

Prior to the commencement of the meeting, the Mayor will make the following declaration:

“I acknowledge the Tasmanian Aboriginal Community as the traditional custodians of the land on which we meet today, and pay respect to elders, past and present”.

The Mayor also to advise the Meeting and members of the public that Council Meetings, not including Closed Meeting, are audio-visually recorded and published to Council’s website.

COUNCIL MEETING
MONDAY 16 JANUARY

TABLE OF CONTENTS

ITEM	SUBJECT	PAGE
1.	APOLOGIES	4
2.	CONFIRMATION OF MINUTES	4
3.	MAYOR’S COMMUNICATION.....	4
4.	COUNCIL WORKSHOPS.....	4
5.	DECLARATIONS OF INTERESTS OF ALDERMAN OR CLOSE ASSOCIATE	4
6.	TABLING OF PETITIONS	5
7.	PUBLIC QUESTION TIME	6
7.1	PUBLIC QUESTIONS ON NOTICE	6
7.2	ANSWERS TO QUESTIONS ON NOTICE.....	6
7.3	ANSWERS TO PREVIOUS QUESTIONS TAKEN ON NOTICE	6
7.4	QUESTIONS WITHOUT NOTICE.....	6
8.	DEPUTATIONS BY MEMBERS OF THE PUBLIC.....	7
9.	MOTIONS ON NOTICE	8
9.1	NOTICE OF MOTION – ALD MCFARLANE STRATEGIC PLAN IMPLEMENTATION.....	8
10.	REPORTS FROM OUTSIDE BODIES	10
10.1	REPORTS FROM SINGLE AND JOINT AUTHORITIES.....	10
	• SOUTHERN TASMANIAN COUNCILS AUTHORITY	
	• COPPING REFUSE DISPOSAL SITE JOINT AUTHORITY	
	• SOUTHERN WASTE STRATEGY AUTHORITY	
	• TASMANIAN WATER CORPORATION	
10.2	REPORTS FROM COUNCIL AND SPECIAL COMMITTEES AND OTHER REPRESENTATIVE BODIES ..	11
11.	REPORTS OF OFFICERS	22
11.1	WEEKLY BRIEFING REPORTS	22

11.2	DETERMINATION ON PETITIONS TABLED AT PREVIOUS COUNCIL MEETINGS	23
11.2.1	PETITION – LAUDERDALE URBAN EXPANSION FEASIBILITY STUDY 2016	23

11.3 PLANNING AUTHORITY MATTERS

11.3.1	DEVELOPMENT APPLICATION D-2016/476 - 6 VENICE STREET, HOWRAH - DEMOLITION OF EXISTING DWELLING AND CONSTRUCTION OF 4 MULTIPLE DWELLINGS	27
--------	---	----

11.4 CUSTOMER SERVICE - NIL ITEMS

11.5 ASSET MANAGEMENT

11.5.1	BUSHFIRE MANAGEMENT STRATEGY FOR COUNCIL OWNED AND CONTROLLED LAND.....	74
--------	---	----

11.6 FINANCIAL MANAGEMENT - NIL ITEMS

11.7 GOVERNANCE

11.7.1	PROPOSED TRANSFER TO COUNCIL – 138 EAST DERWENT HIGHWAY, LINDISFARNE.....	163
11.7.2	REQUEST TO PARTICIPATE IN OVERSEAS STUDY TOUR.....	170
12.	ALDERMEN’S QUESTION TIME.....	176
12.1	QUESTIONS ON NOTICE	176
12.2	ANSWERS TO QUESTIONS ON NOTICE	176
12.3	ANSWERS TO PREVIOUS QUESTIONS TAKEN ON NOTICE	176
12.4	QUESTIONS WITHOUT NOTICE.....	176
13.	CLOSED MEETING.....	177
13.1	APPLICATIONS FOR LEAVE OF ABSENCE	
13.2	PROPERTY MATTER - BELLERIVE	
13.3	PROPERTY MATTER - ROSNY PARK	

BUSINESS TO BE CONDUCTED AT THIS MEETING IS TO BE CONDUCTED IN THE ORDER IN WHICH IT IS SET OUT IN THIS AGENDA UNLESS THE COUNCIL BY ABSOLUTE MAJORITY DETERMINES OTHERWISE

COUNCIL MEETINGS, NOT INCLUDING CLOSED MEETING, ARE AUDIO-VISUALLY RECORDED AND PUBLISHED TO COUNCIL’S WEBSITE

1. APOLOGIES

Nil.

2. CONFIRMATION OF MINUTES

(File No 10/03/01)

RECOMMENDATION:

That the Minutes of the Council Meeting held on 5 December 2016 and the Special Council Meeting held on 19 December 2016, as circulated, be taken as read and confirmed.

3. MAYOR'S COMMUNICATION**4. COUNCIL WORKSHOPS**

No workshops were conducted by Council since its last ordinary Council Meeting.

5. DECLARATIONS OF INTERESTS OF ALDERMAN OR CLOSE ASSOCIATE

(File No)

In accordance with Regulation 8 of the Local Government (Meeting Procedures) Regulations 2015 and Council's adopted Code of Conduct, the Mayor requests Aldermen to indicate whether they have, or are likely to have a pecuniary interest (any pecuniary benefits or pecuniary detriment) or conflict of interest in any item on the Agenda.

6. TABLING OF PETITIONS
(File No. 10/03/12)

(Petitions received by Aldermen may be tabled at the next ordinary Meeting of the Council or forwarded to the General Manager within seven (7) days after receiving the petition.

Petitions are not to be tabled if they do not comply with Section 57(2) of the Local Government Act, or are defamatory, or the proposed actions are unlawful.

The Acting General Manager will table the following petition which complies with the Act requirements:

- Received from 130 signatories regarding Access Issues surrounding Freemasons Homes.

7. PUBLIC QUESTION TIME

Public question time at ordinary Council meetings will not exceed 15 minutes. An individual may ask questions at the meeting. Questions may be submitted to Council in writing on the Friday 10 days before the meeting or may be raised from the Public Gallery during this segment of the meeting.

The Chairman may request an Alderman or Council officer to answer a question. No debate is permitted on any questions or answers. Questions and answers are to be kept as brief as possible.

7.1 PUBLIC QUESTIONS ON NOTICE

(Seven days before an ordinary Meeting, a member of the public may give written notice to the General Manager of a question to be asked at the meeting). A maximum of two questions may be submitted in writing before the meeting.

Questions on notice and their answers will be included in the minutes.

Nil.

7.2 ANSWERS TO QUESTIONS ON NOTICE

The Mayor may address Questions on Notice submitted by members of the public.

Nil.

7.3 ANSWERS TO PREVIOUS QUESTIONS TAKEN ON NOTICE

Nil.

7.4 QUESTIONS WITHOUT NOTICE

The Chairperson may invite members of the public present to ask questions without notice.

Questions are to relate to the activities of the Council. Questions without notice will be dependent on available time at the meeting.

Council Policy provides that the Chairperson may refuse to allow a question on notice to be listed or refuse to respond to a question put at a meeting without notice that relates to any item listed on the agenda for the Council meeting (note: this ground for refusal is in order to avoid any procedural fairness concerns arising in respect to any matter to be determined on the Council Meeting Agenda.

When dealing with Questions without Notice that require research and a more detailed response the Chairman may require that the question be put on notice and in writing. Wherever possible, answers will be provided at the next ordinary Council Meeting.

8. DEPUTATIONS BY MEMBERS OF THE PUBLIC

(File No 10/03/04)

(In accordance with Regulation 38 of the Local Government (Meeting Procedures) Regulations 2015 and in accordance with Council Policy, deputation requests are invited to address the Meeting and make statements or deliver reports to Council)

9. MOTIONS ON NOTICE**9.1 NOTICE OF MOTION – ALD MCFARLANE
STRATEGIC PLAN IMPLEMENTATION**

(File Nos 10-03-05)

In accordance with Notice given Ald McFarlane intends to move the following Motion

“That the General Manager prepares a report to Council on the national climate change objectives as agreed following the 21st Conference of Parties (COP21, Paris) and how these objectives can be implemented within the Clarence community. The report should include the following issues:

- How can Council best respond to the national climate change objectives within the Clarence community;
- Establish a communication strategy to best inform and build awareness in the community on the climate change objectives; and
- Determine a cost estimate to implement the national climate change objectives within the Clarence community for consideration in future Annual Plans”.

EXPLANATORY NOTES

Council has recently endorsed its Strategic Plan 2016-2026 which includes support for the signed “Paris Agreement” on climate change. Council’s Strategic Plan 2016-2026, Strategy 4.5 states:

“Acknowledge and respond to the impacts of climate change by:

- *Continuing to work with all levels of government to meet national climate change objectives as agreed to following the 21st Conference of Parties (COP21, Paris) – the United Nations framework convention on climate change;*
- *Developing climate change adaptation and mitigation action plans to meet the agreed response to climate change impacts;*
- *Considering the impacts in all asset management plans and land-use planning strategies;*
- *Ensuring the community is well informed of potential impacts, particularly coastal communities”.*

Having adopted this strategic position consideration of how Council will now respond and initiate actions that flow from this strategic commitment. The purpose of the Motion is to seek preliminary advice and the consideration of a practical framework for Council to consider. It is anticipated that the report sought will provide some direction on the following key questions:

- How will we manage this expectation?
- How can we build awareness and implementation in the Clarence community?
- Is there a need to set an annual budget to implement action plans?

K McFarlane
ALDERMAN

ACTING GENERAL MANAGER'S COMMENTS

A matter for Council determination.

10. REPORTS FROM OUTSIDE BODIES

This agenda item is listed to facilitate the receipt of both informal and formal reporting from various outside bodies upon which Council has a representative involvement.

10.1 REPORTS FROM SINGLE AND JOINT AUTHORITIES

Provision is made for reports from Single and Joint Authorities if required

Council is a participant in the following Single and Joint Authorities. These Authorities are required to provide quarterly reports to participating Councils, and these will be listed under this segment as and when received.

- **SOUTHERN TASMANIAN COUNCILS AUTHORITY**

Representative: Ald Doug Chipman, Mayor or nominee

Quarterly Reports

September Quarterly Report pending.

Representative Reporting

- **COPPING REFUSE DISPOSAL SITE JOINT AUTHORITY**

Representatives: Ald Jock Campbell
(Ald James Walker, Deputy Representative)

Quarterly Reports

December Quarterly Report pending.

Representative Reporting

- **SOUTHERN WASTE STRATEGY AUTHORITY**

Representative: Ald Richard James
(Ald Sharyn von Bertouch, Proxy)

Quarterly Reports

September Quarterly Report pending.

Representative Reporting

- **TASWATER CORPORATION**

10.2 REPORTS FROM COUNCIL AND SPECIAL COMMITTEES AND OTHER REPRESENTATIVE BODIES**AUDIT PANEL**

(File No 07/02/12)

Chairperson's Report 44 – November 2016

The Audit Panel held a Meeting on 30 November 2016. I attach a copy of the draft Minutes of the Meeting for tabling at Council's Meeting (refer Attachment 1).

The Panel received an update from the General Manager on "Project Jigsaw" (IT implementation) and in particular the monthly Steering Committee report for November 2016.

The Panel has now received and endorsed scope documentation in relation to the following 2 Audit projects which comprise the audit programme for 2016-2017:

- Project 49 audit project to review Council's Strategic Risks and Risk Management Framework (including the Risk Register structure and methodology); and
- Project 50 audit project to review the area of Volunteer Management.

Project 49 is considered by the Panel as significant to its proposed development of its Strategic Forward Audit Plan. Following Council endorsement of the audit projects consultant firm WLF Accounting and Advisory has been engaged to perform these project reviews.

The Fraud Policy and the Fraud Management Plan provides that annually the Fraud Control Officer will provide the Audit Panel with a report on the implementation of the Fraud Control Plan including the following:

- details of all detected instances of fraud or corruption;
- a summary of the resources used in the investigation of allegations of fraud or corruption;
- details of all instances that resulted in administrative remedies;
- details of all instances referred to the police and the outcome of the police investigations and/or prosecution;
- amount of monies recovered;

- modifications to internal controls made as a result of the fraudulent activity; and
- the effectiveness of Council's Fraud Control Policy and the Fraud Control Plan and the need for possible review as to its contents".

Reporting on this matter is scheduled for each calendar year. In the reporting year concluding November 2016, there were no incidents of fraud detected.

The Audit Panel was also provided with an update report on implementation of audit findings and recommended action in respect to "workplace induction" arising from Project 47. The Panel was pleased to note that progress was well underway on the development and introduction of an electronic "workplace induction system" which will be extended to all categories of workers on Council activities including contractors and volunteers, as well the Council own work force personnel.

RECOMMENDATION:

That the Chairperson's Report be received by Council.

Attachments: 1. Minutes of Audit Panel Meeting 30 November 2016 (9)

John Mazengarb
CHAIRPERSON

**MEETING OF THE CLARENCE COUNCIL AUDIT PANEL TO BE HELD IN
THE COMMITTEE ROOM AT 3.00PM, AT THE COUNCIL OFFICES, BLIGH
STREET, ROSNY PARK ON WEDNESDAY, 30 NOVEMBER 2016**

HOUR CALLED: 3.02pm

PANEL MEMBERS: Mr J Mazengarb (Chairperson)
Mr R Bevan
Mr R Hogan
Ald H Chong
Ald P Cusick
Ald K McFarlane (Proxy)

TO BE IN ATTENDANCE: General Manager
(Mr A Paul)
Corporate Treasurer
(Mr F Barta)
Manager Human Resources
(Ms T Doubleday)
Partner WLF Accounting and Advisory
(Mrs A Leis) – item 5 only (3.05pm to 3.30pm)

TABLE OF CONTENTS

ITEM	SUBJECT	PAGE
1.	ATTENDANCE AND APOLOGIES.....	2
2.	CONFIRMATION OF MINUTES.....	2
3.	DECLARATION OF CONFLICTS OF INTEREST/PECUNARY INTERESTS.....	2
4.	CONFIRMATION OF PANEL APPOINTMENTS	2
5.	ANNUAL AUDIT PLAN FOR 2016- 2017.....	3
6.	FRAUD MANAGEMENT PLAN.....	4
7.	UPDATE ON PROJECT 35 - EFFECTIVENESS OF COUNCIL’S IT SOLUTIONS	5
8.	UPDATE ON PROJECT 47 – WORKPLACE INDUCTION.....	5
9.	MANAGEMENT ACTION PLAN	6
10.	SIGNIFICANT INSURANCE/LEGAL CLAIMS	6
11.	ANY FURTHER BUSINESS	7
12.	TIME, DATE, PLACE OF NEXT MEETING	7
13.	CLOSE	8

AGENDA

1. ATTENDANCE AND APOLOGIES

Corporate Secretary (Mr A van der Hek)

2. CONFIRMATION OF MINUTES

The Minutes of the Meeting of the Audit Panel dated 22 September 2016 were circulated to Panel Members.

RECOMMENDATION:

That the Minutes of the Meeting of the Audit Panel dated 22 September 2016, as circulated, be confirmed.

Decision: **MOVED Robert Hogan SECONDED Ald Cusick**

“That the Recommendation be adopted”.

CARRIED

3. DECLARATION OF CONFLICTS OF INTEREST/PECUNARY INTERESTS

Nil

4. CONFIRMATION OF PANEL APPOINTMENTS

The following details are provided by way of advice as to the current status of Panel membership.

Panel Chair

The *Local Government Act 1993* now provides for the appointment of the Panel Chairperson from the independent members of the Panel by the Council.

The period of Council’s appointment of Mr Mazengarb as Panel Chairperson concludes end November 2018.

Aldermen Appointments

At its Meeting on 1 December 2014, Council appointed the following Aldermen to positions on the Audit Committee:

- Alderman Heather Chong
- Alderman Peter Cusick
- Alderman Kay McFarlane (Proxy)

There have been no changes to these appointments.

Rotational Appointments for Independent Panel Members

All appointments of independent members on the Panel remain current. Council will next consider appointments to the independent membership of the Audit Panel in November 2017 for the next appointment term(s).

RECOMMENDATION:

That the advice be noted.

Decision:

“That the Recommendation be adopted”.

RESOLVED

5. ANNUAL AUDIT PLAN FOR 2016- 2017

The following Projects make up the 2016-2017 Annual Audit Plan programme and have been formally adopted by Council.

Project 49: Management of Strategic Risk

Consultant firm WLF Accounting and Advisory submitted a detailed scope for this project based on the preliminarily scoping document endorsed at the 22 September 2016 Meeting.

Project 50: Management of Volunteers

Similarly, Consultant firm WLF Accounting and Advisory submitted a detailed scope for this project based on the preliminarily scoping document endorsed at the 22 September 2016 Meeting.

Additional Component for Project 50

In their proposal WLF make the following additional proposal:

“In similar reviews of this nature, we have included a survey of the volunteers across Council to canvas their views on why they volunteer with Council, how they feel about their experience as a volunteer, and how the interactions with Council have been conducted such as clarity of role, understanding of key policies and procedures and standards expected. The survey and engagement with volunteers has proven very useful in similar reviews and provides Council with feedback from the volunteers, and in some instances, excellent material for annual reports and communications with future volunteers”.

The additional proposal will provide a “bottom up” view of Council’s volunteer involvement in its activities and programmes. This would seem an excellent and desired additional component to the project as it is expected to be a value added outcome by providing a clearer and more comprehensive understanding of how existing processes and arrangements are operating. Accordingly, the enhanced scope for this project is recommended. The additional cost of this component is in the order of \$2,000 which can be met within the budget for Panel activities and projects. If supported commencement of this component of the project will need to occur prior to Christmas in order to meet reporting timeframes for the next Panel Meeting.

As one of the key managers who will have a close involvement with this project, the Manager Human Resources, Tanya Doubleday, was present for this item.

The detailed scopes and project proposals for Projects 49 and 50 are now presented for the Panel's consideration and endorsement. Ms Alicia Leis was in attendance for this part of the meeting from 3.05pm to 3.30pm to discuss with the Panel aspects of the scope proposals.

The approved budget for the Audit Panel for 2016-2017 is \$60,000 which includes Panel member fees of \$16,000 plus super. The total cost for projects plus Panel costs for 2016-2017 is within budget.

RECOMMENDATION:

That the Committee endorses the project scopes prepared for Project 49: Management of Strategic Risk and Project 50: Management of Volunteers (Including the additional component of Scope).

Decision:

“That the Recommendation be adopted”.

RESOLVED

6. FRAUD MANAGEMENT PLAN

The Fraud Policy and the Fraud Management Plan was formally adopted by Council in December 2014.

The Plan provides the following:

“Annually, the Fraud Control Officer will provide the Audit Panel with a report on the implementation of the Fraud Control Plan including the following:

- details of all detected instances of fraud or corruption;*
- a summary of the resources used in the investigation of allegations of fraud or corruption;*
- details of all instances that resulted in administrative remedies;*
- details of all instances referred to the police and the outcome of the police investigations and/or prosecution;*
- amount of monies recovered;*
- modifications to internal controls made as a result of the fraudulent activity; and*
- the effectiveness of the Council's Fraud Control Policy and the Fraud Control Plan and the need for possible review as to its contents”.*

Reporting on this matter is scheduled for each calendar year. In the reporting year concluding November 2016, there were no new incidents detected of any fraud activities.

RECOMMENDATION:

That the report on the Fraud Management Plan be noted.

Decision:

That the report on the Fraud Management Plan be noted.

That management provide advice to the next meeting of the Audit Panel on expected improvements in internal controls arising from implementation of the Technology One software, in particular as the controls relate to matters previously considered by the Panel (eg changes to creditor details, app based time sheets).

The Audit Panel also noted the NSW Auditor General report on fraud, particularly in relation to time sheet fraud, and the Tasmanian Auditor General's review of fuel card controls.

RESOLVED

7. UPDATE ON PROJECT 35 - EFFECTIVENESS OF COUNCIL'S IT SOLUTIONS

This matter is listed as a standing item.

Contract details have been finalised and Implementation Plans have been developed for the phased introduction of new IT systems for Council. Implementation of systems is now underway.

The General Manager and Corporate Treasurer will provide a further verbal update in respect to this matter to the meeting.

RECOMMENDATION:

That the update advice be noted.

Decision:

“That the Recommendation be adopted”.

RESOLVED

8. UPDATE ON PROJECT 47 – WORKPLACE INDUCTION

This matter is listed at the request of the Audit Panel which sought to be provided with an update report on implementation of audit findings and recommended action in respect to “workplace induction” arising from Project 47.

An update report on the progress to date on implementing measures in response to findings on the Project was provided.

The Manager Human Resources Ms Tanya Doubleday was in attendance and provided a further verbal update in respect to this matter to the meeting.

RECOMMENDATION:

That the update report on action in respect to “workplace induction” arising from Project 47 be noted.

Decision:

“That the Recommendation be adopted”.

RESOLVED

At this point the Manager Human Resources left the meeting (3.57pm).

9. MANAGEMENT ACTION PLAN

An updated Management Action Plan was provided.

RECOMMENDATION:

That the advice be noted

Decision:

That the advice be noted.

The Audit Panel highlighted the need to test Council’s Business Continuity Plan, and the need to analyse variations to the Plan which may be required following implementation of the Technology One solution.

RESOLVED

10. SIGNIFICANT INSURANCE/LEGAL CLAIMS

There have been no new major claim notifications since the last report to the Committee.
A copy of the schedule of outstanding matters was attached.

RECOMMENDATION:

That the advice be noted.

Decision:

“That the Recommendation be adopted”.

RESOLVED

11. ANY FURTHER BUSINESS

The draft Auditor General Report to Parliament for 2015/2016 in respect of Local Government was NOTED.

Council's new Strategic Plan and its relationship to climate change action was NOTED.

It was **RESOLVED** that an Attestation Report of Audit Panel activities be prepared for the next meeting, in accordance with Item 3 of the Audit Panel Work Plan.

12. TIME, DATE, PLACE OF NEXT MEETING

It is practice for the schedule to be updated by the Panel each meeting on a rolling basis to maintain an advanced schedule of meetings. The updated Forward Workplan for the Audit Panel was attached

Draft Meeting Schedule – 2017

Mtg Qtr	Business Items are listed as per Work Plan	Scheduled time of year	Proposed Mtg Date
1	<ul style="list-style-type: none">Note: Discussion with Auditor General on forthcoming annual audit at either March or May/June meeting	March	Tuesday, 21 March 2017 (4.00pm)
2.	<ul style="list-style-type: none">	May/June	Tuesday, 20 June 2017 (4.00pm)
3.	<ul style="list-style-type: none">Electronic sign off of Annual Financial Statements 2016/17	August	8 August 2017 (by email exchange)
4.	<ul style="list-style-type: none">	Aug/Sept May require 2 meeting times to deal with these matters and subject to Auditor General availability	Tuesday, 26 September 2017 (4.00pm)
5.	<ul style="list-style-type: none">	Nov/Dec	Tuesday, 28 November 2017 (4.00pm)

Note 1: The above schedule has been based on the past practice of the Panel and recent consultation on suitability of meeting dates; however, ongoing meetings of the Audit Panel are open to the Panel taking into consideration its obligations.

Note 2: The **Work Plan** is distributed with the agenda. The above meeting schedule will be modified to take into account the adopted Audit Panel Work Plan.

The forward schedule has been updated in Panel members' diaries and no advice has been received in response to indicate any conflict between the schedule and Panel member's commitments.

RECOMMENDATION:

That the Panel confirm the proposed schedule of Audit Panel meetings.

Decision:

“That the Recommendation be adopted”.

RESOLVED

13. CLOSE

There being no further business, the Chair declared the Meeting closed at 4.30pm.

11. REPORTS OF OFFICERS

11.1 WEEKLY BRIEFING REPORTS

(File No 10/02/02)

The Weekly Briefing Reports of 5, 12 and 19 December 2016 and 9 January 2017 have been circulated to Aldermen.

RECOMMENDATION:

That the information contained in the Weekly Briefing Reports of 5, 12 and 19 December 2016 and 9 January 2017 be noted.

11.2 DETERMINATION ON PETITIONS TABLED AT PREVIOUS COUNCIL MEETINGS**11.2.1 PETITION – LAUDERDALE URBAN EXPANSION FEASIBILITY STUDY 2016**

(File No E101-15)

EXECUTIVE SUMMARY**PURPOSE**

The purpose of this report is to consider the petition tabled at Council's Meeting on 5 December 2016, relating to the Lauderdale Urban Expansion Feasibility Study 2016.

RELATION TO EXISTING POLICY/PLANS

The project is related to the Clarence Interim Planning Scheme, the Southern Tasmanian Regional Land Use Strategy and the Lauderdale Structure Plan.

LEGISLATIVE REQUIREMENTS

Section 60 of the Local Government Act, 1993 requires Council to formally consider petitions within 42 days of receipt.

CONSULTATION

The petition was made during the consultation period set aside for the above project.

FINANCIAL IMPLICATIONS

Not applicable.

RECOMMENDATION:

That Council notes the intent of the petition and that the matters raised will be considered in conjunction with all other submissions received in relation to the study, at a future Council Meeting.

ASSOCIATED REPORT**1. BACKGROUND**

This project was advertised for a month ending on 30 November 2016. There were 55 submissions made, including a petition signed by 48 people.

2. REPORT IN DETAIL

2.1. The petition received from 48 signatories requested that Council accept the recommendation of the Lauderdale Urban Expansion Feasibility Study 2016: “that is to not proceed with the project at this stage”. This is due to concerns about the amount of fill required, the 30,000 truck movements, the impact stormwater will have on the area, oversupply of residential lots and noise and dust during construction.

2.2. The petition can be taken into account when Council considers all other submissions on the study. The petitioners can be informed of Council’s decision and any further actions that may arise from that.

3. CONSULTATION

At its Meeting of 17 October 2016, Council decided to undertake community consultation before determining whether or not to proceed with the project. As indicated above, a number of submissions were made during this non-statutory consultation process.

4. STRATEGIC PLAN/POLICY IMPLICATIONS

Not applicable.

5. EXTERNAL IMPACTS

Not applicable.

6. RISK AND LEGAL IMPLICATIONS

Not applicable.

7. FINANCIAL IMPLICATIONS

Not applicable.

8. ANY OTHER UNIQUE ISSUES

Not applicable.

9. CONCLUSION

The petition will be considered along with other submissions when Council considers a report on the study at a future Council Meeting.

Attachments: Nil.

Frank Barta
ACTING GENERAL MANAGER

11.3 PLANNING AUTHORITY MATTERS

In accordance with Regulation 25 (1) of the Local Government (Meeting Procedures) Regulations 2015, the Mayor advises that the Council intends to act as a Planning Authority under the Land Use Planning and Approvals Act 1993, to deal with the following items:

11.3.1 DEVELOPMENT APPLICATION D-2016/476 - 6 VENICE STREET, HOWRAH - DEMOLITION OF EXISTING DWELLING AND CONSTRUCTION OF 4 MULTIPLE DWELLINGS

(File No D-2016/476)

EXECUTIVE SUMMARY**PURPOSE**

The purpose of this report is to consider the application made for the demolition of existing dwelling and construction of 4 Multiple Dwellings at 6 Venice Street, Howrah.

RELATION TO PLANNING PROVISIONS

The land is zoned General Residential and subject to the Parking and Access Code and Stormwater Management Code under the Clarence Interim Planning Scheme 2015 (the Scheme). In accordance with the Scheme, the proposal is a Discretionary development.

LEGISLATIVE REQUIREMENTS

The report on this item details the basis and reasons for the recommendation. Any alternative decision by Council will require a full statement of reasons in order to maintain the integrity of the Planning approval process and to comply with the requirements of the Judicial Review Act and the Local Government (Meeting Procedures) Regulations 2015.

Council is required to exercise a discretion within the statutory 42 day period which has been extended to 18 January 2017 with the written agreement of the applicant.

CONSULTATION

The proposal was advertised in accordance with statutory requirements and 2 representations were received. One of the representations was received outside of the statutory notification period. The representations raised the following issues:

- overshadowing;
- loss of privacy; and
- lack of adjoining owner notification.

RECOMMENDATION:

A. That the application for the demolition of the existing dwelling and construction of 4 Multiple Dwellings at 6 Venice Street, Howrah (Ref D-2016/476) be refused for the following reasons.

1. The proposal is contrary to Clause 10.4.1 P1 of the Clarence Interim Planning Scheme 2015 in that the dwelling density of 1 dwelling per 322.5m² of site area is not compatible with the density of the surrounding area.

B. That the details and conclusions included in the Associated Report be recorded as the reasons for Council's decision in respect of this matter.

**DEVELOPMENT APPLICATION D-2016/476 - 6 VENICE STREET, HOWRAH -
DEMOLITION OF EXISTING DWELLING AND CONSTRUCTION OF 4 MULTIPLE
DWELLINGS /contd...**

ASSOCIATED REPORT**1. BACKGROUND**

No relevant background.

2. STATUTORY IMPLICATIONS

2.1. The land is zoned General Residential under the Scheme.

2.2. The proposal is discretionary because it does not meet the Acceptable Solutions under the Scheme.

2.3. The relevant parts of the Planning Scheme are:

- Section 8.10 – Determining Applications;
- Section 10.4 – General Residential Zone;
- Section E6.0 – Parking and Access Code; and
- Section E7.0 – Stormwater Management Code.

2.4. Council's assessment of this proposal should also consider the issues raised in any representations received, the outcomes of the State Policies and the objectives of Schedule 1 of the Land Use Planning and Approvals Act, 1993 (LUPAA).

3. PROPOSAL IN DETAIL**3.1. The Site**

The site is a 1,290m² regular shaped lot located on the northern side of Venice Street. The lot has a gentle west facing slope and is developed with a 2 storey brick dwelling maintaining a generous setback from the road frontage with Venice Street. Mature plantings line the frontage of the site along with the side and rear boundaries.

3.2. The Proposal

The proposal is for the demolition of the existing dwelling to facilitate the construction of 4 new dwellings as shown in Attachment 1.

The dwellings would be located in a linear arrangement to the north of one another and would be accessed via a shared driveway extending parallel with the western side property boundary. Units 2 and 3 are identical in form and Units 1 and 4 would have differing layouts. Each dwelling provides 3 bedrooms and open plan living space on the upper level and an integrated double garage on the ground level. The dwellings would be constructed from a mix of materials including brick, rendered blockwork and “Colorbond” roof sheeting in a low pitched skillion profile. Each unit would have upper level decks facing the Derwent River.

The dwellings would have a maximum height of 6.69m above natural ground level (Unit 1). The dwellings would be setback a minimum of 0.9m from the western boundary of the site (Unit 4), 2.68m from the eastern boundary and 4m from the rear boundary. Unit 1 would have a minimum setback of 4.5m from the frontage boundary.

Private open space is proposed to be located within the space separating each dwelling and alongside the eastern side property boundary. In excess of 60m² of private open space has been allocated to each dwelling.

New front fencing is proposed along the Venice Street frontage which would consist of a 1.8m high fence. The first 0.7m would be a solid masonry fence with the remaining 1.1m consisting of horizontal slat screening with a minimum 30% transparency.

It is proposed to widen the existing crossover onto Venice Street to accommodate the required dual access width.

4. PLANNING ASSESSMENT**4.1. Determining Applications [Section 8.10]**

“8.10.1 In determining an application for any permit the planning authority must, in addition to the matters required by s51(2) of the Act, take into consideration:

- (a) all applicable standards and requirements in this planning scheme; and*
- (b) any representations received pursuant to and in conformity with SS57(5) of the Act;*

but in the case of the exercise of discretion, only insofar as each such matter is relevant to the particular discretion being exercised”.

Reference to these principles is contained in the discussion below.

4.2. Compliance with Zone and Codes

The proposal meets the Scheme’s relevant Acceptable Solutions of the General Residential Zone, Parking and Access Code and Stormwater Management Code with the exception of the following.

General Residential Zone

Clause	Standard	Acceptable Solution (Extract)	Proposed
10.4.1 A1	Residential density for multiple dwellings	Multiple Dwellings must have a site area per dwelling of not less than: (a) 325m ² ; or (b) if within a density area specified in Table 10.4.1 below and shown on the planning scheme maps, that specified for the density area.	The site has a land area of 1,290m ² . The resultant dwelling density is 322.5m ² .

The proposed variation cannot be supported pursuant to the Performance Criteria (P1) of the Clause 10.4.1 for the following reasons.

Performance Criteria	Comment
<i>“P1 – Multiple Dwellings must only have a site area per dwelling that is less than 325m², or that specified for the applicable density area in Table 10.4.1, if the development will not exceed the capacity of the infrastructure services and:</i>	The proposed development would not exceed the service capacity of the area as indicated by correspondence received from TasWater and Council’s Development Engineers. See below for remaining assessment.
<i>a) is compatible with the density of the surrounding area; or</i>	<p>The term “compatibility with the density of the surrounding area” is not defined in the Scheme, however, the Macquarie dictionary defines the word “compatible” as meaning “<i>capable of existing together in harmony</i>”. A density assessment of the surrounding area demonstrates that the average density of dwellings lining Venice Street and the adjoining row of residences along the southern side of Howrah Point Road is one dwelling per 1,530m². Within this area, single detached dwellings prevail with only 2 Multiple Dwelling developments (representing 12% of the building stock) evident among the 16 properties included within this calculation.</p> <p>A density analysis has also been undertaken for the multiple dwelling developments within a 150m radius of the site with the following densities determined:</p> <p>4 Howrah Point Court, Howrah 4 unit development with a dwelling density of one dwelling per 486m²</p> <p>2a Hymettus Street, Howrah 3 unit development with a dwelling density of one dwelling per 476m²</p> <p>3 Venice Street, Howrah 2 unit development with a dwelling density of one dwelling per 507m²</p>

	<p>88 Howrah Road, Howrah</p> <p>3 unit development with a dwelling density of one dwelling per 484m²</p> <p>The above multiple dwelling developments were approved under the 1963 and the 2007 planning schemes. The density of development within the surrounding area is nearly 100m² above the minimum density requirement established under the 2007 Scheme.</p> <p>In determining the meaning to be given to the words of the performance criteria, Clause 7.5.4 of the Scheme specifies that the planning authority may consider the relevant objective in an applicable standard to help determine whether a use of development complies with the performance criterion for that standard. The objective for residential density is “to provide for suburban densities for multiple dwellings that (a) make efficient use of urban land for housing; and (b) optimise the use of infrastructure and community services”.</p> <p>The Tribunal recently determined in <i>M Flood v George Town Council</i> [2016] TASRMPAT 34 that compatibility in this context requires a finding that the proposal is consistent with the density of the surrounding area and that this does not require that every development must be the same density but rather that it is to be similar to or broadly correspond with the densities of the surrounding area. The Tribunal noted in its decision that whilst the density proposed may be compatible with surrounding residential amenity, the proposed density compatibility needs to be considered in the context of the density of the surrounding area. Further, the creation of a wholly different site area standard from that which prevails cannot be considered compatible with the density of the surrounding area.</p>
--	--

	<p>The proposed density of one dwelling per 322.5m² is considered to represent a significant divergence between the existing dwelling density of one dwelling per 1,530m² therefore is not considered compatible with the density of the surrounding area and consequently cannot be said to be in harmony with the surrounding area.</p> <p>The proposal therefore does not satisfy Clause 10.4.1 P1(a) of the Scheme with respect to density compatibility.</p>
<p><i>b) Provides for a significant social or community housing benefit and is in accordance with at least one of the following:</i></p> <p><i>(i) The site is wholly or partially within 400m walking distance of a public transport stop;</i></p> <p><i>(ii) The site is wholly or partially within 400m walking distance of a business, commercial, urban mixed use, village or inner residential zone”.</i></p>	<p>The proposed development would be privately funded and would provide 4 new residential buildings which is not considered to be of such a scale that it would provide for “significant” community housing benefit. This clause is therefore not relevant to the justification for the relaxation of the density standard.</p>

General Residential Zone

Clause	Standard	Acceptable Solution (Extract)	Proposed
10.4.2 A3	Setbacks and building envelope for all dwellings	<p>A dwelling, excluding outbuildings with a building height of not more than 2.4m and protrusions (such as eaves, steps, porches, and awnings) that extend not more than 0.6m horizontally beyond the building envelope, must:</p> <p>(a) be contained within a building envelope (refer to Diagrams 10.4.2A, 10.4.2B, 10.4.2C and 10.4.2D) determined by:</p> <p>(i) a distance equal to the frontage setback or, for an internal lot, a distance of 4.5m from the rear boundary of a lot with an adjoining frontage; and</p>	complies

		<p>(ii) projecting a line at an angle of 45 degrees from the horizontal at a height of 3m above natural ground level at the side boundaries and a distance of 4m from the rear boundary to a building height of not more than 8.5m above natural ground level; and</p>	<p>The proposed upper level rear deck associated with Unit 4 would be located 4m from the rear (northern) property boundary. The upper level design of the deck results in the balustrading and support posts protruding the building envelope by 1.8m as shown on the plans contained within Attachment 1.</p>
		<p>(b) only have a setback within 1.5m of a side boundary if the dwelling:</p> <p>(i) does not extend beyond an existing building built on or within 0.2m of the boundary of the adjoining lot; or</p> <p>(ii) does not exceed a total length of 9m or one-third the length of the side boundary (whichever is the lesser).</p>	<p>In addition, the eastern elevation of Unit 1 would also protrude the building envelope for a distance of 0.7m (excluding the 0.5m eave overhang deemed a minor encroachment). The encroachment affects the eastern boundary of the site.</p> <p>complies</p>

The proposed variation can be supported pursuant to the Performance Criteria (P3) of the Clause 10.4.2 for the following reasons.

Performance Criteria	Comment
<i>“P3 - The siting and scale of a dwelling must:</i>	See below.
<i>(a) not cause unreasonable loss of amenity:</i> <i>(i) reduction in sunlight to a habitable room (other than a bedroom) of a dwelling on an adjoining lot; or</i> <i>(ii) overshadowing the private open space of a dwelling on an adjoining lot; or</i> <i>(iii) overshadowing of an adjoining vacant lot; or</i> <i>(iv) visual impacts caused by the apparent scale, bulk or proportions of the dwelling when viewed from an adjoining lot; and</i>	<p>Shadow diagrams have been submitted with the application demonstrating the adjoining dwelling and associated private open space at 8 Venice Street would not be affected by overshadowing between the hours of 9am to 3pm on 21 June (winter solstice). It is expected that after 3pm on 21 June some shading impact upon the western elevation of 8 Venice Street may be experienced, however, this is not considered unreasonable given the low angle of the sun at this time of the day and that the dwelling would capture full sun between 9am and 3pm when the sun is at its highest point.</p> <p>The shadow diagrams also demonstrate that the proximity of Unit 4 to the rear (northern) property boundary would not cause any overshadowing impact to the dwelling or private open space located upon the adjoining properties at 10 Howrah Point Court, 4 Venice Street and 8 Venice Street.</p> <p>In terms of visual bulk, the setback of Unit 4 would be greater than that associated with the existing residence immediately to the west at 4 Venice Street and would be compatible with the location of the 2 storey Multiple Dwellings located at 4 Howrah Point Court. Whilst the outlook from the adjoining property to the east at 8 Venice Street will be altered as a result of the development, the proximity of Unit 1 to this adjoining property would not be likely to cause any unreasonable visual bulk due to the minor nature associated with the building envelope encroachment and compliance offered by all remaining units.</p>

		(d) is not located to the south, south-east or south-west of the dwelling, unless the area receives at least 3 hours of sunlight to 50% of the area between 9.00am and 3.00pm on the 21 June; and	complies
		(e) is located between the dwelling and the frontage, only if the frontage is orientated between 30 degrees west of north and 30 degrees east of north, excluding any dwelling located behind another on the same site; and	The private open space allocated to Unit 1 is located between this unit and the road frontage with the road frontage oriented 175 degrees west of north (ie south-west facing).
		(f) has a gradient not steeper than 1 in 10; and	complies
		(g) is not used for vehicle access or parking.	complies

The proposed variation can be supported pursuant to the Performance Criteria (P2) of the Clause 10.4.3 for the following reasons.

Performance Criteria	
<p>“P2 <i>A dwelling must have private open space that:</i> <i>(a) includes an area that is capable of serving as an extension of the dwelling for outdoor relaxation, dining, entertaining and children’s play and that is:</i></p>	See below
<p><i>(i) conveniently located in relation to a living area of the dwelling; and</i></p>	Each unit would be provided with an upper level deck of varying sizes (12.47m ² for Unit 1, 11.52m ² for Units 2 and 3 and 17.22m ² for Unit 4). The decks would be directly accessible from the living space via sliding doors and would be screened where required from the private open space and habitable room windows associated with other directly adjoining units within the development site.

	<p>The upper level decks would therefore be capable of facilitating convenient access to private outdoor space likely to be used for outdoor relaxation, dining and entertaining.</p> <p>The main area of ground level private open space for each unit provides in excess of 60m² and offers the minimum horizontal dimension wrapping around various elevations of the dwelling to expose the private open space to the sun. The ground level private open space would be accessible from the upper level living space via a stairway and ground level laundry room which is considered reasonable to facilitate access to the large area of outdoor space for cloths drying, outdoor recreation and children's play.</p>
<p><i>(ii) orientated to take advantage of sunlight".</i></p>	<p>The applicant has provided sun shadow diagrams demonstrating that the decks for Unit 2, 3 and 4 are capable of receiving in excess of 3 hours of sunlight in during the morning on the shortest day (21 June). In addition, the ground level private open space allocated to Units 2, 3 and 4 would receive full morning sun and early afternoon sun.</p> <p>The deck allocated to Unit 1 being south-west facing would be overshadowed by the respective unit throughout the day, however, the ground level private open space would receive solar access to greater than 50% of this space throughout the day.</p> <p>On this basis, the proposed private open space arrangements are considered reasonable in terms of facilitating access to sunlight.</p>

General Residential Zone

Clause	Standard	Acceptable Solution	Proposed
10.4.6 A2	Privacy for all dwellings	<p>A window or glazed door, to a habitable room, of a dwelling, that has a floor level more than 1m above the natural ground level, must be in accordance with (a), unless it is in accordance with (b):</p> <p>(a) The window or glazed door:</p> <ul style="list-style-type: none"> (i) is to have a setback of at least 3m from a side boundary; and (ii) is to have a setback of at least 4m from a rear boundary; and (iii) if the dwelling is a multiple dwelling, is to be at least 6m from a window or glazed door, to a habitable room, of another dwelling on the same site; and (iv) if the dwelling is a multiple dwelling, is to be at least 6m from the private open space of another dwelling on the same site. <p>(b) The window or glazed door:</p> <ul style="list-style-type: none"> (i) is to be off-set, in the horizontal plane, at least 1.5m from the edge of a window or glazed door, to a habitable room of another dwelling; or (ii) is to have a sill height of at least 1.7m above the floor level or has fixed obscure glazing extending to a height of at least 1.7m above the floor level; or 	<p>Non-compliance - The upper level east facing bedroom window associated with Unit 1 proposes a sill height of 0.9m above the finished floor level and would be located 2.8m from the eastern side property boundary.</p>

		(iii) is to have a permanently fixed external screen for the full length of the window or glazed door, to a height of at least 1.7m above floor level, with a uniform transparency of not more than 25%.	
--	--	--	--

The proposed variation can be supported pursuant to the Performance Criteria (P2) of the Clause 10.4.3 for the following reasons.

Performance Criteria	
<i>“P2 – A window or glazed door, to a habitable room of dwelling, that has a floor level more than 1m above the natural ground level, must be screened, or otherwise located or designed, to minimise direct views to:</i>	See below
<i>(a) Window or glazed door, to a habitable room of another dwelling; and</i>	The proposed upper bedroom window has the potential to overlook habitable rooms and the private open space associated with the adjoining dwelling to the east at 8 Venice Street. If the application is approved, it is recommended that a condition be included within the planning permit requiring the sill height to be elevated to 1.7m above the finished floor level so as to ensure the current level of privacy enjoyed by the adjoining property to the east is maintained.
<i>(b) The private open space of another dwelling; and</i>	as per above
<i>(c) An adjoining vacant residential lot”.</i>	not applicable

5. REPRESENTATION ISSUES

The proposal was advertised in accordance with statutory requirements and 1 statutory and 1 non-statutory representation was received. The following issues were raised by the representors.

5.1. Overshadowing (Statutory Representation)

The representor has raised concern that proposed Unit 4 would cause significant overshadowing of the existing dwelling at 2 Venice Street during the winter months as a result of its proximity to the western side property boundary.

- **Comment**

Proposed Unit 4 complies with the building envelope standard relating to the western side property boundary, however, its proximity to the rear (northern) boundary pushes this dwelling further to the north of the dwelling at number 2 Venice Street, therefore increasing the potential for overshadowing. As demonstrated earlier within this report, the western elevations of each unit complies with Acceptable Solution 10.4.2 A3.

Shadow diagrams have been supplied with the application demonstrating the most significant shadowing impact would occur at 9am on 22 June (Winter Solstice). The majority of the shadowing impact would affect the eastern elevation of the dwelling. The dwelling at 2 Venice Street is separated by a 6m wide access strip servicing 4 Venice Street which is lined with tall trees on either side. The tree lined driveway would act to absorb a significant degree of overshadowing impact which is not reflected in the shadow diagrams. The shadow diagrams indicate that the shadowing impact retreats significantly to the common boundary between 4 and 6 Venice Street by 12pm on 21 June. It is therefore likely that by 10.30am, the eastern elevation of the dwelling would be unaffected by sunlight loss. Given the majority of this elevation of the dwelling would be shadowed by the adjoining tree lined driveway, the morning shadowing impact caused by the location of Unit 4 would not be unreasonable and complies with the building envelope standard prescribed for the General Residential Zone.

5.2. Statutory Notification (Outside Time Representation)

The representor has raised concern that they were not notified in writing of the proposed development.

- **Comment**

Council's records indicate that all adjoining owners were notified in writing of the proposed development as required by the Act and the Land Use Planning Regulations 2014.

5.3. Overshadowing (Outside Time Representation)

The representor has raised concern that the development will result in a loss of sunlight to the living room and kitchen windows associated with the adjoining dwelling to the east (8 Venice Street).

- **Comment**

The eastern elevation of proposed Unit 1 would encroach the building envelope with this Unit directly adjoining the dwelling at 8 Venice Street. Shadow diagrams have been submitted with the application demonstrating that the existing dwelling at 8 Venice Street would not be overshadowed from 9am to 3pm on 21 June. The private open space associated with this dwelling would also remain unaffected by overshadowing.

On this basis no unreasonable overshadowing impact will occur.

5.4. Loss of Privacy (Outside Time Representation)

The representor has raised concern that the proposed development will overlook the dwelling and private open space associated with the adjacent dwelling at 8 Venice Street.

- **Comment**

Subject to revisions to the sill height of the upper level east facing bedroom window associated with Unit 1 required by way of a permit condition, the potential for overlooking into the adjoining dwelling and private open space at 8 Venice Street would be alleviated.

6. EXTERNAL REFERRALS

The proposal was referred to TasWater, which has provided a number of conditions to be included on the planning permit if granted.

7. STATE POLICIES AND ACT OBJECTIVES

7.1. The proposal is consistent with the outcomes of the State Policies, including those of the State Coastal Policy.

7.2. The proposal is consistent with the objectives of Schedule 1 of LUPAA.

8. COUNCIL STRATEGIC PLAN/POLICY IMPLICATIONS

There are no inconsistencies with Council's adopted Strategic Plan 2016-2026 or any other relevant Council Policy.

9. CONCLUSION

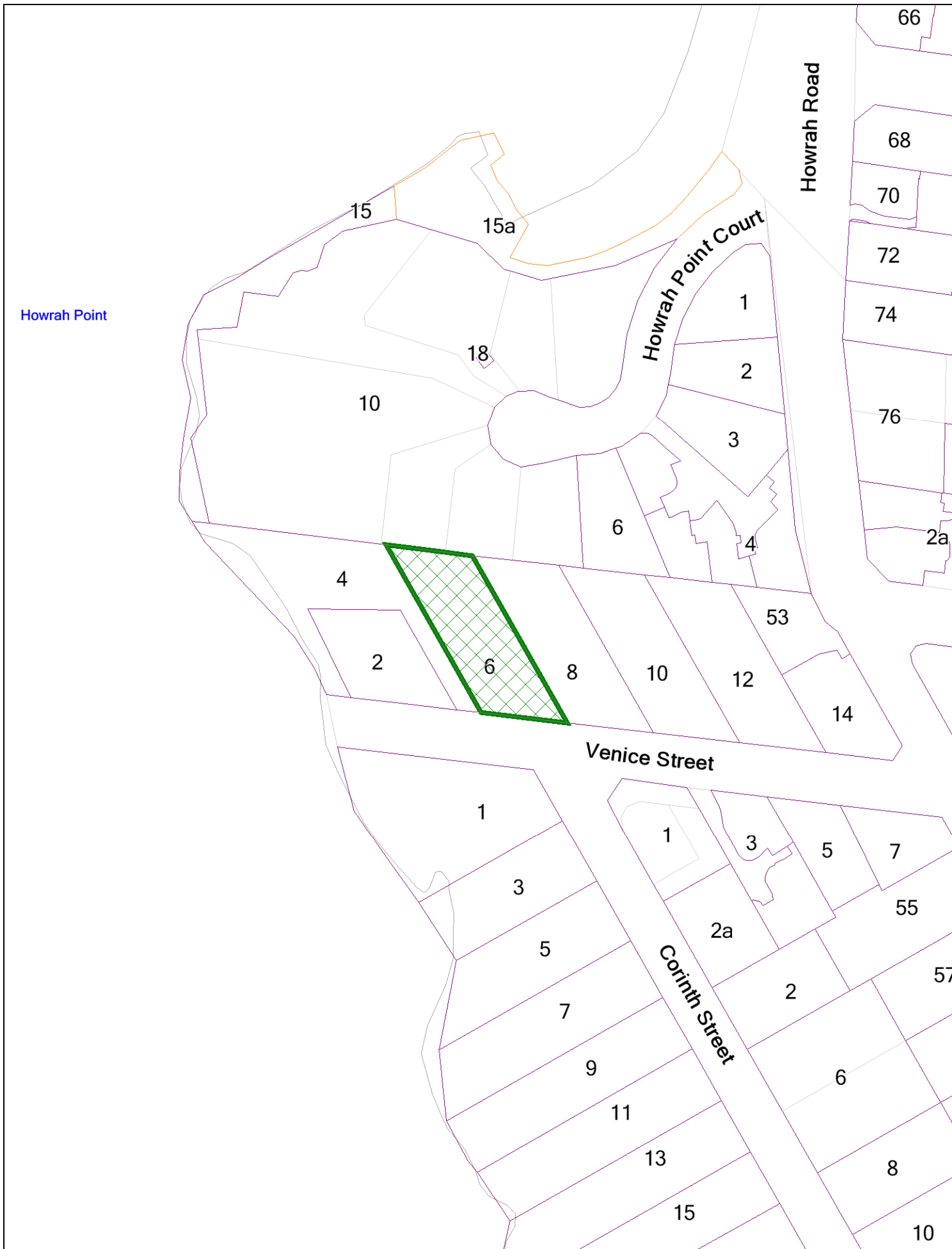
The proposal seeks approval for the demolition of existing dwelling and construction of 4 Multiple Dwellings at 6 Venice Street, Howrah. The application would not satisfy Clause 10.4.1 P1(a) of the Scheme with respect to dwelling density therefore is recommended for refusal.

Attachments: 1. Location Plan (1)
2. Proposal Plan (26)
3. Site Photo (2)

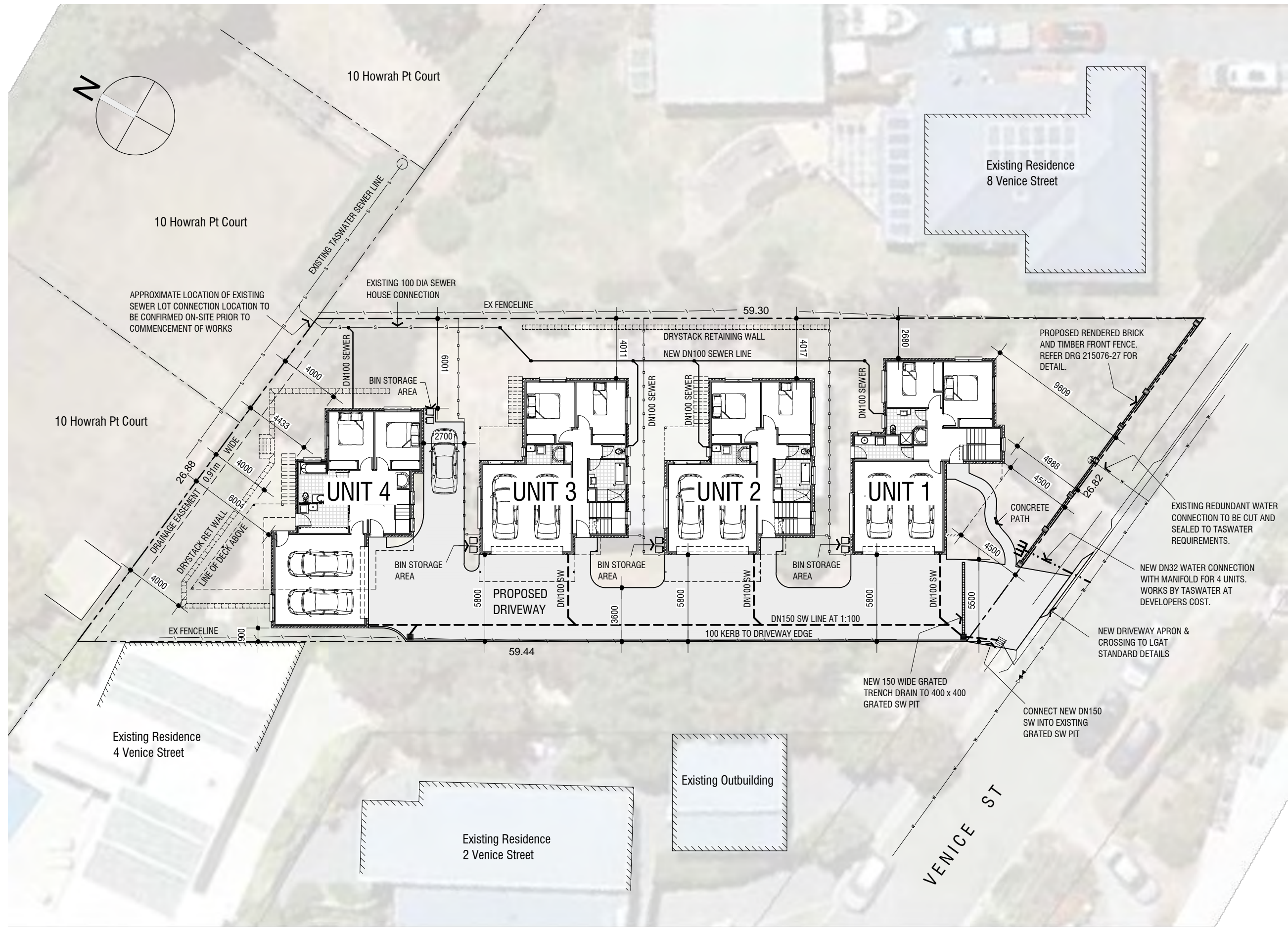
Ross Lovell
MANAGER CITY PLANNING

Council now concludes its deliberations as a Planning Authority under the Land Use Planning and Approvals Act, 1993.

6 VENICE STREET, HOWRAH



Disclaimer: This map is a representation of the information currently held by Clarence City Council. While every effort has been made to ensure the accuracy of the product, Clarence City Council accepts no responsibility for any errors or omissions. Any feedback on omissions or errors would be appreciated. Copying or reproduction, without written consent is prohibited. **Date:** Tuesday, 13 December 2016 **Scale:** 1:1,500 @A4



SITE PLAN

For Planning Approval Only

COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

OVERALL SITE PLAN

SCALE

1:250

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-02

REV

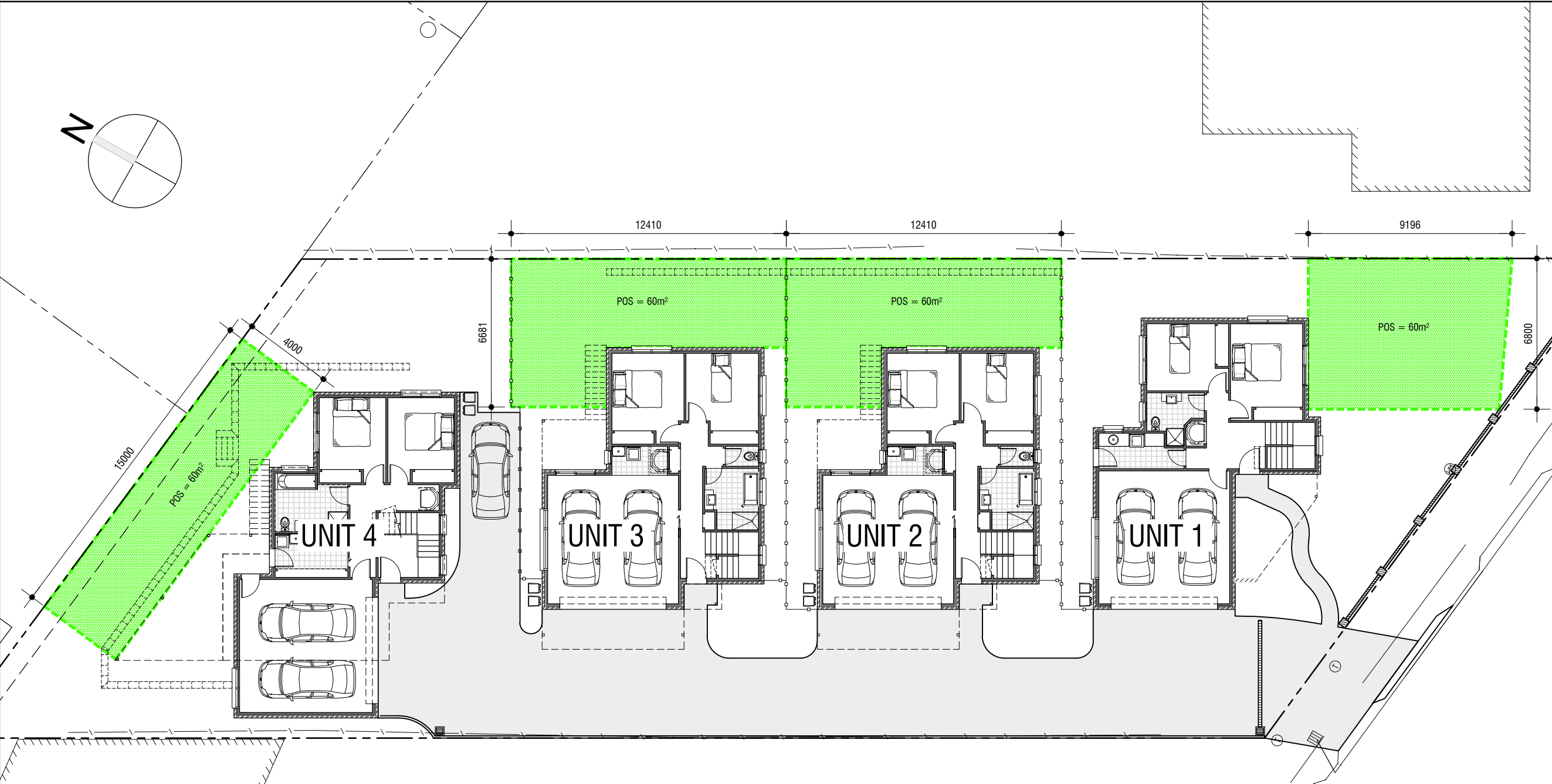
B

SHEET

OF

21

A3



SITE SUMMARY TABLE	
Title Reference	= CT13626/50
Site Area	= 1283m ²
Proposed Building Area	= 399m ²
Site Coverage	= 31.10% (<50%)
Residential Density	= 321m ² /Unit
Outdoor Space	
Unit 1	= 60m ²
Unit 2	= 60m ²
Unit 3	= 60m ²
Unit 4	= 60m ²
% Outdoor Space	= 23.7% (>20%)
Impervious Area	
Roofed	= 399m ²
Paved	= 256m ²
Paved Area	= 51.10% (<75%)

OPEN SPACE PLAN

For Planning Approval Only

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT
Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

OPEN SPACE PLAN

SCALE
1:200

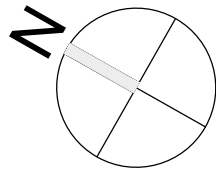
DRAWN	CHECKED
PAH	

DATE:
OCT 2016

DRG NO.	REV
215076-03	B

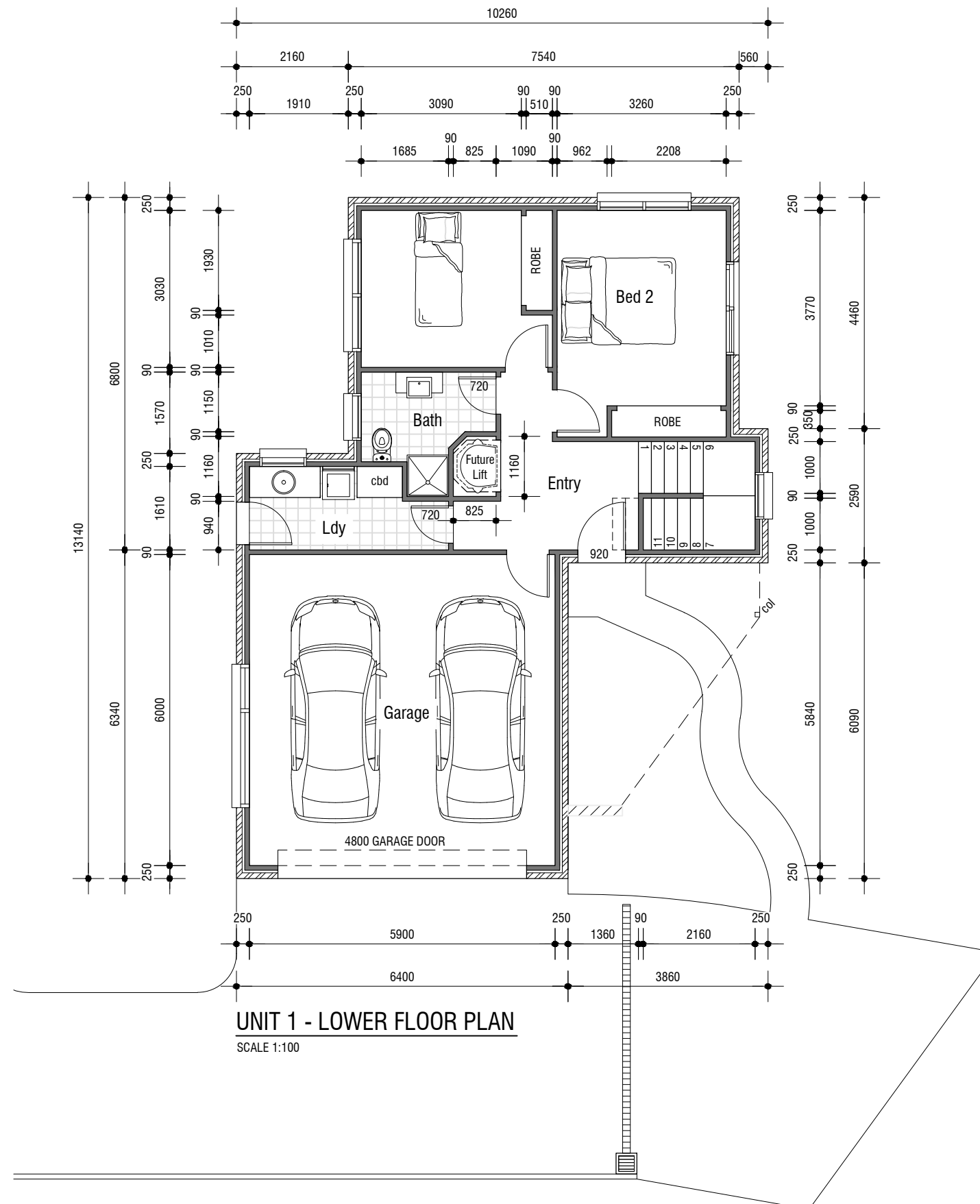
SHEET OF
A3

Agenda Attachments - 6 Venice Street - Page 3 of 29



NOTES:

1. WET AREAS TO BE WATERPROOFED IN ACCORDANCE WITH BCA PART 3.8.1.
2. ALL FLASHINGS AND DAMP PROOF COURSINGS TO BE INSTALLED IN ACCORDANCE WITH PARTS 2.2 & 3.3 OF THE BCA.
3. CUSTOM ORB ROOF SHEETING - COLORBOND FINISH - TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.1.3 OF THE B.C.A.
4. PROVIDE 75 DIA PVC DOWNPIPES WITH 45° BENDS & OFFSET BRACKETS AS REQUIRED, TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.2 OF THE B.C.A. AND TO AS 3500.5
5. FIBRE CEMENT SHEET LINING TO SOFFIT TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.3 OF THE B.C.A. AND TO MANUFACTURER'S INSTRUCTIONS.
6. TIMBER TRUSSES TO BE AS PER MANUFACTURERS DETAILS. DESIGN TO BE IN ACCORDANCE WITH THE WIND LOADING CODE AS1170.2 - 1989 PART 2.
7. PROVIDE WALL TIES IN ACCORDANCE WITH BCA CLAUSE 3.3.3.2.
8. VERTICAL ARTICULATION JOINTS IN BRICKWORK TO BE INSTALLED IN ACCORDANCE WITH BCA CLAUSE 3.3.1.8.
9. PAVED SURFACES SHALL BE A MINIMUM OF 50mm BELOW SLAB LEVEL AND FALL AWAY FROM THE BUILDING. FINISHED GROUND LEVEL TO BE A MINIMUM OF 100mm BELOW FLOOR LEVEL, IN ACCORDANCE WITH 3.12.3 OF THE B.C.A.



UNIT 1 - LOWER FLOOR PLAN

SCALE 1:100

FLOOR AREAS

UNIT 1

LOWER LIVING	58.14 m ²	(6.26 sq)
UPPER LIVING	98.14 m ²	(10.56 sq)
GARGE	40.00 m ²	(4.31 sq)
DECK	12.47 m ²	(1.34 sq)

COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 1 LOWER
FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-04

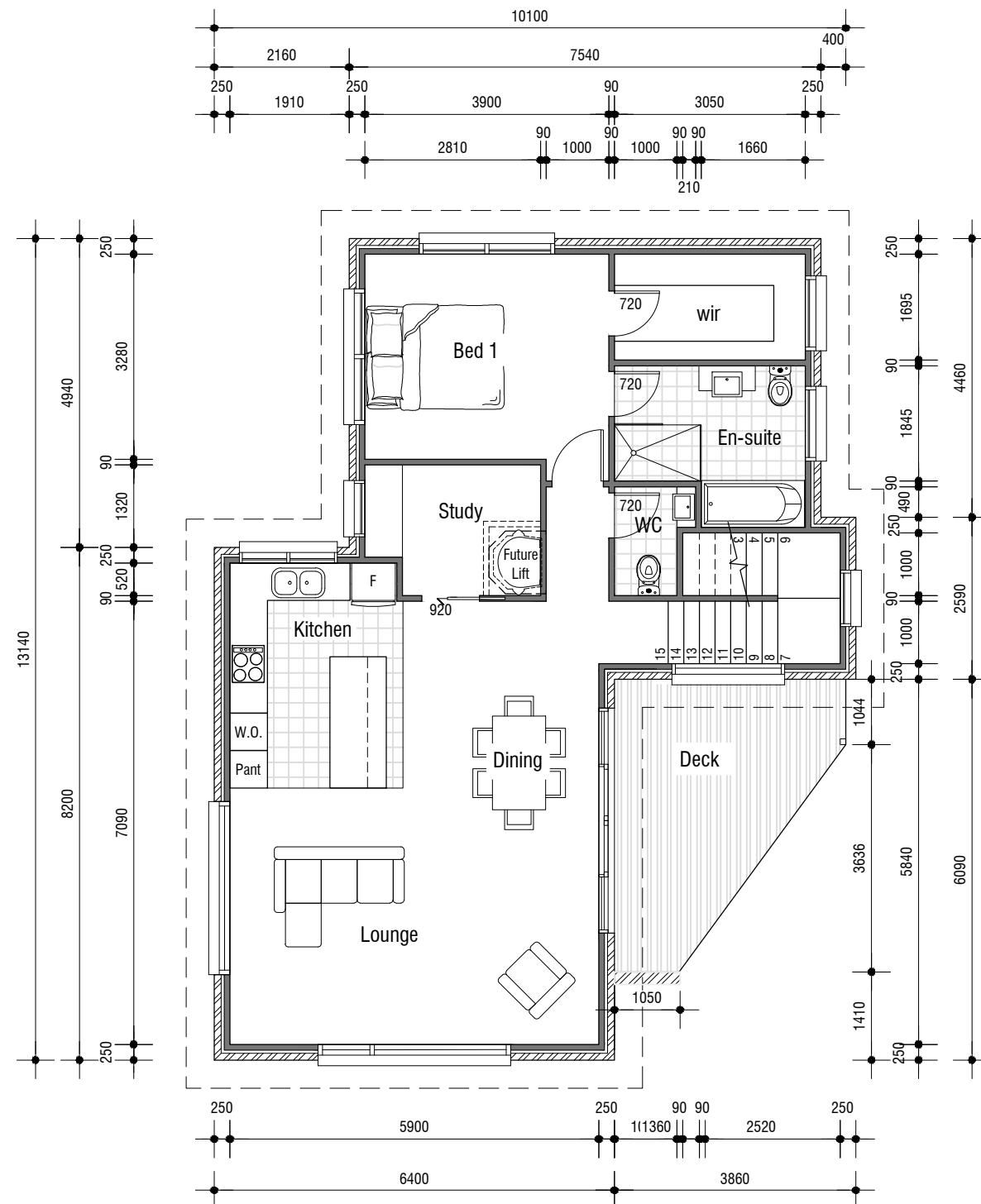
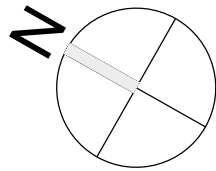
REV

B

SHEET OF
215076-04

A3

For Planning Approval Only



UNIT 1 - UPPER FLOOR PLAN
SCALE 1:100

FLOOR AREAS

UNIT 1

LOWER LIVING	58.14 m ²	(6.26 sq)
UPPER LIVING	98.14 m ²	(10.56 sq)
GARGE	40.00 m ²	(4.31 sq)
DECK	12.47 m ²	(1.34 sq)

COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 1 UPPER FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-05

REV

B

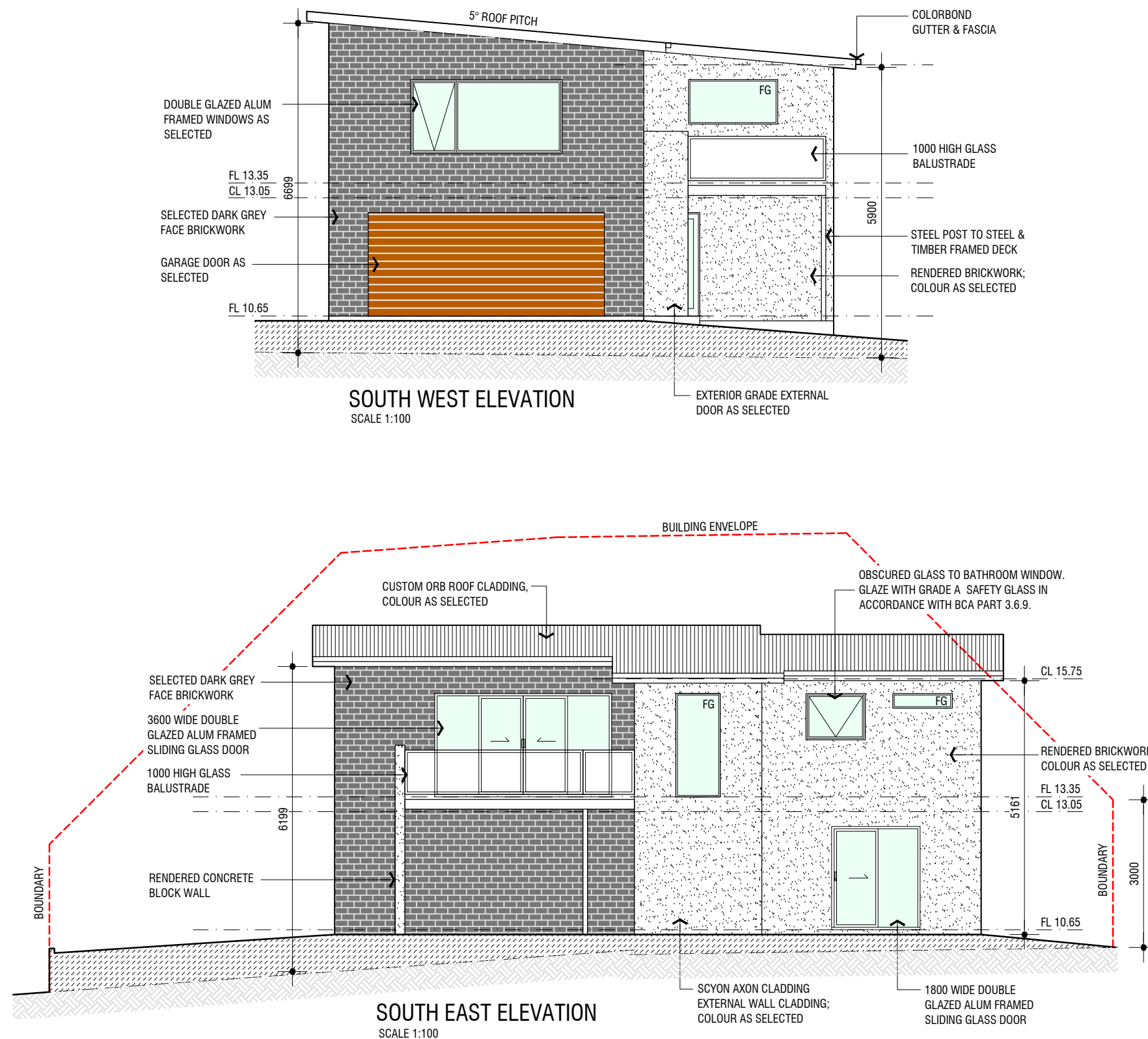
SHEET

OF 29

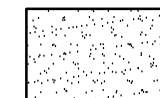
A3

For Planning Approval Only

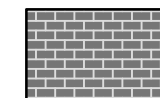
UNIT 1



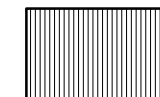
SURFACE MATERIALS & COLOURS



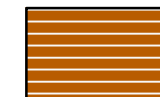
RENDERED BRICK AND/OR POLYSTYRENE
EXTERNAL WALL CLADDING.
COLOUR: DULUX "DUNE"



AUSTRAL BRICK EXTERNAL WALL CLADDING
(ELEMENTS RANGE).
COLOUR: "GRAPHITE"



CUSTOM ORB ROOF CLADDING.
COLOUR: "MONUMENT"



PANEL LIFT GARAGE DOOR
COLOUR: "TIMBER"

COPYRIGHT:

"This document is and shall remain the property of
Henry Design & Consulting.
The document may only be used for the purpose for which it
was commissioned and in accordance with the terms of
engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 1 ELEVATIONS SHEET 1 OF 2

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-06

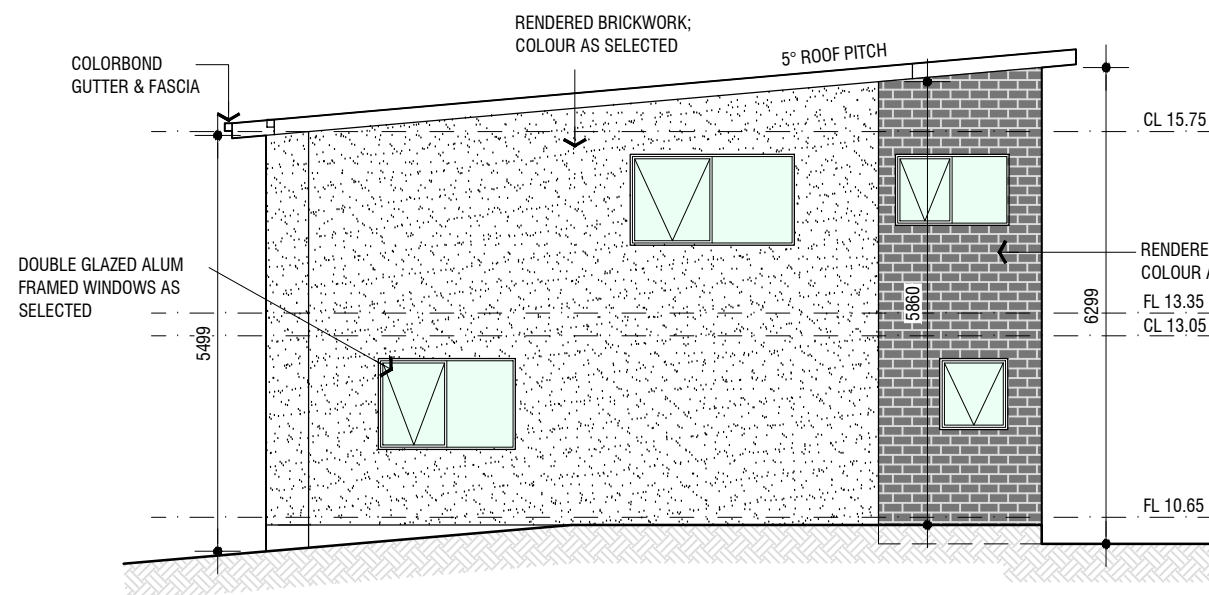
REV

B

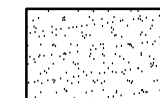
SHEET OF

A3

For Planning Approval Only

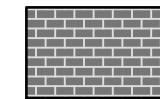


NORTH EAST ELEVATION
SCALE 1:100

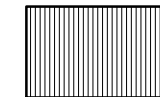


SURFACE MATERIALS & COLOURS

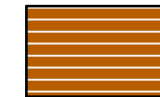
RENDERED BRICK AND/OR POLYSTYRENE
EXTERNAL WALL CLADDING.
COLOUR: DULUX "DUNE"



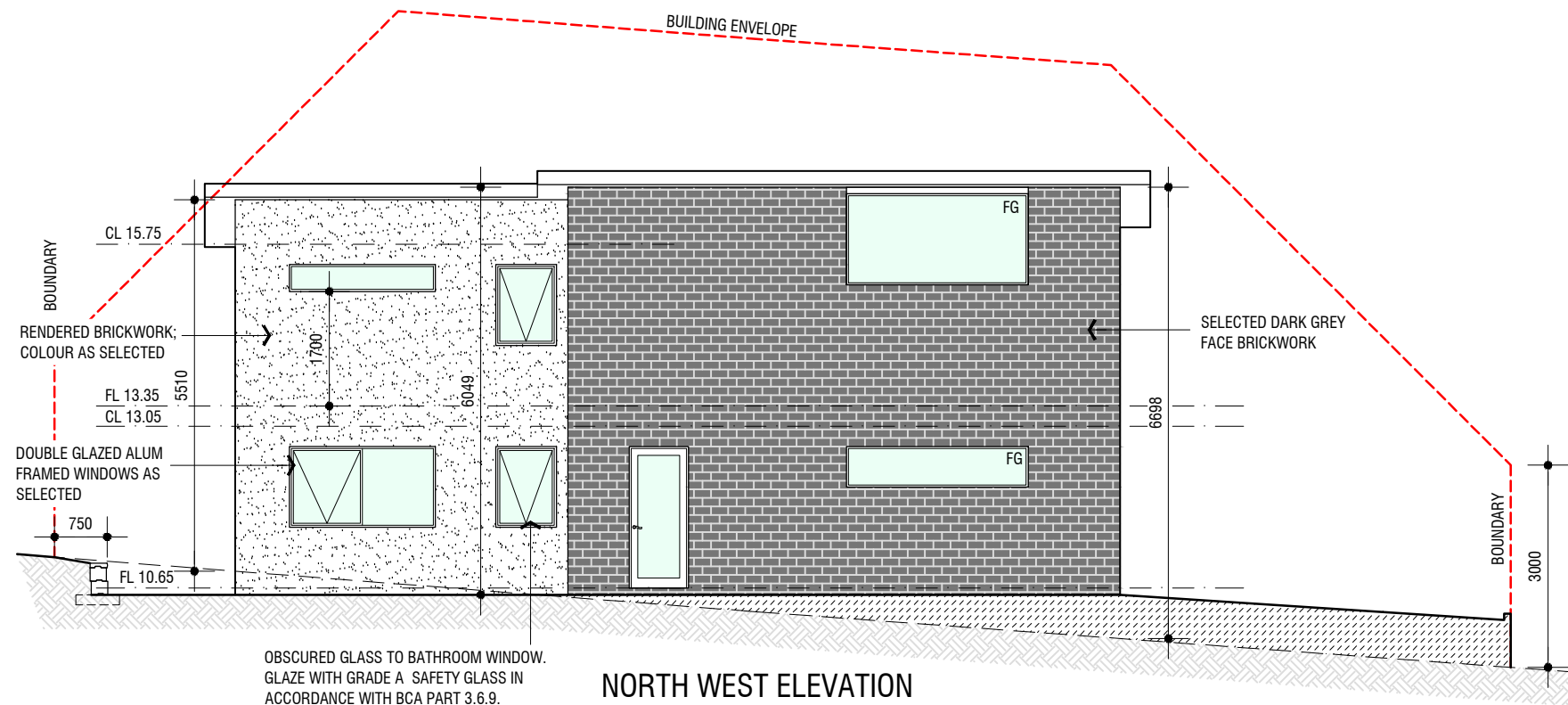
AUSTRAL BRICK EXTERNAL WALL CLADDING
(ELEMENTS RANGE).
COLOUR: "GRAPHITE"



CUSTOM ORB ROOF CLADDING.
COLOUR: "MONUMENT"



PANEL LIFT GARAGE DOOR
COLOUR: "TIMBER"



NORTH WEST ELEVATION
SCALE 1:100

UNIT 1

For Planning Approval Only

COPYRIGHT:

"This document is and shall remain the property of
Henry Design & Consulting.
The document may only be used for the purpose for which it
was commissioned and in accordance with the terms of
engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

**UNIT 1 ELEVATIONS
SHEET 2 OF 2**

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

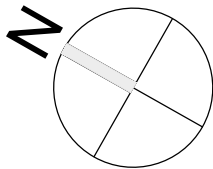
215076-07

REV

B

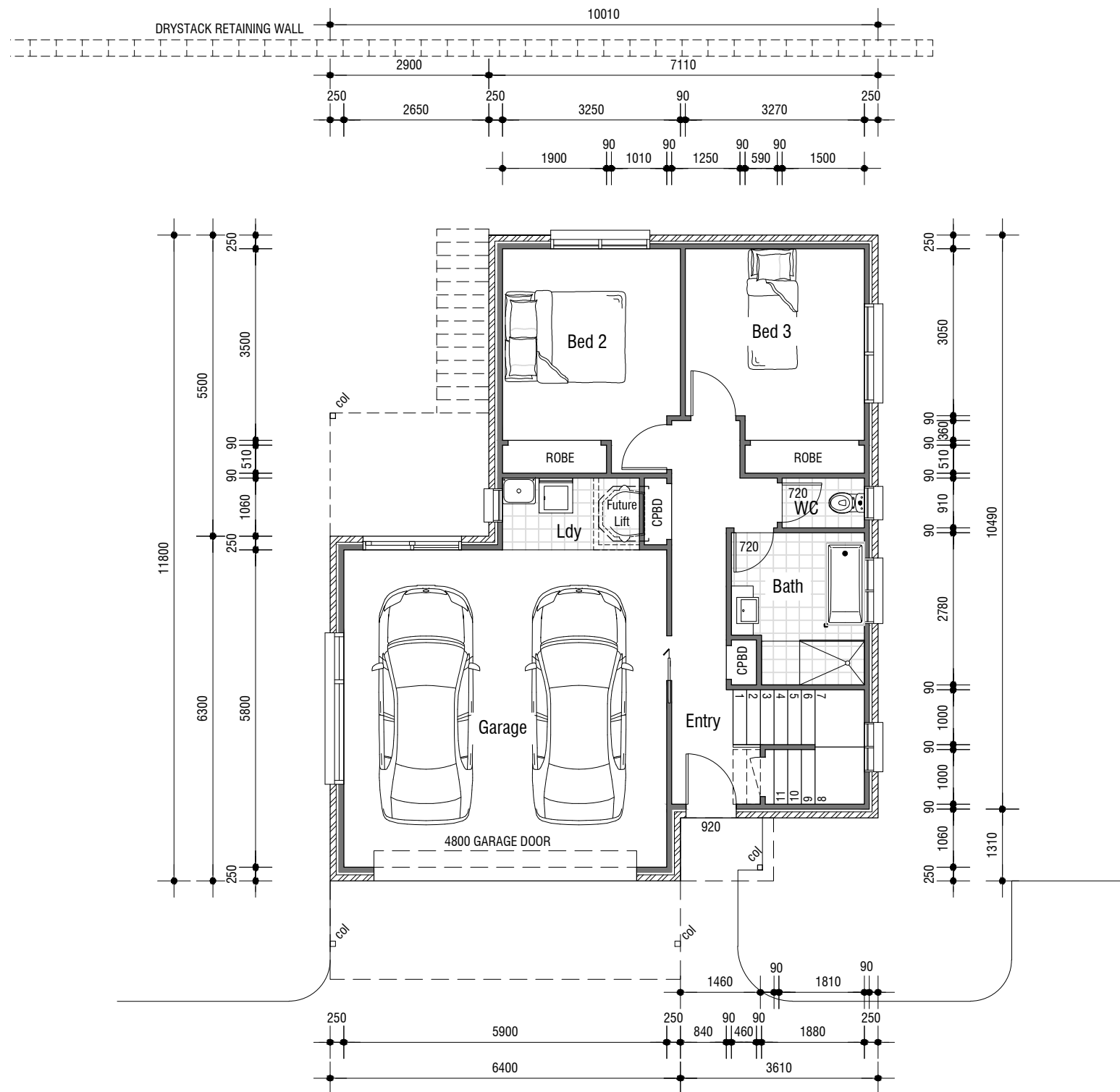
SHEET OF

A3



NOTES:

1. WET AREAS TO BE WATERPROOFED IN ACCORDANCE WITH BCA PART 3.8.1.
2. ALL FLASHINGS AND DAMP PROOF COURSINGS TO BE INSTALLED IN ACCORDANCE WITH PARTS 2.2 & 3.3 OF THE BCA.
3. CUSTOM ORB ROOF SHEETING - COLORBOND FINISH - TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.1.3 OF THE B.C.A.
4. PROVIDE 75 DIA PVC DOWNPIPES WITH 45° BENDS & OFFSET BRACKETS AS REQUIRED, TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.2 OF THE B.C.A. AND TO AS 3500.5
5. FIBRE CEMENT SHEET LINING TO SOFFIT TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.3 OF THE B.C.A. AND TO MANUFACTURER'S INSTRUCTIONS.
6. TIMBER TRUSSES TO BE AS PER MANUFACTURERS DETAILS. DESIGN TO BE IN ACCORDANCE WITH THE WIND LOADING CODE AS1170.2 - 1989 PART 2.
7. PROVIDE WALL TIES IN ACCORDANCE WITH BCA CLAUSE 3.3.3.2.
8. VERTICAL ARTICULATION JOINTS IN BRICKWORK TO BE INSTALLED IN ACCORDANCE WITH BCA CLAUSE 3.3.1.8.
9. PAVED SURFACES SHALL BE A MINIMUM OF 50mm BELOW SLAB LEVEL AND FALL AWAY FROM THE BUILDING. FINISHED GROUND LEVEL TO BE A MINIMUM OF 100mm BELOW FLOOR LEVEL, IN ACCORDANCE WITH 3.12.3 OF THE B.C.A.



UNIT 2 - LOWER FLOOR PLAN

SCALE 1:100

FLOOR AREAS

UNIT 2

LOWER LIVING	59.80 m ²	(6.44 sq)
UPPER LIVING	98.02 m ²	(10.55 sq)
GARGE	38.22 m ²	(4.11 sq)
DECK	11.52 m ²	(1.24 sq)

COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 2 LOWER
FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-08

REV

B

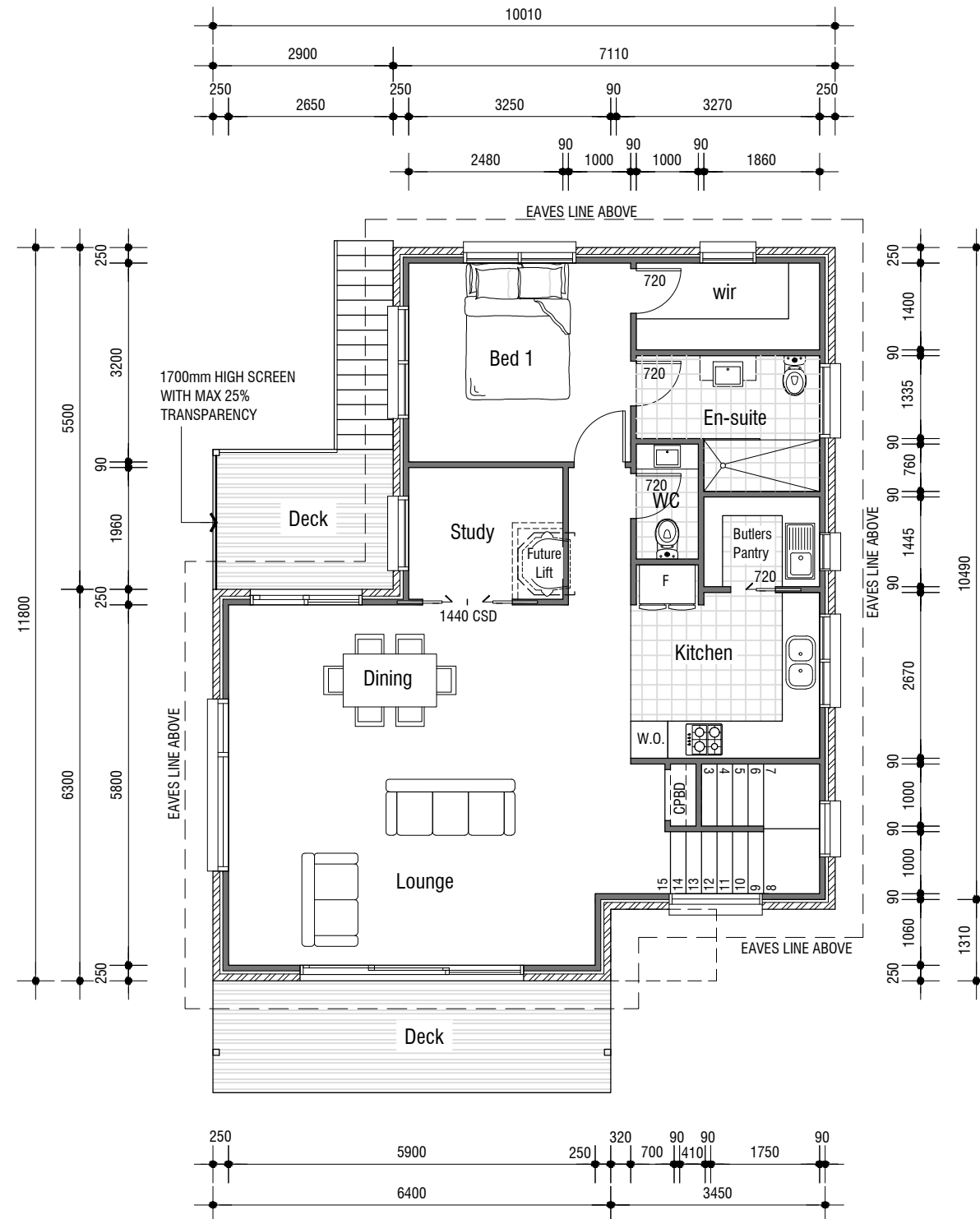
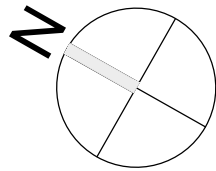
SHEET

OF

Agenda Attachments - 6 Venice Street - Page 8 of 29

A3

For Planning Approval Only



UNIT 2 - UPPER FLOOR PLAN
SCALE 1:100

FLOOR AREAS

UNIT 2		
LOWER LIVING	59.80 m ²	(6.44 sq)
UPPER LIVING	98.02 m ²	(10.55 sq)
GARGE	38.22 m ²	(4.11 sq)
DECK	11.52 m ²	(1.24 sq)

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 2 UPPER FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

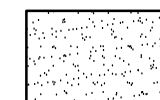
215076-09

REV

B

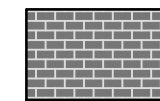
SHEET OF
A3

For Planning Approval Only

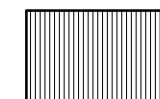


SURFACE MATERIALS & COLOURS

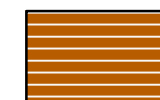
RENDERED BRICK AND/OR POLYSTYRENE
EXTERNAL WALL CLADDING.
COLOUR: DULUX "DUNE"



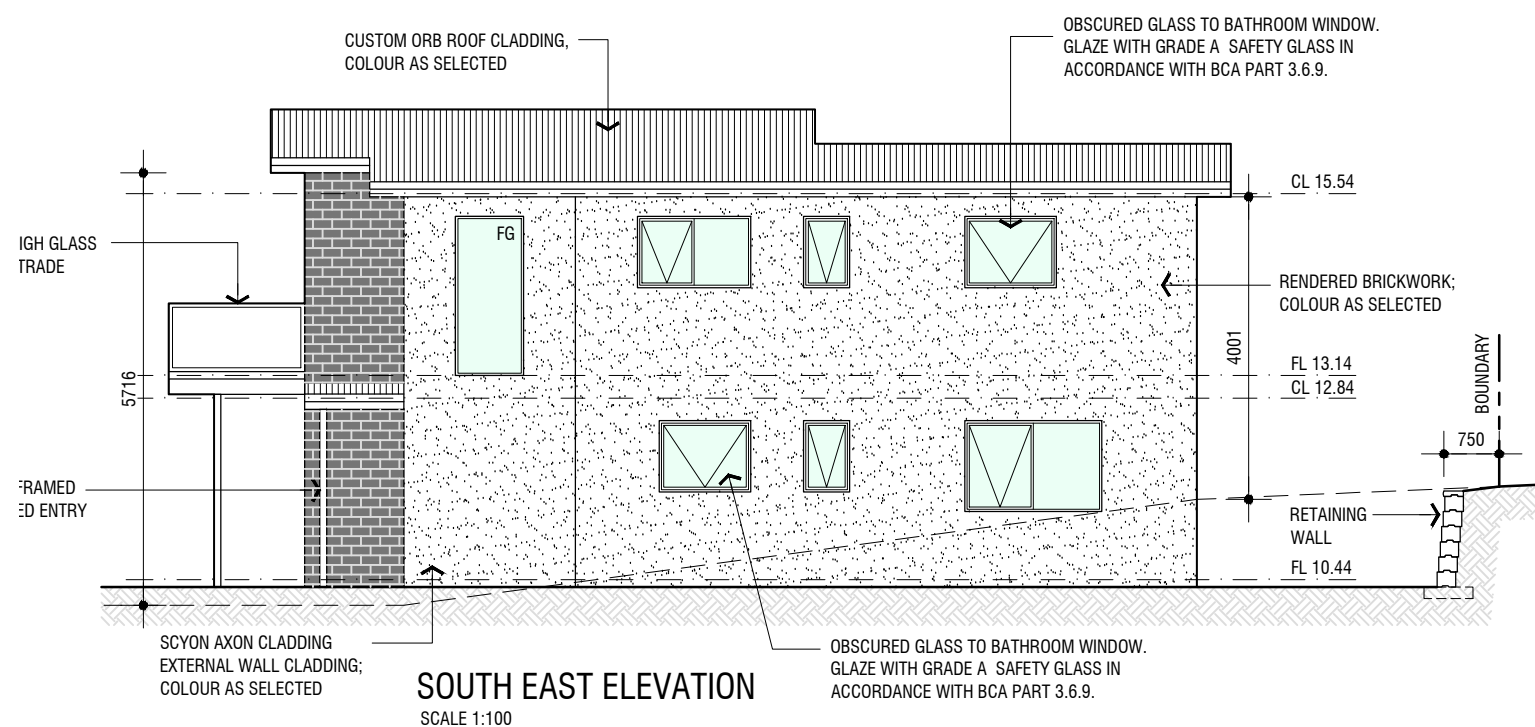
AUSTRAL BRICK EXTERNAL WALL CLADDING
(ELEMENTS RANGE).
COLOUR: "GRAPHITE"



CUSTOM ORB ROOF CLADDING.
COLOUR: "MONUMENT"



PANEL LIFT GARAGE DOOR
COLOUR: "TIMBER"



UNIT 2

For Planning Approval Only

COPYRIGHT:

"This document is and shall remain the property of
Henry Design & Consulting.
The document may only be used for the purpose for which it
was commissioned and in accordance with the terms of
engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and
consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 2 ELEVATIONS
SHEET 1 OF 2

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-10

REV

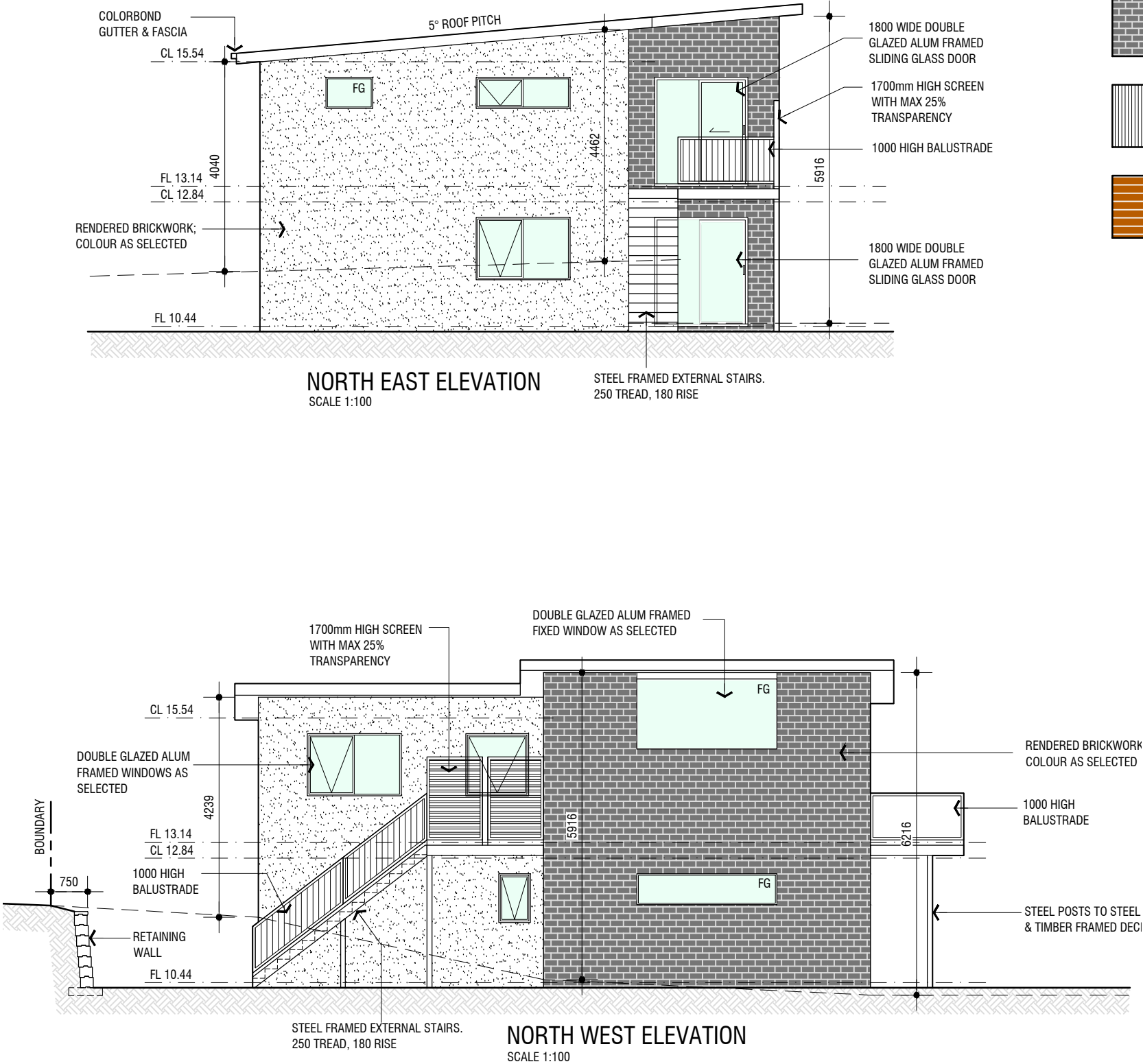
B

SHEET

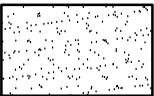
OF

10

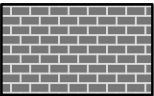
A3



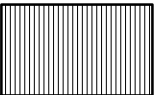
SURFACE MATERIALS & COLOURS



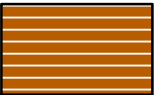
RENDERED BRICK AND/OR POLYSTYRENE
EXTERNAL WALL CLADDING.
COLOUR: DULUX "DUNE"



AUSTRAL BRICK EXTERNAL WALL CLADDING
(ELEMENTS RANGE).
COLOUR: "GRAPHITE"



CUSTOM ORB ROOF CLADDING.
COLOUR: "MONUMENT"



PANEL LIFT GARAGE DOOR
COLOUR: "TIMBER"

COPYRIGHT:
"This document is and shall remain the property of
Henry Design & Consulting.
The document may only be used for the purpose for which it
was commissioned and in accordance with the terms of
engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT
Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 2 ELEVATIONS
SHEET 2 OF 2

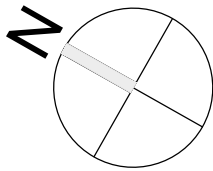
SCALE
1:100

DRAWN PAH	CHECKED
--------------	---------

DATE:
OCT 2016

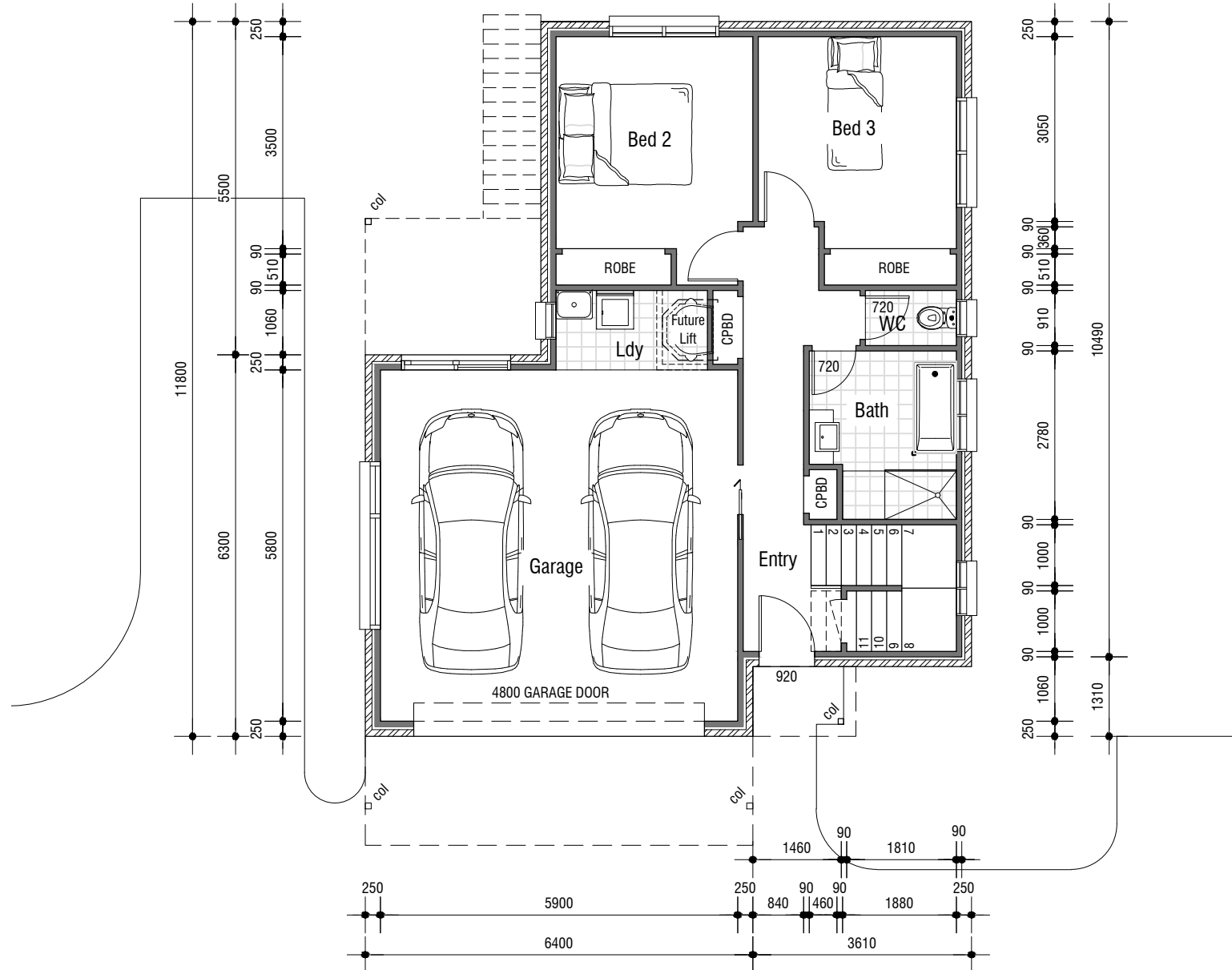
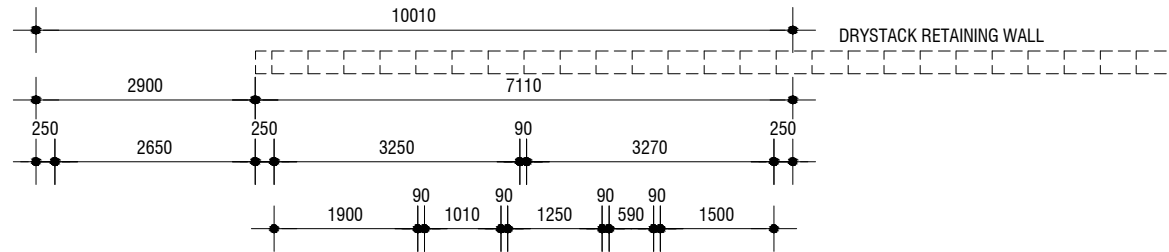
DRG NO. 215076-11	REV B
----------------------	----------

SHEET OF 6	OF 29 A3
------------------	----------------



NOTES:

1. WET AREAS TO BE WATERPROOFED IN ACCORDANCE WITH BCA PART 3.8.1.
2. ALL FLASHINGS AND DAMP PROOF COURSINGS TO BE INSTALLED IN ACCORDANCE WITH PARTS 2.2 & 3.3 OF THE BCA.
3. CUSTOM ORB ROOF SHEETING - COLORBOND FINISH - TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.1.3 OF THE B.C.A.
4. PROVIDE 75 DIA PVC DOWNPIPES WITH 45° BENDS & OFFSET BRACKETS AS REQUIRED, TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.2 OF THE B.C.A. AND TO AS 3500.5
5. FIBRE CEMENT SHEET LINING TO SOFFIT TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.3 OF THE B.C.A. AND TO MANUFACTURER'S INSTRUCTIONS.
6. TIMBER TRUSSES TO BE AS PER MANUFACTURERS DETAILS. DESIGN TO BE IN ACCORDANCE WITH THE WIND LOADING CODE AS1170.2 - 1989 PART 2.
7. PROVIDE WALL TIES IN ACCORDANCE WITH BCA CLAUSE 3.3.3.2.
8. VERTICAL ARTICULATION JOINTS IN BRICKWORK TO BE INSTALLED IN ACCORDANCE WITH BCA CLAUSE 3.3.1.8.
9. PAVED SURFACES SHALL BE A MINIMUM OF 50mm BELOW SLAB LEVEL AND FALL AWAY FROM THE BUILDING. FINISHED GROUND LEVEL TO BE A MINIMUM OF 100mm BELOW FLOOR LEVEL, IN ACCORDANCE WITH 3.12.3 OF THE B.C.A.



UNIT 3 - LOWER FLOOR PLAN

SCALE 1:100

FLOOR AREAS

UNIT 3

LOWER LIVING	59.80 m ²	(6.44 sq)
UPPER LIVING	98.02 m ²	(10.55 sq)
GARGE	38.22 m ²	(4.11 sq)
DECK	11.52 m ²	(1.24 sq)

COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 3 LOWER
FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-12

REV

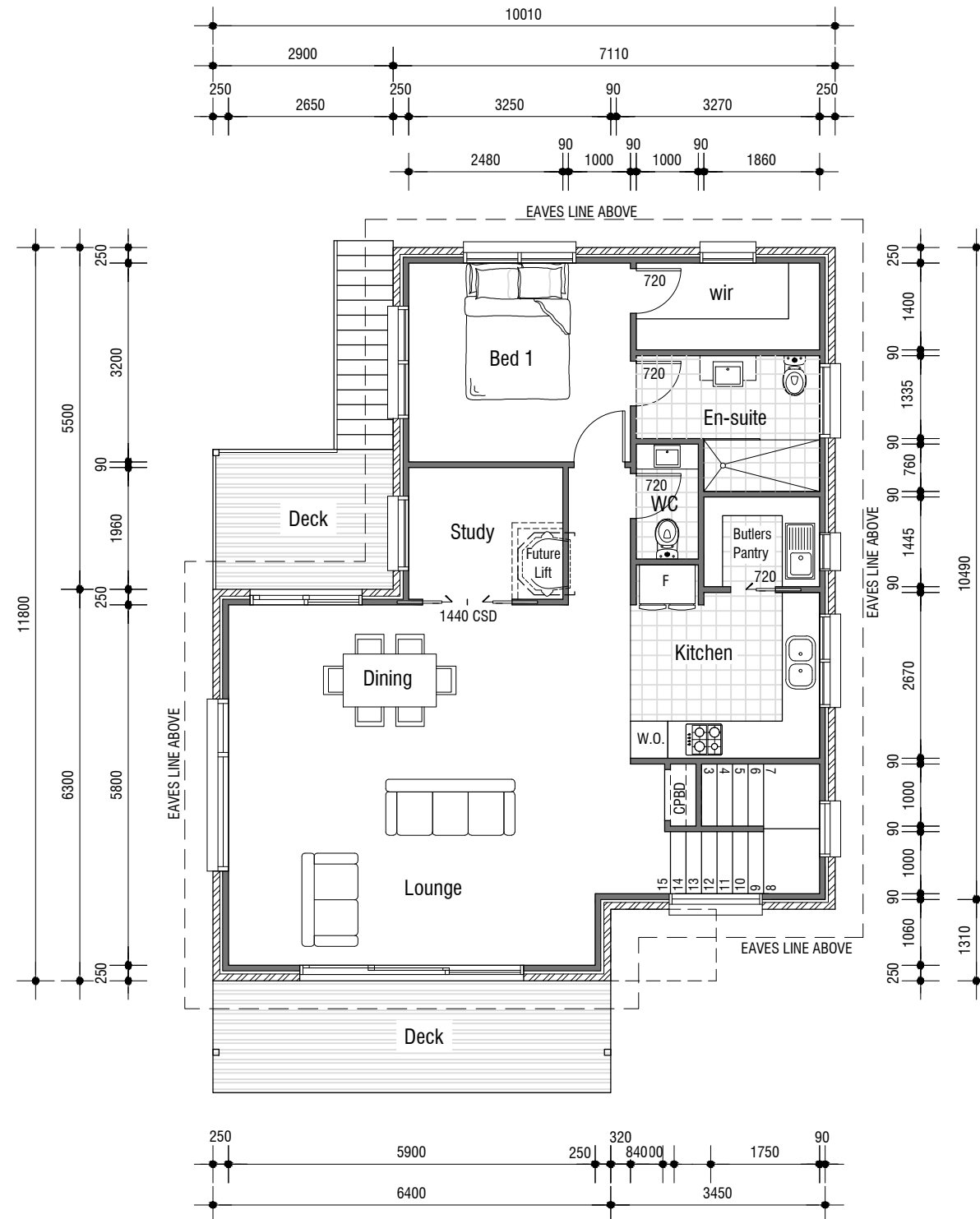
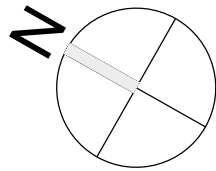
B

SHEET

OF

A3

For Planning Approval Only



UNIT 3 - UPPER FLOOR PLAN
SCALE 1:100

FLOOR AREAS

UNIT 3		
LOWER LIVING	59.80 m ²	(6.44 sq)
UPPER LIVING	98.02 m ²	(10.55 sq)
GARGE	38.22 m ²	(4.11 sq)
DECK	11.52 m ²	(1.24 sq)

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 3 UPPER FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-13

REV

B

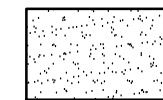
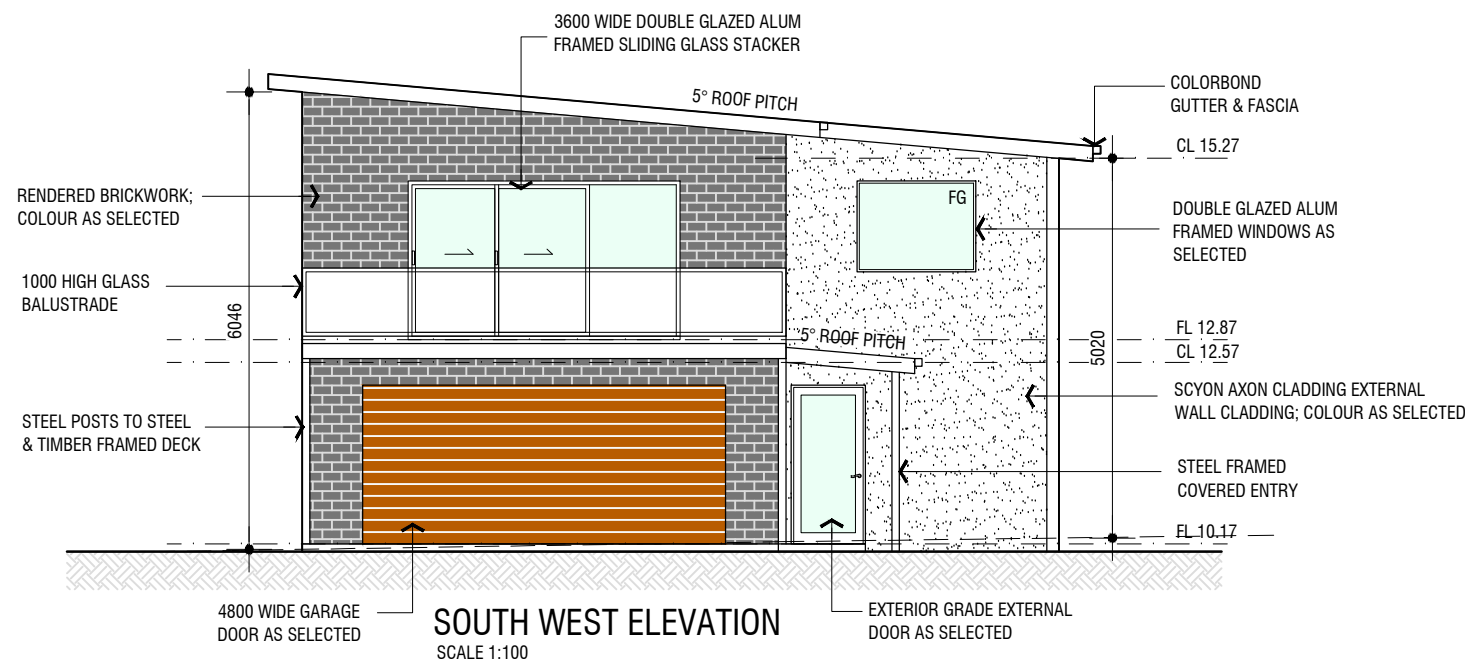
SHEET

OF 6

A3

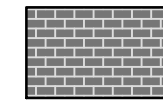
For Planning Approval Only

UNIT 3

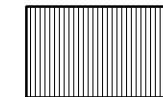


SURFACE MATERIALS & COLOURS

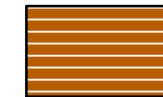
RENDERED BRICK AND/OR POLYSTYRENE EXTERNAL WALL CLADDING.
COLOUR: DULUX "DUNE"



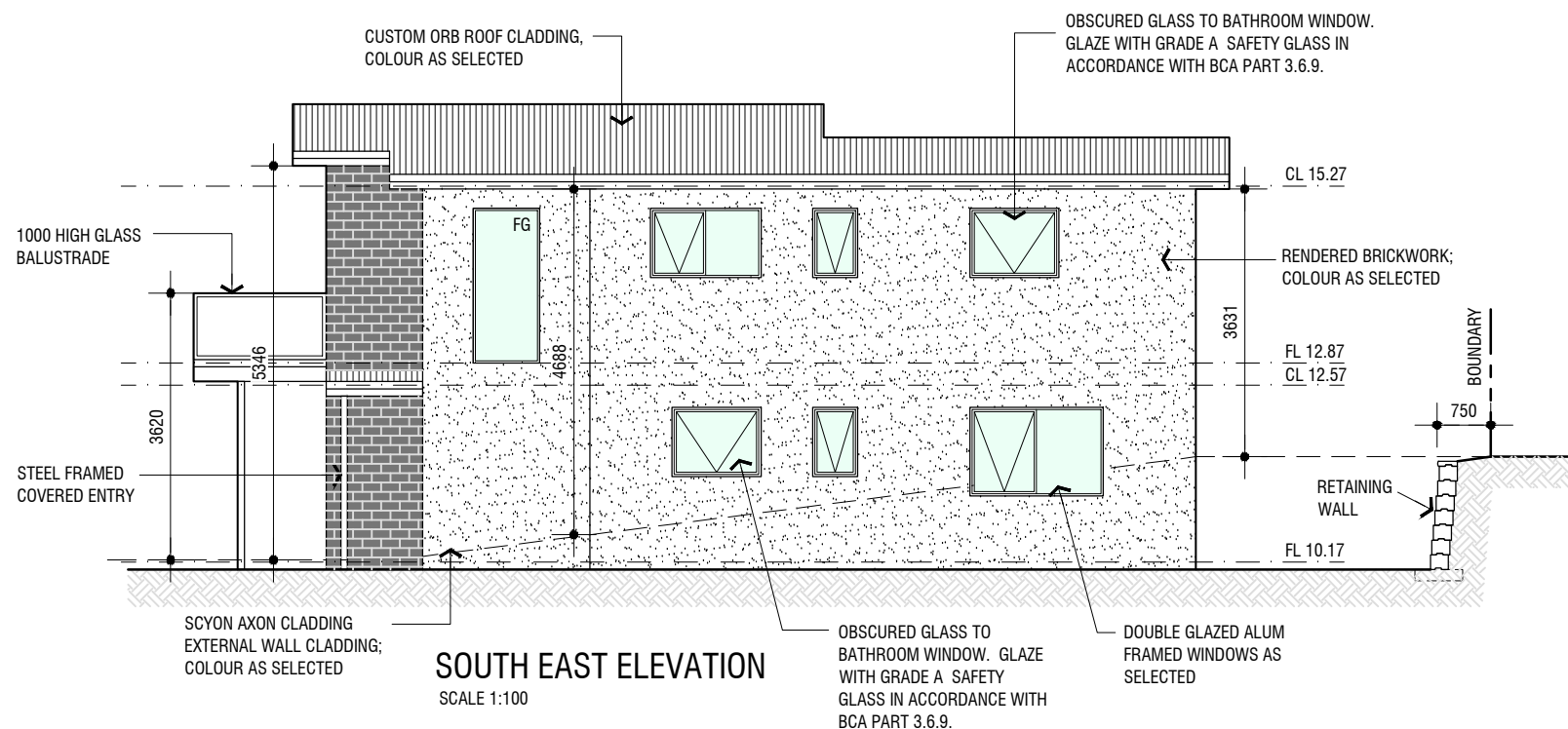
AUSTRAL BRICK EXTERNAL WALL CLADDING (ELEMENTS RANGE).
COLOUR: "GRAPHITE"



CUSTOM ORB ROOF CLADDING.
COLOUR: "MONUMENT"



PANEL LIFT GARAGE DOOR
COLOUR: "TIMBER"



COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

**UNIT 3 ELEVATIONS
SHEET 1 OF 2**

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-14

REV

B

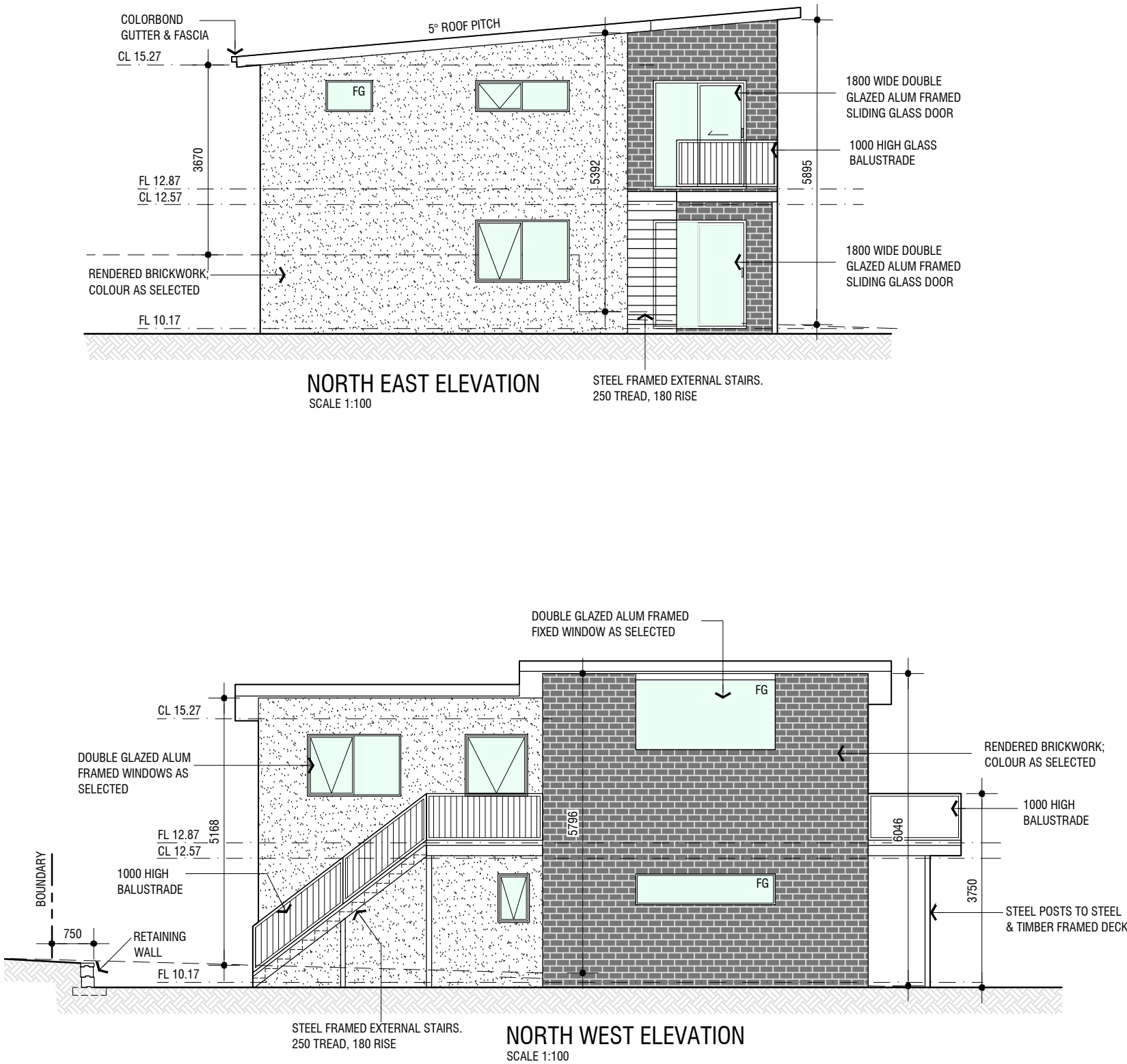
SHEET OF

A3

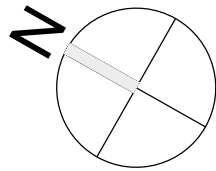
For Planning Approval Only

UNIT 3

For Planning Approval Only

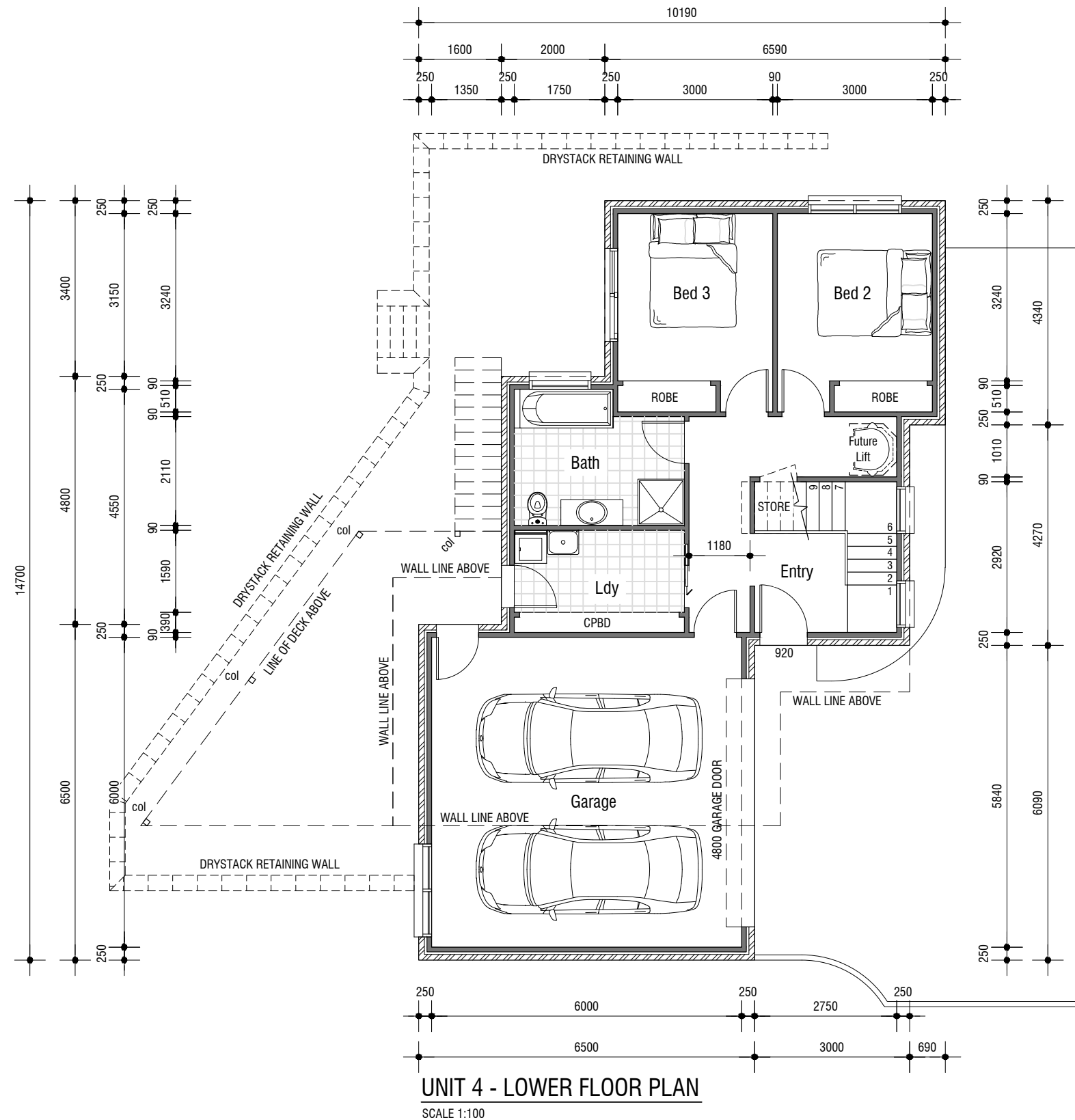


COPYRIGHT: "This document is and shall remain the property of Henry Design & Consulting. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document is prohibited."	
No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016
<div>Henry design and consulting</div> <div>ABN 91 115 998 724 ACN 115 998 724</div> <div>Unit 1/ 2 Kennedy Drive Cambridge 7170 TAS Ph (03) 6248 5195</div>	
Building Practitioner Accreditation No.: CC2703F	
PROJECT Proposed Unit Development For Churchill At 6 Venice Street Howrah	
UNIT 3 ELEVATIONS SHEET 2 OF 2	
SCALE 1:100	
DRAWN PAH	CHECKED
DATE: OCT 2016	
DRG NO. 215076-15	REV B
SHEET OF A3	



NOTES:

1. WET AREAS TO BE WATERPROOFED IN ACCORDANCE WITH BCA PART 3.8.1.
2. ALL FLASHINGS AND DAMP PROOF COURSINGS TO BE INSTALLED IN ACCORDANCE WITH PARTS 2.2 & 3.3 OF THE BCA.
3. CUSTOM ORB ROOF SHEETING - COLORBOND FINISH - TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.1.3 OF THE B.C.A.
4. PROVIDE 75 DIA PVC DOWNPIPES WITH 45° BENDS & OFFSET BRACKETS AS REQUIRED, TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.2 OF THE B.C.A. AND TO AS 3500.5
5. FIBRE CEMENT SHEET LINING TO SOFFIT TO BE INSTALLED IN ACCORDANCE WITH PART 3.5.3 OF THE B.C.A. AND TO MANUFACTURER'S INSTRUCTIONS.
6. TIMBER TRUSSES TO BE AS PER MANUFACTURERS DETAILS. DESIGN TO BE IN ACCORDANCE WITH THE WIND LOADING CODE AS1170.2 - 1989 PART 2.
7. PROVIDE WALL TIES IN ACCORDANCE WITH BCA CLAUSE 3.3.3.2.
8. VERTICAL ARTICULATION JOINTS IN BRICKWORK TO BE INSTALLED IN ACCORDANCE WITH BCA CLAUSE 3.3.1.8.
9. PAVED SURFACES SHALL BE A MINIMUM OF 50mm BELOW SLAB LEVEL AND FALL AWAY FROM THE BUILDING. FINISHED GROUND LEVEL TO BE A MINIMUM OF 100mm BELOW FLOOR LEVEL, IN ACCORDANCE WITH 3.12.3 OF THE B.C.A.



FLOOR AREAS

UNIT 4

LOWER LIVING	63.43 m ²	(6.83 sq)
UPPER LIVING	96.82 m ²	(10.42 sq)
GARGE	41.02 m ²	(4.42 sq)
DECK	17.22 m ²	(1.85 sq)

For Planning Approval Only

COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 4 LOWER
FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-16

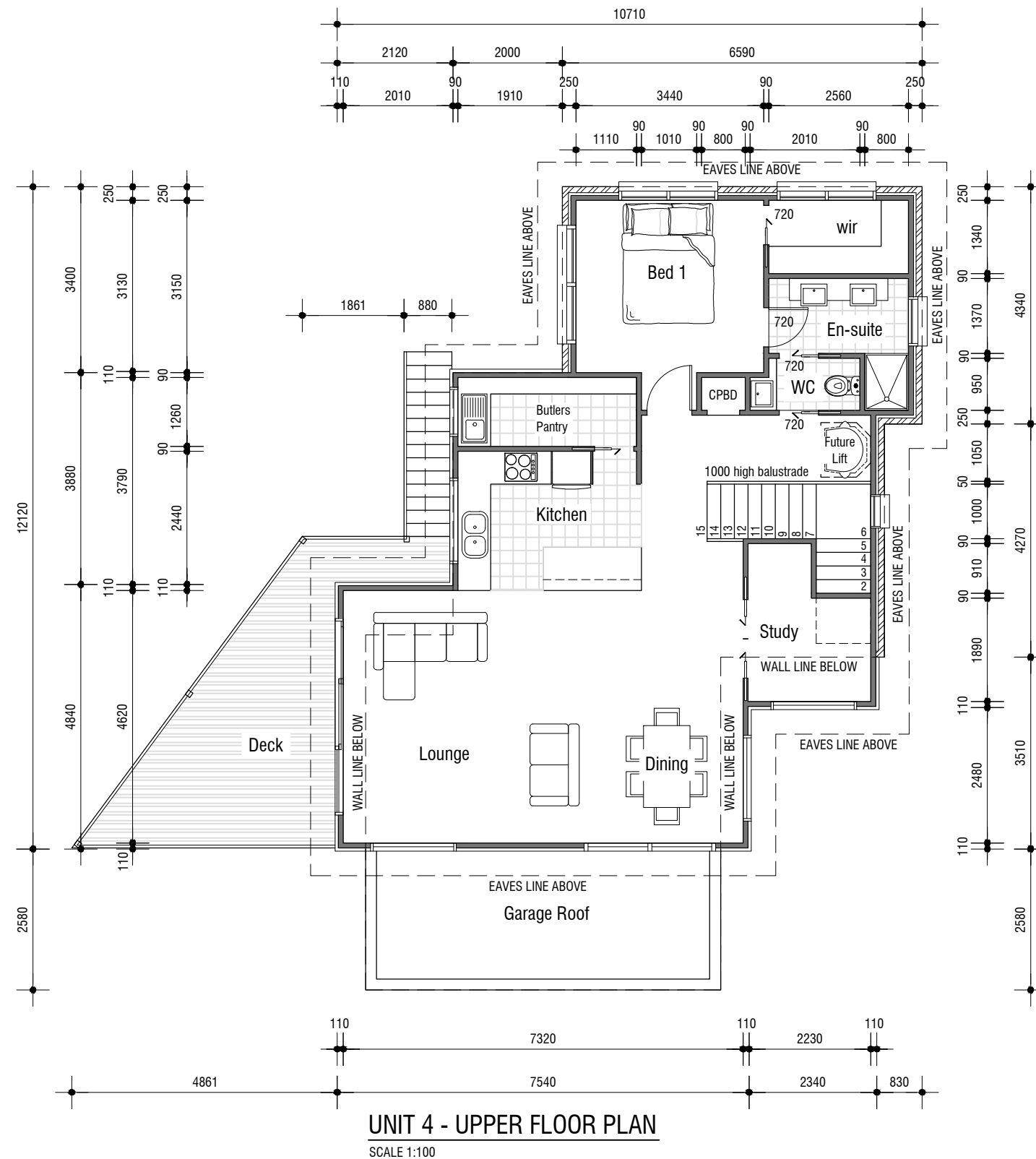
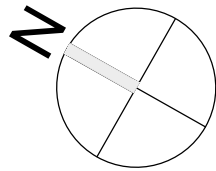
REV

B

SHEET

OF

A3



FLOOR AREAS

UNIT 4		
LOWER LIVING	63.43 m ²	(6.83 sq)
UPPER LIVING	96.82 m ²	(10.42 sq)
GARGE	41.02 m ²	(4.42 sq)
DECK	17.22 m ²	(1.85 sq)

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 4 UPPER FLOOR PLAN

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-17

REV

B

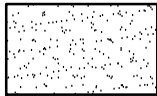
SHEET

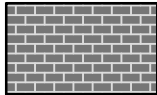
OF
Agenda Attachments - 6 Venice Street - Page 17 of 29

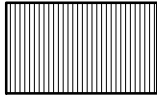
A3

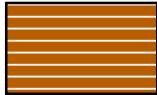
For Planning Approval Only

SURFACE MATERIALS & COLOURS

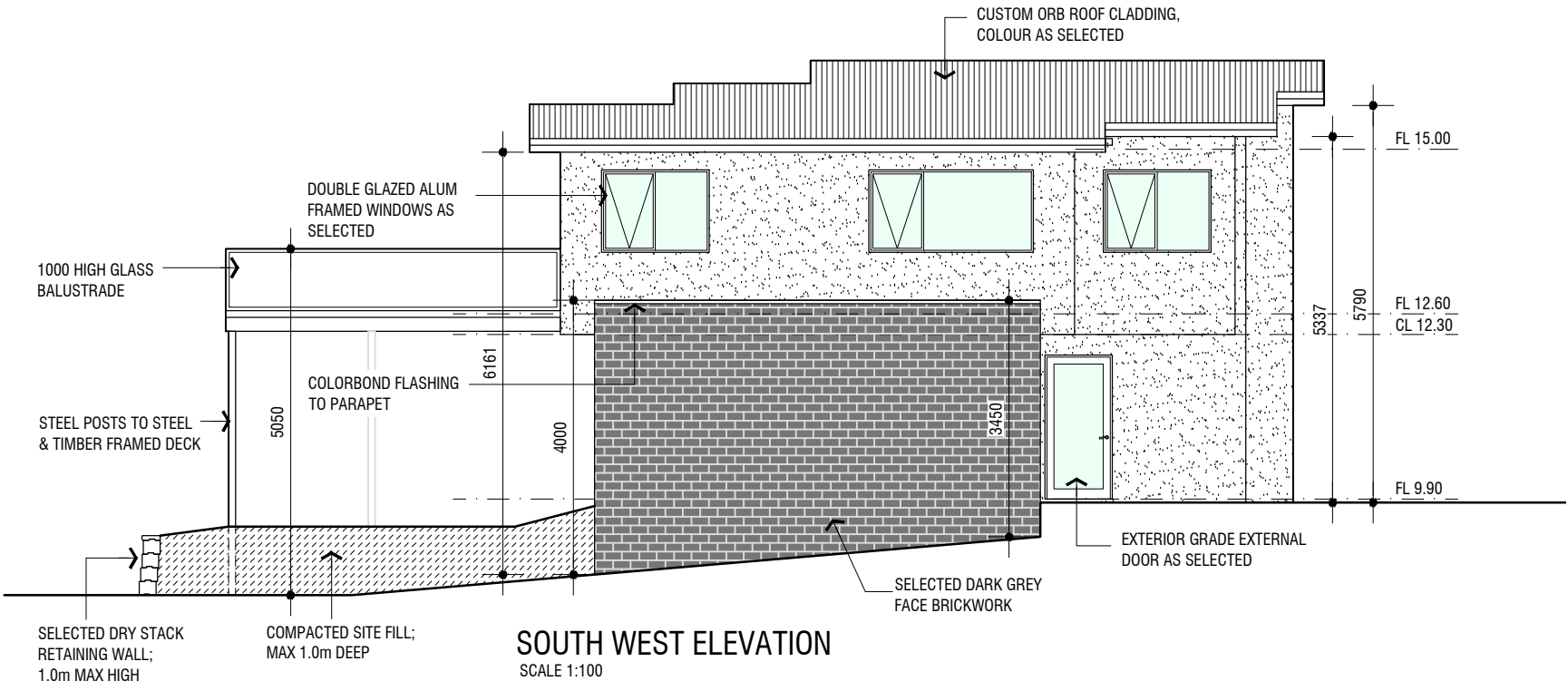
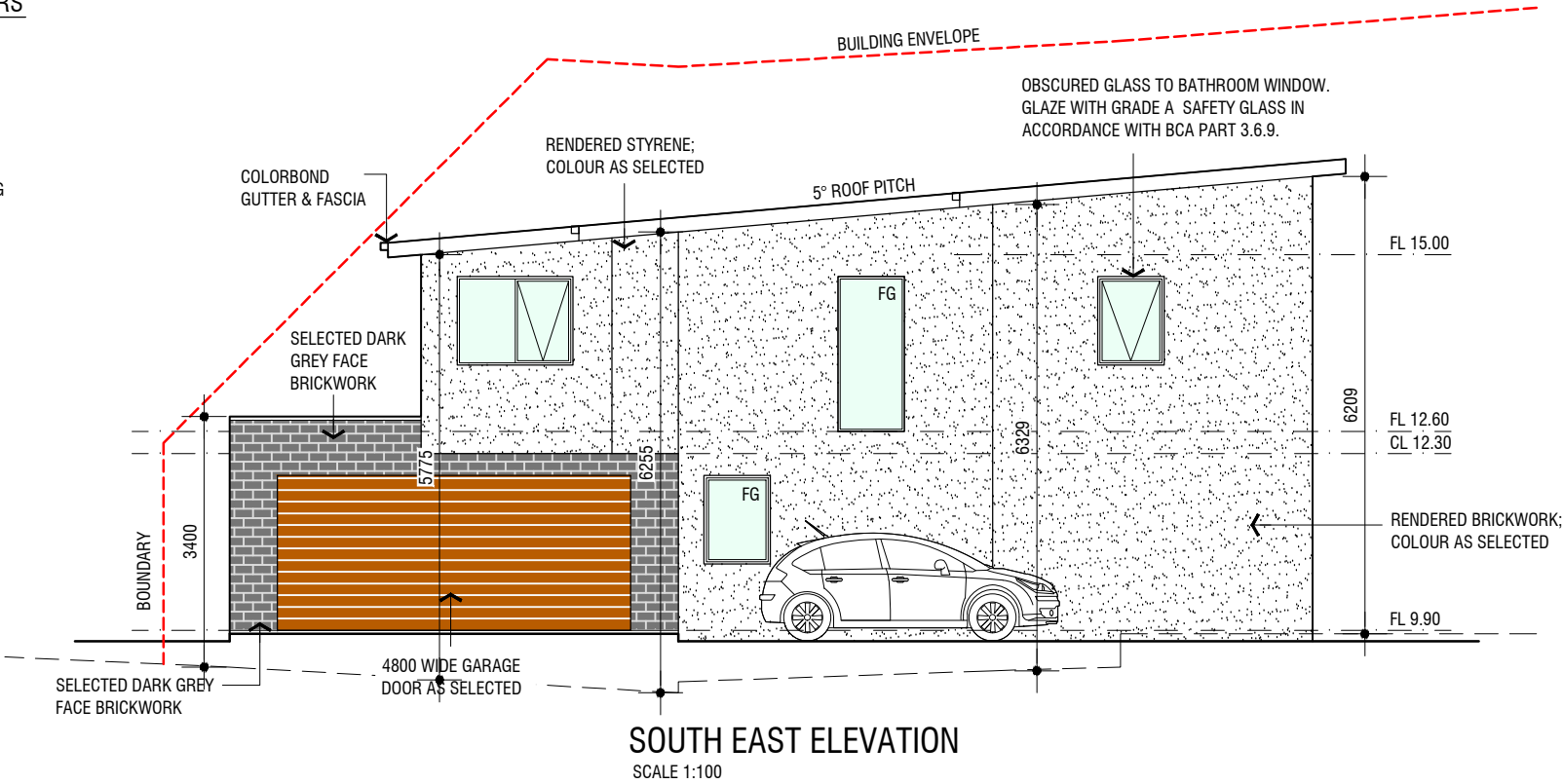
- 

RENDERED BRICK AND/OR POLYSTYRENE
EXTERNAL WALL CLADDING.
COLOUR: DULUX "DUNE"
- 

AUSTRAL BRICK EXTERNAL WALL CLADDING
(ELEMENTS RANGE).
COLOUR: "GRAPHITE"
- 

CUSTOM ORB ROOF CLADDING.
COLOUR: "MONUMENT"
- 

PANEL LIFT GARAGE DOOR
COLOUR: "TIMBER"



UNIT 4

For Planning Approval Only

COPYRIGHT:
"This document is and shall remain the property of
Henry Design & Consulting.
The document may only be used for the purpose for which it
was commissioned and in accordance with the terms of
engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT
Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

UNIT 4 ELEVATIONS
SHEET 1 OF 2

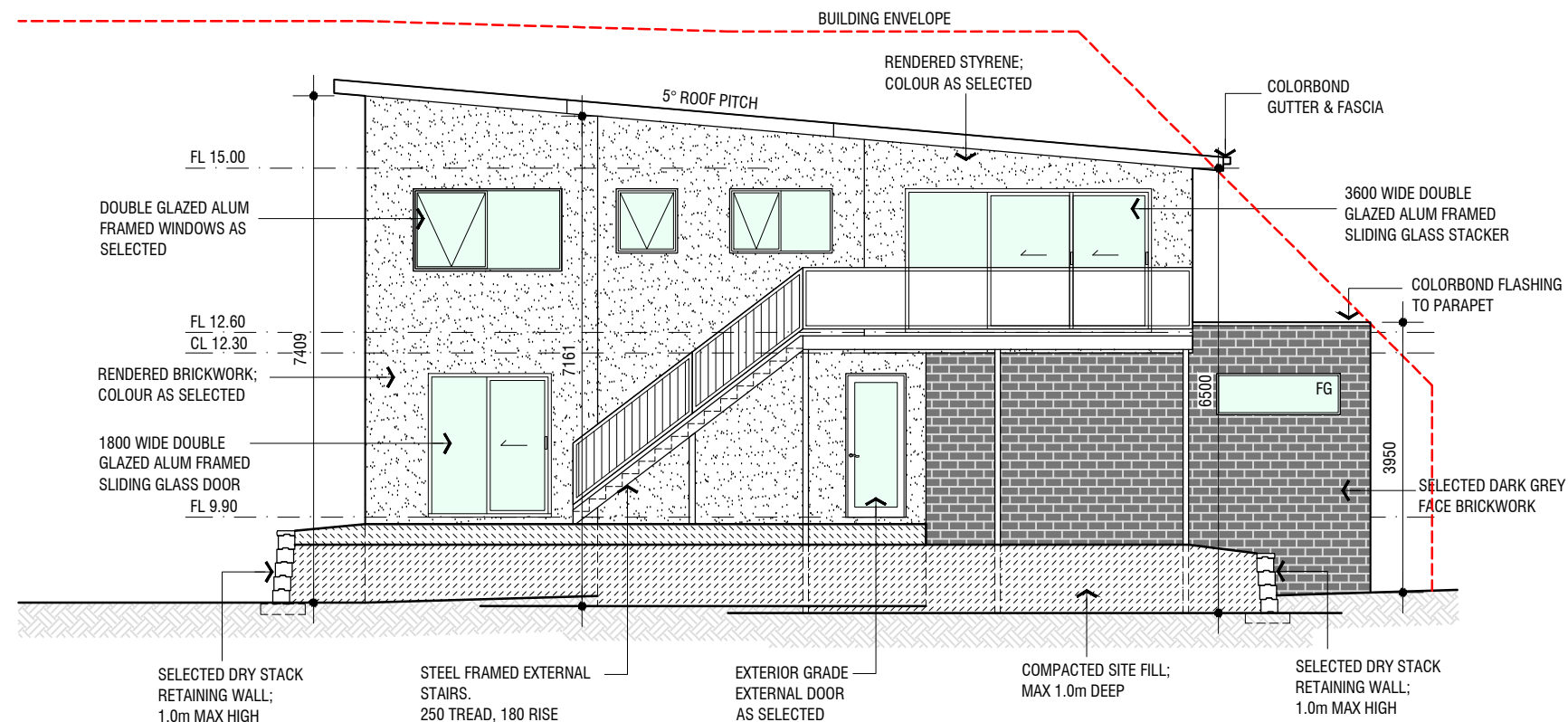
SCALE
1:100

DRAWN	CHECKED
PAH	

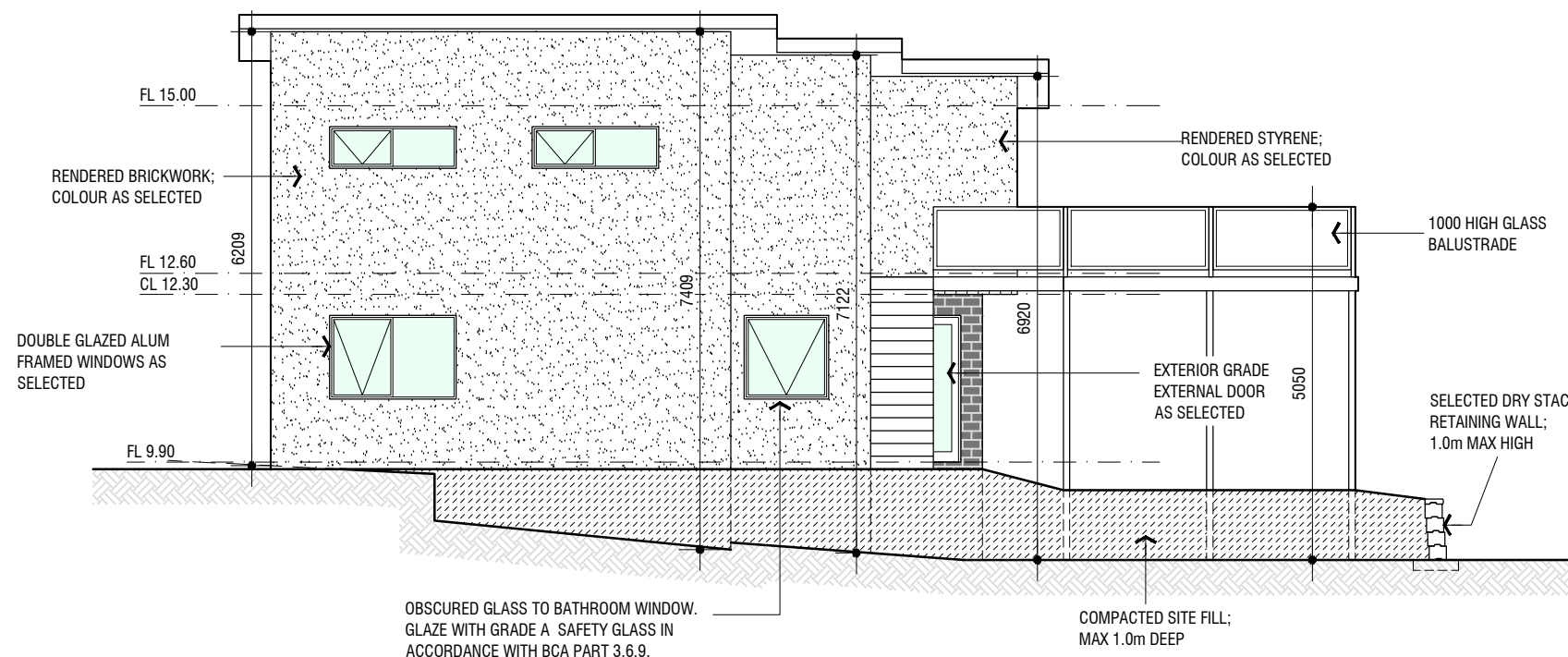
DATE:
OCT 2016

DRG NO.	REV
215076-18	B

SHEET	OF	A3
215076-18	1	1



NORTH WEST ELEVATION
SCALE 1:100



NORTH EAST ELEVATION
SCALE 1:100

UNIT 4

For Planning Approval Only

COPYRIGHT:

"This document is and shall remain the property of Henry Design & Consulting. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

**UNIT 4 ELEVATIONS
SHEET 2 OF 2**

SCALE

1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-19

REV

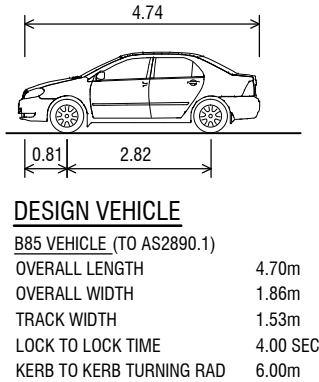
B

SHEET OF

A3

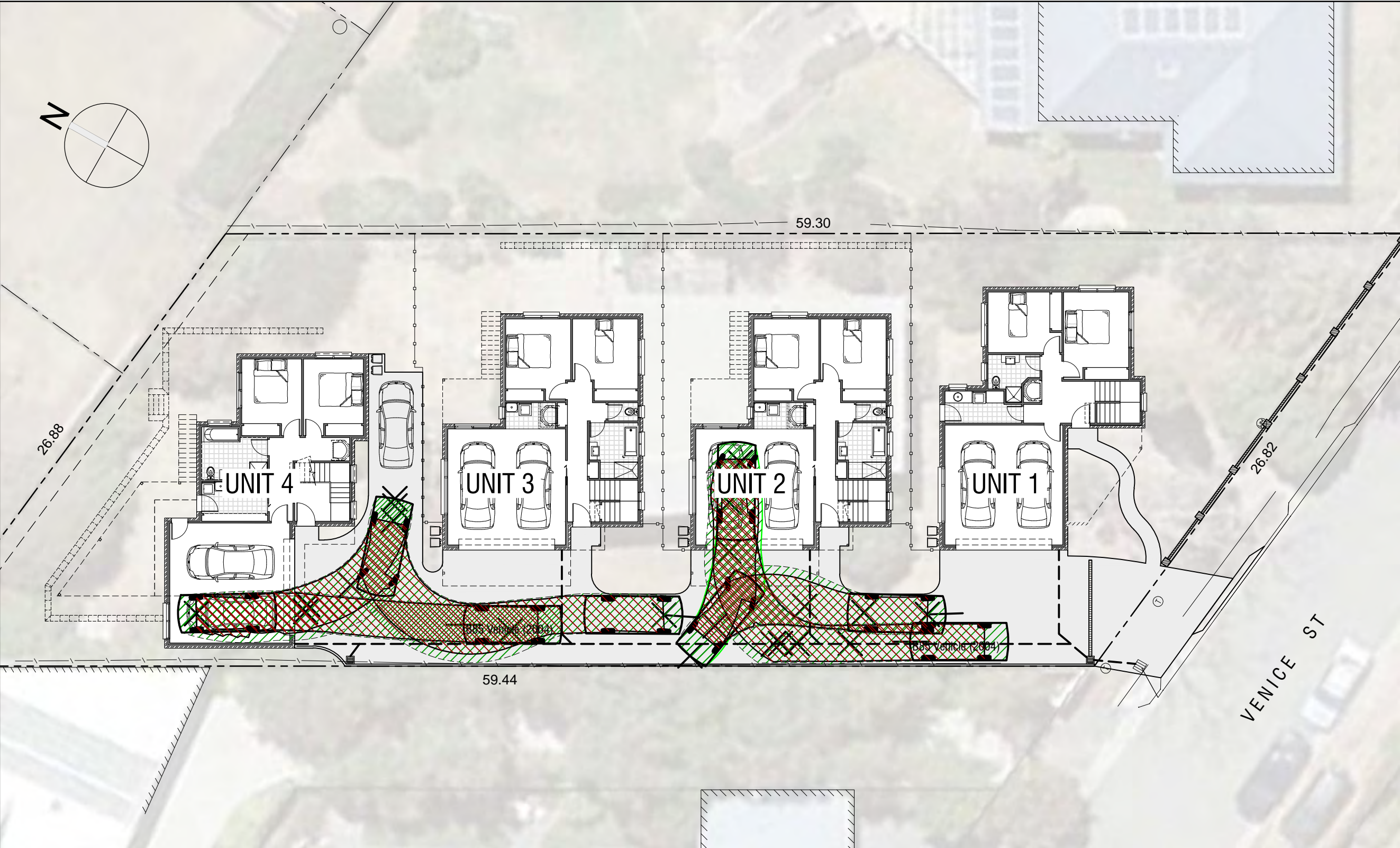


<div>COPYRIGHT:</div> <div>"This document is and shall remain the property of Henry Design & Consulting. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document is prohibited."</div>	
No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016
<div>Henry design and consulting</div> <div>ABN 91 115 998 724 ACN 115 998 724</div> <div>Unit 1/ 2 Kennedy Drive Cambridge 7170 TAS Ph (03) 6248 5195</div>	
Building Practitioner Accreditation No.: CC2703F	
PROJECT Proposed Unit Development For Churchill At 6 Venice Street Howrah	
TURNING PATH PLAN 1 OF 3	
SCALE 1:200	
DRAWN PAH	CHECKED
DATE: OCT 2016	
DRG NO. 215076-20	REV B
SHEET OF 29	A3



- GENERAL NOTES:
- THE MINIMUM DIMENSIONS OF ALL CARPARKING SPACES ARE TO BE IN ACCORDANCE WITH AS2890.1 AND CLARENCE COUNCIL REQUIREMENTS AS FOLLOWS:
 - PARKING BAY WIDTH = 2.60m
 - PARKING BAY LENGTH = 5.50m
 - THE MAXIMUM GRADING OF ALL CARPARKING AND MANOEUVRING AREAS ARE TO COMPLY WITH THE FOLLOWING:
 - MANOEUVRING AREAS - 10% (1:10)
 - CARPARKING SPACES - 5% (1:20) LONGITUDINALLY
 - 6.25% (1:16) ELSEWHERE
 - DRIVEWAY GRADES SHALL COMPLY WITH LGAT STANDARD DRAWING TSD-R09-v1 AND SHALL NOT BE GREATER THAN 20% (1:5).

For Planning Approval Only



<p>COPYRIGHT:</p> <p>"This document is and shall remain the property of Henry Design & Consulting. The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission. Unauthorised use of this document is prohibited."</p>	
No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016
<p>Henry design and consulting</p> <p>ABN 91 115 998 724 ACN 115 998 724</p> <p>Unit 1/ 2 Kennedy Drive Cambridge 7170 TAS Ph (03) 6248 5195</p>	
<p>Building Practitioner Accreditation No.: CC2703F</p>	
<p>PROJECT</p> <p>Proposed Unit Development For Churchill At 6 Venice Street Howrah</p> <p>TURNING PATH PLAN 2 OF 3</p>	
<p>SCALE</p> <p>1:200</p>	
DRAWN	CHECKED
PAH	
<p>DATE:</p> <p>OCT 2016</p>	
DRG NO.	REV
215076-21	B
SHEET OF	A3

For Planning Approval Only



<p>COPYRIGHT:</p> <p>"This document is and shall remain the property of Henry Design & Consulting.</p> <p>The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.</p> <p>Unauthorised use of this document is prohibited."</p>	
No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner Accreditation No.: CC2703F	
PROJECT Proposed Unit Development For Churchill At 6 Venice Street Howrah	
TURNING PATH PLAN 3 OF 3	
SCALE 1:200	
DRAWN PAH	CHECKED
DATE: OCT 2016	
DRG NO. 215076-22	REV B
SHEET OF 6	A3 29

For Planning Approval Only



COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT
Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

SITE CROSS SECTION

SCALE
1:100

DRAWN PAH	CHECKED
--------------	---------

DATE:
OCT 2016

DRG NO. 215076-23	REV B
-----------------------------	----------

SHEET OF Agenda Attachments - 6 Venice Street - Page 23 of 29	A3
---	----

For Planning Approval Only



SHADOW DIAGRAMS - 9am 21/6

For Planning Approval Only

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

SHADOW DIAGRAMS
9am on 21 JUNE

SCALE

1:200

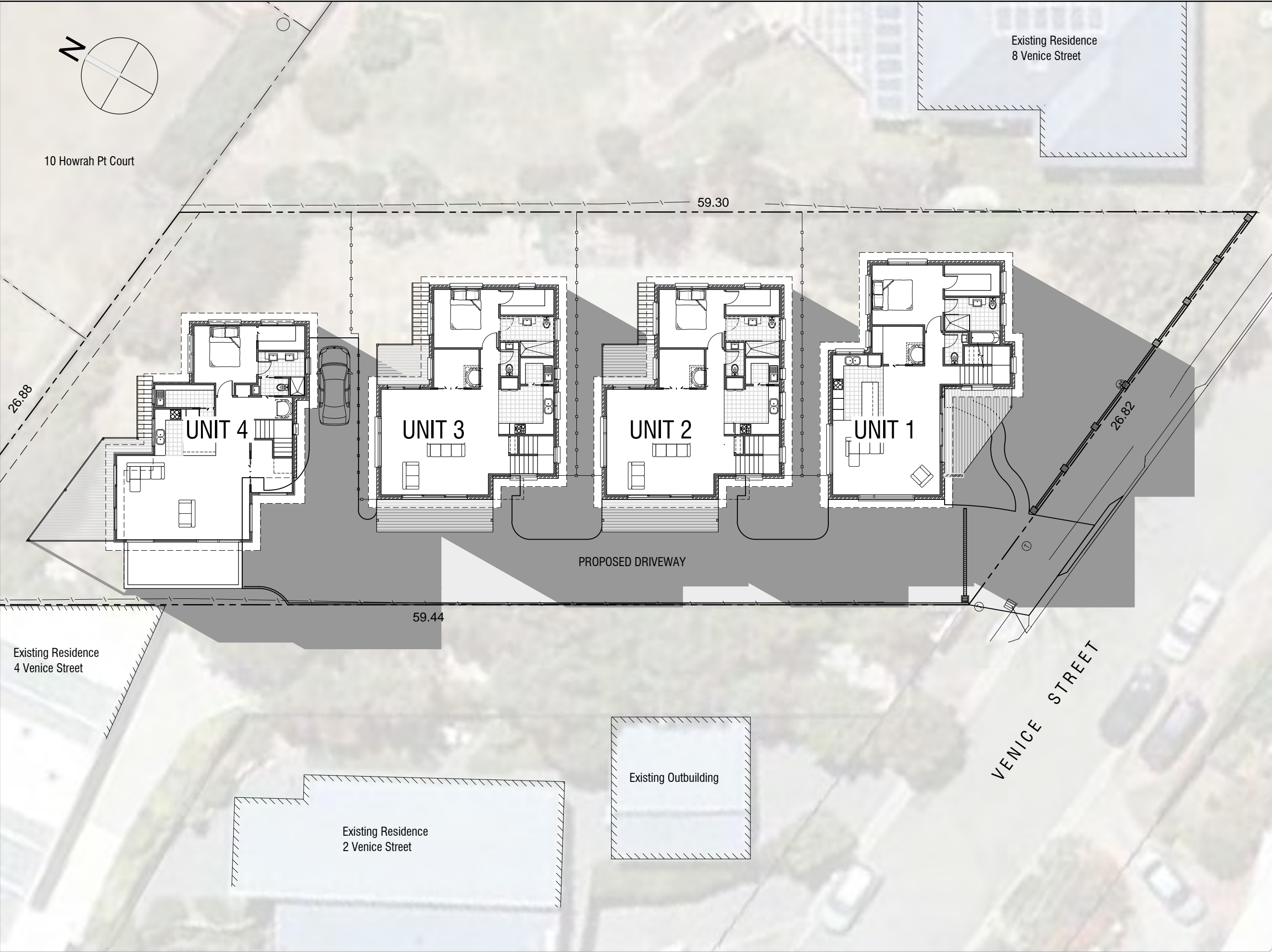
DRAWN	CHECKED
PAH	

DATE:

OCT 2016

DRG NO.	REV
215076-24	B

SHEET	OF	A3
Agenda Attachments - 6 Venice Street - Page 24 of 29		



SHADOW DIAGRAMS - 12pm 21/6

For Planning Approval Only

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT
Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

SHADOW DIAGRAMS
12pm on 21 JUNE

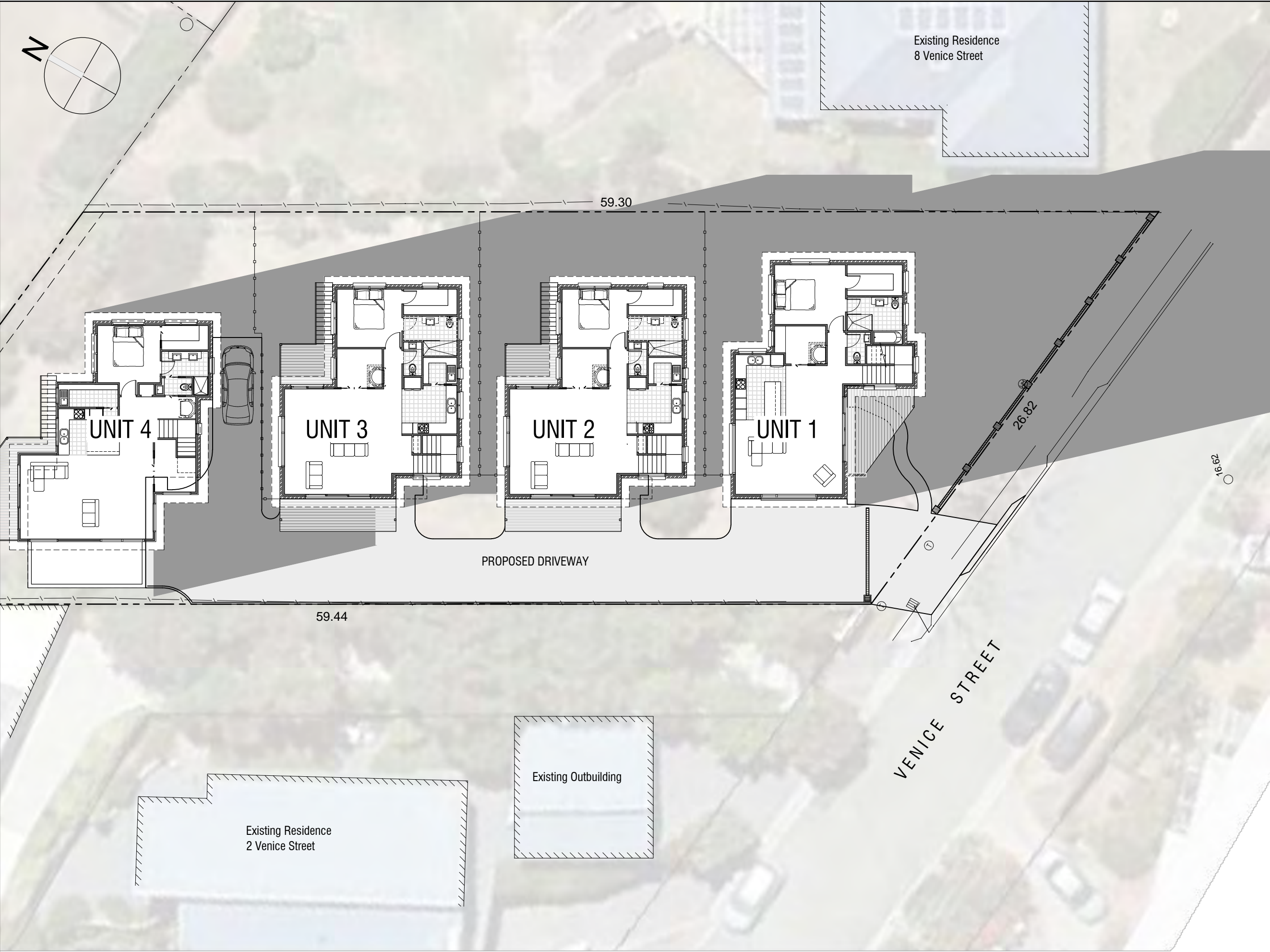
SCALE
1:200

DRAWN PAH	CHECKED
--------------	---------

DATE:
OCT 2016

DRG NO. 215076-25	REV B
----------------------	----------

SHEET OF
A3



SHADOW DIAGRAMS - 3pm 21/6

For Planning Approval Only

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/ 2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

SHADOW DIAGRAMS
3pm on 21 JUNE

SCALE

1:200

DRAWN	CHECKED
PAH	

DATE:

OCT 2016

DRG NO.	REV
215076-26	B

SHEET	OF
6	29

Agenda Attachments - 6 Venice Street - Page 26 of 29

LANDSCAPE LEGEND

BOTANICAL NAME	QTY
PLANTS	
<i>Agonis flexuosa</i> 'Burgundy'	7
<i>Malus ioensis</i> 'Plena'	6
<i>Dicksonia antarctica</i>	4
<i>Rosmarinus officinalis</i> 'Tuscan Blue'	7
<i>Acacia</i> 'Fettuccini'	10
<i>Anigozanthos</i> spp.	17

COPYRIGHT:
"This document is and shall remain the property of Henry Design & Consulting.
The document may only be used for the purpose for which it was commissioned and in accordance with the terms of engagement for the commission.
Unauthorised use of this document is prohibited."

No.	Revision
A	DA ISSUE - NOV 2016
B	RFI RESPONSE - NOV 2016

Henry design and consulting

ABN 91 115 998 724
ACN 115 998 724

Unit 1/2 Kennedy Drive
Cambridge 7170 TAS
Ph (03) 6248 5195

Building Practitioner
Accreditation No.: CC2703F

PROJECT

Proposed Unit Development
For Churchill
At 6 Venice Street
Howrah

LANDSCAPE PLAN

SCALE

1:250 & 1:100

DRAWN

PAH

CHECKED

DATE:

OCT 2016

DRG NO.

215076-27

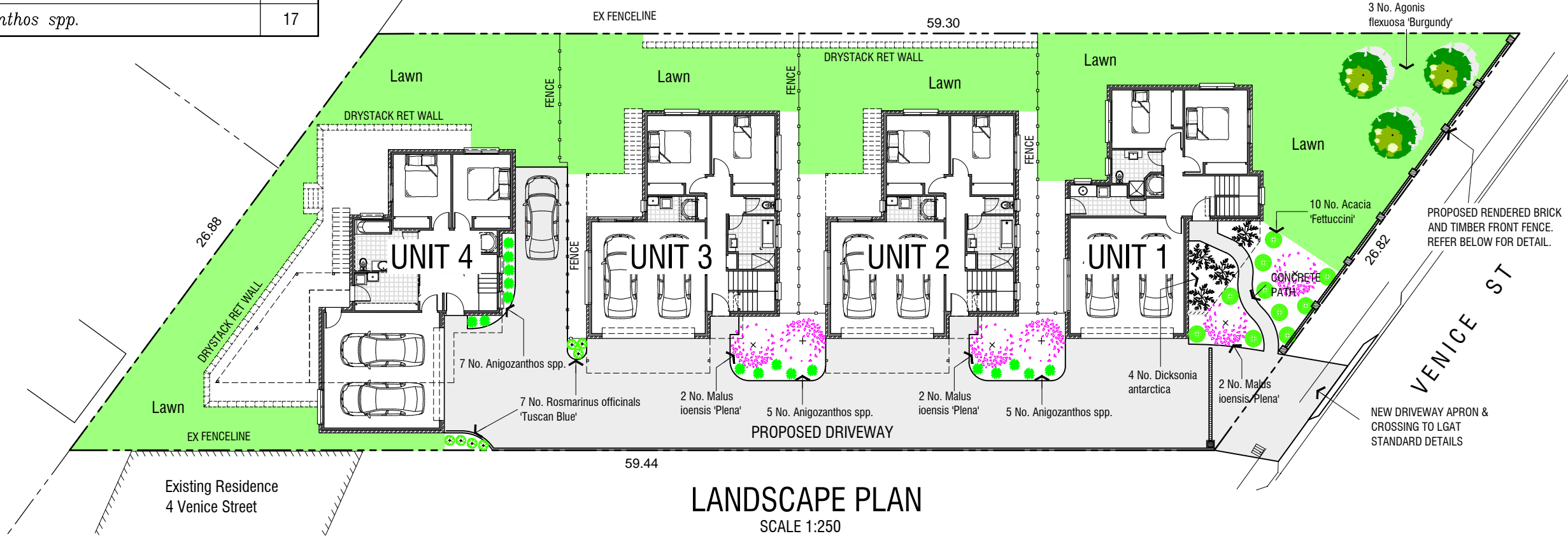
REV

B

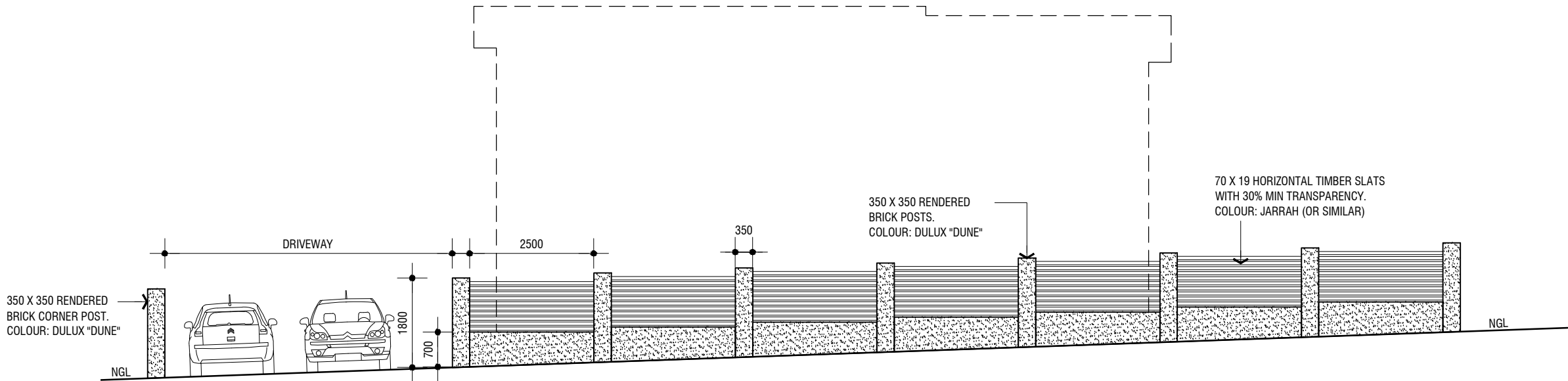
SHEET

OF 6 Venice Street - Page 27 of 29

A3



LANDSCAPE PLAN
SCALE 1:250



FRONT FENCE ELEVATION
SCALE 1:100

For Planning Approval Only

6 Venice Street, Howrah



Site viewed from Venice Street.



The Venice Street streetscape when viewed in an easterly direction.



The Venice Street streetscape when viewed in a westerly direction.

11.4 CUSTOMER SERVICE

Nil Items.

11.5 ASSET MANAGEMENT**11.5.1 BUSHFIRE MANAGEMENT STRATEGY FOR COUNCIL OWNED AND CONTROLLED LAND**

(File No)

EXECUTIVE SUMMARY**PURPOSE**

To seek Council's endorsement of a revised bushfire management strategy for Council owned and managed land.

RELATION TO EXISTING POLICY/PLANS

Council's Strategic Plan 2016 - 2026 and Bushfire Management Policy are relevant

LEGISLATIVE REQUIREMENTS

The following Acts are relevant to the Bushfire Management Plans:

- Fire Services Act 1979;
- Local Government Act 1993;
- Threatened Species Act 1995;
- Local Government (Building and Miscellaneous Provisions) Act 1993;
- Environmental Management and Pollution Control Act 1994;
- Environment Protection Policy (Air Quality) 2004;
- Tasmanian Air Quality Strategy 2006;
- State Policy on Water Quality Management 1997;
- Aboriginal Relics Act 1975; and
- Weed Management Act 1999.

CONSULTATION

The community was extensively consulted in the development of the Bushfire Management Strategy.

FINANCIAL IMPLICATIONS

The adoption of the Bushfire Management Strategy has a potential direct financial impact on future Annual Plans. The impact relates to Recommendation 3 for the purchase of new plant and equipment.

RECOMMENDATION

- A. That Council incorporates the following modifications to the relevant Bushfire Management Plans:
- Roches Beach Coastal Reserve and Nowra Bushland Reserve – change under Section 2.1 Fire History and Causes to accurately reflect the true cause of a wildfire in February 2013, that being the mower being used to reduce the fuel load on private property caught on fire;
 - Rosny Hill Reserve –
 - i. Introduction – add State Recreation Area to Rosny Hill;
 - ii. Reserve Usage – add orienteering, bird watching and 23 years of conservation activities by Rosny Land Care Group;

- iii. Reserve Management Responsibilities – change wording to Rosny Hill Nature Recreation Area Management Strategy adopted by Council on 25 July 2011;
 - iv. Planned Fires – remove words relating to “grazing land” from the text;
 - v. Bushfire Risks to Natural Heritage Assets – adjust Figure 5 to include outcomes of recent threatened species survey; and
 - vi. Bushfire Risk Assessment for Built and Cultural Assets – adjust Table 7 to reflect current status of Built Assets.
- B. That Council endorse the Bushfire Management Strategy for Council owned and managed land including the modifications as described in “A” above.

ASSOCIATED REPORT

1. BACKGROUND

- 1.1. In 2004 Council adopted a Bushfire Management Policy which was the driver for the Bushfire Management Strategy and the Reserve Fire Management Plans. The Bushfire Management Policy is still a relevant document.

“Clarence City Council Bushfire Management Policy

In order to fulfil its responsibilities as a landowner, and in recognition of its community role in land management Clarence City Council will:

- *Implement current recommended practices for bushfire risk management on all land under its control;*
- *Encourage all owners of private and public bushland areas within Clarence to implement current recommended practices for bushfire risk management;*
- *Meet all its statutory obligations for bushfire management;*
- *Educate the Clarence community regarding the risks from bushfires in collaboration with the Tasmania Fire Service;*
- *Consult with community and other stakeholders when planning bushfire management activities on Council managed land; and*
- *Use planned burning as a management tool in areas to reduce bushfire risk, and maintain and enhance biodiversity”.*

- 1.2. At its Meeting on 15 March 2011, Council endorsed the Bushfire Management Strategy (Strategy) for Council owned and managed land.

- 1.3.** A requirement of the endorsed Strategy is to undertake a review every 5 years. Since the previous review was completed Council has accepted additional bushland reserves at Glebe Hill Reserve and Rokeby Hills Reserve.
- 1.4.** Council's Fire and Bushland Vegetation Management Officer undertook the review of the previous Bushfire Management Strategy, Best Management Practice Guidelines and 15 Bushfire Management Plans (Documents).
- 1.5.** A Council Workshop was held on Monday, 8 August 2016 where the outcomes of the key stakeholder consultation were presented and the draft Bushfire Management Strategy, Best Management Practice Guidelines and 15 Bushfire Management Plans were workshopped with Council.
- 1.6.** Council, at its Meeting held on Monday, 5 September 2016 authorised the General Manager to undertake community consultation for the draft Bushfire Management Strategy, Best Management Practice Guidelines and 15 Bushfire Management Plans.
- 1.7.** Advertisements were placed in "The Mercury" newspaper on Saturday, 1 and 8 October 2016 inviting comment from the public on the draft documents. The following key stakeholder groups were written to separately inviting comments:
- Clarence City Council Aldermen and officers;
 - Land Care and Coast Care Groups;
 - Tasmania Fire Service (TFS);
 - Department of Primary Industries, Parks, Water and the Environment (DPIPWE);
 - Aboriginal Heritage Tasmania; and
 - Landowners adjoining each Reserve.
- 1.8.** Fifteen respondents provided feedback to Council at the close of consultation, Wednesday, 3 November 2016.

2. REPORT IN DETAIL

- 2.1.** Council owns a number of large natural areas that contain valuable natural assets and Council is required to manage and protect these natural assets.
- 2.2.** This review is the third revision and builds on previous methodologies and principles. Each revision ensures that Council's bushfire management practices are based on current recommended best practices for protecting assets and life from bushfires, and to maintain and enhance diversity within land managed by Council.
- 2.3.** The Bushfire Management Strategy (refer Attachment 1) contains sections on:
- Fire Management Strategy – contains a review of the previous strategy, statutory responsibilities and contains policy statements on planning, maintenance, fire in the sustainable management of bushland areas, bushfire hazard reduction, bushfire risk assessment methodology, likely effects of climate change, community education and awareness, liaison with Tasmania Fire Service, monitoring and evaluation.
 - Best Management Practices – contains a series of management procedures for use when implementing the fire management plans and includes procedures on construction and maintaining fire trails and walking tracks, fire breaks and defensible space, planned burns, weed management and monitoring.
 - Reserve Bushfire Management Plans – individual fire management plans have been developed for Bedlam Walls Reserve, Mortimer Bay Coastal Reserve, Natone Hill Bush Park, Roches Beach Coastal Reserve and Nowra Bushland Reserve, Rosny Foreshore Reserve, Seven Mile Beach Coastal Reserve, Waverley Flora Park, Pilchers Hill Reserve, Lauderdale Wetlands Reserve, Rosny Hill Nature Recreation Area, Glebe Hill Reserve, Rokeby Hills Reserve, Roscommon Reserve and Canopus Centauri Bushland Reserve.

There was 1 reserve added to the previous bushland management strategy, that being; Wiena Reserve. There have been 4 reserves removed from the 2010 revision as they are either not bushfire prone, managed vegetation or the land is no longer managed by Council. Those reserves are Bellerive/Howrah Foreshore Reserve, 45 and 45A Goodwins Road, Gordons Hill Reserve and Lauderdale Dunes.

2.4. Response to Community Feedback

There were several stages in the community consultation process and once the final draft Strategy was developed the community were asked to provide comments. The attached document “Response to Public Submissions on the Draft Revised Bushfire Management Strategy” (refer Attachment 2) provides how the final Strategy will incorporate the submissions. There are no major issues identified through the consultation process; the minor corrections as per the recommendations are simple minor edits and the provision of up to date information. Comments relating to 45 and 45A Goodwins Road have been included in this document and Council may wish to consider its inclusion based on the issues raised by the respondents.

2.5. The draft Bushfire Management Strategy recommendations are.

- **Recommendation 1**

A permanent Technical Officer Fire and Bushland Management position to provide specialised operational and technical advice to internal and external stakeholders. This is a reallocation of human resources within the Operations Group and not a new position in the establishment.

- **Recommendation 2**

Advancement of Fire and Bushland Management Team’s certified Tree Fallers from intermediate to advanced qualification. This will allow the staff to develop advanced land management, and fire and ecology qualifications within Fire and Bushland Management Team.

- **Recommendation 3**

Further investigation into the procurement of a dedicated 4WD Fire and Bushland Management Team water cart for planned burning with a minimum 3000 litre water capacity. This is a risk mitigation issue in terms of planned burns.

- **Recommendation 4**

Specialist plant and machinery operators to be included in the Plant and Equipment section of the Multi-Use Registrar to suit operational requirements. This is an administrative efficiency and is already underway.

- **Recommendation 5**

Annual meetings held between Council's Fire and Bushland Management Team, Landcare and Coast Care groups to discuss relevant annual planned works. This is a communication matter to ensure the operations of both groups do not interfere or hinder each other and contribute to a more efficient use of Council's Natural Resources.

- **Recommendation 6**

During future developments of Bushfire Management Plans and Reserve Activity Plans, Council's Fire and Bushland Management Team, Natural Resource Management and consultants are to be involved at consultation stage to alleviate conflicting recommendations. This is about effective use of Council's resources and ensuring there is a consistent approach to Council's operations.

- **Recommendation 7**

Council's Fire and Bushland Management Team develop and implement a community awareness and education program structured on the 2016-2021 Documents.

- **Recommendation 8**

Council's Fire and Bushland Management Vegetation Monitoring Program be further incorporated into Council's Fire Management GIS context. This is an operational efficiency issue as is the recommendation to expand the Vegetation Monitoring Program to include threatened species plots.

- **Recommendation 9**

Implement Recommendation 1 to allow for accurate internal and external annual dataset sharing, and database management for Council's Fire and Bushland Management Team operations.

- **Recommendation 10**

- Council, with guidance from TFS, to investigate a formalised additional vehicle escape route for residents living at Mt Rumney.
- Future subdivisions within and adjacent to Mt Rumney to consider allowing a vehicle escape route for residents living at Mt Rumney.
- Future Bushfire Management Strategy reviews be undertaken internally by Council's Fire and Bushland Management Team.

2.6. The Management Procedures from the draft Best Management Practice Guidelines deal with the following:

- fire trail construction;
- fire trail inspection and maintenance;
- trail closure and rehabilitation;
- foot track construction, inspection and maintenance;
- creating defensible spaces from bushfire;
- maintaining a defensible space;
- planned burning;
- weed control, pre and post burning;
- co-ordinating bushfire management activities;

- recording fires;
- recording bushfire management activities; and
- post fire recovery.

2.7. The draft Documents contain a 5 year On-Ground Works Program 2016-2021 which guides operational matters, including prescribed burns, for each of the 15 Reserves and is broken down to individual Vegetation Management Units. This program will guide scheduling of works and budgeting of on-ground activities over the 5 years.

3. CONSULTATION

3.1. Community Consultation

The community was extensively consulted in the development of the Bushfire Management Strategy. Specific consultation steps included a call for submissions from Landcare/Coastcare groups, a “walk and talk” with adjacent landowners at each of the reserves, and other interested stakeholders within the community. Public newspaper advertisements were used to advise the general community that a draft had been produced and inviting comment.

3.2. State/Local Government Protocol

The following State Government or state based organisations were consulted in developing the Bushfire Management Strategy:

- TFS;
- DIPWE; and
- Aboriginal Heritage Tasmania.

3.3. Other

Aldermen were presented the draft Bushfire Management Strategy on Monday, 8 August 2016.

4. STRATEGIC PLAN/POLICY IMPLICATIONS

- 4.1.** Council's Strategic Plan 2016/2026 under the Goal "A people city" has the following Promoting and enhancing safety Strategy:

"1.14 – Develop and implement plans and programs addressing personal and community safety".

- 4.2.** Council's Strategic Plan 2016/2026 under the Goal "An environmentally responsible city" has the following Strategy:

"4.1 – Protect natural assets within Council managed land through development and review of strategies in relation to bushfire, weed, land and coastal management".

- 4.3.** Council's Strategic Plan 2016/2026 under the Goal "Council's assets and resources" has the following Statutory and legal responsibilities Strategy:

"7.10 – Ensure appropriate management of risk to reduce exposure associated with Council's operations and activities".

5. EXTERNAL IMPACTS

Nil.

6. RISK AND LEGAL IMPLICATIONS

- 6.1** The various bushfire management plans were developed to ensure they comply with the Fire Services Act 1979, Local Government Act 1993, Threatened Species Act 1995, Local Government (Building and Miscellaneous Provisions) Act 1993, Environmental Management and Pollution Control Act 1994, Environment Protection Policy (Air Quality) 2004, Tasmanian Air Quality Strategy 2006, State Policy on Water Quality Management 1997, Aboriginal Relics Act 1975 and Weed Management Act 1999.

- 6.2** Individual bushfire management plans were risk assessed using the National Emergency Risk Assessment Guidelines (NEMC 2010).

7. FINANCIAL IMPLICATIONS

Funding to implement the Bushfire Management Strategy and the Bushfire Management Plans will be considered by Council as part of future Annual Plans.

The adoption of the Bushfire Management Strategy has a potential direct financial impact on future Annual Plans. The impact relates to Recommendation 3 for the purchase of new plant and equipment.

8. ANY OTHER UNIQUE ISSUES

Nil.

9. CONCLUSION

9.1. A Bushfire Management Strategy has been developed to address Council's responsibilities as a landowner and land manager.

9.2. The strategy is consistent with Council's statutory and risk management obligations.

9.3. The community were extensively consulted in the development of the Bushfire Management Strategy.

Attachments: 1. Bushfire Management Strategy (66)
2. Response to Public Submissions on the Draft Revised Bushfire Management Strategy (12)

Ross Graham

ACTING GROUP MANAGER ASSET MANAGEMENT

Clarence City Council

Bushfire Management Strategy

for Council Owned and Controlled Land

Revised
June 2016
Clarence City Council

Contents

	<i>Page</i>
1. Clarence City Council Bushfire Management Policy	2
2. Introduction	3
3. Recommendations	Error! Bookmark not defined.
4. Structure of the Bushfire Management Strategy	7
5. Review of the Previous Strategy	10
6. Bushfire Management Strategy (BMS)	18
6.1 Adaptive Management Approach	18
6.2 Preparedness	19
6.3 Mitigation	20
6.4 Response	21
6.5 Recovery	22
6.6 Municipal Fire History	Error! Bookmark not defined.
6.6.1 Bushfire History	23
6.6.2 Planned Burn History 1984-2015	24
7. Statutory Responsibilities	26
7.1 National Standards and Guidelines	Error! Bookmark not defined.
8. Implementation of the Strategy	Error! Bookmark not defined.
8.1 Administration	33
8.1.1 Responsibility for Implementing the Bushfire Management Strategy	33
8.1.2 Training	34
8.1.3 Coordination and Consultation	34
8.1.4 Resources	34
8.2 Use of Fire in the Sustainable Management of Bushland	35
8.3 Bushfire Hazard Reduction	38
8.3.1 Defendable Spaces	38
8.3.2 Hazard Reduction on Private Property	40
8.3.3 Vineyards and Smoke Taint	40

Attachment 1

8.4	Bushfire Risk Assessment	40
8.5	Likely Effect of Climate Change on Bushfire Risk	46
8.6	Community Involvement	46
8.7	Community Education and Awareness	47
8.7.1	Rubbish Dumping in Reserves	48
8.8	Liaison with the Tasmania Fire Service (TFS)	48
8.9	Threatened or Rare Species	49
8.10	Cultural Heritage	49
8.11	Monitoring and Evaluation	50
8.11.1	Performance Indicators	50
8.12	Maintaining Records	51
8.12.1	Bushfire Management Activities	51
8.12.2	Fire Management Geographic Information System (GIS) Context	51
8.13	Review of the Bushfire Management Strategy	51
8.13.1	Revision of the Bushfire Management Plans (BMPs)	52

Bibliography

Glossary

Appendix A - Best Management Practice Guidelines

Appendix B - Reserve Bushfire Management Plans (BMPs)

Appendix C – 5 Year On-Ground Works Schedule

Appendix D – Summary of Comments

FIGURES

Figure 1 – City of Clarence boundary	1
Figure 2 – Fire and Bushland Management objectives	3
Figure 3 – Municipal areas classified as bushfire-prone under the <i>Clarence Interim Planning Scheme 2015</i>	4
Figure 4 – Council’s adaptive approach	19

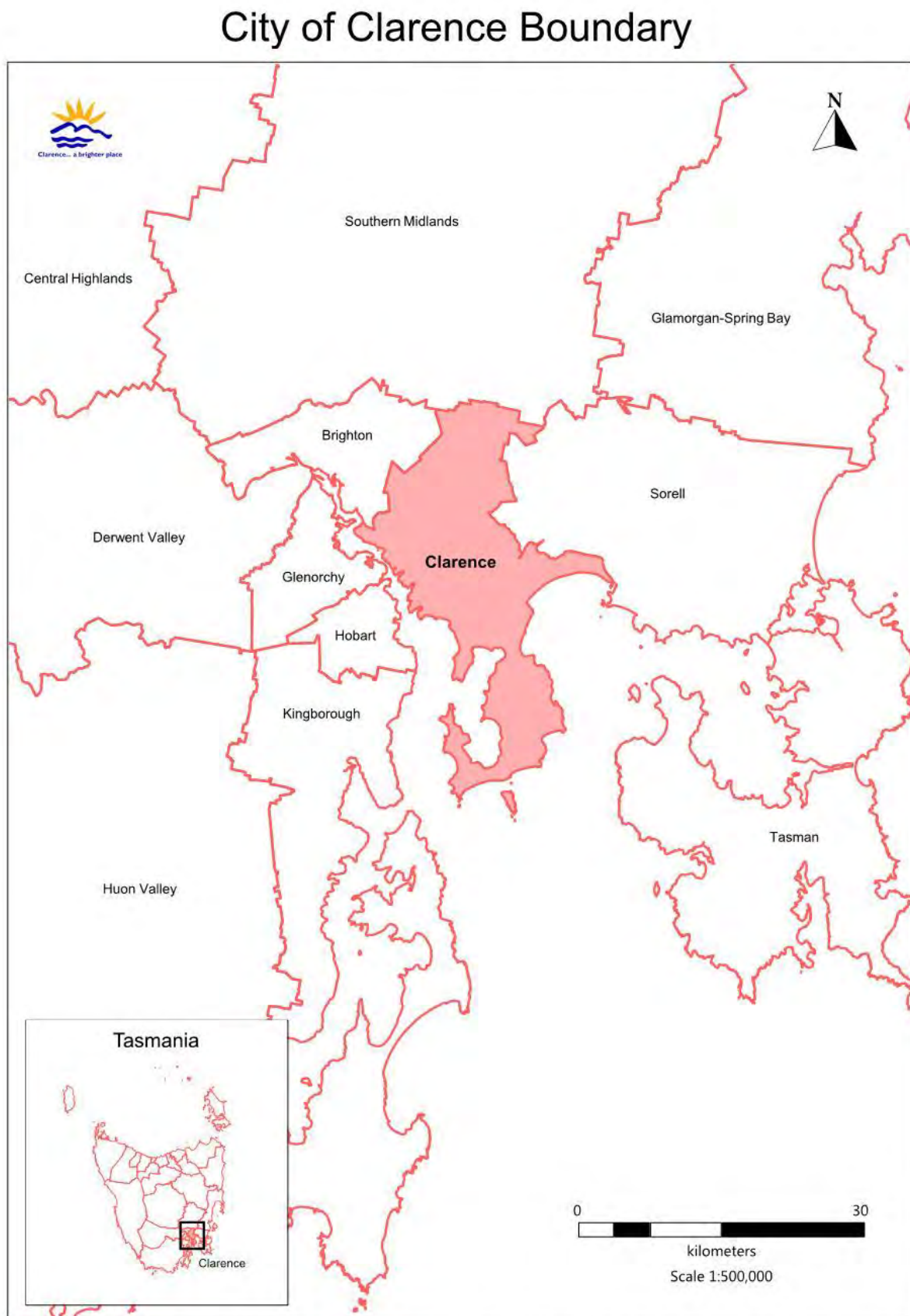
Attachment 1

TABLES

Table 1 – Annual operational deliverables by Council’s Fire and Bushland Management Team	10
Table 2 – Municipal bushfire history (1967-2013)	23
Table 3 – Municipal planned burns conducted (1984-2015)	24
Table 4 – Municipal hectares burnt through planned burning (1984-2015)	25
Table 5 – CCC scheduled planned burns with area (2016-2021)	25
Table 6 - Tasmanian FDR system	38
Table 7 –BMP revision procedures	52

Attachment 1

Figure 1 – City of Clarence boundary



1. Clarence City Council Bushfire Management Policy

Clarence City Council Bushfire Management Policy

(Adopted 2004)

In order to fulfil its responsibilities as a landowner, and in recognition of its community role in land management Clarence City Council will:

- Implement current recommended practices for bushfire risk management on all land under its control.
- Encourage all owners of private and public bushland areas within Clarence to implement current recommended practices for bushfire risk management.
- Meet all its statutory obligations for bushfire management.
- Educate the Clarence community regarding the risks from bushfires in collaboration with the Tasmania Fire Service (TFS).
- Consult with community and other stakeholders when planning bushfire management activities on Council managed land.
- Use planned burning as a management tool in areas to reduce bushfire risk, and maintain and enhance biodiversity.

2. Introduction

This Bushfire Management Strategy (BMS) has been prepared by Clarence City Council's Fire and Bushland Vegetation Management Team. It is the third revision and expansion of Clarence City Council's existing BMS which commenced in 1997.

This review builds on previous methodologies and principles as still valid, and is heavily influenced by a multi-agency approach, targeting areas for maximum risk reduction, utilising Geographic Information Systems (GIS) and increasing Council's Fire and Bushland Management Team's operational outputs.

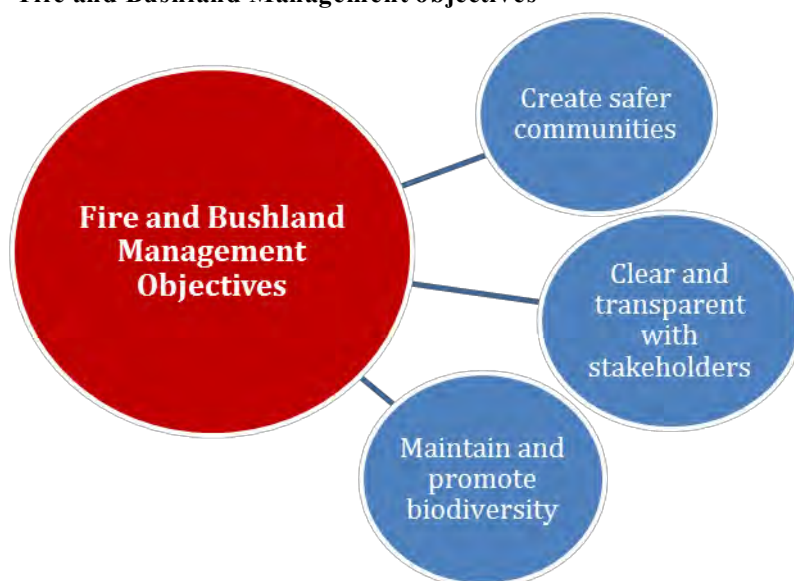
Council's BMS has been developed to assist in delivering a holistic management approach to mitigating impacts from a low probability but high impact event to the municipality - bushfire. Not being able to predict such high impact events creates the need for resilience thinking.

The aim of this revision is to ensure that Council's bushfire management practices are based on current recommended practices for protecting life and assets from bushfires, and to maintain and enhance biodiversity within land managed by Council.

Council's BMS addresses bushfire management challenges that have arisen from the expansion of residential developments within bushland areas, community concerns at the potential threat of bushfire, on ground works and associated operational restraints, wider awareness of the ecological role of fire, and the statutory responsibilities of Local Governments in bushfire hazard management.

As of December 2015, approximately 78% of the Clarence municipality has been classified as bushfire-prone (see figure 3) under the *Clarence Interim Planning Scheme 2015*. Any future developments within mapped areas may require a Bushfire Risk Assessment and a Bushfire Hazard Management Plan.

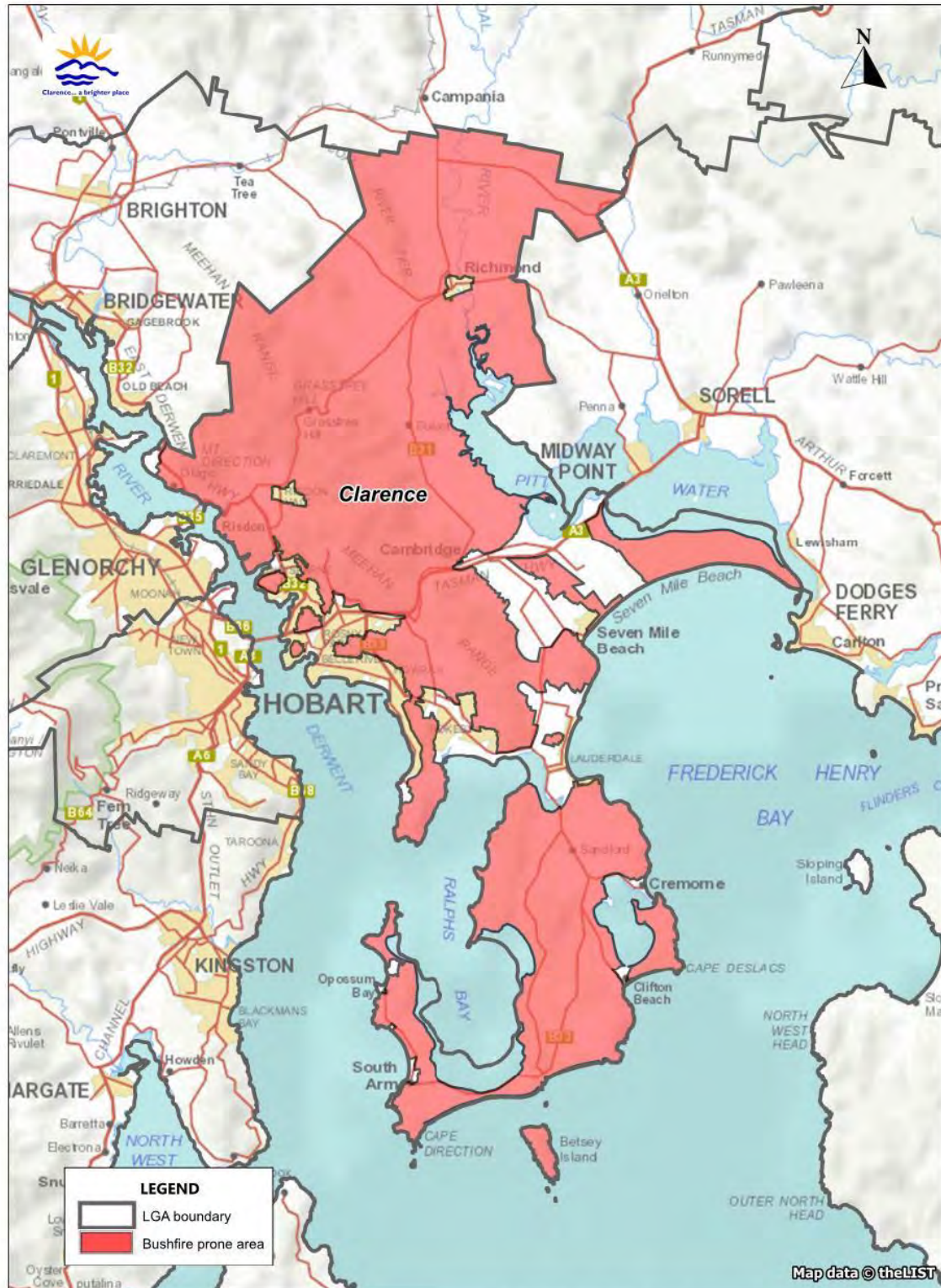
Figure 2 – Fire and Bushland Management objectives



Attachment 1

Figure 3 – Municipal areas classified as bushfire-prone under the *Clarence Interim Planning Scheme 2015*

City of Clarence Bushfire Prone Areas Under CIPS 2015



Created On: 17/06/2016. Original paper size: A4. Source: Base data supplied by the LIST, Copyright State of Tasmania. Copyright: Clarence City Council.

3. Recommendations

The review makes 10 recommendations as follows:

Recommendation 1

The permanent creation of a Technical Fire and Bushland Management Team position to provide specialised operational and technical advice to internal and external stakeholders.

Recommendation 2

- Advancement of Fire and Bushland Management Team's certified Tree Fallers from intermediate to advanced qualification.
- Develop advanced land management, and fire and ecology qualifications within Fire and Bushland Management Team.

Recommendation 3

- Replacement of 2wd Fire and Bushland Management Team's vehicle to 2 door 4wd Toyota Land Cruiser ute or similar.
- Future Fire and Bushland Management Team's vehicles to be replaced with 4wd Toyota Land Cruiser utes or similar.
- Permanent allocation of mud-terrain tyres on all Fire and Bushland Management Team's vehicles.
- Further investigation into procurement of dedicated 4wd Fire and Bushland Management Team water cart for planned burning with minimum 3000l water capacity.

Recommendation 4

Specialist plant and machinery operators are included in the Plant and Equipment section of the Multi Use Registrar to suit operational and legislative requirements.

Recommendation 5

Annual meetings held between Council's Fire and Bushland Management Team, Landcare and Coastcare groups to discuss relevant annual planned works.

Recommendation 6

During future developments of Bushfire Management Plans (BMPs) and Reserve Activity Plans (RAPs), Council's Fire and Bushland Management Team, Natural Resource Management and consultants are to be involved at consultation stage to alleviate conflicting recommendations.

Recommendation 7

Council's Fire and Bushland Management Team develop and implement a community awareness and education program structured on the 2016-2021 BMS.

Recommendation 8

- Council's Fire and Bushland Management Vegetation Monitoring Program (VMP) be further incorporated into Council's Fire Management GIS context.
- Expansion of the VMP to include threatened species.
- Future Development of VMP to be in consultation with the Threatened Species Section of Department of Primary Industries, Parks, Water and Environment (DPIPWE), and in accordance with any conditions attached to a permit to take threatened species.

Note: For successful implementation of recommendation 8, recommendation 1 is to be implemented prior.

Recommendation 9

Implement recommendation 1 to allow for accurate internal and external annual dataset sharing, and database management for Council's Fire and Bushland Management Team operations.

Recommendation 10

- Council with guidance from TFS to investigate a formalised additional vehicle escape route for residents living at Mt Rumney.
- Future subdivisions within and adjacent to Mt Rumney to consider allowing a vehicle escape route for residents living at Mt Rumney.
- Future BMS reviews undertaken internally by Council's Fire and Bushland Management Team.

4. Structure of the Bushfire Management Strategy

This third revision maintains the previous structure; an introductory strategy document, a set of best management practices guidelines (Appendix A), BMP's for individual reserves including a summary of community concerns and comments (Appendix B), a five year on-ground works schedule to assist with planning and budgeting (Appendix C), and a summary of comments document (Appendix D).

The BMS identifies all of Clarence City Council's statutory bushfire management responsibilities, sets overall objectives and confirms a policy framework, and outlines the practices, procedures and actions required to meet them. It also includes general information on bushfire management, details of the bushfire risk assessment process used in the reserve BMPs, including assumptions, methods and data sources, and a glossary of key terms.

The 'adaptive management' approach recommended in this strategy will help overcome the lack of information on the long-term responses of the vegetation to fire. During 2012 Council's Fire and Bushland Management Team established and annually re-assess a VMP specific to the treatments recommended under the BMS. This program will assist to provide long term data sets to support treatments or modify post evaluation (see section 6.1 and 8.11).

Appended to this strategy are the following:

A) Best Management Practice Guidelines

These provide guidelines and procedures for the following bushfire management activities:

- fire trail construction
- fire trail inspection and maintenance
- trail closure and rehabilitation (for trails no longer required for bushfire management)
- foot track construction, inspection and maintenance (where used for bushfire management)
- creating a defensible space from bushfires
- maintaining defensible spaces
- planned burning
- weed control before and after burning
- coordinating bushfire management activities with other management activities
- recording fires
- recording bushfire management activities
- post fire recovery.

B) Reserve Bushfire Management Plans (BMPs)

This appendix contains revised BMPs for the following Clarence City Council reserves:

Bedlam Walls Reserve

Canopus-Centauri Bushland Reserve

Glebe Hill Reserve (incorporating additional 3.4 hectares formerly 50 Minno Street, Howrah)

Rokeby Hills Reserve (formerly Kuynah Bushland Reserve, incorporating Toorittya Bushland Reserve, and an additional 32 hectares of Public Open Space throughout Rokeby Hills)

Lauderdale Wetlands Reserve

Mortimer Bay Coastal Reserve

Natone Hill Bush Park

Pilchers Hill Reserve

Roches Beach Coastal Reserve and Nowra Bushland Reserve

Rosny Foreshore Reserve

Rosny Hill Reserve

Roscommon Reserve

Seven Mile Beach Coastal Reserve

Waverley Flora Park

New plans for the following reserve:

- Wiena Reserve

The four following reserves have had BMPs removed as they are either not bush fire-prone, managed vegetation, or the land is no longer managed by Council:

- Bellerive/ Howrah Foreshore
- 45 and 45A Goodwins Road
- Gordons Hill Reserve
- Lauderdale Dunes

These plans recommend treatments for the use of fire as a management tool in each reserve for the next five years to:

- target area for maximum risk reduction
- reduce bushfire hazard to protect assets from bushfires
- maintain the long-term viability of the ecosystems in each reserve
- assist in the removal of weeds and the regeneration of degraded bushland.

The long-term effects of fire on the habitats of native flora and fauna in Australia are still imperfectly understood. However, available information on the fire ecology of plant communities, and indigenous flora and fauna species within Clarence City Council reserves has been incorporated into the BMPs. Where the required information has not been available, recommendations in the plans are based on a precautionary approach.

It must be noted that it will not be possible to prevent bushfires impacting land managed by Clarence City Council. On days of low-moderate Fire Danger Rating (FDR) suppression of small fires is possible, however on days of very high or above FDR fires will be unpredictable, uncontrollable and fast-moving, with potential to burn substantial areas of the reserves causing damage to assets, environmental values, and even loss of life. These fires may also impact adjoining land, further threatening life and assets. FDR ratings above severe occur in Tasmania around three times a year. Ratings above extreme have occurred only half a dozen times in Tasmania during the last 90 years. However, with the impact of climate change, the potential for such days is increasing (TFS, 2016).

The Australian Standard for Construction of buildings in bushfire-prone areas (AS:3959 – 2009) uses a FDR of 50 to determine the Bushfire Attack Level (BAL) for buildings that need to comply with the standard. An FDR of 50 is the boundary between Very High and Severe Fire Danger Rating.

The BMPs aim to mitigate impacts from bushfire by reducing and managing fuel loads and associated risks influencing ignitions and spread of fire within Council reserves, and in turn reduce the risk of loss of life, property or assets in and around the reserves.

Properties and assets adjacent to reserves will need to be maintained by owners as defensible spaces (section 8.3.1) as outlined in the TFS document *Bushfire Survival Plan 2015-16* or its most current successor.

C) 5 Year On-Ground Works Schedule

This appendix lists the on-ground works recommended in each reserve BMP during 2016-2021, along with the scheduling of the works and the approximate length or area covered. It is designed to assist implementation and budgeting of on-ground bushfire management activities.

D) Summary of Comments

This appendix summarises submissions on the draft revised Bushfire Management Strategy and reserve BMPs by the community and other stakeholders.

5. Review of the Previous Strategy

As part of this revision a review of the implementation of the previous strategy was undertaken; particularly the reserve BMPs.

The reviewed 2016-2021 BMPs have been derived from an operational approach, planning for future developments and sub-divisions, not just a “tick box” exercise. This approach has the key objective of creating a holistic end process.

The detailed results of the review are included in the revised BMPs, and are summarised below.

Establishment of full time Fire and Bushland Vegetation Management Team:

During 2012 Council established a permanent full time Fire and Bushland Vegetation Management Team. The team consists of a Co-ordinator, Works Officer and three Fire and Bushland Workers. This has allowed Council to meet requirements under the *Fire Service Act 1979* whilst: allowing continuity of treatments and programs, retainment of specialised municipal knowledge and experience previously lost through seasonal crew positions. For example annual maintenance programs of defensible spaces.

Table 1 – Annual operational deliverables by Council’s Fire and Bushland Management Team

Bushland managed	Approximately 1400 hectares
Defendable spaces maintained	Approximately 60 hectares
Area broadscale burnt though planned burning	Approximately 20 hectares
Area thinned and heap burnt	Approximately 15 hectares
Fire trail network managed	Approximately 300 kilometres

Crew:

Crew operational experience is at a high standard. The fulltime status has allowed continuity of annual work programs. Crew has sound knowledge of bushland reserves and annual maintenance programs. The current structure of Council’s Fire and Bushland Management Team could be strengthened by the permanent creation of a Technical Fire and Bushland Management position, reporting to the Fire and Bushland Vegetation Management Coordinator. The operational outputs would be maintained by a Fire and Bushland Vegetation Management Works Officer with two Fire and Bushland Vegetation Management Workers (this is the current temporary Fire and Bushland Management Team structure at time of review) i.e. The number of positions in the establishment would remain the same.

Recommendation 1

The permanent creation of a Technical Fire and Bushland Management Team position to provide specialised operational and technical advice to internal and external stakeholders.

Attachment 1

Training:

Crew skills are at a good standard to meet operational requirements at time of review. Succession planning is in place and will continue thorough out duration of revised strategy. Advancement of certified Tree Fallers from intermediate to advanced qualifications is recommended, in addition developing advanced land management, and fire and ecology qualifications within work group. Challenges are ongoing in resourcing specialised fire management training.

Recommendation 2

- Advancement of Fire and Bushland Management Team's certified Tree Fallers from intermediate to advanced qualification.
- Develop advanced land management, and fire and ecology qualifications within Council's Fire and Bushland Management Team.

Fire and Bushland Management Vehicles:

1) At time of review Fire and Bushland Management Team are allocated three vehicles:

- 2 door 4wd firefighting vehicle (Co-ordinator)
- 2 door 2wd vehicle (Works Officer)
- 4 door 4wd firefighting vehicle (Fire Crew)

Until 2015 Fire and Bushland Management Team was allocated only two vehicles (co-ordinator and crew vehicle), this created gross vehicle mass (GVM) weight restrictions for the crew vehicle. On a daily basis the crew vehicle would have four members, associated personal protective equipment, equipment and a permanent 500kg fire fighting tanker. The one crew vehicle allocation also reduced operational outputs through not being able to be split and complete multiple tasks at a given time.

The third vehicle (Works Officer) was allocated in 2015 and now enables Fire and Bushland Management to maximise operational outputs. The weight restriction also has been alleviated through splitting the crew and equipment between the Crew and Works Officer vehicles.

2) Majority of operational work is in bushland reserves which post rain and during winter become slippery. Recommend permanent allocation of mud terrain tyres to all Fire and Bushland Management Team vehicles.

Recommend 2wd vehicle be replaced with 4wd vehicle.

3) Low range gear ratio on current 4wd vehicles is not appropriate for operational use, being too high geared. When working in steep bushland areas with a 500kg fire fighting unit a lower gear ratio (similar to that in Toyota Land Cruisers) is more suited for controlling vehicles traction down fire trails.

Attachment 1

Recommend future Fire and Bushland Management Team vehicle replacements are 4wd Toyota Land Cruiser utes or similar as low range gear ratios more suitable for operational requirements.

The resource sharing of Council's Civil Construction water cart truck for planned burning poses operational restraints. Currently Fire and Bushland Management Team provide very limited notice for requirement of water cart to Civil Construction.

This is due to associated planned burning weather restraints. This creates flow on disruptions to Civil Constructions planned work programs.

Recommend when possible, Fire and Bushland Management Team notify Civil Construction of intent to burn dependant on weather.

Recommend further investigation into procurement of dedicated 4wd Fire and Bushland Management Team water cart for planned burning with minimum 3000l water capacity.

Recommendation 3

- Replacement of 2wd Fire and Bushland Management Team's vehicle to 2 door 4wd Toyota Land Cruiser ute or similar.
- Future Fire and Bushland Management Team's vehicles to be replaced with 4wd Toyota Land Cruiser utes or similar.
- Permanent allocation of mud-terrain tyres on all Fire and Bushland Management Team's vehicles.
- Further investigation into procurement of dedicated 4wd Fire and Bushland Management Team water cart for planned burning with minimum 3000l water capacity.

Contracted Plant and Machinery

With the constant expansion of bushfire-prone areas managed by Council's Fire and Bushland Management Team (see table 1), operational restraints arose with maintaining defendable spaces during fire permit periods, and meeting legislative requirements. A posi track Bobcat with front deck slasher and excavator with drum mulcher is now contracted annually during the fire permit period as required to complete the annual slashing program on time.

Council's operational Fire and Bushland Management Team also runs an annual brushcutting program for defendable spaces.

Recommendation 4

Specialist plant and machinery operators are included in the Plant and Equipment section of the Multi Use Registrar to suit operational and legislative requirements.

Defendable Spaces:

Attachment 1

At time of review Fire and Bushland Management Team annually manage approximately 60 hectares of defendable spaces to current TFS guidelines. Ongoing annual maintenance is required and occurring. Operational restraints towards maintenance and establishment of defendable spaces are evident, works programs are based on a relative risk ranking.

The BMS review has identified areas requiring re-establishment of defendable spaces; these have been outlined in Appendix C.

Revegetation planting occurred in some defendable spaces by Landcare Groups and adjacent land owners. This, in most circumstances, makes the defendable spaces non-compliant with guidelines and maintenance more costly. Annual meetings and information sessions with stakeholders in targeted areas should alleviate reoccurrences.

Recommendation 5

Annual meetings held between Council's Fire and Bushland Management Team, Landcare and Coastcare groups to discuss relevant annual planned works.

Fire Trails:

All fire trails included in BMPs have had regular inspections with maintenance implemented as specified on an operational needs basis. Signposting of all fire trails was recommended during the previous BMS, this has since been re-evaluated and only those fire trails identified as strategic under the Hobart Fire Protection Plan (noted in BMPs) will be signposted. This will allow for less confusion when navigating larger bushland reserves, as strategic fire trails are the main access routes.

During 2015 and 2016 an extensive upgrade and establishment program was implemented.

At time of review the fire trail network within the strategy is of high standard. The amended Glebe Hill Reserve and Rokeby Hills Reserve polygons (since 2016 Council acquirement of additional land) will need upgrade/ maintenance to meet most current operational requirements to manage defendable spaces, manage weed populations and allow access for the TFS. Council's Fire and Bushland Management Team is seeking written approval as specified in respective Conservation Covenants at time of strategy review.

Prior to the establishment of Council's Fire Management GIS context (developed during 2013), very limited data was available to identify formalised fire trail networks on Council land.

The most current fire trail data has been included during the review and will be shared, in addition with reviewed BMPs, with all Council staff to clearly delineate fire trail networks within BMPs.

Bushfires:

Since the last strategy revision in 2011 there has been no large destructive bushfires to impact any reserves covered by BMPs. During March 2013, approximately 500 hectares of dry sclerophyll forest burnt throughout the Meehan Ranges originating from Downhams Road, Risdon Vale. The

Attachment 1

fire did not directly impact Pilchers Hill Reserve; however reestablishment and establishment of containment lines did occur in sections of Vegetation Management Unit (VMU) 7.

Natone Hill Bush Park, Waverley Flora Park, Nowra Bushland Reserve, Seven Mile Beach Coastal Reserve all experienced bushfires less than 1 hectare during the last review. There have been no reports of damage to assets in, or adjoining reserves included in the BMS due to bushfires.

Planned Burning:

53 planned broadscale burns were conducted during the previous BMS by Council's Fire and Bushland Management Team covering approximately 136 hectares (see Table 3 and 4). No planned burns escaped, nor were any assets damaged by the planned burns. In addition approximately 40 hectares annually of bushland underwent planned burning utilising the heap burning regime (thinning vegetation and burning in bonfires). All historical planned burns and bushfire records have been updated on Council's Fire Management GIS context during the review process. In addition, Council's Fire and Bushland Management Team have developed a new Operational Burn Plan form (document stating how each planned burn will be undertaken, including special values, lighting techniques etc.) during the BMS review.

Management of Council managed land:

Management of Council managed land needs to be better coordinated and communicated to all stakeholders to avoid conflicting management approaches including:

- Community groups (official and unofficial) planting trees and shrubs in areas that are identified as defendable spaces and fire trails in BMPs.
- Council Operations Groups (Fire and Bushland Management Team, and Parks and Community Facilities Team) arriving at locations identified in annual works programs to conduct maintenance to find work has been outsourced to contractors.
- Design of management plans such as RAPs and BMPs needs to have holistic management approach. For example RAPs previously have recommend landscaping of reserve entrances which contradicts fire trail standards specified within respective BMPs.
- The community awareness and education program recommended in the previous two strategies has not been implemented. This has strongly influenced the unsuccessful implementation of recommendations within BMPs, ongoing associated remedial expenses, and frustrations between stakeholders.

The community awareness and education program needs to be based on a holistic management approach, with all stakeholders internal and external to Council working as a collaborative as opposed to "we do our bit, and you do your bit". This will pose challenges as most stakeholders will have different opinions and beliefs on most suitable practices.

Attachment 1

To remedy previous implementation failures, ownership of this task should be given. It is recommended Council's Fire and Bushland Vegetation Management Works Officer be assigned to co-ordinate this community awareness and education program.

This program also emphasises the operational need to create a permanent Technical Fire and Bushland Management position, so required actions such as this within the BMS can be successfully implemented and managed.

Recommendation 6

During future developments of BMPs and RAPs, Council's Fire and Bushland Management Team, Natural Resource Management, and consultants are to be involved at consultation stage to alleviate conflicting recommendations.

Recommendation 7

Fire and Bushland Management Team develop and implement a community awareness and education program structured on the 2016-2021 BMS.

Weed management:

Pre and post planned burn weed management has been implemented throughout the municipality in VMUs that have undergone planned burning. Ongoing monitoring and maintenance will be required respectively throughout the duration of the revised BMS, and continued for VMUs scheduled for planned burning throughout the revised BMS.

Additionally areas not treated by fire with large weed communities have been targeted.

Most areas targeted have experienced significant reduction in coverage; however some areas require further treatment and have been identified in respective BMPs.

Many weed control efforts have been coordinated across Council with contractors, work for the dole programs and Landcare groups providing significant support to ongoing maintenance.

Vegetation Monitoring:

During 2012 Council's Fire and Bushland Management Team established a VMP. The objective of this program is to gain datasets on treatments applied by Council's Fire and Bushland Management Team towards vegetation and soil health within bushland managed by Council.

These datasets assist in long term monitoring of effectiveness of prescribed treatments, and also satisfying requirements as outlined in permits to take threatened plants for vegetation management from DPIPWE.

The program includes: pre and post burn photo point monitoring, flora surveys, basic soil health and overall vegetation condition.

Attachment 1

As at June 2016 the program incorporates 22 monitoring sites, with an additional 10 recommended for establishment pre 2021.

The future expansion on the monitoring program should include threatened species and be developed in consultation with the Threatened Species Section of the DPIPWE. It should also be in accordance with any conditions attached to a permit to take threatened species.

The permanent creation of a Technical Fire and Bushland Management position will allow for the implementation of a more formalised and effective program. NRM South will be undertaking a case study of Council's Fire and Bushland Management VMP during 2016.

Recommendation 8

- Fire and Bushland Management Vegetation Monitoring Program (VMP) be furthered incorporated into Council's Fire Management GIS context.
- Expansion of the VMP to include threatened species.
- Future Development to be in consultation with the Threatened Species Section of Department of Primary Industries, Parks, Water and Environment (DPIPWE), and in accordance with any conditions attached to a permit to take threatened species.

Note: For successful implementation of recommendation 8, recommendation 1 is to be implemented prior.

Geographic Information System (GIS):

During 2013 Council's Fire and Bushland Management Team in conjunction with Council's GIS Systems Asset Officer established an extensive Fire Management GIS Context. This context is updated multiple times annually and designed as a central repository for Council's Fire and Bushland Asset Management. Datasets from this context are shared annually with the TFS Fuel Reduction Unit, Natural Values Atlas, and The Land Information System Tasmania (the LIST).

The annual process of gathering, compiling, storing and sharing data specific to annual operational works programs within Council's Fire and Bushland Management Team is time consuming, and requires analysing and documenting all aspects from planning to implementation. This includes obtaining and storing DPIPWE permits, Conservation Covenant authorities, pre and post burn monitoring, ignition dates, location and dimensions of defensible spaces, and polygons of VMUs burnt.

Microsoft Excel and Project are used to store these datasets within Council's Fire and Bushland Management Team. The continuity of gathering accurate annual datasets is a priority, external stakeholders such as TFS, DPIPWE, fire and ecological consultants, and Bushfire Hazard Practitioners require the most current data to develop operational advice and prepare reports.

Attachment 1

Council's Fire and Bushland Management Team also use this data to audit the effectiveness of treatments at each BMS review.

The requirement of database management, and sharing of datasets, emphasises the need to create a permanent Technical Fire and Bushland Management position.

Recommendation 9

Implement recommendation 1 to allow for accurate internal and external annual dataset sharing, and database management for Council's Fire and Bushland Management Team operations.

Planning for future:

- The revised Rokeby Hills Reserve BMP incorporates 32 hectares of Public Open Space (POS) acquired by Council in 2016. This revision has been based on an adaptive management approach considering future subdivisions on adjacent privately owned land; some fire trail alignment has been designed to double as defensible spaces reducing management costs and ecological impact.
- Areas throughout the municipality such as Mt Rumney have limited escape routes for residents in event of bushfire. Future subdivisions should take this into consideration, or an existing route should be investigated and formalised by Council and TFS.
- Recommend all future BMS reviews be undertaken internally by Council's Fire and Bushland Management Team.

Recommendation 10

- Council with guidance from TFS to investigate a formalised additional vehicle escape route for residents living at Mt Rumney.
- Future subdivisions within and adjacent to Mt Rumney to consider allowing a vehicle escape route for residents living at Mt Rumney.
- Future BMS reviews undertaken internally by Council's Fire and Bushland Management Team.

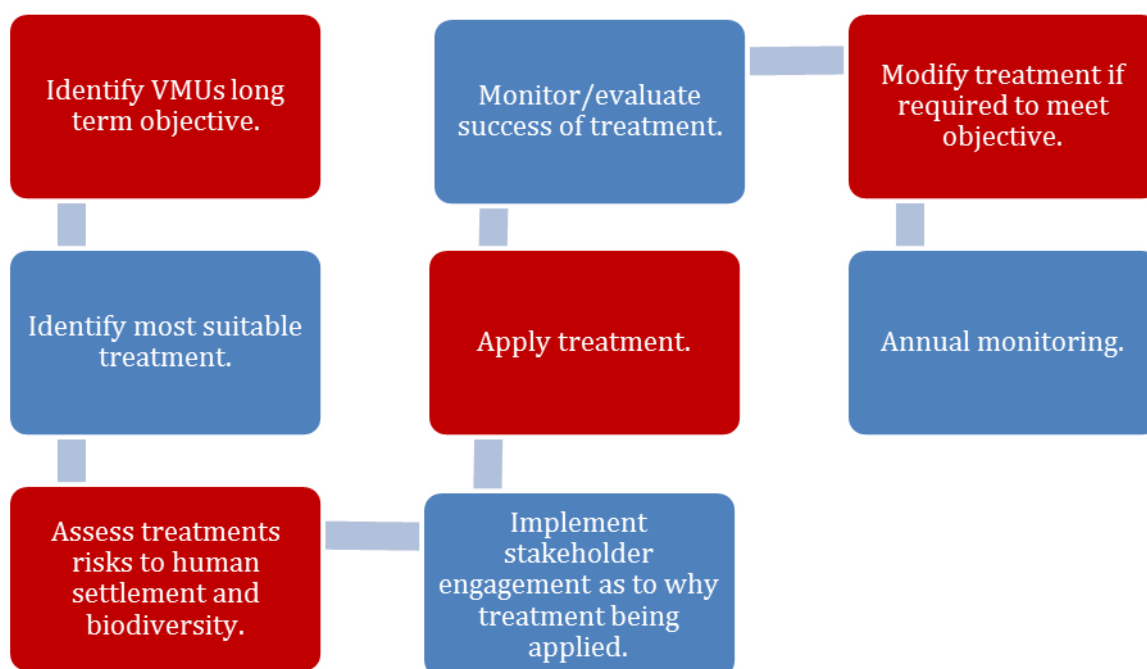
6. Bushfire Management Strategy (BMS)

The BMS has been reviewed using an adaptive management approach based on 4 key objectives: Preparedness, Mitigation, Response and Recovery.

6.1 Adaptive Management Approach

- To help overcome the lack of information on the long-term responses of indigenous vegetation to fire, and ensure BMPs are improved each time they are revised, Council's BMPs will adopt the principles of adaptive management (figure 4). This will include a monitoring and evaluation component which will provide the information required to progressively refine the BMPs to ensure they are achieving their desired outcomes (see section 8.11).
- Council's Fire and Bushland Management Team will annually gather datasets sufficient to monitor the effectiveness of prescribed regimes and treatments within BMPs. These datasets will be moderated by Council's Fire and Bushland Vegetation Management Works Officer within Council's Fire Management GIS context (see section 8.12.2). This will include details of all bushfires and planned burns, assets at risk, fire trail networks, defensible spaces, and VMP sites.
- Council will consult with a broad spectrum of stakeholders during the preparation and revision of BMPs.
- Council will review its BMS and associated BMPs and management procedures (MP) every five years (see section 8.13.1) to ensure they contain the latest information on; conservation significant flora and fauna, most current suitable prescribed burning regimes, required defensible spaces, fuel types and characteristics, VMU regimes and TFS guidelines.

Figure 4 – Council’s adaptive approach



Note: This cycle is repeated until the management actions being applied are producing the desired results.

6.2 Preparedness

- BMPs will be developed for areas of bushfire-prone vegetation managed by Council that require a formalised management plan to prepare and reduce the threat of bushfire to assets at risk, or utilise fire for ecosystem management through a formalised planned burning regime. BMPs will identify the most effective options to reduce risks such as establishment and maintenance of defensible spaces, fire trail alignment, and planned burning. BMPs will be reviewed at a maximum five year interval, and must be integrated into all future or revised RAPs.

It should be noted that BMPs are not operations plans and do not deal directly with “Response” to bushfires. Operational procedures are dealt with in various documents prepared by the TFS and other emergency services.

- Council will seek partnerships with key stakeholders to plan and implement multi-tenure BMPs, particularly in areas with regionally significant vegetation communities.
- A five year planned burning program is developed at time of each BMS review. This will incorporate annual burning programs based on the requirements of VMUs within BMPs, and Council managed land not covered by a BMP, requiring planned burning for risk reduction or ecosystem management.
- The use of planned burning on Clarence City Council managed land will be carried out in accordance with the bushfire management objectives outlined in each BMP. Where no BMP

exists, Council's Fire and Bushland Vegetation Management Co-ordinator shall be responsible for implementing the most suitable treatments to meet the sites bushfire management objectives.

- Council will advise the municipality biannually (prior to autumn and spring) through printed newspaper and social media of each year's planned burning programs. Directly adjoining residents to areas that will be impacted by planned burns will be additionally notified in writing at a minimum one day prior to conducting the burn, by means of letter box dropping a written notification.
- Fire hazard abatement notices for private property will be issued during the fire permit period.
- Council's Fire and Bushland Management Team will be consulted prior to all bushland regeneration and replanting projects within an area managed by a BMP. This will alleviate an increase in the bushfire risk to public and private assets, or compromise the effectiveness of defensible spaces, fuel breaks, fire trails and other measures maintained for the control of bushfires.
- Council will ensure that where possible new subdivisions adjoining Council managed land in bushfire-prone areas incorporate defensible spaces to TFS guidelines, and AS:3959-2009 within the lots.
- Council's Fire and Bushland Management Team should be notified during the planning stages of new subdivisions directly adjacent to Council managed land managed by a BMP. This will allow for the most suitable and economical treatments of bushfire risks on Council managed land. Such future subdivisions may have been factored into BMP designs.

6.3 Mitigation

Council will implement risk mitigation strategies on Council managed land to reduce the likelihood of adverse impacts from fire through:

- Areas of bushfire-prone vegetation under Council's control not covered under a BMP that have potential to impact assets (such as road reserves, defensible spaces and easements) will be maintained in a reduced fuel state during the fire permit period. Council acknowledge some areas where such maintenance would adversely affect conservation significant flora will be managed in a reduced fuel state post seed setting period when possible.
- Establishment and maintenance of fuel breaks and defensible spaces as per current industry guidelines. Where possible fire trail alignment will traverse defensible spaces to reduce ecological impact and maintenance costs.
- Establishment and annual maintenance of fire trails will be undertaken to Tasmanian Parks and Wildlife *Fire Management Infrastructure Categories and Standards Asset Services January 2009*

(V3) as specified in MP1. Fire trails will be strategically designed and located to be utilised for bushfire mitigation treatments.

- Conduct broadscale planned fuel reduction burning as scheduled in Council's 5 year planned burn program. If during the annual fire permit period, planned burning will be carried out according to any conditions on a "Permit to Burn" issued by the TFS. Where broadscale planned fuel reduction burning is not an acceptable treatment, mechanical treatment or heap burning should be utilised as a risk reduction treatment (may not be scheduled in 5 year planned burn program).
- The local TFS brigades will be encouraged to become familiar with bushland reserves managed by Council in their areas, particularly the locations of entry points, fire trails, water points, assets at risk, defensible spaces and fuel breaks (see section 8.8).
- Council recognises the importance of regular communication internally between work groups in addition between fire management agencies, landowners and the community at large in raising public awareness of bushfire risks and management issues and treatments. This will include:

Consultation with the TFS Fuel Reduction Unit during establishment of 5 year planned burning program

Council representation at Hobart Fire Management Area Committee meetings

Consultation with landowners and residents adjoining bushland reserves and interested community groups during development and review of BMPs

Distribution of information on bushfire safety in collaboration with the TFS

Notifying the public, particularly adjoining residents, of planned burns carried out by Council

Ensuring the Clarence community is aware of Council's BMS, specifically individual BMPs, and defensible space objectives and treatments.

6.4 Response

- The TFS will be immediately informed by Council's Fire and Bushland Management Team, of any bushfires in Council reserves detected by Council employees or reported to Council. As an interim measure until the arrival of the fire service, Council's Fire and Bushland Management will carry out any measures to contain the fire which are within their capabilities (skills, experience, and available resources) and can be carried out safely.
- Suppression efforts will, where possible, endeavour to minimise the spread of any fire occurring on Council land, and to contain fires within the boundaries of the VMU in which it occurs.

- Council will supply the TFS with any information it has that would assist fire suppression operations in its reserves, and minimise the risk of adverse impacts to assets.
- Council will supply the TFS with any suitable resources it has available that can assist with the suppression of bushfires in Council reserves.
- Local TFS brigades and other emergency services will be supplied with keys to gates in all Council reserves.

6.5 Recovery

- All Council bushland areas impacted by fire (planned burns or bushfires) will be closed to the public until they are inspected and declared safe by Council's Fire and Bushland Management Team.
- Temporary fire control lines will be either upgraded to meet current standards as specified in MP1 of Council's Best Management Practice Guidelines, or rehabilitated where they are likely to be an erosion hazard as specified in MP3 of Council's Best Management Practice Guidelines.
- Planned burns will be coordinated with pre and post burn weed management.
- Post-fire weed control will be carried out on areas affected by bushfire.
- Council managed land impacted by bushfire or treated with planned burning containing VMP plot, will have the plot assessed no earlier than two weeks post fire, and no longer than six weeks post fire.

6.6 Municipal Fire History

6.6.1 Bushfire History

Developing an understanding of bushfire history throughout the Clarence municipality is an important element in designing the most suitable treatments for vegetation and defensible spaces to mitigate impacts to human settlements whilst maintaining biodiversity. Much of the vegetation throughout Clarence is dry sclerophyll and has a low fire sensitivity which indicates that it is highly fire adapted and a single fire will generally not adversely affect biodiversity. Though repeated fires at intervals of less than ten years may cause long-term changes in floristics and vegetation structure (Pyrke & Marsden-Smedley 2005). The moderate to high flammability rating of the native bushland throughout the municipality indicates that the vegetation will burn readily when fuels are dry but may be too moist to burn for long periods during winter. Table 2 shows significant fires that have previously impacted the municipality. Individual BMPs discuss localised less significant fires.

Table 2 – Municipal bushfire history (1967-2013)

Year:	Location:	Approximate Area (hectares):	Impact to human settlements:
1967	Greater Hobart	264, 270	62 Deaths
1993	Coal Valley/Richmond	2400	0
2006	Meehan Range	800	0
2013	Risdon Vale/Meehan Ranges/Richmond/Cambridge	500	0

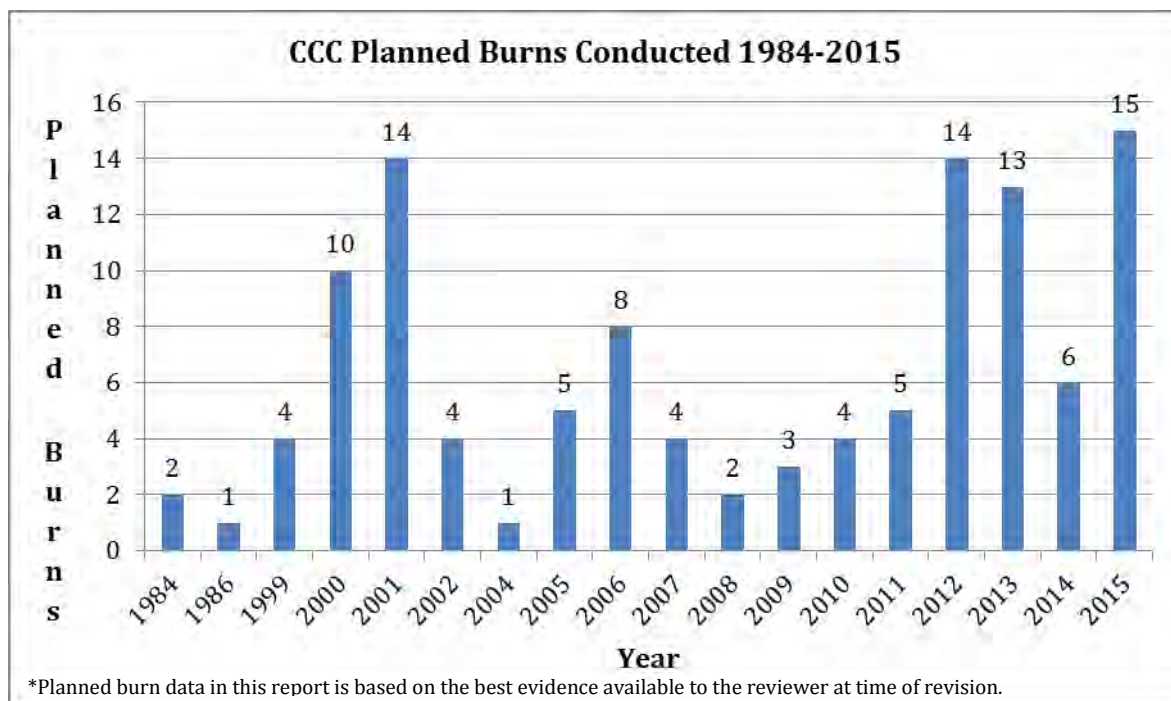
6.6.2 Planned Burn History 1984-2015

Planned burning commenced within Clarence from the mid 1960's. It was characterised by a less formalised program targeted at reducing fuel loads through burning ridgelines and areas with high fuel loads in a “tenure blind” approach (L Cripps 2016, pers. comm., February). Documented planned burning within Clarence started in the mid 1980's.

Effective planned burning programs provide a mosaic of VMUs at multi stages of recovery from fire, and can provide a short term (less than 5 year post planned burn) reduction in bushfire intensity and threat to treated areas.

The planned burning adopted within this BMS builds on the previous strategies' ecological burning structure, with an emphasis on targeting areas for maximum risk reduction through an increase in fuel reduction burning.

Table 3 – Municipal planned burns conducted (1984-2015)



Attachment 1

Table 4 – Municipal hectares burnt through planned burning (1984-2015)

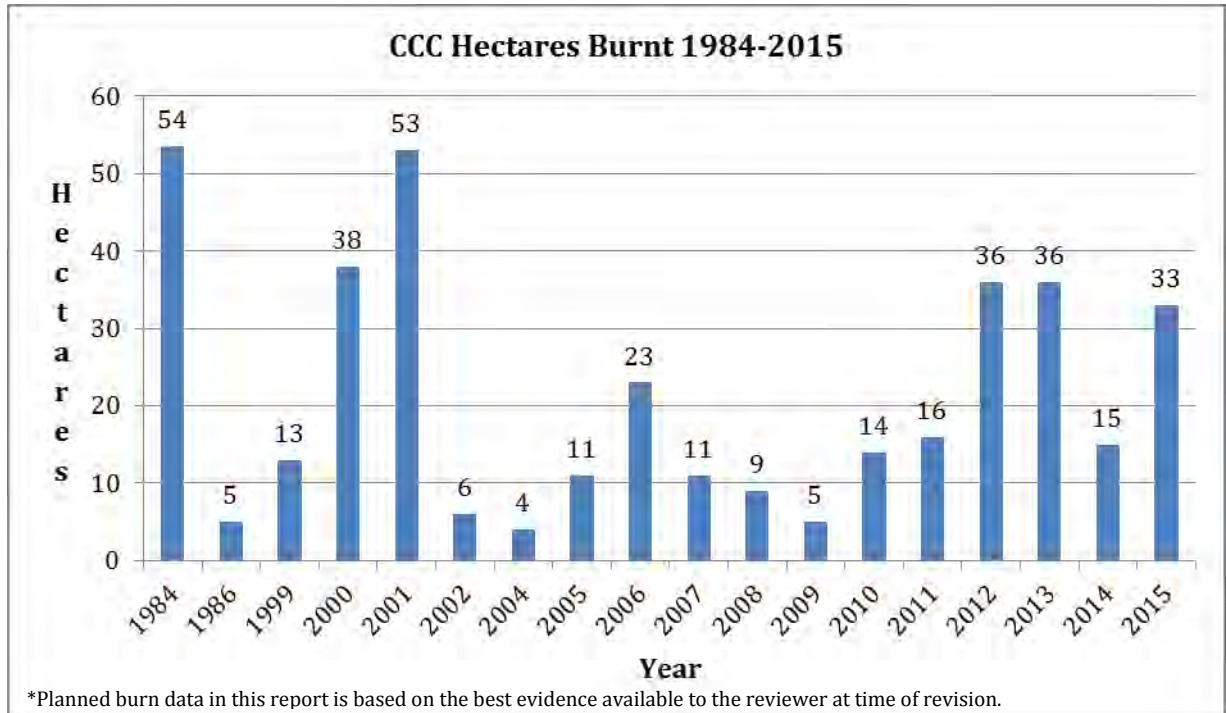
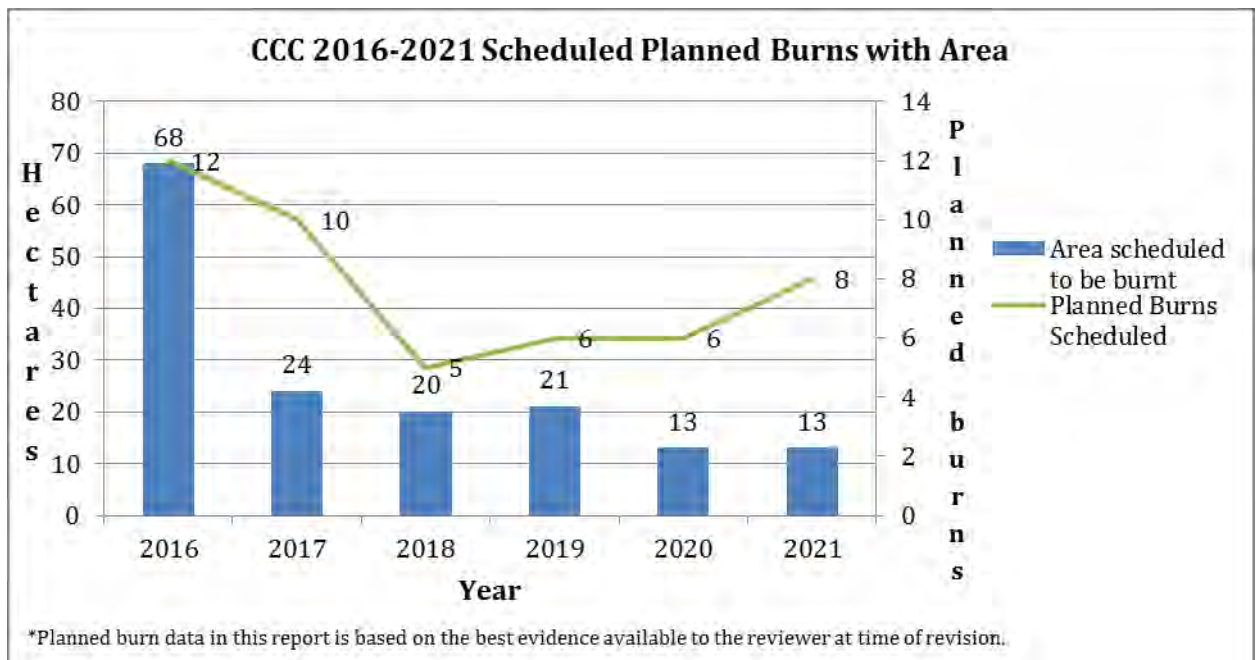


Table 5 – CCC scheduled planned burns with area (2016-2021)



7. Statutory Responsibilities

Clarence City Council and landowners surrounding Council managed land have a general legal responsibility to take all reasonable steps to minimise the risk of fires that originate on their property causing personal injury, damage to adjoining property, or damage to items of natural or heritage value protected by government legislation. Council also has specific responsibilities under various Acts of Parliament for bushfire management, bushfire hazard abatement, and the conservation and management of native flora and fauna. The most important of these are listed below.

Fire Service Act, 1979

The main responsibilities of Clarence City Council and surrounding landowners/ occupiers under the Fire Service Act, 1979, are:

- to take all reasonable precautions to prevent any fire lit on their property from spreading onto neighbouring land (Section 63)
- to take diligent steps to extinguish or control any unauthorised fire on their property during a fire permit period, and to report that fire to the TFS, or the Police (Section 64).

As well as the obligations that apply to all landowners/ occupiers, Clarence City Council has a number of specific powers and obligations under this Act. These are:

- to nominate a representative to sit on the local Special Fire Area Committee (Section 55)
- to “cause the formation in its municipal area of such fire breaks as it considers necessary or desirable to arrest the spread, or to facilitate the suppression of, fires” (Section 56)
- to contribute towards the operating costs of fire brigades (Sections 79 to 95).

It should also be noted that Section 49 of the Act authorises officers of the TSF to enter and inspect land for any fire hazard. Where a fire hazard is detected, the Act further empowers the State Fire Commission or an authorised officer to:

“by notice in writing given to the council of the municipal area in which that land is situated, require that local council to deal with the fire danger, within such reasonable period of not less than 30 days as is specified in the notice, as if that fire danger were a nuisance under the Local Government Act, 1993.”

Section 66 of the Fire Service Act requires persons lighting fires within a fire permit period that have “the effect of clearing land of vegetation or for a like purpose” to do so “in accordance with the conditions of a permit granted by a fire permit officer”. A person lighting and controlling a fire in accordance with the conditions of a permit is exempt from the Environmental Management and Pollution Control Act, 1994, and “is not liable for any loss, injury or damage caused by that fire unless it is proven that the person acted maliciously or recklessly”.

Local Government Act, 1993

Section 93 of the Act allows councils to impose a service rate on rateable land for the purpose of providing bushfire protection.

Section 200 of the Local Government Act requires a council to issue a hazard abatement notice whenever it is satisfied there is, or is likely to be, a fire risk on any privately owned land. If the person served with an abatement notice fails to comply with the notice within the specified time, the council is empowered under Section 201 of the Act to carry out the action specified in the notice, and recover the cost from the owner or occupier of the land.

Threatened Species Protection Act, 1995

The Threatened Species Protection Act (TSPA), 1995, provides for “the protection and management of threatened native flora and fauna, and to enable and promote the conservation of native flora and fauna”. Section 5 of the Act requires that:

“A person who performs a function, or exercises a power, in the administration of a public authority must in so doing have regard to the objectives specified in Schedule 1 for the conservation and management of native flora and fauna”.

Schedule 1 lists the objectives of the Resource Management and Planning System of Tasmania, and the threatened species protection system established by the Act. These objectives include the principles of ‘sustainable development’. The intent of this Act makes protection of threatened species a major objective of any bushfire management plan in the State.

Section 51 (a) of the TSPA states that: “A person must not knowingly, without a permit - take, trade in, keep or process any listed flora or fauna”. The TSPA defines ‘take’ as including: “kill, injure, catch, damage, destroy and collect”. Clarence City Council may therefore be required to obtain a permit from the Department of Primary Industries, Parks Water and Environment to carry out planned burning that may affect any of the species listed in the Act.

Local Government (Building and Miscellaneous Provisions) Act, 1993

Under Section 55 of this Act, Clarence City Council has the power to attach “any terms and conditions it considers appropriate” to a building approval. This would include provisions relating to bushfire protection. Section 56 of this Act gives Clarence City Council the power to impose “any restrictions, limitations or conditions it considers appropriate” on developments.

Environmental Management and Pollution Control Act, 1994

The objectives of the Act as stated in Schedule 1 of the Act includes;

“3(c) to regulate, reduce or eliminate the discharge of pollutants and hazardous substances to air, land or water consistent with maintaining environmental quality”.

Section 96C of this Act allows the Parliament to make environment protection policies for the purpose of furthering any of the objectives of the Act.

Policies that affect bushfire management activities include the draft State Air Quality Policy 2016 and the State Water Quality Management Policy. Note that a person lighting and controlling a fire in accordance with the conditions of a permit issued under section 66 of the Fire Services Act, 1979, is exempt from the provisions of this act.

Environment Protection and Biodiversity Conservation Act, 1999 (EPBC Act)

The EPBC Act is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places — defined in the EPBC Act as matters of national environmental significance.

The objectives of the EPBC Act are to:

- provide for the protection of the environment, especially matters of national environmental significance
- conserve Australian biodiversity
- provide a streamlined national environmental assessment and approvals process
- enhance the protection and management of important natural and cultural places
- control the international movement of plants and animals (wildlife), wildlife specimens and products made or derived from wildlife
- promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources
- recognise the role of Indigenous people in the conservation and ecologically sustainable use of Australia's biodiversity
- promote the use of Indigenous peoples' knowledge of biodiversity with the involvement of, and in cooperation with, the owners of the knowledge.

Environment Protection Policy (Air Quality), 2004

Clause 17 of the State Air Quality Policy covers “planned burning” which includes low intensity burning for fuel reduction and ecological management, but does not include back burning to control wildfires. Clause 17 of the policy states that:

“(2) Persons or organisations involved in the conduct of planned burning or in the preparation of management guidelines for such operations must take account of the health and amenity impacts of smoke pollution on individuals and the community.

(3) Best practice environmental management should be employed by those persons undertaking planned burning to minimise the effects of smoke pollution on individuals and the community. This includes, but is not limited to, complying with the State Fire Management Council Guidelines on high intensity and low intensity burning.

(4) Where practicable, agencies, companies or organisations undertaking burning on a regular basis or on a large scale should:

- (a) adopt efficient and effective air quality monitoring programmes;

Attachment 1

- (b) adopt a uniform approach to recording and assessing complaints;
- (c) focus upon minimising the impact of smoke on the community in terms of health, amenity and safety;
- (d) encourage the planning and execution of planned burning in a way that minimises the generation of smoke and improves the management of the effects of smoke; and
- (e) require a responsible person involved in planned burning for land management to be competent in relevant burning procedures.”

The State Fire Management Council Guidelines for low intensity planned burning advises that:

“The effects of smoke from planned fires should be considered when preparing burning plans, taking account of the probable wind direction. Where practicable, smoke mitigation strategies should be used including: prescribing favourable wind direction; ensuring that fuels are dry; limiting the size of the burning area; limiting the number of areas lit at the same time within the same air shed; allowing time for areas to burn out prior to evening inversions, particularly late in autumn; avoiding planned fires coinciding with public events; avoiding week-ends and Public holidays; providing information to the public.”

The State Air Quality Policy also requires that a uniform approach to recording and assessing complaints be developed. This will be implemented through the Tasmanian Air Quality Strategy.

Tasmanian Air Quality Strategy, 2006

The Tasmanian Air Quality Strategy has been established under the Environment Protection Policy (Air Quality) to guide the management of air quality in Tasmania. The overall aim of the Air Quality Strategy is to “to achieve compliance with the National Environment Protection (Ambient Air Quality) Measure Standard and Goal for PM₁₀ particles, in line with the stated requirements of the Environment Protection Policy (Air Quality)”.

Objective 13 of the strategy deals with smoke management from planned fires and aims to:

“Improve the management of smoke from planned burning in accordance with the Environmental Protection Policy (Air Quality) 2004 by:

- (a) Establishing smoke management procedures for planned burning;
- (b) Incorporating smoke management procedures into the Forest Practices Code;
- (c) Improving the co-ordination of planned burning to minimise smoke impacts; and
- (d) Investigating the most appropriate way to manage and respond to complaints relating to planned burning.”

The strategy also notes that:

“Although fuel reduction burns may impact on air quality, it is recognised that this practice reduces the likelihood of wildfires that could have more significant impacts such as property destruction.”

It should also be noted that Section 66 of the Fire Service Act states that:

Attachment 1

“a person who lights and controls a fire in accordance with the conditions of a permit granted to that person under this section is exempt from the Environmental Management and Pollution Control Act 1994.”

Implementing the Air Quality Policy and Strategy will require planned burns to be coordinated with other planned burns in the area, and to be carried out when weather conditions will help to disperse the smoke.

State Policy on Water Quality Management, 1997

One of the objectives of the State Policy on Water Quality Management is to:

“6.1(b) Ensure that diffuse source and point source pollution does not prejudice the achievement of water quality objectives and that pollutants discharged to waterways are reduced as far as is reasonable and practical by the use of best practice environmental management.”

Clause 31.4 of the policy under the section dealing with diffuse sources of pollution states that:

“Codes of practice or guidelines required by this Policy in respect of specific activities with the potential to impact on stream-side land should pay specific attention to defining appropriate stream-side buffer strips and acceptable management practices within these strips. Strategies and incentives, including economic instruments, to encourage the retention and/or improved management of streamside vegetation should be investigated.”

In relation to the construction and maintenance of fire trails, Clause 35.1 of the policy states that:

“35.1 Road construction and maintenance operations will be carried out in accordance with the guidelines or code of practice developed pursuant to clause 31.3 of this Policy, or employ other measures consistent with best practice environmental management, to prevent erosion and the pollution of streams and waterways by runoff from sites of road construction and maintenance.”

The only codes of practice under the State Policy on Water Quality Management that are relevant to construction and maintenance of fire trails is the *Wetlands and Waterways Works Manual* (DPIWE, 2003). During March 2008 the Premier directed the Minister for Environment, Parks, Heritage and the Arts to conduct a review of the Water Quality Policy. Public submissions were sought, a Response Paper was released which summarised and responded to the issues raised and provided options for the Policy’s future. Until any changes are made formally through a statutory revision process, the existing Policy remains in force.

Aboriginal Relics Act, 1975

Section 14 of the Act provides for the protection of sites with Aboriginal relics:

“14. Protection of relics

- (1) Except as otherwise provided in this Act, no person shall, otherwise than in accordance with the terms of a permit granted by the Minister on the recommendation of the Director –
 - (a) destroy, damage, deface, conceal, or otherwise interfere with a relic;
 - (b) make a copy or replica of a carving or engraving that is a relic by rubbing, tracing, casting, or other means that involve direct contact with the carving or engraving;
 - (c) remove a relic from the place where it is found or abandoned;
 - (d) sell or offer or expose for sale, exchange, or otherwise dispose of a relic or any other object that so nearly resembles a relic as to be likely to deceive or be capable of being mistaken for a relic;
 - (e) take a relic, or cause or permit a relic to be taken, out of this State; or
 - (f) cause an excavation to be made or any other work to be carried out on Crown land for the purpose of searching for a relic.
- (2) A permit under subsection (1) is of no effect if, to the knowledge of the holder thereof, the relic to which it relates has been acquired or dealt with in contravention of this Act.”

During each BMP review process Aboriginal Heritage Tasmania (AHT) must be contacted and requested to search the Aboriginal Heritage Register (AHR) regarding the area inside each BMP boundary. Any AHR searches for BMPs resulting in known locations will require a permit for any bushfire management works that may affect Aboriginal relics.

Tasmanian Weed Management Act, 1999

This is the core piece of weed management legislation within Tasmania. The Act defines a list of 'declared' weeds that:

- Present a threat to Tasmania but are not yet naturalised
- Present a threat but are currently of limited distribution
- Are widely distributed requiring management due to their threat to the native environment and/ or agriculture.

There are 107 weeds that have been declared for Tasmania. 36 of these weeds have a presence within the Clarence municipality

The Weed Management Act 1999 (WMA) also provides a Statutory Weed Management Plan (WMP) for each of these declared weeds. The WMP places each weed into either Zone A or Zone B within each municipality. The management objectives for each zone are:

- Zone A – Eradication
- Zone B – Containment (preventing spread to other areas free of that weed)

Under the WMA, landholders are under a legal requirement to control weeds on their land. Weed Inspectors are given powers to enforce the requirements of the Act; they can be employees under state or local government or relevant bodies including community groups (North Barker Ecosystem Services, 2014).

Pre and post burn weed management will need to be implemented for bushfire management activities in the reserves that have declared and Weeds of National Significance (WONS). In addition, any management burning in the reserves identified with serrated tussock infestations will have to be coordinated with a weed control program.

7.1 National Standards and Guidelines

The following documents prepared by Standards Australia deal with bushfire protection issues at a national level:

Australian Standard 3959 - 2009, Construction of buildings in bushfire-prone areas.

Standards Australia Handbook 330 - 2009, Living in bushfire-prone areas.

Australian Standard 3959 is referenced in the Building Code of Australia and provides construction techniques to improve building resistance to varying levels of bushfire attack by wind-blown burning debris, radiant heat and direct flame contact. The Standards Australia Handbook 330 - 2009 provides general advice on siting, landscaping, design and construction of buildings in bushfire-prone areas.

8. Implementation of the Strategy

8.1 Administration

8.1.1 Responsibility for Implementing the Bushfire Management Strategy

The role of Council's Fire and Bushland Vegetation Management Coordinator includes overseeing the implementation and primary responsibility of the BMS with the assistance of Council's Fire and Bushland Vegetation Management Works Officer.

This third revision has further defined responsibilities of actions and recommendations within recognising current skillsets of Council's Fire and Bushland Management Team. This definition of responsibilities coincides with the previous strategies comments on implementation improvements.

Fire fighting on Council managed land could be improved if there is a Memorandum of Understanding, or similar arrangement, between the TFS and Council that requires Council's Fire and Bushland Vegetation Management Coordinator to be informed as soon as the TFS responds to a fire on Council managed land. Council's Fire and Bushland Vegetation Management Coordinator can then provide detailed information on the reserve to assist the TFS in planning control strategies.

In the event of potential impact to Council managed land from bushfire, Council's Fire and Bushland Vegetation Management Coordinator is to ensure gates are opened to allow the TFS access to fires in reserves, provide information to assist the Incident Controller (small fires) or the Incident Management Team (larger fires), and to close tracks and trails to the public following fires until they are inspected and declared safe for public use. Once deemed safe and TFS is satisfied they have contained the fire, the area is handed back to Council. Council's Fire and Bushland Vegetation Management Coordinator should coordinate blacking out and patrol duties. See section 6.4 for interim suppression measure until TFS arrival.

In the event of an escaped planned burn Council's Fire and Bushland Vegetation Management Coordinator is to attempt within abilities and skillsets of available resources suppression, and if deemed necessary contact TFS for additional resources.

8.1.2 Training

Successful implementation of the prescribed planned burns within this BMS requires trained personnel and specialised equipment. Each planned burn must have a burn plan prepared by someone who has completed the Forestry Tasmania “Develop Prescribed Burning Plans” course or equivalent. All persons engaged in planned burning or firefighting in the reserve must have completed the Forestry Tasmania “Forest Fire Fighting” course or equivalent.

If the planned burning is contracted out, the contractor must be able to meet the required training accreditation in the previous paragraph, as well as provide evidence of experience in carrying out broadscale low intensity fuel reduction burns.

Any smoke shed associated with planned burning with potential to impact public or private road networks is to have a traffic management plan approved by an accredited person, and implemented pre-ignition.

Council’s Fire and Bushland Management tree fallers are to have current advanced tree falling qualifications.

8.1.3 Coordination and Consultation

MP 9 in the Best Management Practice Guidelines was prepared to ensure effective coordination of bushfire management activities amongst the various stakeholders involved in bushfire and vegetation management within Council managed land. In particular annual meetings with Landcare groups discussing any planned revegetation works and scheduled planned burns.

Where treatments and operations are expected to impact known populations of threatened and rare plant species, the Threatened Species Section of DPIPWE must be consulted in writing requesting a “Permit to take threatened plants for vegetation management”. Operations can only commence once the permit is received, and in accordance with conditions of attached schedule.

Weed management pre and post fire may require coordination between Council work groups to achieve objectives as specified in MP8.

At the commencement of each annual planned burning program consultation between the TFS Fuel Reduction Unit and Council’s Fire and Bushland Management Team should discuss planned burns, and if any multiagency/ multi tenure burn boundaries may achieve greater outcomes.

8.1.4 Resources

Council has sufficient resources (experience, manpower and equipment) to carry out all of the planned burns and other treatments prescribed within BMPs. Section 2 discusses recommendations specific to vehicles that if followed will increase productivity through annual heap burning

programs, maintenance of defensible spaces and a reduction in associated risks when conducting planned burning.

Implementation of some other recommendations within BMPs (such as integration of weed control with planned burning, and construction of new fire trail links) may require additional resources (contracted machinery).

All personnel involved at an operational level with planned burning managed by Clarence City Council's Fire and Bushland Management Team are to have all personal protective equipment as specified in relevant Safe Works Method Statements (SWMS).

8.2 Use of Fire in the Sustainable Management of Bushland

Fire plays an important role in maintaining biodiversity in Australia. Changes in the fire regime (season, frequency and intensity of fire) can cause progressive changes in plant communities. Frequent fire and long-term exclusion of fire have both been shown to lead to progressive changes in plant community structure, and a reduction in biodiversity. Failure to use fire properly as a management tool can be considered a threat to some of the natural habitats in Clarence City Council's bushland reserves.

Inappropriate fire regimes can cause progressive and sometimes irreversible changes in indigenous plant communities, including a loss of biodiversity. On the other hand, identification, prescription and implementation of an appropriate fire regime can be used to:

- Reduce fuel loads whilst promoting natural recruitment in dry forest communities
- manage indigenous flora and fauna habitats in a sustainable manner
- maintain biodiversity
- control selected weed species.

The bushland within Council managed land covered by a BMP has been divided into VMUs to facilitate planned burning in a mosaic pattern and other bushfire management activities.

This BMS aims to apply a specific fire regime to individual VMUs, or where no VMU is allocated based on optimal fire frequencies for plant communities present within a planned burn polygon that will maintain current distribution, structure and floristics on a long-term basis.

Bushfires pose a risk to small, isolated bushland aggregates, as a major fire could remove species, and even whole plant communities, from the area. Extensive, frequent, and indiscriminate fuel reduction burning can have a similar effect.

The potential risks to flora and fauna habitats from bushfire can be managed by minimising the risk of ignitions, maintaining adequate fire trails and fuel breaks, defensible spaces, and by

Attachment 1

burning suitable areas of vegetation at different times to create a mosaic of VMUs at different stages of recovery from fire.

Adoption of a mosaic burning pattern has the following advantages:

- reduces overall fuel loads
- increases habitat diversity
- Can provide potential to reduce rate of spread, and subsequently potential reduction in risk of a single, high-intensity bushfire burning a whole reserve when bushfire impacts less than 5 years post planned burn.

Within the mosaic of VMUs the fire regime can be manipulated to achieve some or all of the following objectives:

- removal of woody and herbaceous weeds, and weed seeds from elevated fuels, near surface and surface fuels
- manipulation of ecological processes such as; species composition (via the promotion of selected species or communities), regeneration of senescent vegetation, and the creation of suitable conditions for native seed germination
- reduction in the levels of plant nutrients, such as phosphorus and nitrogen, which may be contributing to weed invasion
- Protection of species of conservation value by maintaining habitat elements that are critical for their survival.

It has been found that sites with accumulated forest litter support a larger and more diverse invertebrate fauna than sites where fire has reduced the litter (Suckling et al., 1985). If a wide range of invertebrate species is to be maintained within Council managed land, it is important that some patches of the different habitats in each reserve remain unburnt. These sites provide essential refugia from which recolonisation can occur (Campbell & Tanton, 1981). The optimal timing of fire for invertebrates in dry forest habitats maintained by relatively frequent burning is not known with certainty, although Hammer (1997) concludes that in dry sclerophyll forest late spring burning is likely to have the least adverse impact.

In bushland, fire can be used to stimulate germination of indigenous plant seeds. She-oaks, most Eucalypts, Acacias, members of the pea family (*Fabaceae*) and many species from other families frequently germinate prolifically in areas that have been burnt, particularly if the fire was of high intensity.

Attachment 1

However, in small isolated reserves where a full suite of native herbivores is no longer present the rapid spread of native species such as she oak and wattle after fire can dominate reserves and reduce biodiversity. The burnt area will also be open to weed invasion and must be carefully monitored. In some cases it may be necessary to include native species such as sheoak and wattles in weed control programs to maintain biodiversity.

Frequent burning of native forests is known to reduce species diversity and make them more vulnerable to weed invasion (Williams, 1991). A high fire frequency (less than five years) will usually favour grasses and bracken in the understorey at the expense of shrubs, and severely restrict the re-establishment of canopy species.


In rural areas frequent burning is sometimes used to control woody weeds, and this method can also be helpful in native grasslands. However, in native bushland fire will generally increase an existing weed problem. Many woody weeds re-sprout rapidly from rootstock after fire, often coppicing densely (hawthorn, gorse, wattle). Herbaceous species (including many grasses) respond in a similar way, regenerating from growth buds on a network of robust underground rhizomes (pampas grass, bracken). Seed germination is usually prolific after fire, a response which necessitates prompt control measures, on-going monitoring, and site maintenance (gorse, boneseed, broom).

Therefore, where weeds are already a problem, planned burning should only be carried out after weeds have been treated, and follow up weed control can be carried out. In general, weed infested bushland areas should not be burnt if resources for post-fire weeding are not available. The exception to this is high bushfire hazard areas close to dwellings where burning is the only feasible method of hazard reduction.

8.3 Bushfire Hazard Reduction

As the intensity of a bushfire increases it becomes progressively more difficult to contain and suppress the fire. Very high intensity (less than 4000 kW/ m heat output at the fire front) fires with flame heights greater than 10m are generally uncontrollable (NSW Rural Fire Service, 1997). The threat from a bushfire therefore increases as its intensity increases. Bushfire intensity is directly related to the quantity, type, and the distribution, of fine fuel (dead plant matter less than 6mm diameter and live plant matter less than 2mm diameter) available to the fire. Other factors, such as effective slope and moisture content of the fuel, also influence fire intensity, but the only factor that can be effectively controlled to limit fire intensity is fine fuel load (usually expressed in tonnes per hectare) and the distribution of the fuel structure. Table 6 shows the FDR system used in Tasmania at time of review.

Table 6 - Tasmanian FDR system



FIRE DANGER RATING	RECOMMENDED ACTION AND POTENTIAL FIRE BEHAVIOUR AND IMPACT
CATASTROPHIC FDR 100+	ACTION: Leaving early is the safest option for your survival – regardless of any plan to stay and defend. <ul style="list-style-type: none"> Most fires will be uncontrollable, unpredictable and fast moving. Flames will be higher than roof tops. Thousands of embers will be blown around. Spot fires will move quickly and come from many directions, up to 20 km ahead of the fire. Some people may die and be injured. Thousands of homes may be destroyed. Well-prepared, constructed and actively defended homes may not be safe during a fire unless firefighters have assessed them as defensible in the prevailing conditions.
EXTREME FDR 75-99	ACTION: Leaving early is the safest option for your survival. Only well-prepared, well constructed and actively defended houses are likely to offer safety during a fire. <ul style="list-style-type: none"> Some fires will be uncontrollable, unpredictable and fast moving. Flames will be higher than roof tops. Thousands of embers will be blown around. Spot fires will move quickly and come from many directions, up to 6 km ahead of the fire. Some people may die and be injured. Hundreds of homes may be destroyed.
SEVERE FDR 50-74	ACTION: Leaving early is the safest option for your survival. Only stay if your home is well prepared and you can actively defend it. <ul style="list-style-type: none"> Some fires will be uncontrollable and move quickly. Flames may be higher than roof tops. Expect embers to be blown around. Spot fires may occur up to 4 km ahead of the fire. There is a chance some people may die and be injured. Some homes will be destroyed. Well-prepared and actively defended houses can offer safety during a fire.
VERY HIGH FDR 25-49	ACTION: Only stay if your home is well prepared and you can actively defend it. <ul style="list-style-type: none"> Some fires can be difficult to control. Flames may burn into the tree tops. Expect embers to be blown ahead of the fire. Spot fires may occur up to 2 km ahead of the fire. There is a possibility people may die or be injured. Some homes may be damaged or destroyed. Well-prepared and actively defended houses can offer safety during a fire.
HIGH FDR 12-24	ACTION: Know where to get more information and monitor the situation for any changes. <ul style="list-style-type: none"> Fires can be controlled. Expect embers to be blown ahead of the fire. Spot fires can occur close to the main fire. Loss of life is highly unlikely and damage to property will be limited. Well-prepared and actively defended houses can offer safety during a fire.
LOW-MODERATE FDR 0-11	ACTION: Know where to get more information and monitor the situation for any changes. <ul style="list-style-type: none"> Fires can be controlled easily. There is little to no risk to life and property.

8.3.1 Defendable Spaces

A defendable space is an area of managed vegetation around an asset likely to be at risk from bushfire that protects it from direct flame contact and intense radiant heat, as well as providing an area where fire fighters can defend the asset. The two primary functions of defendable spaces are room to move, and clear line of site for firefighting resources.

The TFS document *Bushfire Survival Plan 2015-2016* recommends that a defendable space includes two 'zones':

- An inner zone (formerly a Bushfire Protection Zone) where flammable materials are minimised.

Attachment 1

- An outer zone (formerly a Fuel Modified Buffer Zone) where a low level of flammable material is permitted.

In the inner zone, flammable materials on, under and around your home should be moved away from the house.

In the inner zone:

- Include non-flammable areas such as paths, driveways, and mowed lawns.
- Use non-flammable mulch; do not use woodchips or bark.
- Locate any dams, orchards, vegetable gardens and any effluent disposal areas on the fire-prone side of the home.
- Use radiation shields and windbreaks such as stone or metal fences and hedges using low-flammability plants.
- Remove fire hazards such as wood piles, rubbish heaps and stored fuels.
- Replace all highly-flammable plants with low-flammability plants.
- Prune lower branches on trees and remove flammable shrubs from under and between trees.
- Rake up bark and leaves and keep roofs and gutters clear of flammable debris.

The TFS notes it is not necessary to remove all vegetation from the inner zone. Individual trees rarely cause houses to burn in bushfires.

Trees can screen a building from windblown embers while protecting it from radiant heat. Smooth barked trees are less likely to catch fire than those with rough bark. No tree should be able to fall on the building.

In the outer zone, small-sized natural fuels (such as leaf litter, bark, sticks, tussocks and some shrubs) should be removed and larger fuels (trees and shrubs) should be cut back to reduce the intensity of an approaching bushfire.

Natural fuels, both on the ground and between the ground and any larger trees, should be reduced by selective removal of vegetation, both horizontally and vertically, followed by ongoing maintenance.

In the outer zone:

- Retain established trees to trap embers and reduce wind speeds.
- Selectively remove small trees and shrubs to create clumps (rather than a continuous wall of trees) separated by open areas.
- Remove the vegetation between the ground and the bottom of the tree canopy, to a height of at least two metres.
- Minimise fine fuels at ground level, such as grasses and leaf litter.

8.3.2 Hazard Reduction on Private Property

A properly prepared home can be defended by able-bodied people under most conditions experienced in Tasmania, but if severe, extreme or catastrophic FDR conditions are forecast, leaving early is the safest option (TFS, 2015).

Effective bushfire protection requires owners of most properties adjoining Council managed land to manage the bushfire hazard on their properties to complement works within the reserves. In some locations maintenance of defendable spaces in Council managed land will be largely ineffective if adjoining landowners do not also maintain properties as defendable spaces.

This needs to be undertaken through targeted community education, followed up by hazard abatement notices where required.

At time of review the TFS document *Bushfire Survival Plan 2015-2016* can be accessed from the TFS website and provides information on how home owners can prepare their properties for bushfires.

8.3.3 Vineyards and Smoke Taint

Grapevines that are exposed to heavy, persistent smoke can be at risk of producing wine that is affected by smoke taint. The main consequence of smoke taint is to the taste of the wine, where it can produce a burnt or charred taste. The impact of smoke on grapes and the resultant wine varies considerably (TFS, 2003). During the planning stages of a burn Council's Fire and Bushland Management Team will engage with any vineyards with potential to be impacted by smoke resulting from the burn. Details of burn will include location, size, objective and expected smoke modelling.

The Tasmanian grape harvest usually runs between mid-March and late April but some varieties may not be picked until mid-May (TFS, 2003).

8.4 Bushfire Risk Assessment

The bushfire risk to the built and cultural heritage assets within and surrounding Council reserves was assessed using the following procedure developed from the National Emergency Risk Assessment Guidelines (NEMC, 2010). This assessment process has been analysed and complies with AS/ NZS IOS:31000-2009. The purpose of this assessment is to rank the bushfire risk to assets within and adjoining Council reserves so that risk reduction works within the reserves can be prioritised and are appropriate to the level of risk.

Most Council reserves with specific BMPs have been impacted by at least one bushfire within the last twenty years, although there have been no reports of any significant damage to adjoining properties from bushfires that have started in Council reserves. However, there is sufficient fine fuel in at least part of all the reserves to sustain a high intensity fire on days of very high or higher FDR that has the potential to damage assets in and adjoining the reserve or cause death.

Attachment 1

Although there may be some variation in the likelihood of a bushfire starting and spreading in different reserves, this has been assumed to be a constant in the risk assessment, i.e. it is certain to occur at some time.

The assessment is only for fires burning within Council reserves, or approaching an adjoining asset from a reserve. Some assets may face a greater bushfire risk from bushland that is not under Council control. The assessment is based on three main factors:

1. bushfire threat in terms of fuel loads and fire approach
2. vulnerability to damage of the asset
3. Potential consequences of a fire damaging or destroying the asset.

Scores are weighted where it is considered that the factor would have a major influence on bushfire risk. The score numbers are only multiplied so that assets that are not at risk from bushfire have a score of zero. The scores allow the level of risk to be placed in the broad risk categories of low, medium and high.

The assessment is carried out by assigning each factor a relative score, and multiplying the scores to determine a relative level of risk.

0 – minimal risk of fire damage

1 to 250 – low risk

251 to 2000 – moderate risk

2001 to 11664 – high risk.

These risk categories have the following general meanings:

LOW – asset of low value or considered to have a low risk of damage from bushfires in the reserve due to its construction, location, or protection measures already in place.

MODERATE – asset is vulnerable to damage by bushfires and could face attack by a moderate to high intensity bushfire, but has features that will reduce the intensity of the fire attack, or provide some protection from fires. Further bushfire protection measures are required.

HIGH – asset is of high value, is vulnerable to damage by bushfires and could face attack by a high intensity bushfire with few, if any, features that would reduce the intensity of fire attack. Further bushfire protection measures are required.

Attachment 1

NOTE: It was not possible to inspect assets on properties adjoining Council reserves. The risk assessment therefore makes the following assumptions about these assets:

- Landowners/ residents have established and are maintaining a defensible space to current TFS standards around vulnerable assets, either wholly within the lot, or up to the boundary with the Council reserve where there is insufficient space within the lot. Where this is not the case the asset may face a much higher bushfire risk than indicated in the risk assessment.
- All dwellings adjoining a reserve are well maintained to resist attack by wind-blown burning embers. Where this is not the case the asset may face a much higher bushfire risk than indicated in the risk assessment.

Fuel Loads

Vegetation type is used as a surrogate for fuel loads as actual fuel loads vary with time after the last fire, but reach different maximum levels in different vegetation types. The risk assessment is therefore based on the maximum bushfire hazard likely to arise, rather than the actual hazard at a particular time.

(A) VEGETATION TYPE	SCORE
Wet and mixed forests	6
Dry forest & woodland, shrub or heath understorey	5
Heathland and shrubland	4
Dry forest, grass understorey	3
Grassland and grassy woodland	2
Rainforest	1

The vegetation type used in the analysis is the one in the reserve with the highest score within 100m of the asset. Scores are halved where the vegetation threatening the asset is less than 1 hectare in area, or the potential fire run is less than 20m. Areas of mown grass may burn under extreme conditions but the fire is unlikely to be a threat to adjoining assets. Areas of mown grass are therefore considered to be part of the defensible space rather than a hazard.

Bushfire Approach

Bushfire approach has two aspects, slope and wind direction. Fires burning downslope generally have a lower intensity than fires burning upslope in the same fuel type. Extreme bushfire weather in south-eastern Tasmania generally occurs with hot, dry, northerly to north-westerly winds. These winds are usually generated ahead of cold fronts that cause the winds to back round to the west and south as the front passes.

This wind change can turn the previous flank of the bushfire into the head fire which can continue to burn with high intensity until the cooler temperatures and higher humidity brought by the change increase fuel moisture levels. The two bushfire approach factors are scored as follows:

(B) BUSHFIRE APPROACH - SLOPE	SCORE
Up slopes greater than 5 degrees	3
Across slopes – 5 degrees to + 5 degrees	2
Down slopes greater than 5 degrees	1
(C) BUSHFIRE APPROACH - DIRECTION	SCORE
North through west to south-east	3
North-east and east	1

Where there is more than one possible bushfire approach within or from a Council reserve, the combination of vegetation type, slope, and bushfire approach direction that gives the highest risk score should be used in the assessment.

Vulnerability to Damage

Vulnerability to damage is assessed using three factors; the combustibility of the asset, bushfire protection measures in place in the form of a defensible space and whether the asset is accessible by multi-agency fire service vehicles. Note that the assessment does not include an assessment of the vulnerability of structures to ember attack.

It was not possible to inspect properties adjoining Council reserves to determine if they have a defensible space, so the assessment of risk to buildings on these properties from fires in the adjoining reserve is based on whether there is sufficient room on the property to maintain a defensible space to TFS standards, or if the building was constructed to AS:3959 Construction of buildings in bushfire-prone areas. Existing defensible spaces within the reserves were taken into account. Residents adjoining Council bushland reserves need to be reminded that they need to manage the bushfire hazard on their properties to complement defensible spaces within reserves. Where defensible spaces are not being maintained around vulnerable assets on private property adjoining a reserve they may face a much higher bushfire risk than indicated in this risk assessment.

Attachment 1

(D) COMBUSTIBILITY	SCORE
Asset is constructed primarily of combustible materials and is highly susceptible to attack by wind-blown burning embers, radiant heat and/ or flame contact.	3
Asset contains structural, or other essential elements, that are combustible and are likely to be subjected to at least attack by wind-blown burning embers during a bushfire, or may fail at the temperatures likely to be generated by a bushfire (all dwellings adjoining reserves have been included in this category on the assumption they are well maintained).	2
Asset constructed of non-combustible materials but contains combustible materials that, if ignited, could damage the building or cause structural failure (e.g. steel framed and clad buildings with a concrete floor).	1
Asset constructed of non-combustible materials capable of maintaining structural integrity during a bushfire.	0

(E) DEFENDABLE SPACE	SCORE
None (flame contact, intense radiant heat, burning embers).	3
Present but does not meet TFS standard for width without complementary fuel management within the reserve (intense radiant heat, burning embers).	2
Meets current TFS standard for assets within the reserve (low level radiant heat, wind-blown burning embers only). For assets on adjoining properties, there is sufficient space to provide an adequate defendable space on the property or the adjoining portion of the reserve is already managed as an adequate fuel modified buffer zone.	0.2

Accessibility

This factor assesses the ability of the multi-agency fire service vehicles to actively defend an asset during a bushfire. The assessment is in terms of the ability of vehicles to access that asset and assumes that there will be sufficient water available to at least extinguish spot fires on or around the asset. The assessment considers all possible access routes, not just those running through a Council reserve. It should be noted that in a major bushfire where firefighting resources are heavily committed, there may not be enough resources available to defend every dwelling in the path of a bushfire. It is also possible that during high intensity fires it may not be safe for fire fighters to actively defend an asset.

This factor also provides an indication of the likely danger and difficulty in evacuating residents during a major bushfire. It should be noted that in all areas near bushland evacuation becomes progressively more dangerous as the fire front approaches unless the access is through urban areas and is unlikely to be cut by fire.

Attachment 1

(F) ACCESSIBILITY	SCORE
No fire brigade vehicle access.	4
Dead end access through bushland, light tanker only.	3
Dead end access through bushland, light and heavy tanker.	2
Through road or fire trail, or no bushfire hazard along access.	1

Potential Consequences

The following potential consequences of fire have been adapted from those in the National Emergency Risk Assessment Guidelines (NEMC, 2010) to suite the local scale of this assessment. There are no reserves where a bushfire originating in or moving through a reserve is likely to have a catastrophic level of impact.

(G) CONSEQUENCES	SCORE
MAJOR: Assets may be lost or severely damaged and are of high personal, heritage or community value. Persons other than fire fighters likely to be present in or near the asset. Multiple cases of injury or loss of life possible. All dwellings have been included in this category on the assumption that residents may be sheltering in them during a bushfire.	6
MODERATE: Assets may be lost or severely damaged and are of moderate personal, heritage or community value. Persons other than fire fighters may be present in or near the asset. Isolated cases of injury or loss of life possible.	4
MINOR: Isolated cases of damage to structures, equipment and infrastructure only, or asset is of low personal, heritage or community value. Persons other than fire fighters unlikely to be in or around the asset during a bushfire.	2
INSIGNIFICANT: Superficial damage to structures, equipment and infrastructure, if any, or asset is of very low personal, heritage or community value. Persons other than fire fighters unlikely to be in or around the asset during a bushfire.	1

Active protection of an asset during a bushfire can greatly reduce the bushfire risk. Inevitably active protection may not be an option during bushfire suppression due to operational restraints. The potential for active protection by the TFS is incorporated into the assessment under Factor F “accessibility” as there is potential.

Some minor assets such as fencing, timber barriers, signage, wooden steps on paths etc. can be damaged by fire but the cost of replacing the asset, should it be damaged in a fire, is far less than the cost of protecting it from bushfire. However, care will need to be taken to prevent damage to these assets during planned burns.

Other assets, such as Aboriginal heritage sites, may not be directly damaged by fire but may be damaged by bushfire management and bushfire suppression activities, such as construction of fire control lines.

8.5 Likely Effect of Climate Change on Bushfire Risk

A report on the climate change impacts on bushfire weather in south-east Australia by the CSIRO and the Bureau of Meteorology (Hennessy et al. 2005) modelled likely changes in bushfire weather due to global warming using both high and low rates of global warming as predicted by the International Panel on Climate Change.

The results of the model for Hobart broadly predicted very little, if any, change in the average number of days when the Forest Fire Danger Index (FFDI), and a slight increase in the average number of days the Grassland Fire Danger Index (GFDI), is very high or greater over the next 50 years as projected increases in temperature are offset by predicted increases in rainfall and humidity.

FDR ratings above severe occur in Tasmania around three times a year. Ratings above extreme have occurred only half a dozen times in Tasmania during the last 90 years. However, with the impact of climate change, the potential for such days is increasing (TFS, 2016).

There are currently 67.5 days when the GFDI is very high or greater and this could increase to 68.1 – 71.5 days by 2050 (Hennessy et al. 2005).

One possible effect of climate change that could influence the occurrence rather than the severity of bushfires is the incidence of thunderstorms. Currently there are no predictions available on the effect of climate change on the incidence of thunderstorms around Hobart. At present, bushfires started by lightning strikes are rare in Clarence, though at least one was started by lightning on 31 December 2009. This means that ignitions in Clarence are, directly or indirectly, due to people and therefore can be reduced by education programs, surveillance, equipment maintenance, defendable spaces etc. However an increase in the incidence of thunderstorms would introduce a new ignition source into the area over which we have little control.

8.6 Community Involvement

Revision and expansion of Clarence City Council's existing BMPs, and the preparation of one new BMP included extensive consultation with stakeholders to understand what they value. The two stages of consultation recommended during reviews are:

1. Direct contact with stakeholders during preparation of the draft revised BMPs.
2. Public exhibition of the draft revised BMS and reserve BMPs.

During preparation of the draft BMPs, consultation was undertaken with the following individuals and groups:

- Clarence City Council Officers
- TFS - Fuel Reduction Unit
- DPIPWE - Nature Conservation Branch
- Aboriginal Heritage Tasmania
- Major landowners adjoining the reserves
- Community groups with an interest in the reserves
- Other adjacent property owners and community members.

Residents surrounding the reserves and key stakeholder groups were contacted directly by Clarence City Council and invited to attend a community “walk and talk” for each reserve. The walk and talks discussed basic information on the aims and process of the BMP review. A comments sheet was also included for those who wished to make written suggestions. The community “walk and talk” meetings were held on Saturdays and Sundays in November, 2015. The results of the initial community consultation program has been compiled into a Summary of Comments and appended to the relevant reserve BMP.

Public submissions on the draft BMS will be collated into a Summary of Responses. This will include a summary of the issues raised in each submission, identification of where the issues are addressed in the management plans, the Council’s response, and the action taken.

8.7 Community Education and Awareness

To ensure successful implementation of this BMS, and improve public understanding of bushfire mitigation and vegetation treatments, it will be necessary to develop and implement a community awareness education program. This program should be designed to complement campaigns by the TFS. See section 5 *Management of Council managed land* for allocating ownership of this task.

The community education program should include information on:

- the effects and benefits of fire in native ecosystems
- BMP structure for reserves, specifically the breakdown of VMUs
- Council’s annual planned burning program, incorporating information on Council’s heap burning program
- Council’s Fire and Bushland Management VMP
- maintenance and establishment of Council’s defensible spaces
- why bushfire hazard management is integrated with broader nature/ conservation aims
- illegal rubbish dumping within reserves

- how to manage bushfire hazard on private land to protect assets
- reporting fires and suspicious activities to Council and or TFS.

Residents adjoining Council reserves, as well as user and Landcare groups, will need to be informed about the bushfire management issues in their reserves and the recommendations in the reserve BMP. The Community Education and Awareness Program must be designed and implemented prior to the 2021 review. It is recommended this be displayed on the Council website, and promoted annually through social media and local community newspapers and newsletters.

In addition Council's annual planned burning programs should be advertised biannually (at the start of spring and autumn) through social media and written print such as the Mercury Newspaper and local community newspapers.

8.7.1 Rubbish Dumping in Reserves

During site inspections undertaken as part of this review dumped rubbish was observed in the following reserves; Lauderdale Wetlands, Pilchers Hill, Rokeby Hills, Rosny Foreshore, Rosny Hill, Roscommon, Seven Mile Beach, Waverley Flora Park and Wiena Reserve. Most of the rubbish consisted of plant material that appeared to originate from nearby private property. This material can substantially increase the bushfire hazard on reserve perimeters, spread weeds and hamper planned burning and asset protection during bushfires. Bushfire risk could be reduced if residents are educated not to dump garden wastes and other rubbish in reserves and Council takes effective action to reduce dumping where education programs are not effective.

8.8 Liaison with the Tasmania Fire Service (TFS)

Since the establishment of the TFS Fuel Reduction Unit in 2014, a multi-agency approach has been adopted by Council's Fire and Bushland Management Team. Council aims to contribute to a holistic bushfire risk management approach through annually disclosing planned burning programs and reserve fire history with the TFS Fuel Reduction Unit, in addition to regular engagement.

The TFS is responsible for bushfire suppression within Council managed land. To carry out this function effectively it is important that local brigades are familiar with the reserves they are responsible for. The TFS should be provided with copies of the reserve BMPs so the information in the plans can be used when brigades respond to fires in the reserves. Local brigades will be provided a tour of the reserves in their area upon request so they are familiar with the location and condition of fire trails, defendable spaces, assets at risk and planned burn history.

Clarence City Council's Fire and Bushland Vegetation Management Coordinator has equipment and a trained crew that can assist the TFS in a number of ways during bushfire control operations, including:

- advising the Incident Controller on the location and condition of access points, fire trails, fuel breaks, defensible spaces and water points as well as fuel loads
- advising the Incident Controller of the location of assets (infrastructure, heritage and natural) that need to be protected from fire
- advising the Incident Controller of potential hazards for fire fighters
- guiding fire crews, particularly at night
- opening gates
- coordinating the supply of other Council resources (such as water carriers and earth moving equipment) to assist in bushfire suppression
- undertaking blacking out and patrol duties once bushfires have been contained.

8.9 Threatened or Rare Species

It is important that planned burning promotes populations of species of conservation value. In the absence of any specific information on the bushfire management requirements of a particular threatened species, the BMPs prepared under this strategy aim to maintain the structure and floristics of the plant communities in which they occur. However, given the uncertainties in our knowledge of the fire ecology of some of the threatened plants, known populations should be monitored for any changes in population size following bushfires and planned burns. This will allow fire regimes to be altered if they are having an adverse impact on threatened species. Individual BMPs state what if any threatened or rare species are present, in addition to threatened species permit requirements.

8.10 Cultural Heritage

The preservation of cultural heritage values within bushland reserves are a high priority. Cultural heritage sites such as Aboriginal heritage sites, may not be directly damaged by bushfire but may be damaged by bushfire management and bushfire suppression activities, such as constructing fire control lines. These risks if present are noted in the bushfire risk assessment for built and cultural assets in each BMP. During each strategy review Aboriginal Heritage Tasmania must be engaged to conduct searches of the Aboriginal Heritage Register for each BMP.

8.11 Monitoring and Evaluation

Council's Fire and Bushland Management Team established its VMP during 2012. This program was designed with three key objectives in mind, the collection of long term data, utilisation of data to review prescribed treatments effectiveness, and modification of treatments to meet desired outcomes. The program is a collaboration of methodologies used by Planned Burn Practitioners, Field Foresters, and influences from Vegetation Condition Assessment methodologies deriving from NRM South.

Collection of data:

Council's Fire and Bushland Management Team annually collect data from an assortment of assessment plots within bushland reserves. Photo point monitoring helps to visually assess treatments effectiveness and long term impacts to biodiversity. Each assessment site location is stored on Council's Fire Management GIS context.

Review treatments effectiveness:

Storing datasets through cloud computing (internet based data storage) enables Council's Fire and Bushland Management Team to review treatments effectiveness at the touch of a button through an iPad. This makes evaluation relatively easily if the bushfire risk has been reduced or ecological objectives been achieved. The datasets also assist reviewing treatments at strategic level at each five year BMS review.

Modify treatments to suit:

After reviewing datasets at each five year BMS review, Council's Fire and Bushland Management Team can amend treatments to better achieve the VMUs objectives. Annual collection of data continues after the treatment being applied is producing the desired results, in turn completing the adaptive management cycle.

The future expansion of the monitoring program should include threatened species and be developed in consultation with the Threatened Species Section of the DPIPWE. It should also be in accordance with any conditions attached to a permit to take threatened species. As stated in Recommendation 8, the permanent creation of a Technical Fire and Bushland Management Team position will allow for the implementation of a more formalised and effective program.

8.11.1 Performance Indicators

Where applicable, performance indicators are included for actions recommended in reserve BMPs. The performance indicators are used to determine if the specific objectives of the BMPs have been achieved. For example a recommended action may be "Ensure all personnel engaged in planned burning activities in the reserve have the appropriate level of training", the performance indicator would be "All personnel are able to demonstrate the required level of training."

Performance indicators will be assessed every five years when the BMPs are revised. Where performance targets are not being achieved, a review of the relevant portion of the BMP should be undertaken.

8.12 Maintaining Records

8.12.1 Bushfire Management Activities

The area and date of planned burns or bushfires within the area covered by this BMS must be recorded and stored on Council's Fire Management GIS context as outlined in MP 8. This data is to be shared annually with the TFS Fuel Reduction Unit as noted in section 8.8.

8.12.2 Fire Management Geographic Information System (GIS) Context

During 2013 Council's Fire and Bushland Management Team in conjunction with Councils GIS Systems Asset Officer, established an extensive Fire Management GIS Context. This context is updated multiple times annually, and designed as a central repository for Council's Fire and Bushland Asset Management. The context stores datasets such as planned burn and bushfire history, fire trail location, VMU locations, conservation significant flora, defensible spaces and VMP sites.

In a multi-agency approach to bushfire risk management, planned burn, bushfire history and VMU datasets are to be supplied to the TFS Fuel Reduction Unit annually. In addition natural values datasets (such as weed mapping) is to be shared with the Natural Values Atlas annually.

Use of this context as a central repository for information outlined in each BMP will allow BMPs to be easily updated and revised. This is essential to the adaptive management approach used in this BMS, as there will be a need to modify the BMPs in response to:

- new information on the fire ecology of the flora and fauna species in the reserves
- establishment of new fire trails and defensible spaces
- acquisition of new Council land
- unplanned incidents, such as major bushfires
- changes in Clarence City Council and government policy affecting bushfire management.

8.13 Review of the Bushfire Management Strategy

Every five years, Clarence City Council's BMS must be reviewed to ensure that its objectives and strategies meet legislative requirements, operational requirements and current TFS guidelines.

The BMS and all other relevant Council plans such as RAPs must have a collaborative approach to ensure successful implementation and do not prescribe or recommend conflicting actions.

8.13.1 Revision of the Bushfire Management Plans (BMPs)

Reserve BMPs must be reviewed and revised every five years in conjunction with the review of the BMS, and when any of the triggers listed in Table 7 are encountered. The review should include:

- comparison of the condition of burnt and unburnt VMUs
- an audit to ascertain if procedures have been properly carried out and performance targets have been achieved
- a review of contemporary bushfire management and fire ecology literature to incorporate the latest information into each BMP
- a review of established defensible spaces to ensure compliance with most current TFS guidelines
- evaluation of VMP data (section 8.11) to see if management objectives have been met and, if not, what changes need to be incorporated in the revised plans to meet these objectives
- Preparation of a revised BMP to cover the next five years.

Table 7 –BMP revision procedures

ASSESSMENT:	REVIEW TRIGGER:	RECOMMENDED ACTION:
Monitoring of bushfires in Clarence City Council reserves.	Bushfire burns more than half of any single VMU in a reserve.	Consider the whole VMU to have been burnt and reschedule the next planned burn according to the optimal fire frequency for the vegetation communities in the VMU.
Monitoring of bushfires in Clarence City Council reserves.	Bushfire burns more than 50% of the combined VMUs in a reserve in any single year.	Completely revise the burning schedule for the reserve.
Flora and fauna surveys or incidental recordings.	Further threatened species considered sensitive to fire recorded in a reserve.	Revise the burning prescription and/ or burning schedule for the VMU in which the species occurs to ensure it is not adversely affected. A permit to take threatened species will be required for future burns in the areas in which they occur.
Check of actual burn outcomes against the desired outcomes.	Burning prescription not producing the desired outcomes.	Revise burning prescription based on information recorded during the burn to ensure desired outcomes can be achieved.
Weed monitoring in burnt areas.	Post-fire weed treatment has not been successful in controlling target weeds.	Carry out follow-up treatments until target weeds are under control.
Release of recovery plans for threatened species in Clarence City Council reserves.	Current fire regimes are incompatible with the requirements of the recovery plan.	Revise burning schedules for the VMUs containing the particular species or plant community.

Bibliography

- Adams R. and Simmons D. (1993) The Impact of Fire Intensity on Litter Loads and Understorey Floristics in an Urban Fringe Dry Sclerophyll Forest and Implications for Management. In *Proceedings of a Conference, Fire and Biodiversity: The Effect and Effectiveness of Fire Management*. Victorian National Parks Association, Melbourne.
- AFAC (1996) *Prescribed Burning I*. Australian Fire Authorities Council and Longman, Melbourne.
- Barker, P. (2001) *A Technical Manual for Vegetation Monitoring*. Resource Management and Conservation, Department of Primary Industries, Water and Environment., Hobart.
- Brereton R. (1996) *The Swift Parrot Recovery Plan: 1997-1999*. Parks & Wildlife Service, DPIWE, Hobart.
- Brereton R. (1997) *Management Prescriptions for the Swift Parrot in Production Forests*. Report to Tasmanian RFA Environment and Heritage Technical Committee, Hobart.
- Bresneham S. J. and Pyrke A. (1998) *Dry Forest Fuels in South-east Tasmania*. Parks and Wildlife Service, Hobart.
- Brown W. E. and Mooney N. J. (1997) *Modelling of the nesting habitat of the Wedge-tailed Eagle (Aquila audax) in Tasmania*. Report to the Tasmanian RFA Environment and Heritage Technical Committee, Hobart.
- Bryant S. and Jackson J. (1999) *Tasmania's Threatened Fauna Handbook: what, where and how to protect*. Threatened Species Unit, Parks & Wildlife Service, Hobart.
- Campbell A. J. and Tanton M. T. (1981) Effects of Fire on the Invertebrate Fauna of Soil and Litter of Eucalypt Forest. In Gill A. M., Groves R. H. and Noble I. R. (Eds), *Fire and the Australian Biota*, pp 273-310, Australian Academy of Science, Canberra.
- Cheney P. and Sullivan A. (2008) *Grassfires: fuel, weather and fire behaviour, second edition*. CSIRO Publishing, Melbourne.
- Chladil M. (1991) Fire management for nature conservation. In Kirkpatrick J. B. (Ed) *Tasmanian Native Bush: A Management Handbook*. Tasmanian Environment Centre, Hobart.
- Chladil M. and Sheridan J. (2006) *Fire Resisting Garden Plants for the Urban Fringe and Rural Areas*. Tasmania Fire Research Fund and the Royal Tasmanian Botanical Gardens, Hobart.
- Conroy B. (1988) Bushfire management planning in natural areas. In proceedings of the conference - *Caring for Warringah's Bushland*. Warringah Council, Dee Why, NSW.
- Dickinson K. J. M. and Kirkpatrick J. B. (1985) The flammability and energy content of some important plant species and fuel components in the forests of south-eastern Tasmania. *Journal of Biogeography*, **12**, 121-134.

Attachment 1

- DPIWE (2003) *Waterways and Wetlands Works Manual*. Department of Primary Industry, Water and Environment, Hobart.
- Driessen M. M., Taylor R. J. and Hocking G. J. (1991) Trends in abundance of three marsupials after fire. *Australian Mammalogy*, **14**, 121-4.
- Ellis S., Kanowski P. and Whelan R. (2004) *National Inquiry on Bushfire Mitigation and Management*, Commonwealth of Australia, Canberra.
- Fensham R. J. (1991) *Fire Management in Hobart's Bushlands*. Unpublished report for Hobart City Council, Hobart.
- Fensham R. J. (1992) The management implications of fine fuel dynamics in bushlands surrounding Hobart, Tasmania. *Journal of Environmental Management*, **36**, 301-320.
- Flora Advisory Committee (1994) *Native Higher Plant Taxa which are Rare or Threatened in Tasmania*. Parks and Wildlife Service, Hobart.
- Forest Practices Board (1998) *Threatened Fauna Manual For Production Forests In Tasmania. (revised version)*. Forest Practices Board, Hobart.
- Gilfedder L. (1991) Management Plan Case Study: Waverley Flora Park, Tasmania. Chapter 11 in *Tasmanian Native Bush: A Management Handbook*. Ed: J. B. Kirkpatrick. Tasmanian Environment Centre, Hobart.
- Hammer T. (1997) *The Effects of Fire on Vertebrate and Invertebrate Fauna. Results of a Mammal Survey In the N. R. Pierce Memorial Reserve*. Unpublished report to Glenorchy City Council.
- Hennessy K, Lucas C, Nicholls N, Bathols J, Suppiah R and Ricketts J. (2006) *Climate change impacts on fire-weather in south-east Australia*. CSIRO, Australia.
- Hird D. and Hammer T. (1995) Mammals of Gum Top Spur in the north-west of Wellington Park with comments on a new habitat type for the barred bandicoot. In *The Tasmanian Naturalist*. **117**, 32-38.
- Inions G. B., Tanton M. T. and Davey S. M. (1989) Effect of fire on the availability of hollows in trees, used by the common brushtail possum (*Trychosurus vulpecula*), Kerr 1792, and the ring-tailed possum (*Pseudocheirus peregrinus*), Baddaerts, 1785. *Australian Wildlife Research.*, **16**, 449-458.
- Invertebrate Advisory Committee. (1994). Interim List of Native Invertebrates which are Rare or Threatened in Tasmania. Edition 1. *Species at Risk, Tasmania - Invertebrates*. Parks and Wildlife Service, Tasmania.
- Johnson C. N. (1997) Fire and habitat management for a mycophagous marsupial, the Tasmanian bettong *Bettongia gaimardi*. *Australian Journal of Ecology* **22**, 101-105.

Attachment 1

- Jones M. E. and Rose R. K. (1996) *Preliminary Assessment of Distribution and Habitat Associations of the Spotted-tailed Quoll (Dasyurus maculatus maculatus) and Eastern Quoll (D. viverrinus) in Tasmania to Determine Conservation and Reservation Status*. Report to the Tasmanian RFA Environment and Heritage Technical Committee, Hobart.
- Keith D. (1998) *A Recovery Plan - Tasmanian Forest Epacrids, 1999-2004*. Parks and Wildlife Service, Hobart.
- Kirkpatrick J. B. (1985) The viability of bush in cities - ten years of change in an urban grassy woodland. *Australian Journal of Botany*, **34**, 691-708.
- Kirkpatrick J. B., Barker P., Brown M. J., Harris S., and Mackie R. (1995) *The Reservation Status of Tasmanian Vascular Plant Communities*. Wildlife Scientific Report 95/ 4. Parks and Wildlife Service, Hobart.
- Kirkpatrick J. B., Gilfedder L. and Fensham R. (1988a) *City Parks and Cemeteries, Tasmania's Remnant Grasslands and Grassy Woodlands*. Tasmanian Conservation Trust, Hobart.
- Kirkpatrick J. B., Gilfedder L., Hickey J. and Harris S. (1991) *Reservation and Conservation Status of Tasmanian Native Higher Plants*. Wildlife Division Scientific Report 91/ 2. Parks and Wildlife Service, Hobart.
- Luke H. R. and McArthur A. G. (1986) *Bushfires in Australia*. CSIRO Division of Forest Research, Canberra.
- Lunt I. D. and Morgan J. W. (1998) *Second Generation Management of Grassland Reserves: Lessons from First Generation Reserves*. A report to the Victorian Grassy Ecosystem Reference Group. Unpublished Draft Report.
- Marsden-Smedley J. B. (2009) *Planned Burning in Tasmania, operational guidelines and review of current knowledge*. Fire Management Section, Parks and Wildlife Service, Department of Primary Industries, Water and the Environment, Hobart.
- Mooney N. J. and Holdsworth M. (1991) The effects of disturbance on nesting wedge-tailed eagles (*Aquila audax fleayi*) in Tasmania. *Tasforests*, **3**, 15-31.
- NEMC (2010) *National Emergency Risk Assessment Guidelines*. National Emergency Management Committee, Hobart.
- North A. J., Johnson K., Ziegler K., Duncan F., Hopkins K., Ziegler D. & Watts, S. (1998). *Flora of Recommended Areas for Protection and Forest Reserves in Tasmania*. Forestry Tasmania / Forest Practices Board / Parks & Wildlife Service, Hobart.
- North Barker Ecosystem Services (2014) *Clarence Weed Strategy 2014-2029*. Prepared for Clarence City Council.

Attachment 1

- NSW Rural Fire Service (2006) *Planning for Bushfire Protection*. NSW Rural Fire Service, Sydney.
- NSW Rural Fire Service (1997) *Prescribed Burning Course Manual*. NSW Rural Fire Service, Sydney.
- Parsons W. T. and Cuthbertson E. G. (1992) *Noxious Weeds of Australia*. Inkata Press, Melbourne.
- PLUC (1996) *Environment and Heritage Report. Background Report Part C Vol I-V*. For Tasmanian-Commonwealth Regional Forest Agreement. Tasmanian Public Land Use Commission, Hobart.
- Pyrke A. F. and Marsden-Smedley J. B. (2005). Fire-attributes categories, fire sensitivity, and flammability of Tasmanian vegetation communities. *Tasforests* **16**, 35-46
- PWS (2009) *Fire Management Infrastructure Categories and Guidelines (Version 3)*. Tasmania Parks and Wildlife Service Hobart.
- Robin J. (1991) Control of environmental weeds. In Kirkpatrick J. B. (Ed) *Tasmanian Native Bush: A Management Handbook*. Tasmanian Environment Centre, Hobart.
- Slijepcevic A, Tolhurst K. G., Saunder G., Whight S and Marsden-Smedley J.B. (2007) *A prescribed burning risk assessment tool (BRAT)*. Bushfire Cooperative Research Centre and Australasian Fire Authorities Council Annual Conference, Hobart Tasmania, September 2007
- Standards Australia Limited. (2011). *AS 3959-2009 Construction of buildings in bushfire-prone areas (incorporating Amendments Nos 1, 2 and 3)*. Sydney: SAI Global Limited.
- Standards Australia Limited. (2009). *AS/NZS ISO 31000:2009 Risk management – Principles and guidelines*. Sydney: SAI Global Limited.
- Sutton J. H. (1985) *Bushfire Risk in the Hobart Environs, a Critical Assessment of Bushfire Management in the Hobart Municipality*. Hobart City Council, Hobart.
- Tasmanian Fire Service (2015), *Bushfire Survival Plan 2015-2016*. Tasmanian Fire Service, Hobart.
- Tasmanian Fire Service (2016), Fuel Reduction Program Fact Sheet, Vineyards and smoke, viewed 10 June 2016,
<<http://www.fire.tas.gov.au/userfiles/tym/file/FuelReduction/vineyardsandsmoke.pdf>>.
- Tasmanian Fire Service (2016), Information on the Fire Danger Rating and Alerts, viewed 10 June 2016, <<http://www.fire.tas.gov.au/Show?pageId=colFireDanger#FDI-guide>>.
- Tasmania Fire Service (undated) *Guidelines for Vegetation Burning*. Tasmania Fire Service, Hobart.
- Tasmania Fire Service (2016), *Information on the Fire Danger rating and Alerts*, Hobart, viewed 10 March 2016, <<http://www.fire.tas.gov.au/Show?pageId=colFireDanger#FDI-guide>>.

Attachment 1

- Tasmanian Planning Commission. (2016). *Interim Planning Directive No. 1 Bushfire-Prone Areas Code*. Hobart: Tasmanian Planning Commission.
- Taylor R. J. (1993) Habitat requirements of the Tasmanian bettong (*Bettongia gaimardi*), a mycophagous marsupial. *Wildlife Research*, **20**, 699-710.
- Tolhurst, K. G. (1990) Response of bracken to intensity prescribed fire in open eucalypt forest in west-central Victoria. In *Bracken Biology and Management*, eds. J. A. Thomson & R. T. Smith, Australian Institute of Agricultural Science, Sydney, pp. 53-62.
- Tolhurst K. (1993) Effects of fuel reduction burning on flora in a dry sclerophyll forest. In *Proceedings of the Conference, Fire and Biodiversity: Effects and Effectiveness*, Victorian National Parks Association, Melbourne.
- Vertebrate Advisory Committee (1994) *Native Vertebrates which are Rare or Threatened in Tasmania. Edition 1. Species at Risk, Tasmania-Vertebrates*. Parks and Wildlife Service, Hobart, Tasmania.
- Whelan R. J. (1995) *The Ecology of Fire*. Cambridge University Press, Melbourne.
- Williams K. (1991) Dry sclerophyll vegetation. In Kirkpatrick J. B. (Ed) *Tasmanian Native Bush: A Management Handbook*. Tasmanian Environment Centre, Hobart.
- Williams, K. J. and Potts, B. M. (1996) The natural distribution of *Eucalyptus* species in Tasmania. *Tasforests* Vol. 8, pp 39-165. Forestry Tasmania, Hobart.
- Withers J. (1979) Studies on the status of unburnt Eucalyptus woodland at Ocean Grove, Victoria, IV. The effect of shading on seedling establishment. *Australian Journal of Botany*, **27**, 47-66.

Glossary

The following descriptions of bushfire related terms are taken or adapted from:

Tasmanian Planning Commission. (2016). *Interim Planning Directive No. 1 Bushfire-Prone Areas Code*. Hobart:
Tasmanian Planning Commission.

Tasmanian Fire Service. (2015). *Bushfire Survival Plan 2015-2016*. Tasmanian Fire Service, Hobart.

Marsden-Smedley J. B. (2009) *Planned Burning in Tasmania, operational guidelines and review of current knowledge*.
Fire Management Section, Parks and Wildlife Service, Department of Primary Industries, Water and
the Environment, Hobart.

Australian Fire Authorities Council (2009) *Wildfire glossary*

Attachment 1

Bushfire attack level (BAL):

means the bushfire attack level as defined in AS3959 –2009 *Construction of Buildings in Bushfire Prone Areas* as ‘a means of measuring the severity of a building’s potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat expressed in kilowatts per metre squared, and the basis for establishing the requirements for construction to improve protection of building elements from attack by bushfire’.

Back-burning

A fire started intentionally along the inner edge of a fire line during indirect attack operations to consume the fuel in the path of a bushfire. This is usually the only method for controlling large wildfires.

Black out

The process of extinguishing or removing burning material along or near the fire control line, felling stags, trenching logs to prevent rolling and the like, in order to make the fire safe.

Bushfire

An unplanned fire burning in vegetation; also referred to as wildfire.

Bushfire Hazard

Materials that can fuel a fire.

Bushfire-Prone Area

In Tasmania a Bushfire Prone Area is:

- a) Land that is within the boundary of a bushfire-prone area shown on an overlay on a Planning Scheme map; and
- b) (i) where there is no overlay on a Planning Scheme map: or
- (ii) where there land is outside the boundary of a bushfire-prone area shown on an overlay on such a map,

Land that is within 100m of an area of bushfire-prone vegetation equal to or greater than 1 hectare.

Bushfire-Prone Vegetation

Means continuous vegetation including grasses and shrubs but not including maintained lawns, parks and gardens, nature strips, plant nurseries, golf courses, vineyards, orchards or vegetation on land that is used for horticultural purposes.

Bushfire Risk

In general, bushfire risk is the probability of a wildfire starting and spreading, but it can also be used to describe the likelihood of an asset, such as a building, being damaged or destroyed in a bushfire.

Attachment 1

Defendable Space

An area of managed vegetation around an asset likely to be at risk from bushfire that protects it from direct flame contact and intense radiant heat, as well as providing an area where fire fighters can defend the asset.

Duff

The layer of decomposing vegetative matter on the forest floor below the litter layer, the original structure still being recognisable.

Effective slope

The slope under vegetation which most influences the bushfire attack direction.

Fine Fuel

Dead plant matter less than 6mm in diameter and live plant matter less than 2mm in diameter (including grasses, bracken, leaves, bark, and twigs and branches) that ignites readily and burns rapidly when dry. Fine fuel is what burns at the fire front and contributes directly to fire behaviour. Increasing fine fuel loads increases the rate of spread and intensity of fire fronts.

Fire Danger Rating (FDR)

A system to warn of the potential impact of a bushfire on any given day, based on forecast weather conditions. Rated as: **low-moderate** (FDI 0-11), **high** (FDI 12-24), **very high** (FDI 25-49), **severe** (FDI 50-74), **extreme** (FDI 75-99) or **catastrophic** (FDI >100).

Fire Intensity

The rate of energy output per unit length of fire front, usually measured in kilowatts per metre. It is a function of the heat yield of the fuel (H), the dry weight of the fuel consumed (W), and the forward rate of spread of the fire (R) i.e. $I = HWR$.

Fire Regime

The history of fire in a particular vegetation type or area including the frequency, intensity and season of burning. It may also include proposals for the use of fire in a given area.

Fuel break

Synonymous with “firebreak”; any natural or constructed change in fuel characteristics, which affects fire behaviour so that fires burning into them can more readily be controlled. Fuel breaks will not stop a major bushfire but provide a fire control line from which to suppress a fire.

Fuel Load

The amount of combustible material commonly expressed in tonnes per hectare (also known as fuel loading).

Attachment 1

Fuel Structure

The quantity and type of fuel at different heights above the ground usually separated into the following strata; surface, near surface, elevated and canopy. Where trees are present bark fuel is also included. In forests and woodlands the canopy fuels are normally left out of fuel assessments, but are included in shrublands and heathlands where they are the equivalent of elevated fuels in forests.

Hazard Management Area

The area between a habitable building or building area and bushfire-prone vegetation, which provides access to a fire front for fire fighting, which is maintained in a minimal fuel condition and in which there are no other hazards present which significantly contribute to the spread of fire.

Hazard Reduction

Reducing fuel loads in a given area. Generally by burning, mechanical, manual or chemical means.

Head Fire

The part of a fire where the rate of spread, flame height and intensity are greatest, usually when burning downwind or upslope.

Heap burning

The piling of vegetation into large bonfires and burning.

Indigenous Vegetation

The plant species and/or plant communities which occur naturally in a locality. The term 'indigenous' excludes Australian species from another locality or region, as well as non-native species that have been introduced to a locality.

Inner Zone

An area between an asset at risk from bushfire and the outer zone, where fine fuels are maintained in a minimum fuel condition to ensure that the zone acts as a barrier between the assets and bushfire.

Introduced Species

Species of plants or animals that have been deliberately, or accidentally, brought into an area in which they did not naturally occur.

Managed Vegetation

Combustible material that is permanently maintained in a minimal fuel state. Generally mechanically treated in defensible spaces.

Minimum Fuel Conditions

A condition where fine fuels are minimised to the extent that the passage of a fire will be prevented or severely restricted. This generally requires the removal of dead fine fuel and control of live fuel,

Attachment 1

breaks in the continuity of any fuel, maintenance of a high moisture content in vegetation, or replacement of vegetation with roads, paths, etc.

Outer Zone

The area between the inner zone and unmanaged vegetation where fine fuels are removed and larger fuels strategically modified to reduce the intensity of an approaching bushfire. Provision of an inner zone and an outer zone will ensure that there is a progressive reduction of fine fuel between a bushfire hazard and any combustible structure.

Planned Burn

(Synonymous with prescribed fire, controlled burn, prescription burn, scheduled fire or management burn) The controlled application of fire under specified environmental conditions to a predetermined area, and at the time, intensity, and rate of spread required to attain planned resource management objectives. It is undertaken in specified environmental conditions.

Soil Dryness Index (SDI)

A form of drought index. A measure of the average dryness of an area in terms of the number of millimetres of rainfall required to thoroughly wet the soil.

Spot Fire

Isolated fire started ahead of the main fire by sparks, embers, or other ignited material carried by the wind, sometimes to a distance of several kilometres.

Spotting

Behaviour of a fire producing sparks or embers that are carried by the wind and start new fires beyond the zone of direct ignition by the main fire.

Wildfire

An unplanned vegetation fire. A generic term which includes grass fires, forest fires and scrub fires.

Clarence City Council

Bushfire Management Strategy

for Council Owned and Controlled Land

**Response to Public Submissions
on the Draft Revised
Bushfire Management Strategy**

December 2016
Clarence City Council

1. Introduction

This report gives Clarence City Councils Fire and Bushland Managements responses to comments received from the community and other stakeholders following exhibition of the draft revised Bushfire Management Strategy and its associated documents, including Bushfire Management Plans for the following Clarence City Council reserves:

- Bedlam Walls Reserve
- Canopus-Centauri Bushland Reserve
- Glebe Hill Reserve (incorporating additional 3.4^{ha} formerly 50 Minno Street, Howrah)
- Rokeby Hills Reserve (formerly Kuynah Bushland Reserve, incorporating additional 32^{ha} of Public Open Space throughout Rokeby Hills)
- Lauderdale Wetlands Reserve
- Mortimer Bay Coastal Reserve
- Natone Hill Bush Park
- Pilchers Hill Reserve
- Roches Beach Coastal Reserve and Nowra Bushland Reserve
- Rosny Foreshore Reserve
- Rosny Hill Reserve
- Roscommon Reserve
- Seven Mile Beach Coastal Reserve
- Waverley Flora Park
- Wiena Reserve

During revision of the Bushfire Management Strategy and Bushfire Management Plans, surrounding landowners, and other stakeholders were sent a letter notifying them that the revision was being undertaken and inviting them to suggest issues that they would like to see addressed in the revised strategy. A series of ‘walk and talk’ community consultation meetings were held for each reserve during preparation of the draft Bushfire Management Plans. The results of this consultation are summarised in the reserve Bushfire Management Plans.

On completion, the draft Bushfire Management Strategy and reserve Bushfire Management Plans were made available for comment to the public and other stakeholders commencing 1 October and concluding 3 November 2016 . Specific persons and organisations that were invited to comment on the draft plans included:

- owners of properties adjoining the reserves
- Land and coast care groups operating in the reserves
- Tasmanian Parks and Wildlife Service
- Tasmania Fire Service Fuel Reduction Unit
- Aboriginal Heritage Tasmania
- Clarence City Council officers and aldermen.

Attachment 2

15 submissions were received from interested residents and land and coast care groups, as well as comments from the Parks and Wildlife Service. A number of general comments were made as well as specific comments on the following Bushfire Management Plans

- Bedlam Walls Reserve
- Canopus – Centauri Bushland Reserve
- Roches Beach Coastal Reserve and Nowra Bushland Reserve
- Mortimer Bay Coastal Reserve
- Roscommon Reserve
- Rosny Foreshore Reserve
- Waverley Flora Park Reserve
- Rosny Hill Reserve
- Seven Mile Beach Coastal Reserve

There were no comments on the draft plans for the other reserves. There were comments received on 45 and 45A Goodwins Road Reserve mainly about it being removed from the Bushfire Management Plans.

Most comments in the submissions have been paraphrased to fit them into the following table. Councils Fire and Bushland Management apologises if any of the comments have been misinterpreted. The table also includes Councils Fire and Bushland Management responses to the submissions and changes made to the strategy and plans in response.

Attachment 2

2. Response to Submissions on the Draft Bushfire Management Strategy and Reserve Bushfire Management Plans

General Comments (Parks and Wildlife Service - PWS)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
PWS is supportive of the Management Strategy and its overall focus on Community Risk Mitigation. As a Land Management Agency with a number of significant Reserve areas within the Clarence Municipality PWS would like to plan co-operatively with Council on land at Knopwood and Mornington Hills, Meehan Range and Seven Mile Beach areas. It is recognised that Mt Rumney, where PWS has land management responsibility, requires some community safety infrastructure and once again PWS are keen to plan co-operatively with Council.	It is imperative that all land owners/managers plan co-operatively to ensure that the local community are provided with safe and well managed bushland reserves.	Continue to participate in co-operative planning forums with other land owners and managers as described in the Bushfire Management Strategy.

Bedlam Walls Reserve (Mr B Morgan 6 Sarean Court, Geilston Bay)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Often see emergency vehicles in the cul-de-sac trying to find access to the Reserve.	Emergency authorities have been issued with keys to unlock Council's master key system including this particular locked gate at 76 Geilston Bay Road.	No action required.

Attachment 2

Canopus-Centauri Bushland Reserve (Mt Rumney Land Care Group Inc 86 Canopus Drive, Mt Rumney)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Support the recommendation to strengthen the communication between Council's Fire and Bushland Management Team and the Land and Coast Care Groups	Included as Recommendation 5 in the Strategy.	No action required.
Endorse the need to provide vehicle escape routes from Mt Rumney as a high priority to be implemented as soon as feasible.	Opportunities to provide vehicular escape routes will be dependent on local subdivisions occurring to create the opportunity to incorporate escape routes as part of any future development. This action is included as part of Recommendation 10 in the Strategy.	No action required.

Mortimer Bay Coastal Reserve (P Yaxley, 200 Gellibrand Drive, Sandford)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Request for additional water holding dams within the northern section of Mortimer Bay Reserve to assist with refilling of fire fighting trucks.	Recommendation 3 in the Strategy includes the provision of a 4WD tanker to undertake planned burns. In the case of a wildfire in the Reserve the TFS will be the responding authority. Council's Fire and Bushland Management Team are not equipped to respond to wildfires but to undertake fire mitigation activities.	No action required.
Management of dead and fallen trees in Reserve and the apparent conflict between the local Land Care Group to find the balance for this activity.	Regular meetings with the Land and Coast Care Groups will foster improved communication between the needs of the natural environment and the fire mitigation activities of Council's Fire and Bushland Management Team.	Included as Recommendation 5 in the Strategy, no action required.

Attachment 2

Mortimer Bay Coastal Reserve (P Yaxley, 200 Gellibrand Drive, Sandford)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Foreshore bushfire assembly point for residents should a wildfire impact Sandford properties.	There are numerous tracks that lead from residents to the foreshore walking track adjacent to the foreshore. This is a reasonable and sensible option for local residents.	Recommendation 7 provides for a community awareness and education program which may include providing local residents adjoining Mortimer Bay Reserve information relating to a safe escape route to the foreshore.
Mortimer Bay Coastal Reserve (T Adam-Adamsons and D Mittelheuser 216 Gellibrand Drive, Sandford)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Concern that felled radiata pine trees are not being completely treated as per the previous Mortimer Bay Reserve Bushfire Management Plan Section 6.3 which requires the felled trees to be delimbed, stockpiled and burnt.	The removal of radiata pine trees is to be in accordance with Best Management Practices - Management Plan 8 which requires the removed weeds to be burnt.	No action required.
Roches Beach Coastal Reserve and Nowra Bushland Reserve (J and K Noble, 9 Bardia Court, Roches Beach)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Incorrect statement for cause of fire impacting the Nowra Bushland Reserve dated February 2013 as being caused by burning of green waste. The actual cause was from the ignition of grass retained in the mower being used to reduce the fuel load on the private property. Request to change the statement to the actual cause not the burning of green waste.	A letter has been sent to the residents explaining the process and that the text will be changed to reflect the actual cause of the fire.	Change the text under Section 2.1 Fire History and Causes to reflect the actual cause. That being the fire occurred due to a fault with the mower being used to reduce the fuel load on the adjoining private property where dry grass was retained in the mower causing the grass to ignite and spread into the Reserve.

Attachment 2

Roscommon Reserve (D French, 7 Ringwood Road, Lauderdale)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Council to ensure that a 5m firebreak is established in the Roscommon Reserve adjacent to his property.	Table 7 in the Roscommon Reserve Fire Management Plan requires a 5m fire break be mown along the boundary of 7 Ringwood Road.	No action required.

Rosny Foreshore Reserve (Dr R Yeoland, 66 Rosny Esplanade, Rosny)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Not impressed with the recommended fuel reduction treatment in the Reserve of burning piles.	Rosny Foreshore Reserve is a focal viewline from the western shore and for that reason the desire to maintain the vegetation community in tact along this foreshore area. The treatment to reduce fuel loads within the Reserve by burning piles is consistent with both previous fire management plans for the Reserve. There has been a low occurrence of wildfires within the Reserve, just 2 occasions since 1998 which burnt less than 1Ha.	No action required.

Rosny Hill Reserve (Mrs C Edwards, 65 Leura Street, Rosny)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Introduction: Important to add that Rosny Hill is a State Recreation Area which seems to have been removed from the previous Bushfire Management Plan.	Whilst Council is the management authority for Rosny Hill it still remains as a State Recreation Area.	Add the words State Recreation Area to Rosny Hill in Bushfire Management Plan.
Aim: what are the strategies to achieve last 2 dot points without accurate native plant and weed mapping?	Council has recently undertaken a threatened species survey of Rosny Hill.	Include output from this survey for inclusion in Bushfire Management Plan, mainly Figure 5.

Attachment 2

Rosny Hill Reserve (Mrs C Edwards, 65 Leura Street, Rosny)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
1.2.3. Reserve Usage: add the following to paragraph 3. Orienteering, bird watching and 23 years of conservation activities by the Rosny Landcare Group	Agreed	Add orienteering, bird watching and 23 years of conservation activities by Rosny Landcare Group to the uses of Rosny Hill.
1.4 Reserve Management Responsibilities: The Management Plan for Rosny Hill developed by Inspiring Place has this been adopted by Council?	The Rosny Hill Nature Recreation Area Management Strategy was adopted by Council on 25 July 2011.	Change wording to reflect the correct title for the Strategy and the date it was adopted by Council.
2.1.1 Planned Fires: The 2 nd paragraph should be removed, the grazing land was below the hill where houses now stand. Clearly shown on old photographs throughout the years.	Remove this statement as it seems to cause concern about its accuracy.	Remove statement relating to the grazing land.
2.3.1 Bushfire Risk to Natural Heritage Assets: the rare <i>Thelymitra bracteata</i> is not confined to the top of Rosny Hill there are locations elsewhere on Rosny Hill.	The recent threatened species survey confirms this statement.	Adjust Figure 5 to include the recent findings of the threatened species survey.
Table 7 – Bushfire Risk Assessment for Built and Cultural Assets: 21 Haven Court – the building is almost completed.	New building is being constructed on this property.	Adjust Table 7 to match current status of built Assets.
Figure 6 Vehicle and Foot Access: Which fire trail has threatened species located nearby	The fire trail identified as RH3 when compared to Figure 5 shows the location of the threatened species.	No action required.
Table 9 – Bushfire Management in the Reserve – is there a map showing where these threatened species are located?	Figure 5 shows the location of the threatened species.	No action required.

Attachment 2

Rosny Hill Reserve (Mr J Counsell – Rosny Montagu Bay Landcare and Coast Care Group)		
Comments	Response by Council	Action taken
<p>1.2 Location and Description: “<i>The reserve is part of a scenic rim of low tree covered hills on the foreshores of the Derwent River and provides a high level of visual amenity along the main tourist route of the Tasman Highway and contributes significantly to the scenic appeal of the Hobart/Clarence region.</i>” Our Group appeals to Clarence City Council staff and Aldermen to ensure that the visual amenity and scenic appeal is maintained to the current level.</p>	<p>This statement is most likely in relation to the development proposed for Rosny Hill and bears no relationship with the Bushfire Management Plan for Rosny Hill.</p>	<p>No action required.</p>
<p>Members of our Group believe that the threatened species <i>Thelymitra bracteata</i> is more widespread than indicated in the Bushfire Management Plan. Our Group requests that Council urgently arranges for a survey of the distribution of this orchid, this will in turn influence the management strategies such as hazard reduction burning or slashing.</p>	<p>The recent threatened species survey confirms this statement.</p>	<p>Adjust Figure 5 to include the recent findings of the threatened species survey.</p>

Attachment 2

Seven Mile Beach Coastal Reserve (Ms S Murfet – Seven Mile Beach Coast Care Group)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Request that the native fire retardant shrubs planted by the Coast care Group along the reserve between Lewis Park and Sunways Avenue not be slashed. They are successfully suppressing weeds.	This type of request will be more effectively communicated with the establishment of regular meetings between the Council’s Fire and Bushland Management Team and the Coast care Group.	No action required.
Could the Coast Care Group be informed of any proposed tree removal or clearing by Council’s Fire and Bushland Management Team.		

Waverley Flora Park (Mr A Cocker, 17 Waverley Court, Bellerive)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Concern raised about the “do nothing approach” to the southern slope of Mornington Hill. The overgrowth of bracken is likely to see a fire burn quickly down the hill. Would like to see greater emphasis on rehabilitating this area.	The Bushfire Management Plan proposes to manually control the bracken on the southern slope of Mornington Hill as a trial. This method should allow the regrowth of native species to impact on the bracken and reduce the fuel load in this area.	No action required.
The powerline easement is poorly managed and an eye sore.	Vegetation within the powerline easement is controlled by guidelines set by TasNetworks. The Bushfire Management Plan proposes to establish low vegetation to provide protection from the impacts of erosion.	No action required.
Inadequate control of trail bike access to Waverley Flora Park	This is an on-going problem and one that proves to be difficult to manage effectively. Many of the access points into the park are via private property and difficult to control.	Council’s Bushfire Management Team to liaise closely with Asset Management staff when developing future Activity Plans for Waverley Flora Park to minimise the access points for trail bikes.

Attachment 2

45 & 45A Goodwins Road Reserve (Ms L Redway, PO Box 50, Rokeby)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Concerned about removal of Bushfire Management Plan for this Reserve. Would like to see this Bushfire Management Plan included to ensure that all reasonable steps are taken to prevent serious fire.	This Reserve is not included as bushfire prone in Clarence's Interim Planning Scheme 2015. The Reserve is maintained on a regular basis by mowing or slashing and other activities associated with volunteer groups and other funded programs. There will still be minor heap burning undertaken within the Reserve to manage the fuel loads. The Reserve has a low probability of being able to sustain a high intensity wildfire, in addition to having a permanent creek through the Reserve.	No action required. Council may consider the inclusion of a Bushfire Management Plan for this Reserve.

45 & 45A Goodwins Road Reserve (Mr I Duffy and Ms L Grewcoe, 31 Goodwins Road, Clarendon Vale)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Concerned about removal of Bushfire Management Plan for this Reserve. Would like to know which of the reasons for its removal applies to the Reserve. Would like Council to reconsider this change to the Bushfire Management Plan.	This Reserve is not included as bushfire prone in Clarence's Interim Planning Scheme 2015. The Reserve is maintained on a regular basis by mowing or slashing and other activities associated with volunteer groups and other funded programs. There will still be minor heap burning undertaken within the Reserve to manage the fuel loads. The Reserve has a low probability of being able to sustain a high intensity wildfire, in addition to having a permanent creek through the Reserve.	No action required. Council may consider the inclusion of a Bushfire Management Plan for this Reserve.

Attachment 2

45 & 45A Goodwins Road Reserve (Ms W Andrew, Carella Street, Howrah)		
<i>Comments</i>	<i>Response by Council</i>	<i>Action taken</i>
Concerned about removal of Bushfire Management Plan for this Reserve. The first Bushfire Management Plan was developed just 5 years ago and it seems odd that it has now been removed. Would like to see this Bushfire Management Plan included to ensure that all reasonable steps are taken to prevent serious fire.	This Reserve is not included as bushfire prone in Clarence's Interim Planning Scheme 2015. The Reserve is maintained on a regular basis by mowing or slashing and other activities associated with volunteer groups and other funded programs. There will still be minor heap burning undertaken within the Reserve to manage the fuel loads. The Reserve has a low probability of being able to sustain a high intensity wildfire, in addition to having a permanent creek through the Reserve.	No action required. Council may consider the inclusion of a Bushfire Management Plan for this Reserve.

11.6 FINANCIAL MANAGEMENT

Nil Items.

11.7 GOVERNANCE**11.7.1 PROPOSED TRANSFER TO COUNCIL – 138 EAST DERWENT HIGHWAY, LINDISFARNE**
(File No E01-138)**EXECUTIVE SUMMARY****PURPOSE**

To consider purchasing from the Crown the vacant land at 138 East Derwent Highway, Lindisfarne.

RELATION TO EXISTING POLICY/PLANS

Council's Strategic Plan 2016-2026 is relevant.

LEGISLATIVE REQUIREMENTS

The Local Government Act, 1993 is relevant.

CONSULTATION

Consultation has occurred between Council officers and the Department of State Growth.

FINANCIAL IMPLICATIONS

The cost of any purchase has not been considered in the 2016-2017 Annual Plan.

The costs to construct the car park have been estimated at \$80,000 and such funds will need to be considered as part of a future Annual Plan if the purchase offer is accepted.

RECOMMENDATION:

- A. That Council declines the offer to purchase the State Government land at 138 East Derwent Highway, Lindisfarne.
- B. That the General Manager be authorised to write to the Department of State Growth declining the offer to purchase the State Government land at 138 East Derwent Highway, Lindisfarne.

ASSOCIATED REPORT**1. BACKGROUND**

- 1.1.** The Department of State Growth (DSG) owns the vacant area of land at 138 East Derwent Highway, Lindisfarne as shown on Attachment 1.
- 1.2.** The area is currently primarily used for informal parking by patrons of the Masonic Hall and the general public.

- 1.3.** The Masonic Lodge recently contacted the DSG regarding the possible purchase of the land for parking by patrons of the Masonic Hall.
- 1.4.** The area is surplus to the DSG's requirements, however, has been offered to Council in the first instance.
- 1.5.** This Agenda Item considers the history of the property and makes a recommendation for its future use.

2. REPORT IN DETAIL

- 2.1.** The land at 138 East Derwent Highway, Lindisfarne is a portion of a parcel acquired by the Crown in 1996 from Ampol Limited to provide safety/improved access from Gordons Hill Road to East Derwent Highway by way of a traffic light controlled intersection.
- 2.2.** At the time of redevelopment of the intersection in 1999, the Masonic Lodge raised concerns about safe access for patrons of the hall with the increase of traffic from the proposed road works.
- 2.3.** Council and the Crown at the time of design of the new junction were in discussions about developing the residue area of land for car parking and at that time the Crown requested Council consider sharing the estimated total cost of \$37,000. Council declined the offer.
- 2.4.** Council agreed to maintain the footpath and nature strip with the East Derwent Highway road reservation with the balance area being the responsibility of DSG.
- 2.5.** Since the new junction was constructed the area of land has remained vacant and used informally for car parking purposes.
- 2.6.** The Masonic Lodge recently contacted the DSG regarding the possible purchase of the land for car parking for patrons of the Hall.

- 2.7.** DSG has offered to sell the land to Council in the first instance. It is understood that any sale would be for a nominal sum but on condition that the property use be restricted to “community use” or similar.
- 2.8.** To assist in Council’s consideration of this matter 2 preliminary car park designs for the land have been prepared, which also involve a slight lengthening of the left hand turning lane on Gordons Hill Road; (see Attachment 2) for an estimated cost of \$80,000.
- 2.9.** There are several key issues which suggest the purchase would not be in Council’s interest. Firstly and most importantly, should the land be developed as a car park the issue arises about pedestrian safety in either crossing Gordons Hill Road to the Masonic Hall, or the East Derwent Highway in the case of development of the Tyre Power or former Aproneers sites. In developing the car park Council could effectively be promoting the site as a safe parking option, knowing that the likely pattern of use and pedestrian movements it would generate would be quite unsafe. On that basis alone any such development of a car park should be opposed.
- 2.10.** The second issue that the development of a car park for this land potentially raises is that it is essentially providing a private benefit. There are no directly defined public benefits that would arise out of such a development, such as parking to utilise Public Open Space or Recreational facilities.
- 2.11.** If the land is developed as a car park there are likely to be issues associated with Park and Ride. The Metro stop is approximately 130m distant and such a potential car park will be inviting to Park and Riders who already use side roads off the East Derwent Highway. To prevent this activity the car park would need to be time restricted and enforced which will divert Council Ranger resources from other duties.

3. CONSULTATION

3.1. Community Consultation

Nil.

3.2. State/Local Government Protocol

DSG officers have been in discussion with Council officers over the proposed sale of the land.

3.3. Other

Nil.

4. STRATEGIC PLAN/POLICY IMPLICATIONS

Council's Strategic Plan 2016-2026 under the Goal "Clarence will be a well-planned liveable city with services and supporting infrastructure to meet current and future needs" has a Roads and Transport Strategy to:

"2.6 – Provide and prioritise a safe, reliable and accessible pedestrian network".

5. EXTERNAL IMPACTS

5.1. Currently the land is vacant and used by the public for informal car parking.

5.2. The area has minimal maintenance undertaken by DSG to keep grass levels low.

6. RISK AND LEGAL IMPLICATIONS

Under the Local Government Act, Council can purchase land for any purpose which it considers to be of benefit to Council or its community.

7. FINANCIAL IMPLICATIONS

7.1. If Council purchases the land for a nominal sum, there will be costs for the purchase and associated charges such as survey and legal fees that have not been considered in the 2016-2017 Annual Plan.

7.2. The construction costs for the car park have been estimated at \$80,000 and funds will need to be allocated from a future Annual Plan if Council decides to acquire the land.

8. ANY OTHER UNIQUE ISSUES

Given that the proposed sale is for a nominal amount, the offer is essentially a transfer from one level of government to another. In the absence of a specific need for the land by Council, there appears no logical reason for Council to agree to such a transfer.

9. CONCLUSION

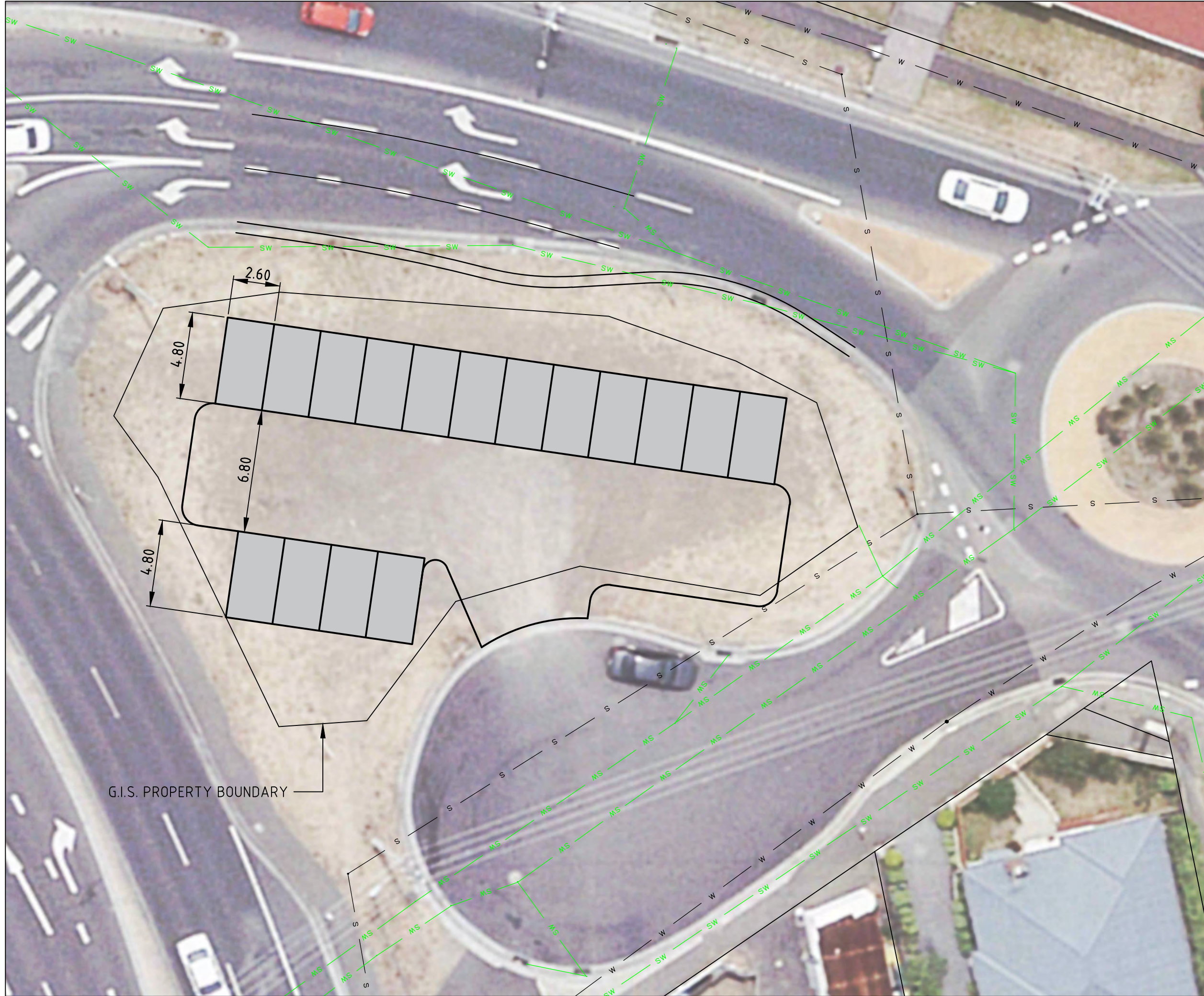
On the basis of road safety access for pedestrians and the lack of direct public benefits that will accrue, the offer of acquisition and associated development of a car park for land at 138 East Derwent Highway should be refused.

Attachments: 1. General Site Plan (1)
2. Car Parking Development Options (1)

Frank Barta
ACTING GENERAL MANAGER



Disclaimer: This map is a representation of the information currently held Clarence City Council. While every effort has been made to ensure the accuracy of the product, Clarence City Council accepts no responsibility for any errors or omissions. Any feedback on omissions or errors would be appreciated. Copying or reproduction, without written consent is prohibited. **Date:** Friday, 30 December 2016 **Scale:** 1:491.5 @A4



OPTION 1
SCALE 1:200

- NOTES (AS2890.1:2004):
1. USER CLASS 3
 2. PARKING WIDTH 2.60m
 3. AISLE WIDTH 6.80m - INCREASED OVER STD
 4. PARKING LENGTH 4.80m - INCL. LOW KERB ALLOWING 600mm OVERHANG.
 5. PAVEMENT AREA 450m²



OPTION 2
SCALE 1:200

- NOTES (AS2890.1:2004):
1. USER CLASS 3
 2. PARKING WIDTH 2.60m
 3. AISLE WIDTH 6.80m - INCREASED OVER STD
 4. PARKING LENGTH 4.80m - INCL. LOW KERB ALLOWING 600mm OVERHANG.
 5. PAVEMENT AREA 500m²

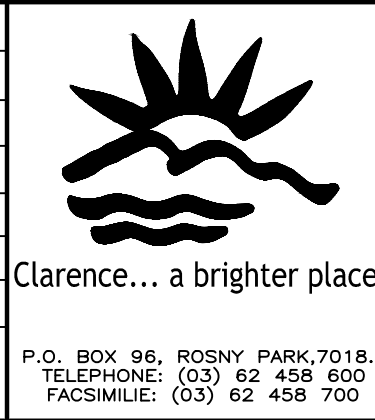
SERVICES

NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN, OR THAT THE POSITION OF THOSE SHOWN IS ACCURATE. THE EXACT POSITION OF ALL SERVICES SHALL BE DETERMINED ON SITE BEFORE CONSTRUCTION COMMENCES.

©COPYRIGHT, 2004, BY THE CLARENCE CITY COUNCIL

This plan is copyright. Other than for the purposes of and subject to the conditions prescribed under the Copyright Act, no part of it may in any form or by any means (electronic, mechanical, microcopying, photocopying or otherwise) be reproduced, stored in a retrieval system or transmitted without the prior written permission of the Clarence City Council.

SCALES — PLAN				As Shown	HORIZONTALLY	As Shown	VERTICALLY	As Shown	DATUM	GDA94/AHD	DATE
POINT OF INTEREST —	EAST	NORTH	ROTATION	—					REC. REF.	SCANNED	
COMPUTER FILE REFERENCE									DRAWN	AWB	OCT 2016
									DETAILED		
									DESIGNED		
									CHECKED		
									EXAMINED		
									APPROVED		
No.	REVISIONS			INITIAL	DATE	SCANNED	ENGINEER				



PROPOSED CAR PARKING FACILITY 138 EAST DERWENT HIGHWAY CONCEPT PLAN			REFERENCE DRAWINGS	CONTRACT NUMBER	—
PLAN No. 6463—1	PROJECT No.			A1	

11.7.2 REQUEST TO PARTICIPATE IN OVERSEAS STUDY TOUR

(File No 10-01-02)

EXECUTIVE SUMMARY**PURPOSE**

The purpose of this report is to consider a request from Ald Daniel Hulme and Ald Debra Thurley to participate in a Study Tour organised by Auckland Transport.

RELATION TO EXISTING POLICY/PLANS

Council's adopted Alderman Allowances and Entitlements Policy sets out the criteria for Aldermen wishing to attend overseas conferences and seminars. This request meets the requirements of this Policy.

LEGISLATIVE REQUIREMENTS

Not applicable.

CONSULTATION

Not applicable.

FINANCIAL IMPLICATIONS

Costs identified to participate are in the order of \$4,500. The amount can be funded from each individual Alderman's allocation for large scale conferences and seminars.

RECOMMENDATION:

A matter for Council.

ASSOCIATED REPORT**1. BACKGROUND**

1.1. Council's adopted Alderman Allowances and Entitlements Policy provides opportunities for Aldermen to attend overseas conferences or seminars.

Which provides as follows:

- “• *The appropriateness of the conference/seminar attendance is to be based on the primary consideration that the attendance would reasonably be regarded by the public as relevant to the role of Alderman and consistent with the provisions and requirements of the Council's Code of Conduct; and*
- *That the attendance would satisfies one or more of the following prerequisite criteria:*
 - *Assist an Alderman in the performance of their role;*
 - *Relevant to policy, project, issues and matters currently being considered by the Council;*

- *Direct relevance to the local government industry (including implications, roles and responsibilities due to legislative change);*
- *Related to the functions of, and services delivered by the Council;*
- *An identified need within the Clarence community which can be directly linked to an objective and strategy in Council's Strategic Plan;*
- *Related to a Council function or the functional responsibilities of a Council Committee or Special Committee of the Council upon which the Alderman is an appointed representative".*

1.2. Aldermen Daniel Hulme and Debra Thurley have submitted a request to participate in a study tour organised through Auckland Transport, a public company owned and controlled by the Auckland Council.

2. REPORT IN DETAIL

2.1. Notification has been received of a study tour proposal by Auckland's Integrated Transport Programme to be conducted on Friday, 24 March and Saturday, 25 March 2017.

2.2. The outline for the study tour is as follows:

- briefing on Auckland Transport's structure, functions and projects;
- briefing on New Network public transport initiative;
- meetings with AT managers responsible for smart transport solutions – Intelligent Transport Systems Manager, Traffic Engineering Manager and Travel Demand Manager;
- possible meeting with Walking and Cycling Manager to discuss Auckland's cycleway building programme;
- visit to ATOC (Auckland Transport Operations Centre) to observe monitoring of the motorways, roads and public transport networks;
- briefing on special events management;
- northern Busway field trip including park and ride facilities; and
- meeting with an elected member of Auckland Council to discuss Auckland Transport's role as a Council-Controlled Organisation.

- 2.3.** In support of the application to participate in the study tour, Aldermen Daniel Hulme and Debra Thurley have provided a detailed outline of the study tour proposal which is attached as Attachment 1.
- 2.4.** The focus of the Tour will be Auckland's Integrated Transport Programme (ITP). The ITP is a 30-year plan from 2012 to 2041 which seeks to manage Auckland's transport as one integrated system across all modes including state highways and local roads, railways, buses, ferries, footpaths, cycleways, intermodal transport facilities and supporting facilities such as parking and park-and-ride.
- 2.5.** It is considered that the tour will provide valuable background understanding of scope and options for integration solutions to address the delivery of transportation needs for the City as well as the greater Hobart region.
- 2.6.** The total cost for both Aldermen to attend the study tour is estimated at \$4,500 for airfares, accommodation and incidental costs (meals and transport fares etc).

3. CONSULTATION

Not applicable.

4. STRATEGIC PLAN/POLICY IMPLICATIONS

- 4.1.** Council's adopted Alderman Allowances and Entitlements Policy sets out the criteria for Aldermen wishing to attend overseas conferences/seminars and study tours.
- 4.2.** This request is in accordance with the Policy. The proposal is considered to be consistent with the objectives and criteria of the policy.

5. EXTERNAL IMPACTS

Not applicable.

6. RISK AND LEGAL IMPLICATIONS

Not applicable.

7. FINANCIAL IMPLICATIONS

Costs identified to attend the Study Tour plus the anticipated out-of-pocket expenses could be funded from the respective individual Alderman's allocation for large scale conferences and seminars.

8. ANY OTHER UNIQUE ISSUES

Not applicable.

9. CONCLUSION

9.1. Aldermen Daniel Hulme and Debra Thurley have submitted a request to attend a study tour in New Zealand.

9.2. The request is consistent with Council's adopted Alderman Allowances and Entitlements Policy. It is a matter for Council to determine the request.

Attachments: 1. Outline of Study Tour (2)

Frank Barta

ACTING GENERAL MANAGER

Study Tour Proposal – Auckland Transport

Overview

Council's *Alderman Allowances and Entitlements* policy provides each alderman with an allocation of \$2,000—which can be brought forward each year to a maximum of \$6,000—for Large Scale Conferences, Seminars, Sister City Relations and Study Tours. An alderman wishing to undertake an overseas study tour may submit a request and explanatory memorandum to the General Manager for listing as an agenda item at an ordinary Council meeting agenda.

Alderman Daniel Hulme and Alderman Debra Thurley propose to participate in a Study Tour organised by Auckland Transport, a public company owned and controlled by the Auckland Council, on Friday, 24 March and Saturday, 25 March 2017. It is proposed that the Large Scale Conferences, Seminars, Sister City Relations and Study Tours entitlement of each participating alderman be used to finance the Tour.

Study Tour Objectives

The proposed Study Tour will help participating aldermen to learn about how the City of Auckland manages its transport network, and consider how these learnings can be applied to the transport networks in the City of Clarence and Greater Hobart.

The focus of the Tour will be Auckland's Integrated Transport Programme (ITP). The ITP is a 30-year plan from 2012 to 2041 which seeks to manage Auckland's transport as one integrated system across all modes including state highways and local roads, railways, buses, ferries, footpaths, cycleways, intermodal transport facilities and supporting facilities such as parking and park-and-ride.

While not all areas of study are local government responsibilities in Tasmania, Clarence City Council has an important advocacy role when it comes to the Tasmanian Government's planning of the transport network in Greater Hobart. Information gained from the Tour and reported to Council will contribute to Clarence City Council's planning of its own transport infrastructure as well as our role in working with neighbouring councils and the Tasmanian Government to improve the Hobart-wide transport network.

Council's Strategic Plan 2016-2026 provides that Council will "Enhance Sister City relationships and international linkages as a mechanism to foster and deliver cultural and/or economic benefits." (5.8) Study tours are a useful way of promoting international linkages for mutual benefit.

The Plan also provides that Council will "Adopt 'Smart City' policies and strategies to enhance the quality of life..." (5.9) While there is much debate about what defines the concept of a 'Smart City', Auckland's integrated transport system is often referred to in public commentary as a 'Smart City' approach.

Outline of the Tour

A detailed program is being put together by Anthony Cross, Public Transport Network Manager, Network Development, AT Metro. While the program has not been completed, Mr Cross's advice is likely to include the following elements, with meetings and site visits to take place over the course of Friday, 24 March and Saturday, 25 March:

- Briefing on Auckland Transport's structure, functions and projects;
- Briefing on New Network public transport initiative;
- Meetings with AT managers responsible for smart transport solutions – Intelligent Transport Systems Manager, Traffic Engineering Manager, Travel Demand Manager;
- Possible meeting with Walking and Cycling Manager to discuss Auckland's cycleway building programme;
- Visit to ATOC (Auckland Transport Operations Centre) to observe monitoring of the motorways, roads and public transport networks;
- Briefing on special events management;
- Northern Busway field trip including park and ride facilities; and
- Meeting with an elected member of Auckland Council to discuss Auckland Transport's role as a Council-Controlled Organisation.

Costings

While final costings can only be confirmed at the time of booking, approval is requested for expenditure up to the following amounts:

Air Travel (\$500 per participant per journey – including airport transfers)	\$2,000
Accommodation (2 nights, \$250 per night per participant)	\$1,000
Total	\$3,000

Alderman Hulme will be travelling directly from Melbourne to Auckland after attending the Cities 4.0 Conference in Melbourne. Accommodation will be booked in the Auckland CBD close to Auckland Council's main building and transport for any site visits included in the tour will be provided by the hosts.

12. ALDERMEN'S QUESTION TIME

An Alderman may ask a question with or without notice at Council Meetings. No debate is permitted on any questions or answers.

12.1 QUESTIONS ON NOTICE

(Seven days before an ordinary Meeting, an Alderman may give written notice to the General Manager of a question in respect of which the Alderman seeks an answer at the meeting).

Nil.

12.2 ANSWERS TO QUESTIONS ON NOTICE

Nil.

12.3 ANSWERS TO PREVIOUS QUESTIONS TAKEN ON NOTICE

Nil.

12.4 QUESTIONS WITHOUT NOTICE

An Alderman may ask a Question without Notice of the Chairman or another Alderman or the General Manager. Note: the Chairman may refuse to accept a Question without Notice if it does not relate to the activities of the Council. A person who is asked a Question without Notice may decline to answer the question.

Questions without notice and their answers will not be recorded in the minutes.

The Chairman may refuse to accept a question if it does not relate to Council's activities.

The Chairman may require a question without notice to be put in writing. The Chairman, an Alderman or the General Manager may decline to answer a question without notice.

13. CLOSED MEETING

Regulation 15 of the Local Government (Meetings Procedures) Regulations 2015 provides that Council may consider certain sensitive matters in Closed Meeting.

The following matters have been listed in the Closed Meeting section of the Council Agenda in accordance with Regulation 15 of the Local Government (Meeting Procedures) Regulations 2015.

13.1 APPLICATIONS FOR LEAVE OF ABSENCE

13.2 PROPERTY MATTER - BELLERIVE

13.3 PROPERTY MATTER – ROSNY PARK

These reports have been listed in the Closed Meeting section of the Council agenda in accordance with Regulation 15 of the Local Government (Meeting Procedures) Regulation 2015 as the detail covered in the report relates to:

- proposals to acquire land or an interest in land or for the disposal of land;
- applications by Aldermen for a Leave of Absence.

Note: The decision to move into Closed Meeting requires an absolute majority of Council.

The content of reports and details of the Council decisions in respect to items listed in “Closed Meeting” are to be kept “confidential” and are not to be communicated, reproduced or published unless authorised by the Council.

PROCEDURAL MOTION

“That the Meeting be closed to the public to consider Regulation 15 matters, and that members of the public be required to leave the meeting room”.