, GRAFTON.	Lot 3 DP 866434	CVLEP 2011, NT	Local
FMW12	Dwelling and gas lamp “Bishopsholme”	I815	35 Victoria Street, GRAFTON.	Lot 4 DP 866434	CVLEP 2011	Local
FMW13	The Deanery	I97	Duke Street, GRAFTON.	Lot 9 DP 866434	CVLEP 2011, NCREP	Local

Biosis ID	Item name	CVLEP ID	Item address	Legal description	Listings/references	Heritage Significance
FMW14	Memorial Park	1727	Prince Street, GRAFTON.	Lots 4–6 and 10 DP 758470; Part Lot 701 DP 92920; Lot 702 DP 92916; Lot 7001 DP 1054597	CVLEP 2011	Local
FMW15	Grafton Court House	1124	53 Victoria Street, GRAFTON.	Lot 701 Section 4, DP 92920	CVLEP 2011, NT, NCREP. RNE	Local
FMW16	Police inspector's residence (former)	194	1 Duke Street, GRAFTON	Part Lot 701 DP 92920	CVLEP, NCREP, RNE, NT	Local
FMW18	Dwelling "Itala"	1754	1 Queen Street, GRAFTON.	Lot 1 DP 736979	CVLEP 2011	Local
FMW20	Dwelling "Fowey"	1633	1 Mary Street, GRAFTON.	Lot 1 DP 650134	CVLEP 2011, NT	Local
FMW21	Dwelling	1830	133 Victoria Street, GRAFTON.	Lot 11 DP 846839	CVLEP 2011, NT	Local
FMW22	Dwelling	1130	137 Victoria Street, GRAFTON.	Lot 1 DP 833552	CVLEP 2011, NT	Local
FMW23	Dwelling	1833	146 Victoria Street	Lot 1, DP 196852	CVLEP 2011	Local
FMW24	Dwelling ("Arcola"), including house, stables, garden and fence	1131	150 Victoria Street, GRAFTON.	Lot 2 DP 101002	SHR, NCREP, CVLEP 2011, NT	State
FMW25	Dwelling	1106	213 Fitzroy Street, GRAFTON	Lot 5 DP 25861	CVLEP 2011, NT	Local
FMW26	Dwelling	1600	222 Fitzroy Street, GRAFTON	Lot 8, DP 1097311	CVLEP 2011	Local
FMW31	Dwelling	1936	22 Wharf Street, South Grafton	Lot 1, DP 713376	CVLEP 2011	Local
FMW32	Dwelling	1931	75 Through Street, South Grafton	Lot 5, DP 783029	CVLEP 2011	Local
FMW33	Lane Park	1921	Through Street, SOUTH GRAFTON	Lot X DP 33661	CVLEP 2011	Local
FMW34	Water trough, Lane Park	1922	Through Street, GRAFTON.	Lot X, DP 33661	CVLEP 2011	Local

Biosis ID	Item name	CVLEP ID	Item address	Legal description	Listings/references	Heritage Significance
FMW36	Walker's Marina Hotel	I370	90 Through Street, SOUTH GRAFTON	Lot 20, DP 803507	CVLEP 2011, NCREP	Local
FMW37	Dwelling	I933	112 Through Street, SOUTH GRAFTON.	Lots 2 and 3 DP 192757	CVLEP 2011	Local
FMW38	Dwelling "Dallinga"	I900	279 Ryan Street, GRAFTON.	Lots 1 and 2 DP 197033	CVLEP 2011	Local
CZB01	Dwelling	I848	129 Villiers Street, GRAFTON	Lot 5 DP 1085165	CVLEP 2011	Local
CZB02	Dwelling	I847	127 Villiers Street, GRAFTON	Lot 1 DP 906961	CVLEP 2011	Local
CZB03	Dwelling	I846	125 Villiers Street, GRAFTON	Lot 1 DP 119692	CVLEP 2011	Local
CZB04	Dwelling	I845	123 Villiers Street, GRAFTON	Lot 1 DP 369042	CVLEP 2011	Local
CZB05	Dwelling	I537	106 Dobie Street, GRAFTON	Lot 1 DP 999826	CVLEP 2011	Local
CZB06	Dwelling	I538	108 Dobie Street, GRAFTON	Lot 1 DP 1098418	CVLEP 2011, NT	Local
CZB07	Fisher's Drain	I535	Corner of Villiers and Dobie Streets, GRAFTON	Lot 1, DP 662827	CVLEP 2011	Local
CZB08	Showground Complex	I533	Corner of Villiers and Dobie Streets, GRAFTON	Lot 1, DP 662827; Lot 235, DP 751371	CVLEP 2011, NCREP	Local
CZB09	Dwelling	I116	30-32 Villiers Street, GRAFTON		CVLEP 2011	Local
CZB10	Dwelling ("Ravensford")	I841	36 Villiers Street, GRAFTON	Lot 1, DP 998330	CVLEP 2011	Local
CZB11	Former residence "Dunvegan"	I115	47 Pound Street< GRAFTON	Lot 100 DP 851143	NCREP, CVLEP 2011, NT	Local
CZB12	Coronation Plaque	I516	Clarence Street Railway Viaduct, GRAFTON	Road Reserve	CVLEP 2011	Local

Biosis ID	Item name	CVLEP ID	Item address	Legal description	Listings/references	Heritage Significance
CZB13	Street trees—Brachychiton, Ficus or Jacaranda trees over 3 metres in height	I135	All road reserves throughout Grafton	Road reserves	CVLEP 2011	Local
CZB14	Dwelling	I522	28 Clarence Street, GRAFTON.	Lot A, DP 160258	CVLEP 2011	Local
CZB15	Dwelling	I520	26 Clarence Street, GRAFTON.	Lot 1, DP 781324	CVLEP 2011	Local
CZB16	Dwelling	I519	12 Clarence Street, GRAFTON	Lot 1, DP 710917	CVLEP 2011	Local
CZB17	Dwelling	I518	10 Clarence Street, GRAFTON	Lot 20, DP 8220	CVLEP 2011	Local
CZB18	Residential	I694	31 Pound Street, GRAFTON	Lot 4, DP 783118	CVLEP 2011	Local
CZB19	King George V Plaque	I688	Pound Street, GRAFTON	Road Reserve	CVLEP 2011	Local
CZB20 & CZB21	Grafton Railway Viaduct	I514	Clarence Street, GRAFTON	Road Reserve	CVLEP 2011, s.170	Local
CZB22	Dwelling	I627	26 Kent Street, GRAFTON.	Lot 1, DP 781258	CVLEP 2011	Local
CZB23	Dwelling	I626	24 Kent Street, GRAFTON.	Lot 2, DP 781258	CVLEP 2011	Local
CZB24	Dwelling	I625	22 Kent Street, GRAFTON	Lot 2, DP 564774	CVLEP 2011	Local
CZB25	Dwelling	I624	18 Kent Street GRAFTON	Lot 1 DP 713416	CVLEP 2011	Local
CZB26	Dwelling	I623	16 Kent Street, GRAFTON	Lot 2 DP 782843	CVLEP 2011	Local
CZB27	Dwelling	I622	14 Kent Street GRAFTON	Lot 1 DP 782843	CVLEP 2011	Local
CZB28	Dwelling	I621	12 Kent Street GRAFTON	Lot 9 DP 12717	CVLEP 2011	Local
CZB29	Dwelling	I693	14 Pound Street, GRAFTON.	Lot 4, DP 781258	CVLEP 2011	Local
CZB30	Dwelling ("Clarendon")	I692	13 Pound Street GRAFTON	Lot 1, DP 817474	CVLEP 2011	Local
CZB34	Dwelling	I690	1 Pound Street, GRAFTON.	Lot 1, DP 12717	CVLEP 2011	Local

Biosis ID	Item name	CVLEP ID	Item address	Legal description	Listings/references	Heritage Significance
CZB35	Glyndon Private Hospital former	I616	4 Greaves Street GRAFTON	Lot 13 DP 1048362	CVLEP 2011	Local
CZB36	Grafton Rail & Road Bridge	I134	North Coast Railway; Pacific Highway	n/a	SHR, NCREP, GLEP 1988, CVLEP2010, s170, NT	State
CZB37	Grafton City Railway Precinct	I372	25–31 Bent Street, SOUTH GRAFTON	n/a	SHR, s.170, CVLEP 2011	State
Conservation areas						
C3	Grafton Conservation Area C3	C3	n/a	n/a	CVLEP 2011, NT, NCREP, RNE	Local
C7	South Grafton Conservation Area C7	C7	n/a	n/a	CVLEP 2011, NT, NCREP, RNE	Local
Maritime						
FMW29	<i>SS Induna</i>	Shipwreck ID no. 890	South bank of the Clarence River west of the Grafton Bridge.	n/a	CVLEP 2011, NSW Shipwreck Database	Local
n/a	Grafton Punt	Shipwreck ID no. 787	Unknown	Unknown	NSW Shipwreck Database	Local



Legend

Project Area

- Construction works zone
- Indicative location of pump station infrastructure
- Temporary Jetty (Indicative)
- Indicative location of ancillary sites
- Flood mitigation works construction zone
- Listed heritage items

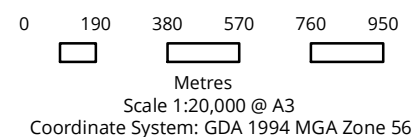
Figure 3: Location of heritage items within and adjacent to the Project Area



Ballarat, Brisbane, Canberra, Melbourne, Sydney, Wangaratta & Wollongong

Acknowledgements: Imagery provided by Arup Pty Ltd

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 Date: 06 May 2014,
 Checked by: AJB, Drawn by: JMS, Last edited by: jshepherd
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3 Historical context

3.1 Introduction

Historical research has been undertaken to identify the land use history of the project area, identify key phases in its history and identify the location of any archaeological resources within the project area. The historical research places the history of the project area into the broader context of the Clarence Valley region and the Grafton township.

The historical research mainly focussed on published secondary sources. Key sources for the history of the project area are *Grafton: Jacaranda City on the Clarence: A History* by Terry Kass⁶ and *A Thematic History of the City of Grafton* by Brett Stubbs⁷ which forms Volume 2 of the *Grafton City (former) Community Based Heritage Study*. Research using primary sources was undertaken for the project area at the following locations:

- NSW State Reference Library (the Mitchell Library).
- State Records NSW.
- NSW Department Property Information (LPI) (former Land Titles).
- The National Libraries Digital Archive – Trove.
- NSW Department of Public Works.
- Schaeffer House – Grafton Historical Society.

Contextual analysis is undertaken to place the history of a particular site within relevant historical contexts in order to gauge how typical or unique the history of a particular site actually is. This is usually ascertained by gaining an understanding of the history of a site in relation to the broad historical themes characterising Australia at the time. Such themes have been established by the Australian Heritage Commission and the NSW Heritage Office and are outlined in synoptic form in *New South Wales Historical Themes*, issued by the NSW Heritage Office⁸.

There are 38 State Historical Themes, which have been developed for New South Wales, as well as nine National Historical Themes. These broader themes are usually referred to when developing sub-themes for a local area to ensure they compliment the overall thematic framework for the broader region.

The Grafton Heritage Study identified a number of local historic themes for the local area⁹. These have been used in this report to maintain consistency with the overall heritage study and contextual analysis of Grafton's history. It is important to note that not all of the historical actions identified in the themes applied to the project area.

⁶ Kass, 2009

⁷ Stubbs, 2007

⁸ NSW Heritage Office, 2001

⁹ Grafton City Council 1985

Table 10: Identified historical themes for Grafton

National themes.	State themes	Local Theme
2. Peopling Australia	2. Aboriginal Cultures and interactions with other cultures	1. Aboriginal Past Pre 1835
3. Developing Local, Regional and National Economies	7. Commerce 13. Forestry	2. The Cedar Getters 1835-1840
4. Building Settlements, Towns and Cities 3	21. Accommodation 22. Land Tenure 23. Towns, Suburbs and Villages	3. Squatters, Settlers and the Town Plan 1840-1860
3. Developing Local, Regional and National Economies	7. Commerce 13. Forestry	4. Grafton Boom, Grafton Bust: The Golden Years 1860-1890
4. Building Settlements, Towns and Cities 5	23. Towns, Suburbs and Villages	5. The Big River 1890-1910 6. Bridging the Gap 1910-1932 7. United City of Two Towns 1932-1957 8. Modernism 1957 - present

3.2 Topography and resources

The city of Grafton is situated on the Clarence River within the northern coastal plain of New South Wales. The northern region is not strictly a coastal plain, but rather a series of river valleys separated by ranges¹⁰. Extensive alluvial flats and flood-prone lands stretch across many of the valleys in the region including the Clarence River area. The Clarence River catchment is characterised by upper tableland areas which fall away to a relatively large, flat coastal floodplain. Grafton and South Grafton are located within the upper reaches of the floodplain.

Importantly the Clarence River is wide and navigable to a considerable distance inland from its entrance taking in virtually the entire floodplain from the coast to the foot of the Great Dividing Range. Thus the river system provided a useful ready-made transport route. The major difficulties were the bar at the coastal entrance and shifting deposits of sediment in the river itself both of which made navigation unpredictable and in the case of the bar frequently dangerous.

The Grafton and South Grafton area has a history of both droughts and floods. Since 1839 the Clarence River has experienced 74 moderate to major floods, the most recent flood events being in 2001, 2009, 2011 and 2013, when the river reached levels of 7.70m AHD, 7.37m AHD, 7.64m AHD and 8.09m AHD respectively at the Prince Street gauge in Grafton. Flooding of the Clarence Valley coastal floodplain typically occurs from low intensity rainfall events that last several days or even weeks. Seasonally, flooding within coastal floodplain predominantly occurs in both late summer and early winter months. This seasonal distribution reflects the fact that the Clarence Valley is predominantly affected by tropical cyclones and winter depressions¹¹. The floods resulted in shifting sediment in the rivers and the droughts limited navigation at the head of the river.

All early historical accounts of the Clarence support an understanding that the current vegetation patterns do not reflect pre-contact vegetation types. While the margins of the Clarence are now largely cleared urban or agricultural lands, cedar

¹⁰ Heritage Office 1996

¹¹ The Australian Height Datum (AHD) is the reference level for defining reduced levels adopted by the National Mapping Council of Australia. The level of 0.0 m AHD is approximately mean sea level

getters were some of the earliest non-Aboriginal people along the Clarence River. An early account by Captain James Butcher noted that the banks of the river were 'thickly covered with timber'¹². The alluvial plains were thick with brush when an influx of settlers arrived following the passing of the Lands Act in 1861¹³. The density of brush was synonymous with soil fertility, and essentially ensured that such areas were the first selected and cleared to allow the commencement of agriculture. Historical records of the vegetation present along the Clarence River before European settlement indicate riparian vegetation and open woodlands existed within 1 km of the riverbank¹⁴.

3.3 Aboriginal Past (pre 1835)

At the time of non-Aboriginal arrival in Grafton the area to the north of the Clarence River were Bundjalung lands. The Yaegl tribe occupied lands on the coast. The Clarence River and Grafton are within the area previously inhabited by the Gumbainggir people. These people also inhabited the steep terrain of the escarpment zone, located south of Grafton, where other sites and evidence of occupation have been found. Conflict between the Aboriginal population and the incoming settlers followed soon after initial European settlement. Killings were carried out by both communities and stock was speared to drive them off land. Violence, displacement and disease reduced the numbers of Aboriginal people in the area. By 1891 it was reported that the police had brought 'peace'. Nine reserves had been created to house the remaining Aboriginal population and many Aboriginal people were employed in European industry as stockmen, cane strippers and fishermen.¹⁵ A community of Aboriginal people remains in Grafton to this day, many of them with strong spiritual links to the original inhabitants and important knowledge of their past ways of life.

3.4 Cedar Getters (1835 – 1840)

The first interaction between the Indigenous inhabitants of the Grafton region and the incoming European settlers came in 1830-31 in the form of an escaped convict, Richard Craig, who lived in the area prior to coming into the settlement at Port Macquarie. Craig's descriptions of the rich cedar forests of the area inspired a Sydney merchant, Thomas Small and his partner Henry Gillett, to take an expedition north with a team of sawyers, including Craig, in late 1837. Small and Gillett were both interested in timber cutting and shipbuilding. Francis Girarad, who had also heard of Craig's reports, set out to cut timber and was present in the Clarence region in about 1838.¹⁶

At this time the Clarence River was outside the "Limits of Location" for NSW so permission had to be obtained from the Colonial Government to visit the area. Nevertheless a series of small settlements of timber cutters established themselves along the Clarence River by 1838, squatting on Crown Land. Initially cedar logs felled in the Grafton region were simply floated downriver and formed into rafts in readiness for shipping. Kass notes that Captain Butcher of the Abercrombie explored the river in December 1838 and recorded a number of saw milling settlements. These would have been small pit-sawing operations developed to serve local needs. Butcher's map does not show any settlements in the project area.¹⁷ This pattern of unregulated cedar cutting supported by sea transport of the valuable red cedar to Sydney was quite common in the northern river valleys.

The natural companion to timber cutting and sea transportation was the construction of vessels in small shipyards along the rivers. Denis Jeans, in a pioneering overview research article, has highlighted the contribution of local shipyards in

¹² Stubbs 2007 p.9

¹³ Sabine 1970 p.1; 8

¹⁴ *ibid*

¹⁵ Heritage Office 1996

¹⁶ Kass 2009 p16-17.

¹⁷ Kass 2009 p22

constructing much of the shipping on the Sydney register.¹⁸ The Clarence was one such important region with a number of shipyards being established along the river. The Clarence had a prominent place in shipbuilding during the 1840s, providing trees far more suitable for shipbuilding than those of the South Coast where good timber supplies were rapidly becoming exhausted.¹⁹ Jeans and other historians have questioned the quality of shipbuilding because of the apparently short life of ships on the shipping register and this question of technical quality was an important early research agenda for maritime archaeology in Australia.²⁰

William Phillips applied for permission to build a vessel on the Clarence in October 1838, occupying land on the Clarence from about December 1838. The site Phillips selected was at South Grafton which was a useful point for collecting and transshipping logs. Phillips also operated a store and seems to have also acted as a timber merchant as well.²¹ The location of Phillips establishment is shown in a plan of the Clarence River by C Wilson dated to 1840. A more precise location of Phillips shipyard is provided by W.C.B. Wilson's plan of the Parish of Southampton surveyed in August 1840 (see Plate 1). This shows some buildings between the river bank and a small creek identified as Cowan's Creek in historical plans. He remained in that location until late 1848.²²

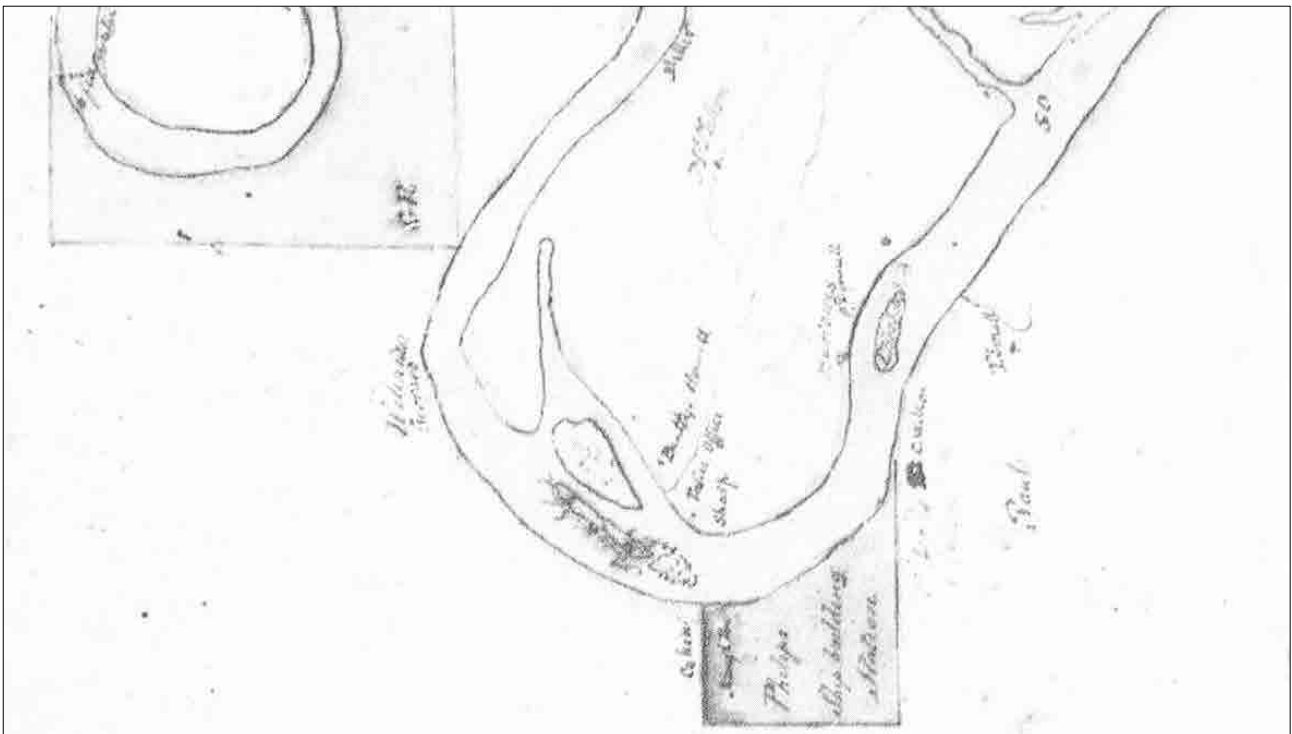


Plate 1: Wilson, George “Chart of the Clarence River” 1840 (Source: Mitchell Library).

This is a detail from this plan displaying the general location of Phillips shipyard. The plan is too general to overlay onto the location of the project area but it seems the shipyards was upstream from the Construction works zone boundary but within the South Grafton Flood mitigation works. Note the Mitchell catalogue says “C Wilson” but this must be a misreading for either of the Wilson brothers.

Very little evidence of the early period of the cedar cutting settlements remains. The absence of cedar in surviving regional biodiversity serves as the most tangible physical reminder of this activity while the products such as cedar lining or buildings and furniture are located outside the region.

¹⁸ Jeans 1974 p160.

¹⁹ Kass 2009 p30

²⁰ Hosty and Stuart 1994:15

²¹ Kass 2009 p23 28-29

²² Kass 2009 p29

3.5 Squatters, Settlers and the Town Plan (1840 - 1860)

Apart from the cedar getters the Clarence River was explored by squatters looking for sheep or cattle runs and from 1839 various runs in the area were taken up. In comparison with the New England, Monaro and Murrumbidgee squatting districts the Clarence River was not ideal for grazing of stock simply because of the difficulty of overlanding stock there and the need to clear areas. Squatting runs were taken up including several small runs in the vicinity of the project area on what was to become Grafton. The government added the Clarence district land to that which could be settled in May 1839 (see Plate 2). By 1842, 4,000 cattle and 25,000 sheep were recorded in the Clarence River district.²³

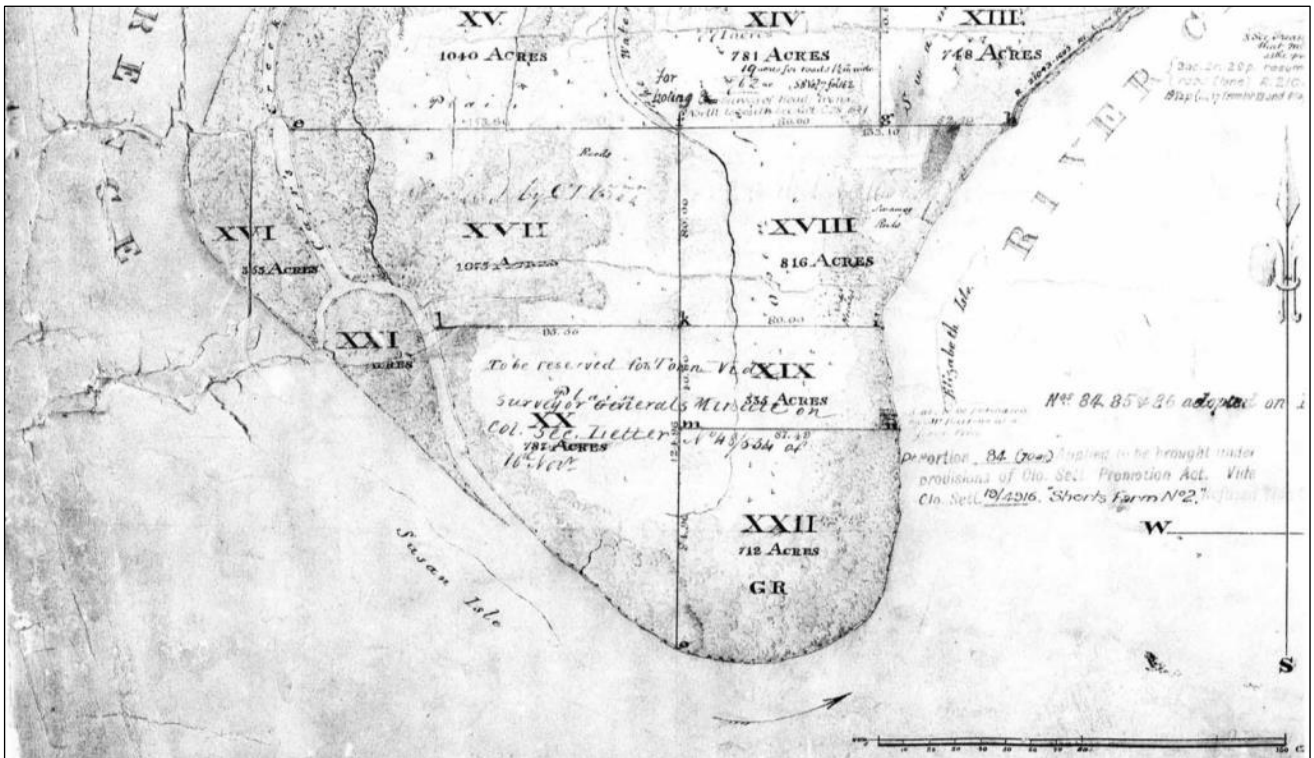


Plate 2: 1841 survey plan of the Grafton area (north side of the Clarence River).

The project area appears undeveloped at this time and covered in "brush" according to the annotations on the plan. Portions XXII and XX shown above were subsequently reserved for town allotments in 1848. Some early unregulated settlement had already occurred at this time but does not appear on the plan. (Source: Burrowes ME 1841 Government subdivision, Parish Great Marlow Clarence River District, same County, C.4.1121 SR Map 2256).

Surveyors W.C.B. Wilson and C.M. Wilson arrived in the Clarence District in September 1840 with the contract to survey land for subdivision. C.M. Wilson reported himself to be back at Parramatta in July 1842.²⁴ While W.C.B. Wilson continued surveying until he was replaced by assistant surveyors during mid-1843.²⁵ The Wilsons established themselves at South Grafton on land they later developed for farming. W. C. B. Wilson's 'Youloumba' run covered 4,000 acres, and encompassed most of the present town of South Grafton. W.C.B. Wilson surveyed and named the Parishes of Ulmarra, Lavadia, Latykia, Southampton and Clarenza (the latter two include the project area, see Plate 2). On the northern bank Surveyor E.L.M. Burrows surveyed the Parish of Great Marlow which became the site of Grafton and also includes part of the project area (see Plate 3).

²³ Grafton City Council 1985

²⁴ "Original Correspondence." The Sydney Gazette and New South Wales Advertiser, 9 Jul 1842: 3.

²⁵ Wilson petitioned the Legislative council against the breaking of his contract "LEGISLATIVE COUNCIL." The Australian 16 Dec 1843: 2.

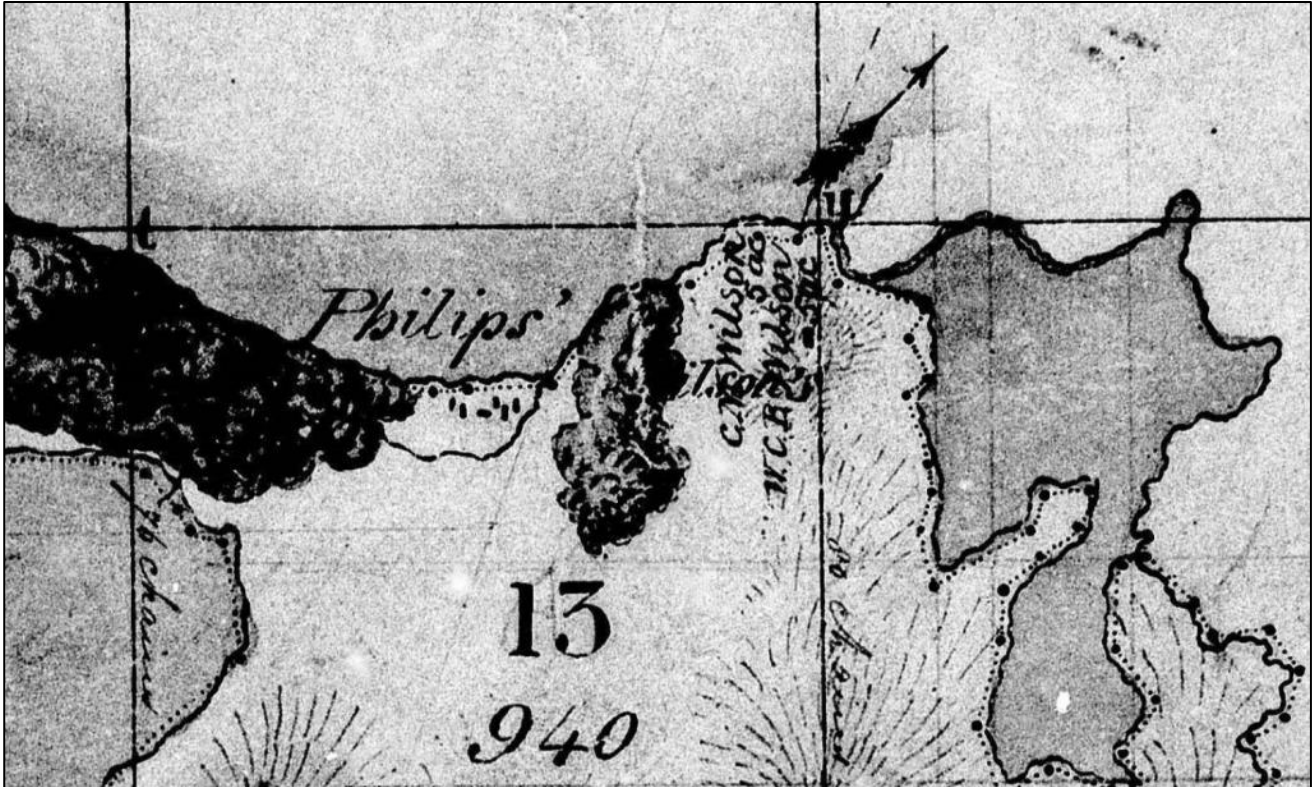


Plate 3: Detail of the southern project area showing the locations of both Phillips Shipyard and Store and the Wilson brothers.

Note the precision on the overlay is not great due to the inherent inaccuracy of the original plan (Source: Wilson, W.C.B. 1840 Government subdivision of Parish Southampton, County Hants (now Clarence), Clarence River District C.2.1121 SR Map 2254).

With approval to settle granted in 1839, licences to occupy Crown Land became available which encouraged squatters to take up runs but also small businesses to establish themselves. By the early 1840s two informal settlements had begun to form on the banks of the Clarence River at the future site of Grafton. Settlement was ideally was to occur at "The Falls" which was the head of the navigable river however few vessels passed further upstream than Susan Island and so South Grafton became the preferred centre for settlement.

In South Grafton, the Surveyors W.C.B. Wilson and C.M. Wilson obtained land grants and erected buildings on the river bank, to the west of the Construction works zone boundary (but within the flood mitigation works) in South Grafton. The areas of early settlement were focused on early industry, specifically where Phillips was building vessels and the surveyors and WCB and CM Wilson had taken up land. The 1841 Census listed 42 people living near these locations in South Grafton.²⁶ Along with the establishments owned by Phillips and Wilson, other focal points included public wharves which linked Grafton and South Grafton by ferry or punt. Stores and inns began to be erected to exploit these hubs of activity.²⁷ Phillips and Cole began the first depot or store in South Grafton (this later became the location of the Steam Ferry Hotel and later the Walker's Marina Hotel (FMW36). However, the first genuine store, distinct from depots was opened in South Grafton by Arthur Price in October 1840; this would also become the first post office (located upstream of Phillips' property).²⁸

In Grafton, George Ritchie took out an occupation licence in October 1840 for a substantial portion of land from which he ran a cedar depot. By 1841 the land upstream of Ritchie's was occupied by William Bawden who erected a hut close to

²⁶ Kass 2000 p33.

²⁷ Kass 2000 p30

²⁸ Kass 2009 p31, Stubbs 2007 p16

the river. Robert Bentley occupied York run and opened a store in early 1841, which he later sold to Hewitt; these were set up adjacent to Alumny Creek, which is located in the western portion of the flood mitigation works. Joseph Sharp arrived in Grafton in August 1841 and set up a store in a sawyer's hut in Through Street, South Grafton near the public wharf. Shortly after this he purchased Bawden's property near the wharf in Grafton and set up a store and hotel on the site of the current Crown Hotel²⁹. These structures can be clearly seen on the 1849 map of Grafton, along with the inn and several other structures within the vicinity of the flood mitigation works. Further upstream the several building labelled as a "courthouse" and "lock up" are visible, as is Hewitt's Store and complex of buildings near Alumny Creek (identified on Figure 4).

Although settlement began in the late 1830s within what would later become known as the town of Grafton, the town did not officially exist until December 1849 when the plan of surveyor William Darke was adopted. The government wanted a site at the head of navigation (and at the river mouth) which was preferably flood free, yet there was a considerable settlement at Grafton which was prone to flooding and lacked fresh water. By 1847 the Deputy Surveyor General pointed out the South Grafton was a preferable spot for settlement but the Grafton Bench of Magistrates recommended the settlement on the North Bank. In December 1848 Surveyor William Darke was instructed to undertake the subdivision survey and report on the town.³⁰

Darke laid out two towns one at South Grafton and one on the northern bank called Grafton. Darke in his survey report made clear that the Grafton site was very flood prone and referred any decisions to the Surveyor General.³¹ Once the survey was approved by the Surveyor General a plan of allotments was issued and land sales proceeded in 1851.³² The focus of the early settlement within Grafton and South Grafton was outside of the Construction works zone boundary to the west but given the riverside nature of the early settlement it is dissected by the flood mitigation works. Within the Construction works zone boundary, the bank of the river associated with Grafton was not occupied at that time largely due to the shallow nature of the river in this location which would have made the area unsuitable for shipping. The initial subdivisions were set back from the river's edge presumably to avoid flooding. In South Grafton the Construction works zone boundary is located within pastoral leases owned by W.C.B. Wilson. None of the structures dating to the early occupation of Grafton or South Grafton remain; all have been cleared by subsequent residential or infrastructure development.

²⁹ Kass 2009 p33, Stubbs 2007 p16

³⁰ Kass 2000 p42.

³¹ Kass 200pp42-45.

³² Kass 2000 p45.

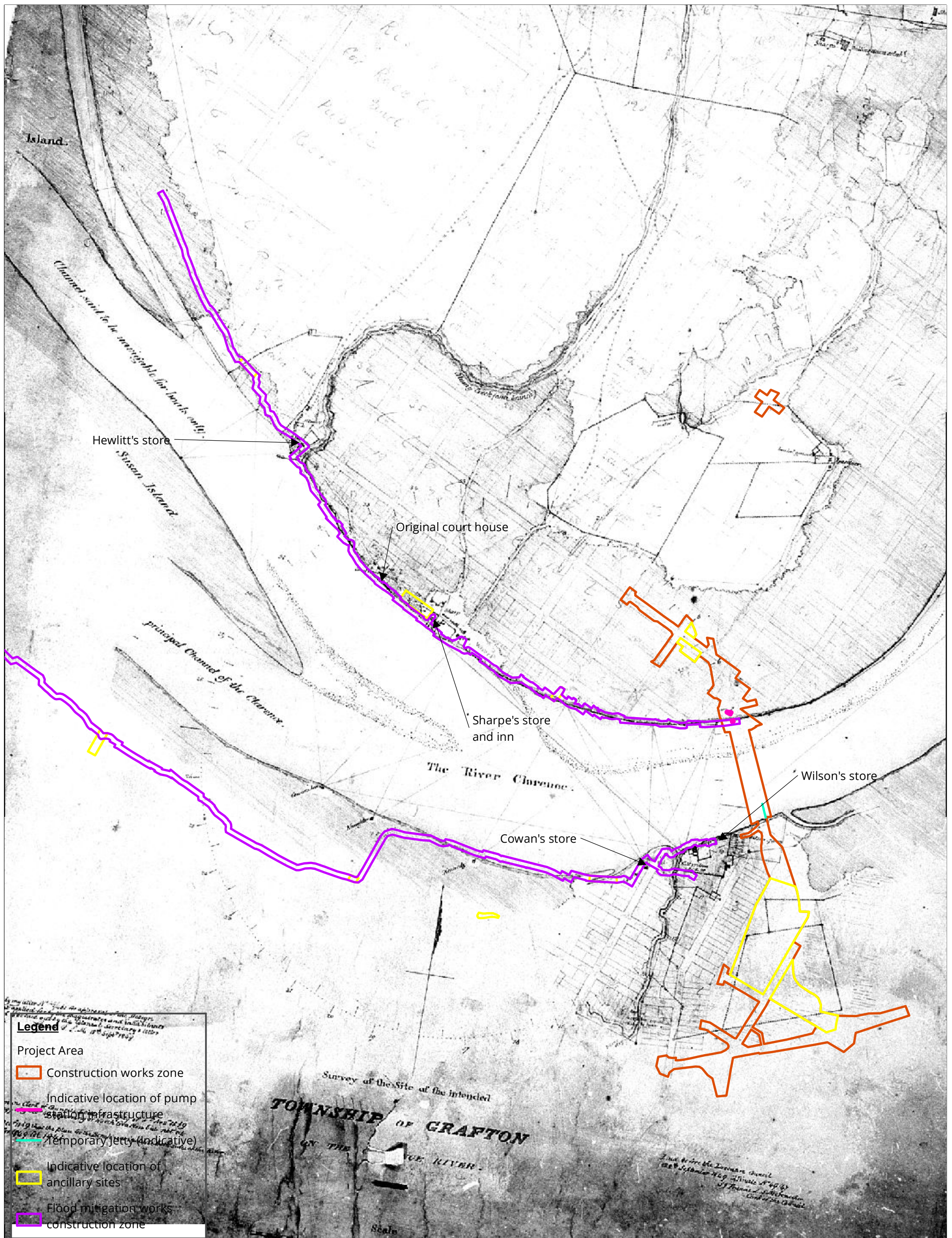


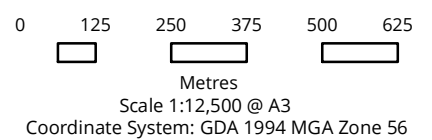
Figure 4: Overlay of 1849 Survey plan for the townships on both sides of the Clarence River at Grafton (Source: Darke, W.W. 1849 Grafton, Town site on the Clarence River, G.1359, SR Map 2847).

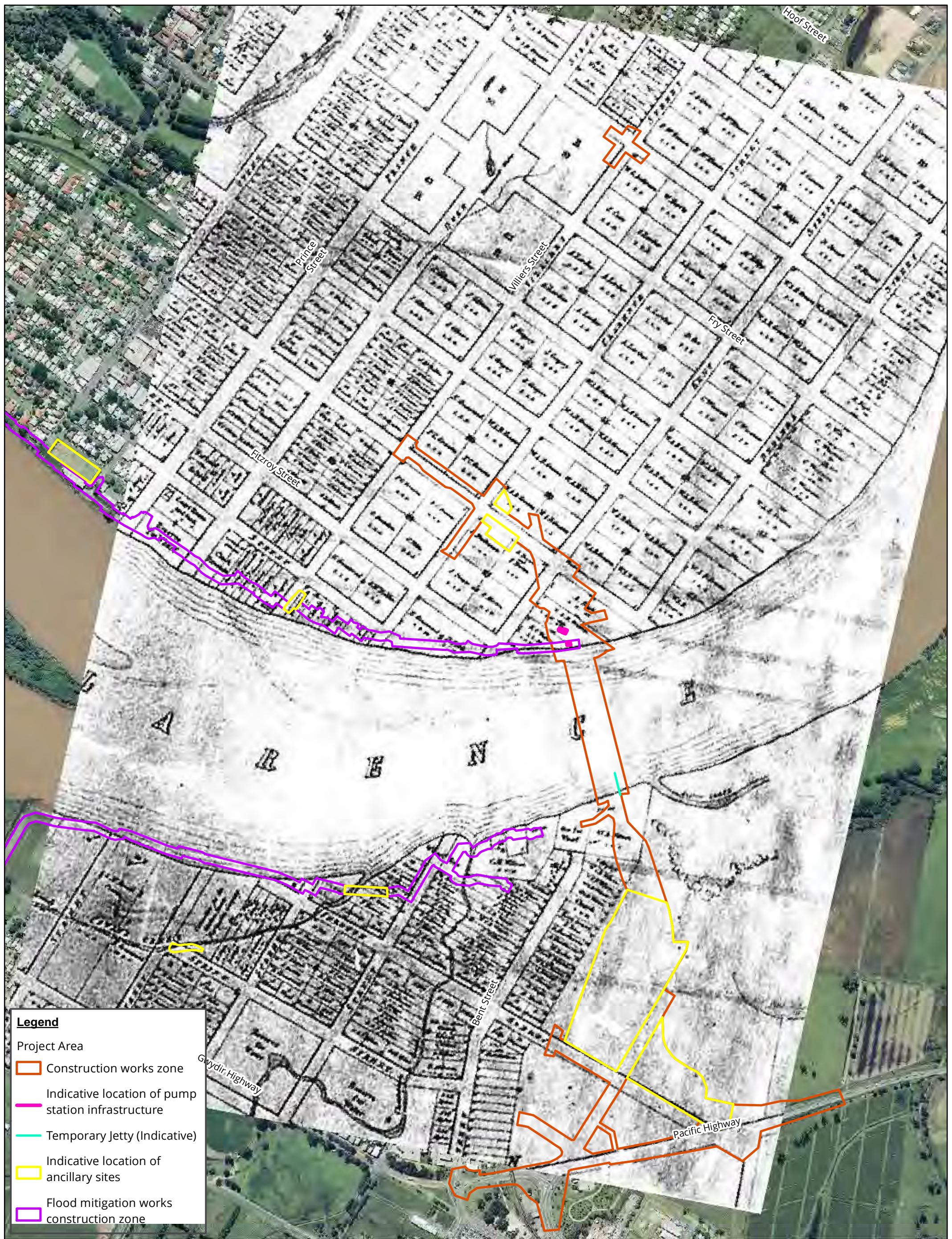


Ballarat, Brisbane, Canberra, Melbourne, Sydney, Wangaratta & Wollongong

Acknowledgements: Imagery provided by Arup Pty Ltd

Matter: 16255
 Date: 06 May 2014,
 Checked by: AJB, Drawn by: JMS, Last edited by: jshepherd
 Location: P:\16200s\16255\Mapping\16255_F04_HistMap_Darke1849_20140430





Legend

- Project Area
- Construction works zone
- Indicative location of pump station infrastructure
- Temporary Jetty (Indicative)
- Indicative location of ancillary sites
- Flood mitigation works construction zone

Figure 5: 1863 Town Plan showing the completed grid layout of Grafton and South Grafton. Few buildings are illustrated but this is not surprising on a Cadastral Plan which indicates ownership rather than buildings.



Acknowledgements: Imagery provided by Arup Pty Ltd
 Historic map source: Schaeffer House, Grafton Historical Society.
 Matter: 16255
 Date: 06 May 2014,
 Checked by: AJB, Drawn by: JMS, Last edited by: jshepherd
 Location: P:\16200s\16255\Mapping\16255_F05_HistMap_TownPlan1863_20140430

0 80 160 240 320 400
 Metres
 Scale 1:8,000 @ A3
 Coordinate System: GDA 1994 MGA Zone 56

3.6 Boom and Bust (1855 – 1890)

The pioneers of the Clarence were producing for a commercial market and wanted buyers for their commodities.³³ The settlements at Grafton provided the necessary centres of trade and benefitted from the wider processes of opening up the Clarence to new settlement and industry.³⁴ Growth was initially focussed around the established shipyard and stores in South Grafton during the 1840s. In Grafton small residences, farms and businesses sprang up and in 1851, the town was described by prospective settler Etienne Bordier as 'a town more or less in its infancy, very beautiful now on paper, but with only thirty or so houses actually built'.³⁵

During the 1850s land became available for purchase as freehold, encouraging the further development of agriculture along the river and attendant commercial and residential purchases within Grafton and South Grafton. Large sections were purchased, often with very small and rudimentary dwellings erected. A residence offered for sale in 1865 was described as 'A good bark house, well floored and brick chimney, fowl yard, milking yard and sheds'.³⁶ When one of these early 'vernacular' buildings was demolished in 1934 a witness noted that the floor bearers were simply a raft of logs, set into the ground and notched for the floorboard joists.³⁷

Surveyors W. A. B. and P.C. Greaves arrived in 1856 to survey farms for sale and made numerous land purchases of their own including many sections within the project area in Grafton on Pound, Kent, Clarence, Victoria and Clarence Streets. William Greaves soon was appointed to the position of Commissioner for Lands. Other prominent citizens of early Grafton also held land sections and Lots within the project area in anticipation of later subdivision including Police Magistrate Richard Bligh with land on lower Pound Street, mariner Edward Greenwood with Lots on Fitzroy and Villiers Streets and Storekeeping partners Joseph Penzer and Thomas Horton.

By 1853 William Darke was noting that the rapid growth of the towns, particularly South Grafton, necessitated the setting aside of reserves for civic buildings and a cemetery before all the best land above the flood zone was taken up. Three years later the momentum had swung to the northern bank of the Clarence and Grafton entered into the first phase of a building boom that would continue for four decades³⁸. Through the 1850s the population grew by 352%.³⁹ Brickworks were established during the mid-1850s⁴⁰ with building lime supplied from shell extracted from Aboriginal middens on the coast,⁴¹ and by 1856 there were 65 buildings in brick in addition to those in timber. It was claimed that a house a day was being erected by 1859.⁴²

³³ Kass 2009 p47

³⁴ Ibid.

³⁵ Dutton & Rowe 1987 p9-10

³⁶ Clarence & Richmond Examiner 10 October, 1865 p3

³⁷ Kass 2009 p123

³⁸ Kass 2009 p51

³⁹ Ibid.

⁴⁰ Jahn (1985, p15-17)

⁴¹ Kass 2009 p54

⁴² Maitland mercury 26 June 1860 p2

The Municipality of Grafton was declared in July of the same year, making Grafton one of the first towns to incorporate as a Local Government Area under the *Municipalities Act 1858*. Enterprising settlers were attracted to the area and in May 1859, W.B. Greaves summarised the prospects of Grafton as a town possessing:

*...natural advantages as a shipping port, with a gold field nearly all round her; and an extent of rich alluvial lands unequalled by any river on the coast, able to supply New England with every article that her soil can produce, must, together, ultimately lead to wealth and importance.*⁴³

River trade, farming and gold were indeed the driving forces behind Grafton's growth. The introduction of steamships from the 1860s fostered further expansion as trade with Sydney increased as well as ports further afield including Victoria and New Zealand.⁴⁴ Exported cargoes were varied, representing the spectrum of produce being trialled at this time including timber, wheat, maize, tobacco, cotton, sorghum, sugar, opium, breadfruit and many others. The oldest commodity on the Clarence, Cedar, was no longer viable as the cedar-getting boom had exhausted supplies in the Clarence valley as early as 1842.⁴⁵ During the 1860s other hardwoods continued to be heavily exploited for local building and shipbuilding as well as export. As recognised by the future forestry ranger William Carron in 1871, valuable stands of timber trees:

*...which a short time ago were so plentiful in and around Grafton are now almost entirely cleared away...So completely have they disappeared in the course of a few years that cargoes of timber are now sought from the Richmond River to supply the local saw-mills...*⁴⁶

The clearance of trees was so comprehensive that as early as 1866 a petition was presented to the Colonial Government asking that trees be planted under proper regulations in the streets and public places of the town,⁴⁷ thus beginning a long connection between Grafton and its street trees.

Another direct result of this widespread deforestation was the emergence of the Clarence as one of the last major rivers in the region where quality alluvial land had not yet been taken up and agriculture was promoted as the focus of growth. Maize proved most successful (93% of cultivation)⁴⁸ and good prices on Sydney markets supported rapid development of the industry and of the towns of Grafton and South Grafton. With the introduction of free selection under the Land Alienation Act in 1861 much smaller areas of land were able to be purchased. Within the first year 200 purchases were made in and around the towns,⁴⁹ however the next year widespread flooding caused crop failure and building damage along the river. Early experiments in farming were often devastated by these sporadic floods and it became clear failures would persist until the right balance was struck between environment and crop. Most crops proved unviable on a large scale, however sugar took hold and expansion of the sugar industry saw the establishment of farm-based mills and then larger industrial mills. These included the Colonial Sugar Refining Company (CSR) mills at Southgate and at Chatsworth 55km downstream near the mouth of the Clarence; both crushing by 1870. The CSR mills particularly promised a new scale of agricultural productivity in the Grafton area and 'an era of prosperity, unknown in the maize growing days.'⁵⁰ CSR provided growers with interest free loans and other incentives to produce cane (see Plate 4).

⁴³ V&PLANSW 1860 p921-41

⁴⁴ Kass 2009 p74

⁴⁵ Stubbs 2007 p74

⁴⁶ V&PLANS 1872 p229-30

⁴⁷ Kass, 2009 p93

⁴⁸ Kass 2009 p67

⁴⁹ Kass 2009 p68

⁵⁰ Meston 1882 p919-23



Plate 4: Cane cutters on the Clarence circa 1890 (Source: Kass 2009 p.146).

During the height of the NSW Gold Rush gold was found at Rocky River at the head of the Clarence in 1853 and many travelled to the diggings here and elsewhere in the region via Grafton.⁵¹ This flow of men and money continued through to the 1870s following the discovery of gold at Timbarra and then at Solferno and Lionsville on the upper Clarence.

The combined effects of these successes further stimulated the boom in building from 1860 - 1880, particularly north of the river. The influx of people spurred an escalation in both contracted and speculative residential and commercial buildings and Government constructions included a new Courthouse (FMW15), Gaol, Police residence (FMW16) and Customs House and Post and Telegraph Office. Several banks were also established as well as building societies that funded residential purchases. The value of land rose accordingly; a Lot on Prince Street purchased for just over five pounds in 1857 returned 78 pounds in 1860 following subdivision.⁵² Town sections were rapidly subdivided during the boom to capitalise on demand as Grafton moved toward its modern suburban layout. The number of occupied dwellings in Grafton rose from 411 to 825 during the peak of this 1870s urban boom period,⁵³ making it one of the fastest growing towns in NSW and Grafton was one of the first towns to be recognised as a city under the *Crown Lands Act 1884*. Stubbs notes that this meant little in practical terms and the circumstances surrounding this move are somewhat mysterious as cities were not officially recognised until after the *Local Government Act 1906* and Grafton did not meet the requirements for this classification.⁵⁴

Around the same time that the benefits of the gold rush, sugar mills and regional trade were transforming Grafton a series of downturns signalled a change in fortune. In 1881 the railway was extended to New England, greatly reducing the reliance on Grafton as a port for the commodities of that region.⁵⁵ The price of sugar slumped and in 1882 CSR closed its Southgate Mill, moving operations to Queensland. Other Independent mills continued to operate on the Clarence until a general decline following drought in 1886 and a series of floods from 1887 – 1893 took a further toll on the struggling city and its southern neighbour. In the 1890s sugar cane growers took another blow when gumming disease infested crops. The sugar boom was over and farmers looked to a new source of economic stability.

⁵¹ Kass 2009 p.47

⁵² Kass 2009 p.119

⁵³ Kass 2009 p.123

⁵⁴ Stubbs 2007 p.3

⁵⁵ Kass 2009 p.74



Plate 5: Image depicting the Grafton flood of 1890 (Source: Kass 2009 p.152)

Grafton had not developed a major manufacturing industry to fall back on, relying instead on agricultural produce for local markets and export. The manufacturing that did take place was largely in service of the agricultural sector, limited to farm machinery, blacksmithing, coach building, wheelwrights, brickmaking and by-products of the meat industry including tanning, tallow works and soap making.⁵⁶ The Ramornie meatworks was a major early industry from 1866⁵⁷ and the success of cattle-raising in the area prompted a shift toward dairying during the 1890s. The transition was aided by an influx of experienced men from the South Coast and once established, especially following the introduction of Paspalum grass in the mid 1890s, the dairy industry thrived. Centralised butter factories and creameries were established at Ulmarra, South Grafton and Grafton.⁵⁸ After the 'bust' period of repeated floods combined with bank crashes and depression between 1886 and 1893; renewed confidence in the town developed surrounding the dairy industry.⁵⁹

In Grafton dwellings erected during the early years of settlement were generally of the basic 'vernacular' type and did not survive the subdivision boom during the late nineteenth century, during which they were replaced by more substantial dwellings; predominantly four-roomed weatherboard cottages, many of which survive in the project area and throughout Grafton. There are a number of dwellings present within the Grafton portion of the project area dating to the boom era (1860-1890) including prominent examples such as 30-32 Villiers Street (CZB09), Ravensford (CZB10), 10 and 12 Clarence Street (CZB16, CZB17), 18 Kent Street (CZB25), Avoca (FMW01), 5 and 7 Fitzroy Street (FMW02, FMW04), Itala (FMW20) and Fowey (FMW20). Many of these properties were built for prominent local families such as the Henson's (Ravensford – CZB10) and Fraser's (Fowey – FMW20). Another property "Dallinga" was constructed during this period for the noted naturalist James Wilcox.

There is an absence of historical evidence relating to the establishment of street trees within the project area during this period, although it is known that H.A. Volkers was contracted to plant hundreds of street trees in Grafton from 1879.

There is the potential that the five figs (*Ficus sp.*) planted on Pound Street between Villiers and Clarence Streets date to this period.

⁵⁶ Kass 2009 p116

⁵⁷ Kass 2009 p115

⁵⁸ Berger 2006 p6

⁵⁹ Hardy 2003 p10

In 1864 three sections held by Surveyor P.C. Greaves were subdivided into groups of 14 lots. These included sections 30 and 24 in the project area where several heritage items (CZB10, CZB11, CZB14 and CZB15) are clustered on Clarence, Pound and Villiers Streets. During this period, many areas of Grafton had become reasonably well developed, with the majority of early dwellings consisting of four-roomed weatherboard cottages. More substantial Victorian homes such as that built for Captain George Greenaway at 36 Villiers Street were also constructed during this period. Greenaway served as a Pilot at Ballina and then as a Captain of river boats on the Clarence from 1863 until he retired. He died in Grafton in 1928⁶⁰. At some stage Greenaway's home was acquired by the Henson family, proprietors of 'Henson's Soft Drink and Cordial makers', a business established at 28-32 Villiers Street in 1876⁶¹. The Henson's converted Greenaway's house into the two-storey Late Victorian 'Ravensford' residence in 1890 (CZB10)⁶². Ravensford (CZB10) is therefore the oldest of the grand residences associated with the project area and one of the more historically significant houses in Grafton.

The success of Grafton was based on its geographic location as a transport interchange. Apart from local produce there was an overland route for wool and stock from the New England Tablelands to Grafton and then onwards to Sydney by ship. There was a return traffic of supplies both to squatters and from the late 1850s to the goldfields. A key event in marine transport was the introduction of steam powered ships to Australia in 1831 and by the time the Clarence was settled, paddle and screw steam ships were increasingly dominant on the coastal routes.⁶³ There were several advantages to steam ships that outweighed their higher purchase price and running costs. Firstly, they were more manoeuvrable which was critical in crossing the bar at the Clarence river mouth and in the river itself where they could more easily avoid shifting sandbars. Secondly, not being reliant on winds, steam ships could offer a regular and timely service (so called packet service) which was more convenient for passengers. As Lee notes this resulted in sailing ships taking bulk traffic like timber, wool and skins while passengers used steam ships.⁶⁴

There was also internal river traffic to and from focal points on the river such as flour mills, timber mills and sugar mills where produce was transported to these places for processing and then transported onwards. In addition to this there was commercial traffic from butchers, bakers and storekeepers traveling out to smaller settlements and farms as well as individuals traveling to and from towns.⁶⁵

There also was a cross river ferry between Grafton and South Grafton. The punt originally left Grafton at Villiers Street and until after 1886 where it crossed from Prince Street, Grafton crossing to South Grafton at Through Street and Skinner Street. A second ferry left Grafton at Dobie Street and crossed to Clarenza from c1866 to 1932⁶⁶.

All this traffic required infrastructure such as wharves large enough to accommodate a large vessel and equipped with suitable cranes and storage for goods. There would have been the need for repair facilities such as slips and machinery works to maintain and repair boats.

It is difficult to ascertain the locations of all these facilities as they were usually built on leased or occupied Crown Land and the lease records are fragmentary in nature and difficult to obtain. Some information is available in the form of annotations to the plans of the City of Grafton and the Town of South Grafton which were compiled by the Lands Department from the 1880s. These annotations record details of leases or permissive occupancies granted by the Government. Examinations of plans that survive indicate that there was no land leased for jetties or other facilities on either river bank up until the advent of the railway marked on the plans. Numerous commercial and private wharves, associated boatsheds and other buildings are visible on the 1890 Town Plan (see Plate 7 and Figure 6). The riverbanks of the Clarence hold the potential to retain buried or submerged relics from this formative period of Grafton. There is no

⁶⁰ State Heritage Register, database number 1640099

⁶¹ State Heritage Register, database numbers 1640099,1640050

⁶² Ibid.

⁶³ Lee, S. 2003 Riverboats of the Clarence, The Port of Yamba Historical Society Inc. pp15-16.

⁶⁴ Lee 2003 p17

⁶⁵ Lee 2003 pp59-61

⁶⁶ Lee 2000 pp 225-227

evidence for wharfages occurring during this period within the Construction works zone boundary; however within the flood mitigation works there are several sites which have the potential to contain remains associated with this boom period of river trade (see FMW17, FMW30, and FMW35).



Plate 6: The location of the photograph has been identified as the foot of Prince Street, looking downstream from near the current location of the Crown Hotel.

This provides an example of the construction on the river banks in Grafton and South Grafton (Source: State Library NSW Manuscripts Collection – no date available but predates the existing bridge).

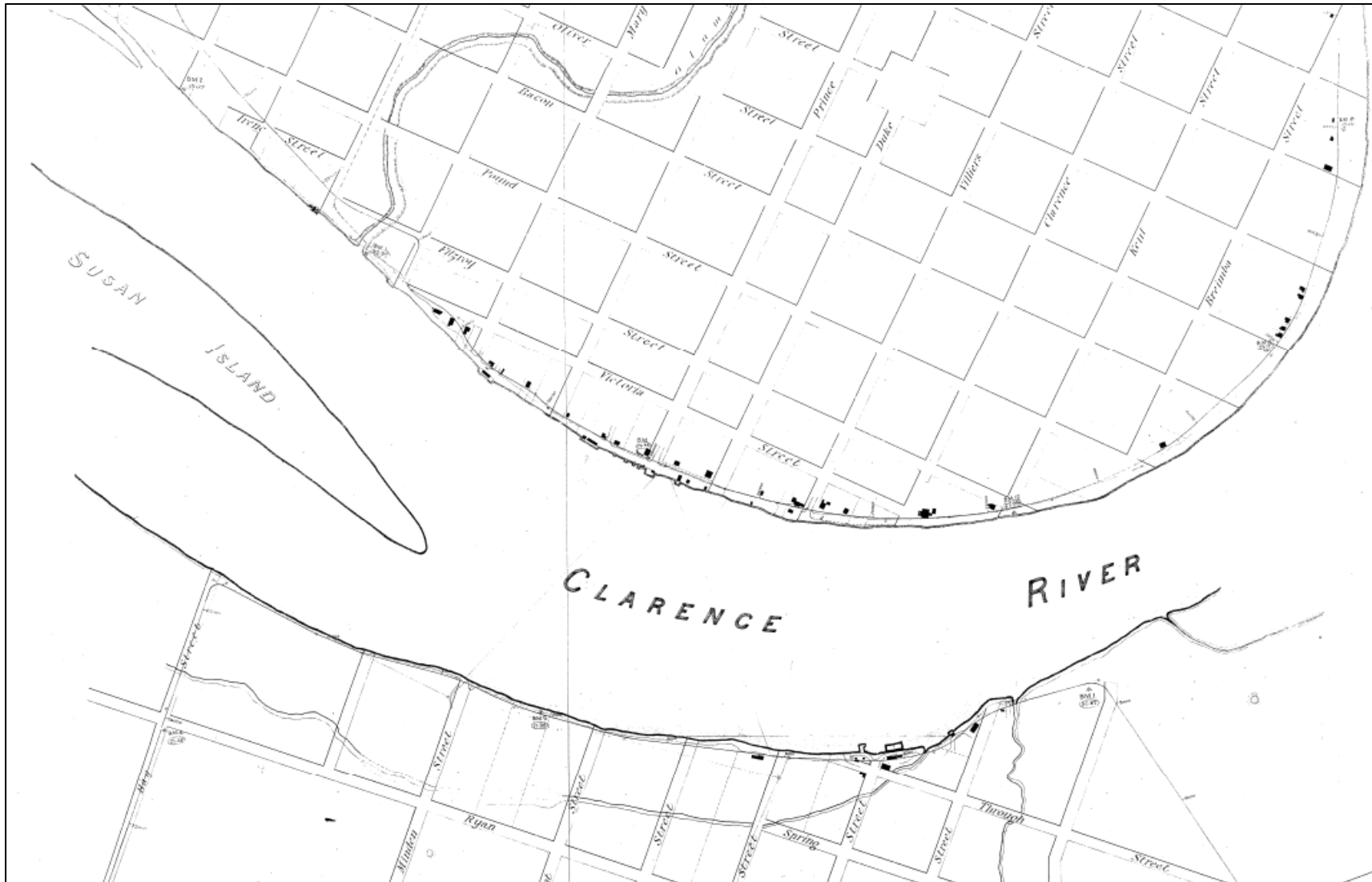
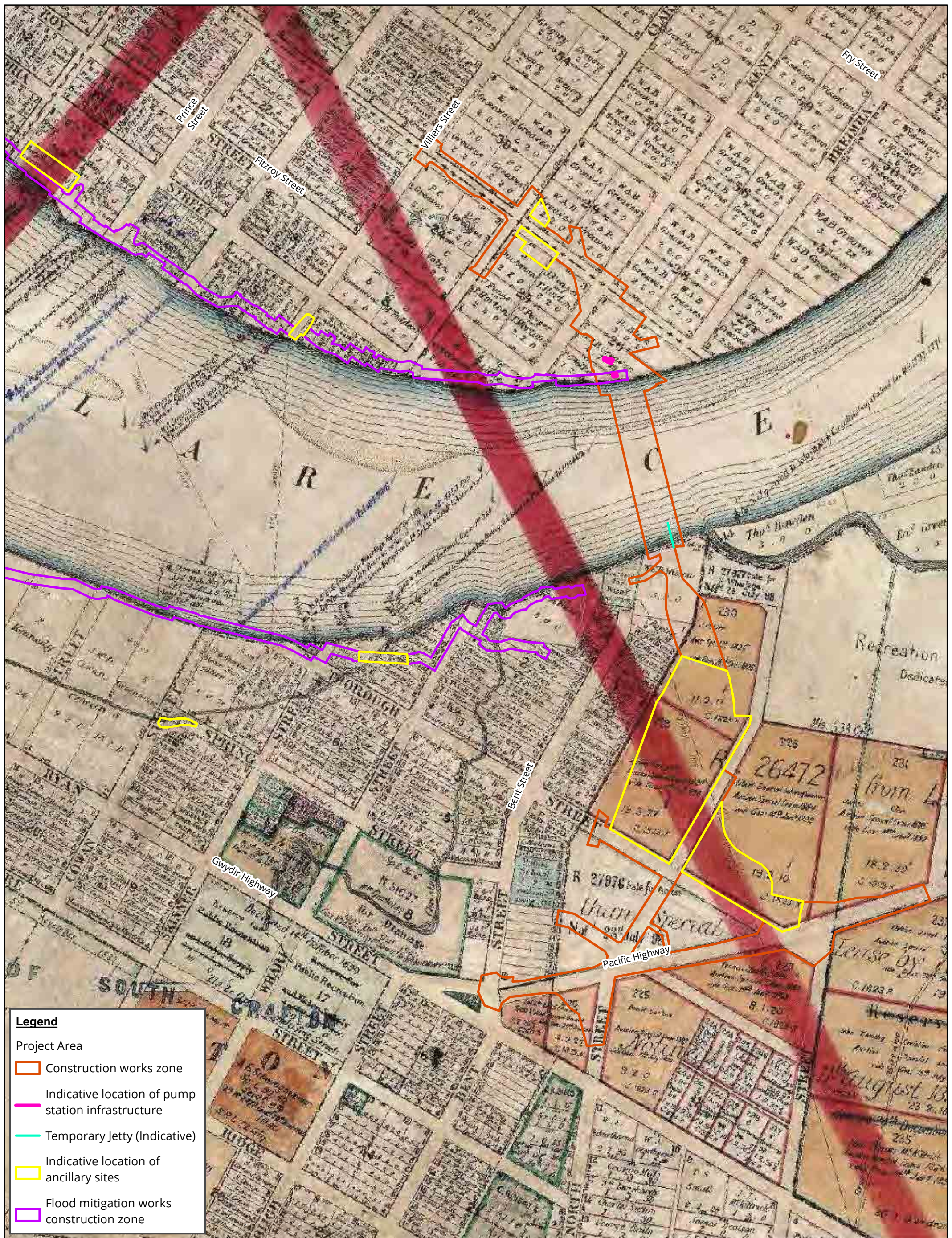


Plate 7: 1880 map of Grafton and South Grafton showing proposed flood embankments and buildings and wharfrage located near or adjacent to the flood mitigation works (Department of Public Works Map Room: 22840, Reference No: 110121).



Legend

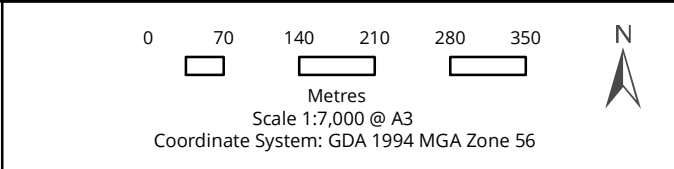
- Project Area
- Construction works zone
- Indicative location of pump station infrastructure
- Temporary Jetty (Indicative)
- Indicative location of ancillary sites
- Flood mitigation works construction zone

Figure 6: Map of the City of Grafton and the Town of South Grafton, Parish of Great Marlow and Southampton, County of Clarence 1889 (charted to 1901). This plate shows early subdivisions within Grafton.



Acknowledgements: Imagery provided by Arup Pty Ltd

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3.7 The Big River, Bridging the Gap and United City of Two Towns (1890 – 1957)

The Clarence River was a key element to the settlement and prosperity of Grafton and South Grafton from its early occupation, providing access into the interior's rich resources and a means of trade with other ports. Wharves were crucial to the river trade and lined both sides of the Clarence at Grafton to service trade and transport. The River also presented a barrier and 'the magnitude of the problem is indicated by the fact that two separate towns developed, one on each side of the river, with duplicated services, including schools, churches, post offices, newspapers, and wharves'. Steam punts operated crossings of the river from 1874 and residents canvassed for a bridge linking the two populations from the earliest days of settlement. This need reflected the wider impetus to provide crossings for other major inland rivers of the NSW interior like the Murray and Murrumbidgee to limit the costs of indirect overland routes for the transfer of wool, wheat and other commodities. By 1900 prospects in Grafton were brighter after the downturn of the 1890s. A planned railway from Casino to Grafton strengthened confidence in the two towns, bolstering trade and development. Despite receiving much of the river trade and being older than Grafton, South Grafton had been overshadowed by the northern city since the 1860s. At the turn of the century South Grafton was developing steadily and was finally proclaimed an independent municipality in 1896.

The 1890s brought an economic change to the region with the decline of the sugar industry and movement of production downstream towards the coast.⁶⁷ In place of sugar cultivation, mixed farming and dairying emerged as viable industries. Although dairying had occurred along the Clarence the reasons for the rapid uptake of dairying was the development of the cream separator, refrigeration and new methods of testing all of which were developed and operationalized in the 1880s and 1890s.⁶⁸ The result was a longer lasting range of dairy products that could be exported to Sydney and Brisbane for domestic consumption and overseas to Great Britain. A number of large dairying factories or creameries were established along the Clarence River including the Fresh Food and Ice Co at South Grafton.⁶⁹ This boom in dairying created a new form of river traffic comprising of cream boats used to bring cream from dairy farms to the central factories for processing. Cream boats began to appear on the river system in the late 1889s until the 1930s when road transport began to take over.⁷⁰

The towns of Grafton and South Grafton continued modest but erratic growth in the 1890s and early 1900s. Much of this was based on Grafton's position as a regional centre although the railway to the New England tableland threatened to capture much of the trade to New England through Grafton.⁷¹ Connecting Grafton to the railway network presented some difficulties as the route along the North Coast from the Hunter Valley was through steep ranges and across large rivers which made this an expensive prospect and prompted ideas of connecting Grafton by rail to Glen Inness. This meant that the railway came to Grafton not from Sydney but from the Tweed Valley in the North. In 1884 the then Government proposed a line from Grafton to the Tweed Valley via the Richmond Valley but this did not achieve funding. The Parliamentary Public Works Committee, a committee for vetting public works proposals, investigated the proposal in 1890 and recommended constructing only the Lismore to the Tweed section. This was authorised in 1890 and construction started in 1891 and was completed in 1894.⁷²

Following further enquires this line was approved to be extended to Casino in 1900 and in 1903 from Casino to Grafton. Ground was broken in Grafton in April 1901 and the line was opened in November 1906⁷³. The railway network simply

⁶⁷ Higman, B., 1968. SUGAR PLANTATIONS AND YEOMAN FARMING IN NEW SOUTH WALES. *Annals of the Association of American Geographers*, 58(4), pp.697-719 Kass 2009.p241.

⁶⁸ Jeans D.N.1974 A historical Geography of NSW to 1901, reed Educational p255-256.

⁶⁹ Jeans 1974 p266.

⁷⁰ Lee 2003 p251-253.

⁷¹ Kass 2009 p163.

⁷² Dunn, Ian (2002). *Byways of Steam 18* : 'the railway from nowhere to nowhere': the Grafton to the Tweed Railway 1894-1932. Eveleigh Press, New South Wales pp17-30.

⁷³ Kass 2009 p164

linked wharves in the three river valleys. The facilities at South Grafton (constructed in 1915) consisted of a Station and platform; goods siding and shed, engine and carriage facilities and a siding to a wharf.⁷⁴ The wharf provided transhipment facilities to the sea link to Sydney. The majority of these railway facilities are outside the project area, with the exception of a through-type engine shed built in 1908, a roundhouse depot built in 1915 and 18.2 metres turntable built in 1925 (see Plate 8 and Plate 10).

The railway into South Grafton was an isolated section to Glenreagh (and from there a branch line headed to Dorrigo) opened in October 1915.⁷⁵ The terminus at South Grafton resulted in the resumption of land on the west side of Bent Street which as Plate 7 shows included a number of existing houses. The terminus included a station; goods yards and shed; a six stall locomotive shed and engine facilities, and a carriage shed. A branch line ran to the west over Alipou Creek to a government wharf and later the North Coast Steam Navigation Company acquired land and established a jetty to the west of the wharf. Plate 9 shows the railway facilities in December 1914.



Plate 8: An aerial view of the Clarence River Bridge after construction in the 1930s. Many now-demolished elements of the Railway Terminus area (CZB36 and CZB37) occupy a large area east of the bridge.

The line from Sydney was opened in 1923 with the opening of the section from Coffs Harbour but this occasion did not require South Grafton railway station to be altered.⁷⁶ This more or less completed the North Coast line between Murwillumbah on the Tweed and Sydney except for the bridge over the Clarence River. Construction of the main line to Brisbane via Kyogle was completed in 1930 putting Grafton on the main interstate line. The problem was the Clarence River crossing.

The NSW Government railway adopted a temporary solution by acquiring and converting a barge – the *Swallow* and a small cargo ship the *SS Induna* and converting them into train ferries. This involved constructing an upper deck on which the rolling stock ran for transportation across the Clarence. Initially, only one track was installed on the upper deck of the *Swallow* but soon after their entry into service this was enlarged to three tracks. The *SS Induna* being smaller had only

⁷⁴ Dunn 2002 p95.

⁷⁵ Milne, R 2005 Grafton Rail Centre of the Clarence for 100 years, *Australian Railway History* November 2005.

⁷⁶ Chief Traffic Manager 1922 Opening of the line from Glenreagh to Grafton, Circular 218, NSW Government Railways

one track. The *Swallow* was first in service in 1925 followed by the *SS Induna* in 1926⁷⁷. The ferry route was from the railway wharf at South Grafton upstream to the railway wharf at Grafton and not directly across like the current bridge alignment (see Plate 9).

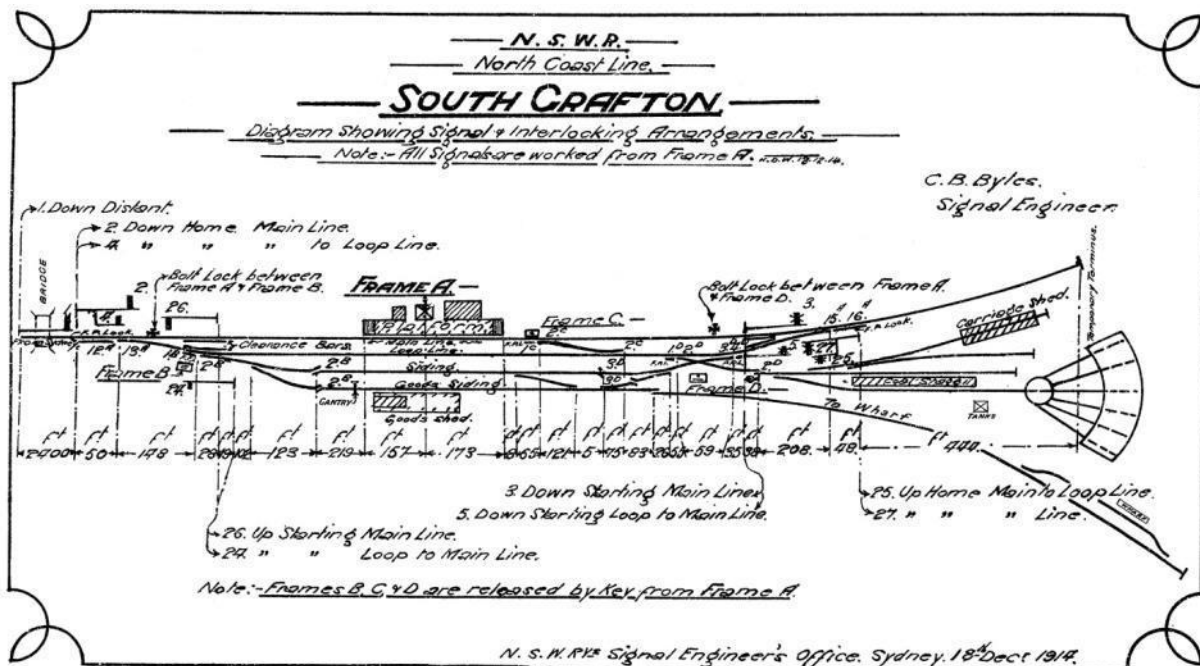


Plate 9: South Grafton as originally established in 1915. Note this is a not to scale plan but a diagram indicating the station layout (Source Opening of the line from Glenreagh to Grafton, Circular 245 NSW Government Railways).

The *Swallow* had a capacity of 198 tons or 16 vehicles. Locomotives were not permitted except as specially authorised movements. Generally the ferries carried non-passenger rolling stock so passengers transferred into new trains while the goods and mail vans were transported; most other transfers were of freight following stock. Passengers were transported in regular passenger ferries⁷⁸. Jetties and track work were constructed at both locations. The tracks ran down steep embankments to jetties with “adjustable 100’ long drawbridges” leading to floating pontoons⁷⁹ (Plate 10).

⁷⁷ Dunn 2003 pp111-112; Lee 2003 p236-238.

⁷⁸ Dunn 2003 p111

⁷⁹ Dunn 2003 p109, p111.

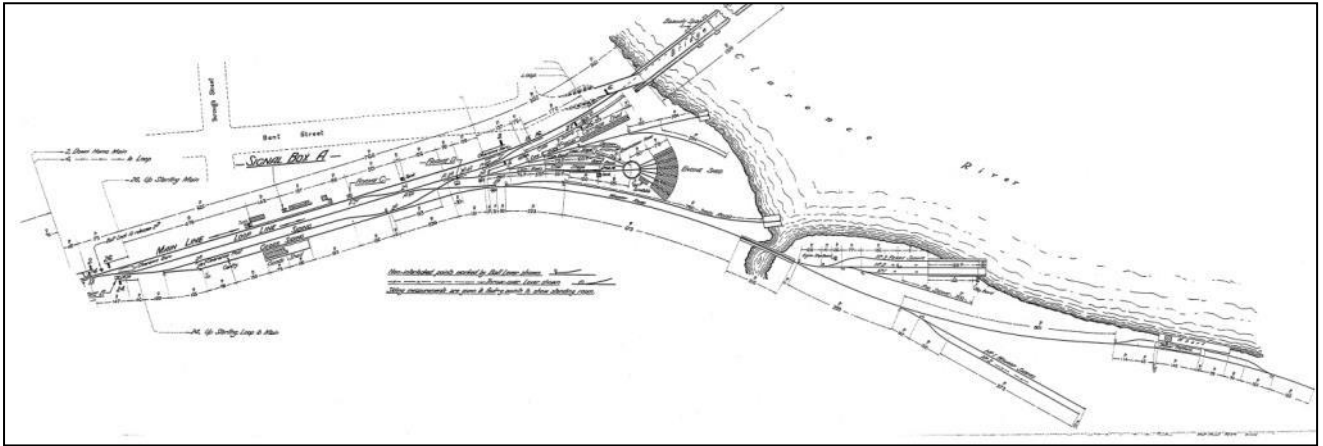


Plate 10: South Grafton in 1932 showing ferry arrangements and the new bridge. Note this is plan is not to scale.

The SS *Induna* had travelled far to arrive at Grafton and, in the process, played an important part in the history of Britain and the conduct of World War Two. The SS *Induna* was a 703 ton (gross) screw steamer built by Hall and Russell of Aberdeen in the United Kingdom in 1891. Eight years later it aided in the rescue of a 25 year old escapee from the Boer War in Pretoria, South Africa. That escapee went on to be Britain's First Lord of the Admiralty in World War One and World War Two, arguably one of the greatest war time leaders of the 20th century and one of the most famous British Prime Ministers of all time. The escapee, Winston Churchill, an ex-British Army officer serving as a war correspondent for the London Morning Post, boarded the weekly mail boat at Lourenco Marques (now Maputo), Mozambique for the last leg of his escape to Durban. The mail boat was the SS *Induna*.⁸⁰

At the time of Churchill's escape, the SS *Induna* was operated by Rennie and Sons in South Africa. In 1904 Burns Philp bought the SS *Induna* for trading in the Pacific, primarily in the Gilbert and Ellice Islands. The Patrick Steam ship Company of Sydney bought the SS *Induna* in 1920 for the Tasmanian and Australian East Coast trade. It was in 1925 that the SS *Induna* was refitted as a train ferry after being sold to the NSW Department of Railways. The refit involved substantial changes to the superstructure and the introduction of heavy concrete and iron rail ballast.

⁸⁰ Graham 1965 p13

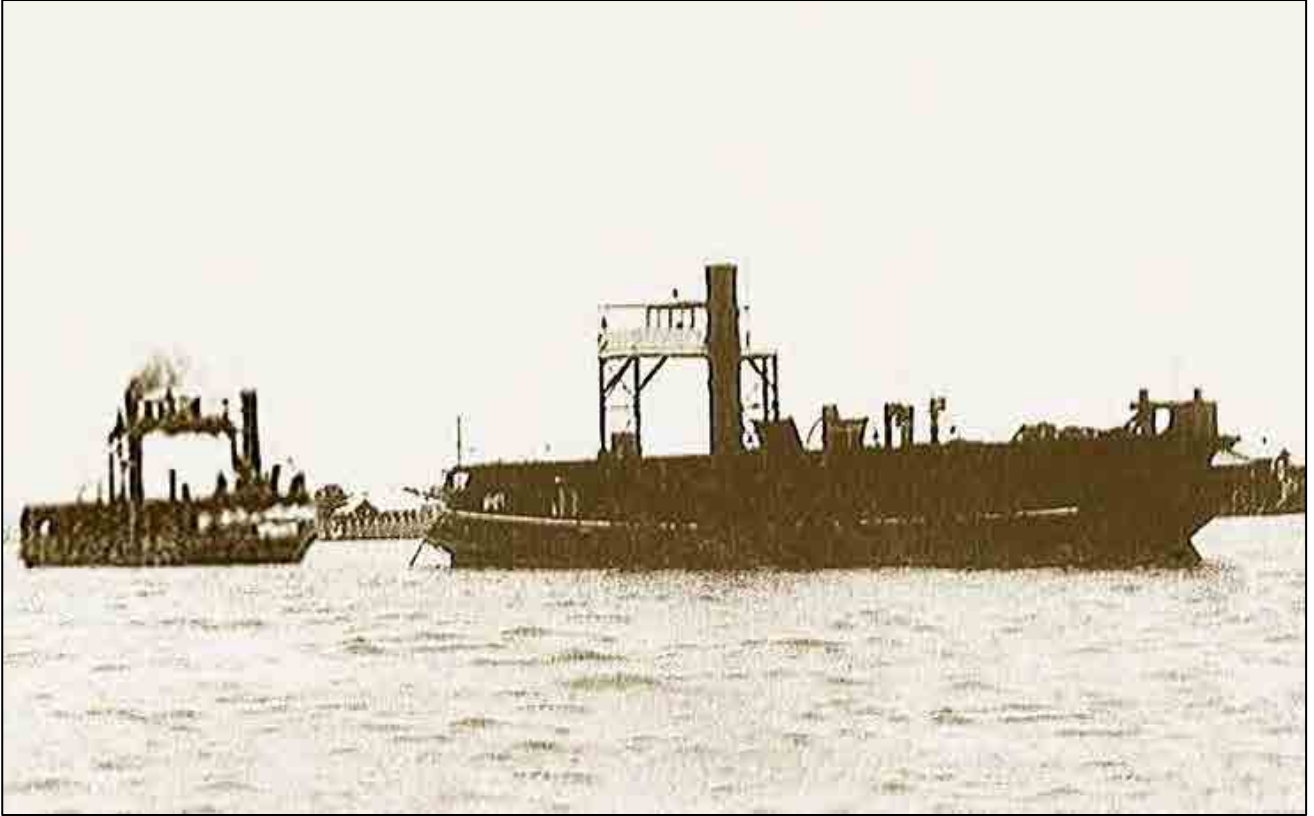


Plate 11: Rail Ferries *Swallow* (left) and *SS Induna* (Source: Frozen in Time Gallery, www.frozentime.com.au)



Plate 12: Rail Ferries wharves for *SS Induna* and *Swallow* (Source: Frozen in Time Gallery, www.frozentime.com.au)

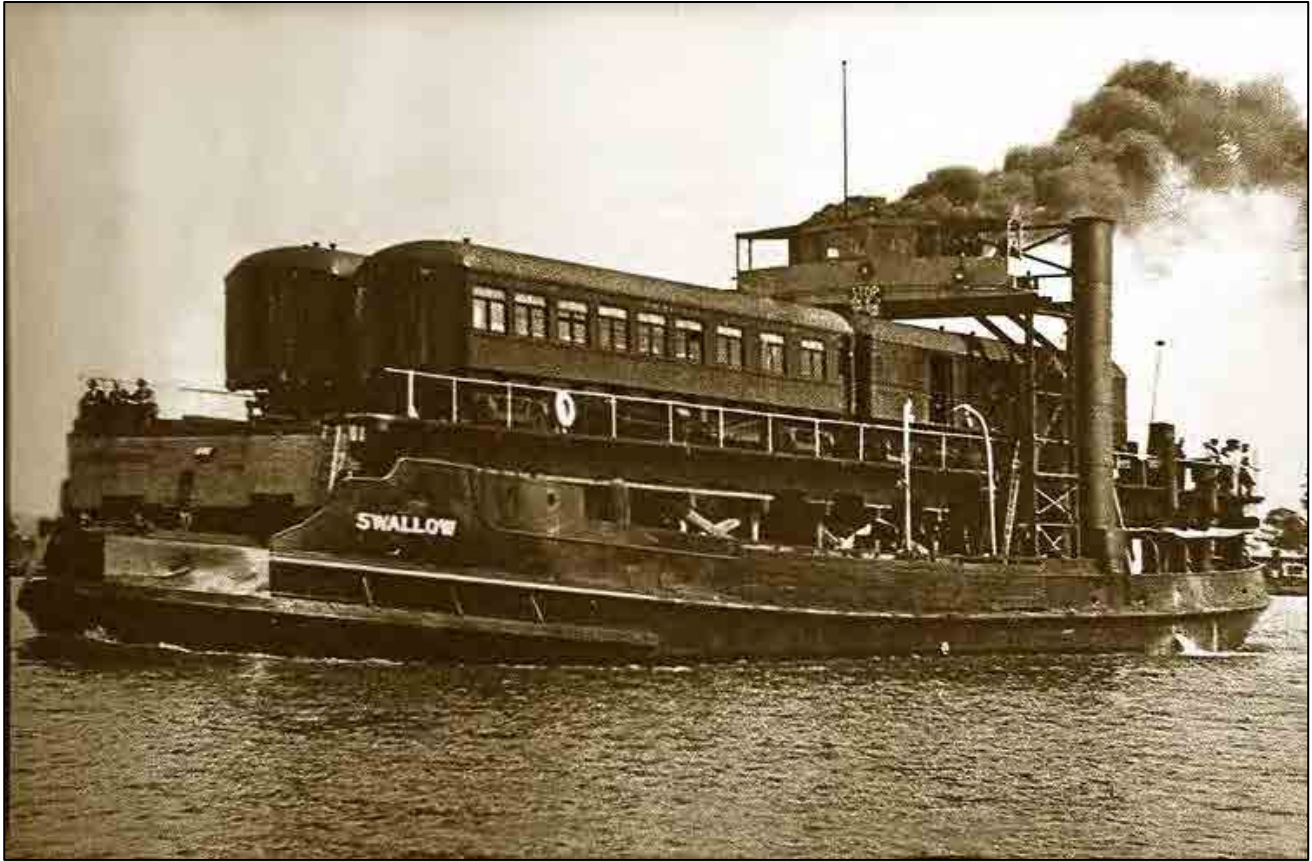


Plate 13: Rail carriages on board Swallow (Source: Frozen in Time Gallery, www.frozentime.com.au)

By the late 1920s the volume of both road and rail traffic had proved the steam ferry service insufficient. Long delays were experienced, particularly when manoeuvring the trains across the river and the construction of a bridge had to proceed urgently.⁸¹ Plans for a bridge at Grafton had been underway since 1910 and in 1913 the Public works Committee recommended construction of a bridge across the Clarence at Wilson's Hill (i.e. where it is now). However design and resource problems held up construction. By 1922 the Minister for Works asked the Railway Commission to include vehicle traffic in the bridge design. The Works Department and Railway Construction Branch decided that plans should be made for a bridge unique to the Commonwealth and a design was produced by Mr Whickham, Chief Engineer of the Railway Construction Branch for a double-deck rail, vehicle and pedestrian bridge. This design allowed for traffic on two separate levels using a rare "Rail" type bascule span to accommodate the double-deck structure. The importance of shipping to the area was a major consideration in the design and due to the low clearance, of 8 metres the span was required to lift to allow river vessels to pass.⁸²

In 1926 tenders were invited for construction stipulating that all metalwork excepting special machine parts were to be fabricated and processed in Australia. Clyde Engineering Ltd won the contract to manufacture and supply the caisson metalwork and bridge superstructure⁸³ and the Railway Department opted to complete the remaining elements of construction to reduce costs. Workers and material began to arrive in late 1927 (there was a track running past the roundhouse at South Grafton noted as "steel road" - this is likely to have been for bridge materials). On the Grafton side the railway line was extended from the existing railway station south east to reach the river in Portion 26. The land was resumed by the Government and any buildings or structures were demolished.

⁸¹ Kass 2009 p.220

⁸² Berger 2005 p.10

⁸³ Clarence River Historical Society 1992 p.45



Plate 14 Onshore facilities and wharves photographed during construction of the Grafton Bridge at South Grafton c.1930. View is eastward from the bridge over the former wharf reserve toward the Railway Precinct terminus and project area (Source: Engineering Heritage Australia report: Grafton to Brisbane National Railway Link 2009:26)

The five truss spans, each weighing 500 tons, were built on a platform on the south side of the river within the former wharf reserve under the direction of resident engineer S.D. Webb and floated out into position on punts pulled by tugs with the remaining spans built on to the structure. Seven substructure piers were built onto rock foundation by a means of caissons sunk by pneumatic process. Construction took approximately five years at a cost of £408,723⁸⁴ and spanned the advent of the Great Depression, providing much needed employment within Grafton. The railway bridge was opened on 7 May 1932 and completed the last section of the standard rail gauge link between Sydney and Brisbane. The road section was opened in July in conjunction with the official opening by Governor General Sir Isaac Isaacs before a large crowd, providing the long-awaited link between the twin towns.



Plate 15: Shipping passing through the bascule span of the completed Grafton Bridge (Source: Kass 2009 p.226)

⁸⁴ Berger 2005 p.11



Plate 16: Aerial view of the opening of Grafton Clarence River Bridge, Grafton, NSW, 20 July 1932 (Source: National Library of Australia). This view shows extensive construction facilities on the south bank of the Clarence River and mostly in the project area, the steel siding is visible along with floating pontoons and cranes

The Minister for Works and Railways Mr Buttenshaw drove in the first rivet on 11 July 1928. Despite a slow down in work due to the Depression the bridge was opened for traffic on 8 May 1932.⁸⁵ The construction of the bridge stimulated an initial building boom which did much to revive the economic fortunes of the city⁸⁶. Once Grafton Bridge was completed the importance of South Grafton as a centre of distribution and civic activity declined. The absence of serious flooding in the period 1928 – 1945 also encouraged increased building. The restricted availability of building materials during the Second World War period led to the development of a fibro plant and resulted in an increase in fibro buildings in the city.

With free access across the Clarence South Grafton was opened to goods and services in Grafton and in return Grafton residents were free to take up property south of the river on flood free land.⁸⁷ The Grafton Bridge effectively eliminated South Grafton's role as a major shipping point⁸⁸ and bringing to a close 100 years of ship-dependent trade. Since that time the bridge has been used for road, rail and pedestrian transport. The bascule span was closed in 1968 and many old wharves would have fallen into disrepair or disuse since the advent of the bridge. The various punts and steam ferries were also made redundant and the wreck of the *SS Induna* is now located against the bank of the Clarence in South Grafton. The superstructure and a section of the bow were removed from the *SS Induna* in 1972. In 1975 the Council of the City of Grafton erected the section of the bow as a monument on a grassed area beside Riverside Drive in front of the retirement village.

Many dwellings were erected in Grafton during this period, including a number of examples within and adjacent to the project area that characterise the development of housing in Grafton during these decades. In Grafton housing continued to develop and diversify, with distinguished two-storey timber residences built at the turn of the century. An example

⁸⁵ Kass 2009 p220-221

⁸⁶ Grafton City Council 1985

⁸⁷ Kass 2009 p212

⁸⁸ Ibid.

adjacent to the project area is seen in 'Dunvegan', (CZB11) a two-storey Late Victorian timber residence constructed on an unusually large scale at 47 Pound Street in 1905 by the Powell family. Dunvegan (CZB11) was extended to its final form in 1926 and presents a variety of Victorian and Federation elements. The property is now located within the TAFE complex. Other Federation style properties include 129 and 127 Villiers Street (CZB01 and CZB02).

Other dwellings within the project area which were constructed in Grafton during this period include a variety of Inter-war period homes reflecting architectural influences of the era, such as 106 to 108 Dobie Street (CZB05 and CZB06) and 12 to 26 Kent Street (CZB22 – 28). Buildings constructed within the project area during this period consist of predominantly weatherboard dwellings, whilst this is typical of Grafton, it is unusual for this period when fibro cement sheeting became readily available and may reflect the popularity of weatherboard throughout Grafton's history. A prominent example of a single-storey weatherboard inter-war dwelling is located at 4 Greaves Street, in the former Glyndon Private Hospital (CZB35).

The unification of Grafton and South Grafton during this period coincided with the introduction of electricity and the mood of the times is symbolised by various social events and commemorations from the 1930s. The town celebrated the 25th anniversary of the reign of King George V in 1925, and in a proud tradition begun in the 1870s marked the occasion with various community street tree plantings. An avenue of Jacaranda trees, already prevalent in the town, had been planted on Pound Street north of Villiers Street in the 1880s and this was expanded on with the planting of 39 more along the project area section of Pound Street from Clarence Street to the river to mark the anniversary. Pound Street has long been known as 'Jacaranda Avenue' as a result of these plantings. Twenty-five of these Jacarandas remained in 1991.⁸⁹ Further street trees would have been planted within or adjacent to the project area during this historic phase however direct evidence for the history of all street plantings is lacking. Two plaques are present within the project area that commemorate the events surrounding certain plantings (see Coronation Plaque – CZB12 and King George V Plaque – CZB19).

⁸⁹ Wrigley 1991 p.23



Legend

Project Area

- Construction works zone
- Indicative location of pump station infrastructure
- Temporary Jetty (Indicative)
- Indicative location of ancillary sites
- Flood mitigation works construction zone

Figure 7: 1959 aerial of the Project Area



3.8 Modernisation (1957 to present)

After being linked for over two decades the two parts of Grafton, then known as the City of Grafton and the Municipality of South Grafton, were reunited in January 1957, and together with parts of the adjoining Copmanhurst, Orara and Nymboida Shires they formed an enlarged City of Grafton.⁹⁰

Whilst Grafton has been subject to some flood mitigation works in the late nineteenth and early twentieth century,⁹¹ this mainly consisted of a series of rural drains and floodgate structures designed to bring valuable agricultural lands back into production as soon as possible after each major flood event. A series of damaging floods in the 1940s and 1950s resulted in the formation of the Clarence River County Council in 1959 to tackle flood mitigation for all the shires of the floodplain (including Grafton). The Grafton levees were completed during the 1970s.⁹²

After the 1950s several manufacturing industries provided employment and revenue for Grafton most notably in the production of dairy goods, meat products and brewing,⁹³ all fostered by the benefit of access to the railway line and distant markets. By the 1970s these industries were beginning to falter as they came up against a greater national focus on urban factory production in and around the metropolitan centres on the coast and this would lead to the eventual closures of notable Grafton manufacturers including Peters Ice cream, the Clarence River Co-operative Meat Society and the Grafton Brewing Company, all bought out or forced to close by diminishing economic prospects.⁹⁴ In conjunction with these developments the Clarence had lost its role as a major shipping route leaving the area increasingly dependent on rail and road for goods. An increased focus on tourism and leisure associated with the coast at this time further impinged on Grafton's future growth and employment, population growth and development stagnated from the 1980s.⁹⁵ In addition to these developments devastating floods continued to ensure Grafton suffered added pressures that were not felt elsewhere in NSW during a time of general prosperity.⁹⁶

Grafton was still the centre of regional Government and remained the administrative core of the region. In 1967 serious attempts were made to set up a new state in the region in response to what was seen as the economic stranglehold of Sydney.⁹⁷ Many voters supported the concept as it was geared toward creating growth, employment and independence.⁹⁸ The referendum was defeated however the point had been made: a precedent for the recognition of struggling rural towns, and greater state government input provided the support the economy of the area needed to stabilise.⁹⁹ Grafton reached a balance between adversity and adaptation over the period 1970-2000 and is now the major urban centre within the Clarence Valley local government area, which was incorporated in February 2004 under the *Local Government Act 1993*. Clarence Valley was created by the amalgamation of the City of Grafton with Maclean Shire, together with most of Copmanhurst and Pristine Waters Shires, and a small part of Richmond Valley Shire.

After the forward thinking and economic focus of the previous decades, Grafton developed a pronounced historic perspective centred on its historic urban precincts, period houses and local colour, most typified by the continued growth of the Jacaranda festival. This festival began in 1935 and still an important local social and cultural occasion and an event of national focus and international recognition.¹⁰⁰ In recognition of its past, the Clarence Valley Council established nine Heritage Conservation Areas within the Clarence Valley and these were acknowledged in the now-annulled North Coast

⁹⁰ Stubbs 2007 p3

⁹¹ Department of Public Works 110109: 22693

⁹² http://www.clarence.nsw.gov.au/cp_themes/metro/page.asp?p=DOC-YOA-75-07-31

⁹³ Stubbs 1997 p98-101

⁹⁴ Ibid.

⁹⁵ Kass 2009 p255

⁹⁶ Kass 2009 p259

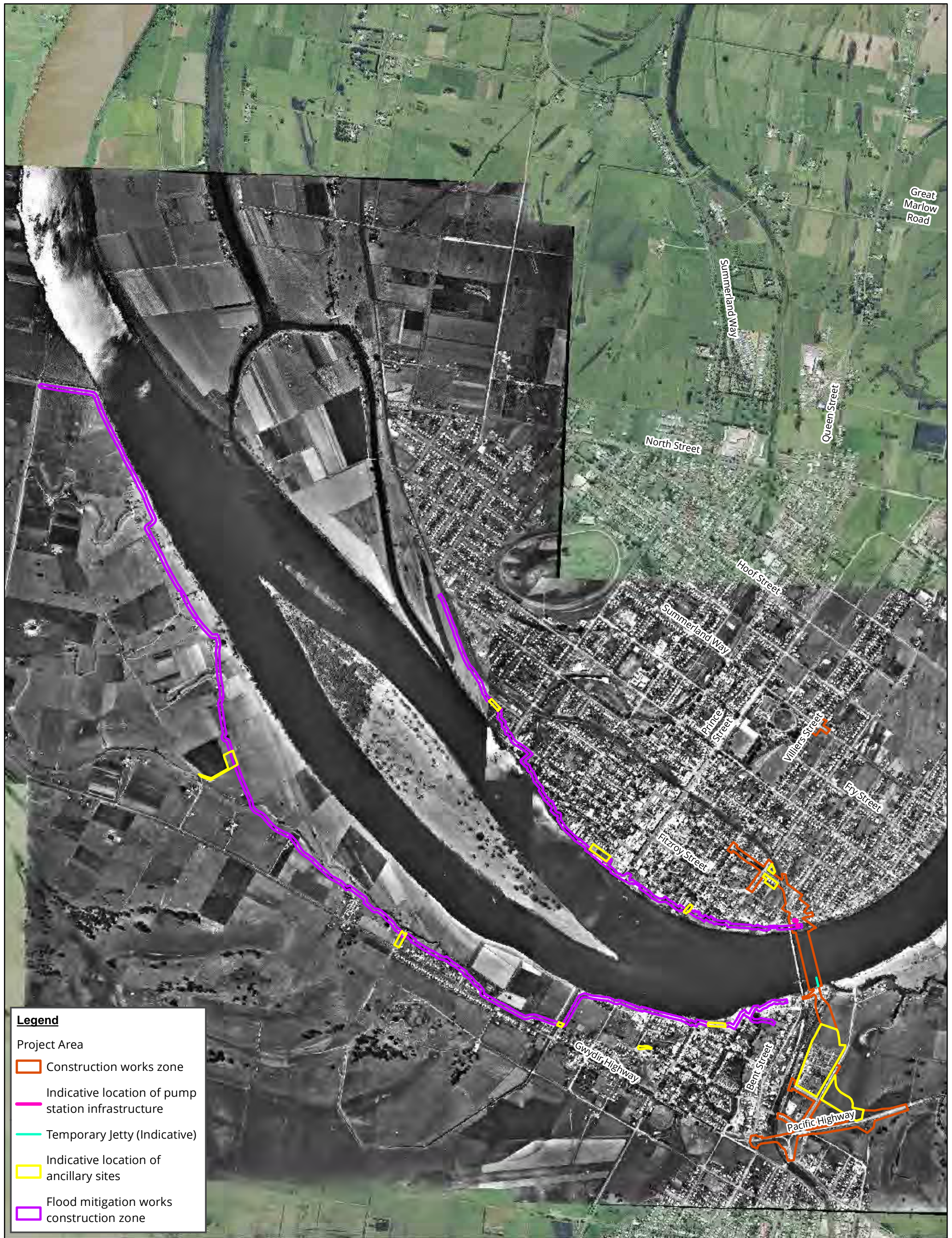
⁹⁷ Kass 2009 p261

⁹⁸ Kass 2009 p262

⁹⁹ Ibid.

¹⁰⁰ Kass 2009 p.275

Regional Environmental Plan (1988). With the annulment of the North Coast Regional Environment Plan, Clarence Valley Council is now the administrative body of the Heritage Conservation Areas of Grafton. The conservation areas include most of the historic core areas of the towns and villages with noteworthy collections of period buildings. The purpose of the Conservation Areas is to give overall protection to the heritage character and scale and form of these areas. A direct result of these moves is the listing of individual items on the LEP for their contribution to the heritage character of Grafton as a whole.



Legend

Project Area

- Construction works zone
- Indicative location of pump station infrastructure
- Temporary Jetty (Indicative)
- Indicative location of ancillary sites
- Flood mitigation works construction zone

Figure 8: 1972 aerial of the Project Area

3.9 Summary of historical themes

This section presents a summary of historical evidence for land use in the project area organised by historical theme (see Table 11).

Table 11: Summary of historical evidence for local themes and events within or adjacent to the project area.

Era	Theme	Year(s)	Event	Evidence within Grafton and South Grafton
1835 – 1840	The Cedar Getters	-	Timber getters, graziers and shipbuilders move into the Grafton area in increasing numbers in the late 1830s.	There is no evidence of cedar getting or shipbuilding within the project area. The main focus of ship building was at Phillips' establishment which was located between Christopher and Cowans Creek, in South Grafton. Archaeological remains associated with the precise location of his establishment is not known, but this may be traversed by flood mitigation works sections of the existing levee that are proposed to be raised (FMW30).
1840 – 1860	Squatters, Settlers and the Town Plan	1840	First surveys conducted of the Grafton area. Surveyors C.M. and C.B. Wilson settle on the south side of the river.	The C.M. and C.B. Wilson establishment in South Grafton was located within the sections of the existing levee that are proposed to be raised by flood mitigation works, although no standing structures remain. Archaeological remains of Wilson's establishment may survive within undisturbed portions of the foreshore area (FMW28). The Construction works zone boundary encompasses agricultural land owned by the Wilsons; however there is no historical evidence for structures located within this area.
		1841	Development of early infrastructure and early commercial endeavours	No standing structures associated with early commercial activity are located within the project area. The 1849 plan shows the locations of these early activities, some of which are traversed by the sections of the existing levee that are proposed to be raised flood mitigation works, potential archaeological sites which may be within this area include early infrastructure included public wharves (FMW17, FMW30 and FMW35) and the locations of Hewitt's store (FMW27), Sharp's Store in South Grafton (FMW35) and Store and Inn in Grafton (FMW17).
		1848-1849	Grafton and South Grafton are surveyed into a grid layout town plan (adopted in 1849).	The 1848 town plan survives in the present day street alignments and blocks within the town centres of Grafton and South Grafton. The major exception is the later intersection of the rail and road corridors associated with the bridging of the Clarence River.
		1850	Town allotments begin selling in Grafton and South Grafton.	Reflected in the existing street and block layout.

Era	Theme	Year(s)	Event	Evidence within Grafton and South Grafton
		1858	Grafton and South Grafton incorporated as the Municipality of Grafton.	-
		1861	"Dallings", 270 Ryan Street, South Grafton is constructed (FMW38).	Listed heritage item.
		1867	Fishers Park established at corner of Villiers and Dobie Street (CZB08).	Listed heritage item and archaeological site.
1860 – 1890	Grafton Boom, Grafton Bust: The Golden Years	1867	The Municipality of Grafton (combining both Grafton and South Grafton) was renamed the Borough of Grafton.	-
		1870	133 Victoria Street (FMW21) constructed	Listed heritage item.
		1874	An official program for the planting and protection of trees in streets and parks begins.	May be represented by the presence of mature street trees within the project area.
		1876	Memorial Park (FMW15) is established	Listed heritage item.
		1876	"Verona", 213 Fitzroy Street is built (FMW25).	Listed heritage item.
		1877	Grafton Court House (FMW15) is constructed	Listed heritage item.

Era	Theme	Year(s)	Event	Evidence within Grafton and South Grafton
		1885	Grafton proclaimed a City, South Grafton proclaimed a town, both within the Borough of Grafton.	-
		1885	30-32 Villiers Street (CZB10), Grafton build by the Henson Family.	Listed heritage item.
		1886	Police Inspector's Residence constructed (FMW16).	Listed heritage item.
		1890	Ravensford (CZB10) built by the Henson family.	Listed heritage item.
		1895 - 1910	A period of residential expansion commences with the construction numerous Federation style dwellings.	129 Villiers Street (CZB01), 127 Villiers Street (CZB02), 125 Villiers Street (CZB03), 123 Villiers Street (CZB04), 26 Clarence Street (CZB15), 12 Clarence (CZB16), 10 Clarence Street (CZB17), 14 Kent Street (CZB27), "Clarendon" (CZB30), 3 Fitzroy (FMW01), 5 Fitzroy (FMW02), "Riverview" (FMW03), McWilliams Lodge (FMW11), Itala (FMW18), Fowey (FMW20), 137 Victoria Street (FMW22), 146 Victoria Street (FMW23), 22 Wharf Street (FMW31), 75 Through Street (FMW32), 112 Through Street (FMW37).
		1900	Construction of Grafton to Casino rail line began. The rail line commenced from the former Grafton Station near the intersection of Pound and Turf Streets, west of the Project rea.	Existing rail infrastructure.
		1905	Opening of the Grafton to Casino rail line.	Existing rail infrastructure.
		1905	Dunvegan (CZB11) at 47 Pound	Listed heritage item.

Era	Theme	Year(s)	Event	Evidence within Grafton and South Grafton
			Street built around 1905.	
		1906	Construction of the Maitland to South Grafton rail line is authorised.	Listed heritage item.
		1907	"Arcola", 150 Victoria Street is build by the Strauss brothers (FMW24).	Listed heritage item.
		1907	Fisher's Park becomes the Grafton showground and the complex at corner of Villiers's and Dobie Street is opened (CZB08). Timber pavilion is relocated from its former location at Grafton Racecourse.	Listed heritage item.
		1909	Walker's Marina Hotel, 90 Through Street, South Grafton (FMW35) opens.	Listed heritage item.
1910 – 1932	Bridging the Gap	1910 - 1932	Interwar period residences are constructed	Listed heritage items including 106 Dobie Street (CZB05), 108 Dobie Street (CZB06), 26 Kent Street (CZB22), 24 Kent Street (CZB23), 22 Kent Street (CZB24), 16 Kent Street (CZB26), and 12 Kent Street (CZB28).
		1911	Roman Catholic Presbytery (FMW07) at 57 Victoria Street opened.	Listed heritage item.
		1913	Convent at 2 Villiers Street (FMW09) is built.	Listed heritage item.
		1914	St. Mary's Church (FMW06) is	Listed heritage item.

Era	Theme	Year(s)	Event	Evidence within Grafton and South Grafton
			opened.	
		1915	Line from South Grafton south to Glenreagh is completed.	Rail line and associated infrastructure including the turntable within the rail yard at South Grafton.
		1915	Construction of a bridge and a rail line extension to join the South Grafton rail line to the station at Grafton is authorised.	Existing rail infrastructure.
		1922	Glyndon Private hospital (CZB35) opened Mrs A Locton, the daughter of surveyor W.B. Greaves.	Listed Heritage Item.
		1923	All sections of the rail line between South Grafton and Sydney are connected.	Existing rail infrastructure.
		1924	S.S. <i>Swallow</i> , a modified steamship, commences operation as a rail ferry across the Clarence River.	The rail ferries operated from wharves on the south bank of the Clarence River east of Alipou Creek. The archaeological remains of these wharves and associated rail lines still exist, but are outside the project area.
		1926	SS <i>Induna</i> , a modified steamship, commences operation as a rail ferry across the Clarence River.	The hull of the SS <i>Induna</i> is situated on the south bank of the river between Bent Street and Wharf Street (FMW 29).
		1928 - 1932	Construction of the Clarence River bridge. Opened in 1932.	The bridge (CZB36) and associated railway viaducts (CZB20 & 21) and road approaches.

Era	Theme	Year(s)	Event	Evidence within Grafton and South Grafton
1932 – 1957	United City of Two Towns	1935	Planting of Jacaranda trees on Pound Street between Clarence Street and the river to commemorate the Silver Jubilee of King George V.	Surviving trees and a memorial tablet affixed to the railway viaduct (CZB12).
		1940	RTA Regional office (FMW10) is opened.	Listed Heritage Item.
		1943	Barrack blocks (CZB37) constructed at South Grafton Station to house WWI troops.	Listed Heritage Item.
		1953	Avenue of Cassia trees planted in Clarence Street between Bacon and Pound Streets to commemorate the coronation of Queen Elizabeth II.	Surviving trees and a memorial tablet affixed to the railway viaduct at Clarence Street (CZB12).
		1957	Grafton and South Grafton reincorporated to form the City of Grafton.	-
1957 – present	Modernism	-	Revival of historic associations incorporating development of conservation areas and events such as Jacaranda Festival -	-