ATTACHMENTS TO REPORTS –

Item 13.1 – DA 15/1005 Construction of a Four Multi Dwelling Development – 23 Purcell Street, Bowral

ORDINARY COUNCIL MEETING

Wednesday 23 March 2016

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Attachments to Reports

Item

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ATTACHMENTS TO REPORT

Item 13.1

DA 15/1005 Construction of a Four Multi Dwelling Development - 23 Purcell Street, Bowral

Attachment 1

Draft Notice of Determination

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Plans of Proposed Development

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Arboriculture Report

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Heritage Landscape Report

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Planning Report from 9 March 2016

Attachment 6

Letter from Applicant regarding reconsideration of DA

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Figure 1 - Site Location

ATTACHMENT 1

1. Approved Development

The development shall be generally in accordance with development application number DA15/1005 submitted by the applicant on 12 October 2015 and in accordance with the submitted supporting documentation.

Drawing No.	Revision/ Issue	Name of Plan	Date
Architectural (or Design) Drawings prepared by Kathy Barnsley Architect (ref. 15-566)			
01	E	Site/Floor Plan	03.02.3016
02	C	Unit 1 & 2 Details	04.02.2016
03	C	Unit 3 Details	04.02.2016
04	C	Unit 4 Details	04.02.2016
05	B	Recessed Ceiling Fittings Plan	08.10.2015
06	A	Site Diagrams	03.02.2016
Stormwater Plans prepared by SEEC (ref. 15000036)			
STW01	01	Stormwater Management Plan 1 of 2	03.02.2016
STW02	01	Stormwater Management Plan 2 of 2 and Details	03.02.2016
STW03	01	Site Catchment Plan & Typical Section Through Overland Flow Path	03.02.2016
Hydraulic Plans prepared by Adams & Associates.			
01-35812	A	Site Hydraulics & Fire Hydrant Service	28.01.2016
Site Survey prepared by LandTeam.			
207254-DET1	A	Detail Survey and Contour Plan	26.02.2016
Landscape Plan prepared by Catherine Lewis Landscape Architect.			
DA01	E	Landscape Plan	03.02.2016
Statement of Environmental Effects prepared by Kathy Barnsley Architect, dated October 2015.			
Water Cycle Management Study prepared by SEEC, ref. 15000036-WCMS-01, dated 8 October 2015.			
Waste Management Plan prepared by the Applicant, dated 9 October 2015.			
BASIX Certificate No. 672116M, dated 9 October 2015.			
Arboriculture Report prepared by Summit Tree Services, dated February 2016.			
Addendum to Statement of Environmental Effects, prepared by Lee Environmental Planning, dated 2 February 2016.			

Heritage Landscape Report prepared by Chris & Charlotte Webb Pty Ltd, dated 3 February 2016.

except where amended by any conditions below.

2. Inconsistencies between Notice of Determination and Plans

In the event of any inconsistency between conditions of this consent and the drawings/documents referred to above, the conditions of this consent prevail to the extent of the inconsistency.

3. Compliance

Development is to take place in accordance with the approved plans and documentation submitted with the application and subject to the conditions below, to ensure the development is consistent with Council's consent.

4. Use not to Commence

The approved use is not to commence until the proposed development has been completed in accordance with this consent and any other Council approvals which may be required, and a final inspection carried out and approved by Council staff.

5. Demolition Approval

The dwelling and any associated outbuildings shall be demolished in accordance with the requirements of AS2601-2001 "The Demolition of Structures".

Amongst others, precautions to be taken shall include compliance with the requirements of the WorkCover Authority of New South Wales and Council's Water and Sewer Asset Protection, including:-

(a) Protection of site workers and the general public.

(b) Erection of hoardings where appropriate.

(c) Asbestos removal handling and disposal where applicable by licensed contractors.

(d) Ensuring only licensed demolition contractors are used as required pursuant to Occupational Health and Safety Legislation.

(e) Appropriate precautions are taken in regard to lead based paints.

(f) Water and Sewer Asset Protection

All water and sewer assets on the site or on adjacent road reserve or lands that may be affected by the demolition works are to be clearly identified on site and protected from damage. Those water and sewer protection measures are to be shown on the site plan and are to be approved by

Council's Water and Sewer Planning and Development Engineer before any demolition works can commence.

(g) Sewer Assets Temporary Disconnection or Closure

The site sanitary drainage is to be temporarily disconnected or closed off by a suitably qualified Plumber from any of Council's sewer sidelines, sewer junctions and or boundary traps that are to be retained and reused to prevent ingress contaminants into Council's sewer mains. This work shall be sited and approved by Council's Water and Sewer Planning and Development Engineer before demolition works can commence.

6. Qualifications and Responsibility for Documentation

Council requires that all design plans be prepared to Council's standards by a person, who has proven experience and suitable relevant qualifications in the preparation of plans specifications and any other relevant documentation for the approved development. All of these requirements are outlined in Council's Engineering Policies.

The Developer will be responsible for the correctness of all information contained in the drawings, specifications or any other documentation. The Council will not accept responsibility for any errors or inaccuracies that may be found in such documents, regardless of whether these documents have been checked and/or approved by Council.

7. Responsibility for Works

The Council will hold the Developer (Applicant/Owner), to whom the development approval was issued, solely responsible for constructing the required development works to Council's satisfaction and maintaining them during any specified period.

8. Construction Certificate

The building works are not to commence until a Construction Certificate has been issued in accordance with the *Environmental Planning and Assessment Act 1979*. A Building Code of Australia assessment has not been undertaken on the proposal. For further advice you may contact Council's Building Surveyors.

9. Other Approvals

Prior to any work commencing, written approval under Section 68 of the *Local Government Act 1993* shall be obtained for stormwater, sanitary drainage and water plumbing from the Council as the appropriate Water Supply Authority.

10. Removal of Plants for Propagation

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION OR DEMOLITION, the Australian Garden History Society Southern Highlands Branch, and the Friends of the Southern Highlands Botanic Gardens shall be invited and permitted to take vegetative material for propagation from the plants to be removed from the site.

11. Structural Engineer's Details

Separate details be prepared by a practising Structural Engineer for the following work shall be lodged with the Principal Certifying Authority and accepted for construction prior to commencing the relevant work:-

(a) retaining walls.

NOTE: The name, address and qualifications of the practising Structural Engineer certifying the design shall be clearly indicated on the plans and any accompanying documentation. Such engineer is to hold qualifications appropriate to the project as defined in the Building Code of Australia. The design shall relate to the particular site.

Any such Certificate is to set forth the extent to which the Engineer has relied on relevant Specifications, Rules, Codes of Practice or Publications in respect of the construction.

12. Lighting Plan

PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE, a Site Lighting Plan shall be submitted to Council for consideration and shall be in accordance with section A10.3 of the Bowral Development Control Plan. The lighting plan shall be designed so as to not result in a glare nuisance to neighbouring residences

13. Letterbox Location Plan

PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE, a plan showing the location of letterboxes, their dimensions and materials shall be submitted to Council for approval.

14. Adaptable Housing

PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE, amended plans shall be provided that demonstrate two of the four units can comply with not less than Class C level of Australian Standard 4299 – Adaptable Housing.

15. Developers Representative during Construction of Works

A minimum of 48 hours prior to commencement of any construction works on site the Developer must nominate to Council in writing their representative (Construction Supervisor) who will be responsible for all aspects of construction and site control, including Traffic Control, Sediment and Erosion Control and liaison with Council Officers and all other Authorities.

Details to be submitted include:-

- Name of Representative:
- Company :
- Position:

- Contact Ph:
- Contact Fax:
- After Hours Contact:
- Signature of Representative:
- Signature & Acceptance of representative by the Developer:
- Council requires that the nominated " Construction Supervisor" either hold qualifications acceptable for Corporate Membership of the Institute of Engineers, Australia, or be Approved by the Director and/or has proven experience and suitable relevant qualifications for the control, supervision and management of civil engineering works as required for carrying land development.

Prior to commencing any works on site the representative shall:-

- Inform Council in writing of their intention 7 days before entering the site.
- Submit to Council a proposed Schedule of Works.

The Developer may be required to arrange for Council to peruse all other contract documentation **PRIOR TO THE CONTRACTOR ARRIVING ON SITE TO COMMENCE WORK** (Schedule of Works, Specifications, Bill of Quantities, Traffic Control Plan and Soil and Water Management Plan).

Failure to comply with the requirements as set out above will result in an immediate stop work order.

16. Hours of Demolition and Construction Works

In order to minimise impacts upon the locality demolition and construction activities must be limited to between 7.00am - 6.00pm Monday to Friday and 8.00am to 1.00pm Saturdays with no work on Sundays and public holidays. Any variation of these hours will only occur with Council's consent.

17. Workers Compensation & Public Liability

It is the Developer's responsibility to ensure that Contractors engaged to carry out works indicated on the approved plans carries current Workers Compensation Insurance and hold Public Liability Insurance for $20,000,000 cover.

18. Management of Construction

A detailed Construction Management Plan is required to be **SUBMITTED TO COUNCIL WITH ANY APPLICATION FOR A CONSTRUCTION CERTIFICATE.** The required Construction Management Plan MUST indicate the measures to be implemented to protect the environment as well as public health, safety and convenience. The plans MUST detail provisions for:

(a) Off-street parking for employees, contractors and sub-contractors.

(b) Site access for construction vehicles and equipment purposes.

(c) Public safety in the use of roads and footpaths where development activities adjoin such facilities.

(d) The storage and removal, on a regular frequency, of builder's rubble and waste by trade waste contractors.

(e) Storage of ALL building materials and equipment wholly within the construction site.

(f) Public risk policies and management for all contractors' employees using or gaining access over public footpaths and roads.

(g) External lighting and security alarms proposed for the construction site.

(h) Fire fighting measures to be available on site during development and construction.

(i) Sanitary amenities and ablutions proposed on site during development and construction.

(j) Ensuring the safety of members of the public and Council staff who may have occasion to enter and be in attendance on the site.

19. Drainage Protection

Protection of the development and/or property by provision of underground drainage pipelines and fail-safe above ground flow paths to cater for stormwater flooding from all roofed and paved areas of the site and to connect to downstream drainage system.

20. Storage Materials

No storage or placing of any building materials to occur on adjacent public roads or footpath areas in association with the construction, maintenance or use of the development or site, without prior Council approval.

21. Pedestrian Safety

All care to be taken to safeguard both contractors and the public while the works are being carried out. The Contractor shall endeavour to minimise disturbance to pedestrian / vehicle traffic in the vicinity of the site.

22. Developer Must Advise of Damage to Property

The Developer must advise Council of any damage to property controlled by Council which adjoins the site including kerbs, gutters, footpaths, walkways, reserves and the like, prior to commencement of any work on the site. Failure to identify existing damage will result in all damage detected after completion of the building work being repaired at the Developer's expense.

23. Erosion Control

To minimise soil erosion and sediment movement during construction, the following measures shall be implemented:-

(a) Removal and/or disturbance of vegetation shall be confined to within two metres of the site of required works.

(b) Topsoil stripped from the construction site shall be stockpiled and protected from erosion until re-use during landscaping. Soil is to be retained within the property.

(c) Stockpiles of construction and landscaping materials, and of site debris shall be located clear of drainage lines and in such a position that they are protected from erosion and do not encroach upon any footpath, nature strip or roadway.

(d) Vehicular access shall be controlled so as to prevent tracking of sediment onto adjoining roadways, particularly during wet weather or when the site is muddy. Where sediment is deposited on adjoining roadways the same shall be removed by means other than washing. All material is to be removed as soon as possible and the collected material is to be disposed of in a manner which will prevent its mobilisation.

(e) All disturbed areas shall be progressively stabilised and/or revegetated so that no areas remain exposed to potential erosion damage for more than 14 days or such other period as may be approved after earthworks cease. All driveways and parking areas shall be stabilised with compacted sub-grade as soon as possible after their formation.

24. Imported Fill Material

Fill material shall not be obtained from contaminated land (as defined in Part 7A of the *Environmental Planning & Assessment Act 1979).* All imported fill shall be validated in accordance with NSW Office of Environment and Heritage guidelines prior to it being brought onto the site.

25. Overburden / Waste

Any unused materials not used on site shall be taken to an appropriately licensed waste facility for disposal. Receipts from the disposal of such waste shall be retained and submitted to Council **PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE.**

26. Protection of Trees during Construction

During construction, the development area is to be clearly delineated to protect the remaining natural environment. With regard to protecting trees during the construction phase, a protective fencing must be erected around the two remaining Eucalyptus trees. A tree Asset Protection Zone (APZ) is to be established around such trees to minimize disturbance to their root zones. The tree protection zone shall be shown on the plan for tree removal.

27. Root Barriers

Root barriers shall be installed during construction to prevent compaction of the root zone around the two Eucalypt trees to remain.

28. Waste Management

An approved litter receptacle with a tight fitting lid shall be provided on site for the disposal of builder refuse that may be wind blown (all polystyrene waste must be bagged and securely contained). The bin shall be onsite during all demolition and construction works. Sorting of waste materials shall occur on site in accordance with the approved Waste Management Plan.

29. Waste Management Plan

The approved Waste Management Plan must be displayed on site and implemented during construction and ongoing operation of the development. Evidence of recycling/disposal actions and waste management contracts are to be maintained for three years from the date of commencement of work.

30. Compliance with Building Code of Australia

All building work must be carried out in accordance with the provisions of the Building Code of Australia.

31. Residential Building Work

A. Building work that involves residential building work (within the meaning of the *Home Building Act 1989)* must not be carried out unless the principal certifying authority for the development to which the work relates:

(a) in the case of work to be done by a licensee under that Act:

(i) has been informed in writing of the licensee's name and contractor licence number, and
(ii) is satisfied that the licensee has complied with the requirements of Part 6 of that Act, or

(b) in the case of work to be done by any other person:

(i) has been informed in writing of the person's name and owner-builder permit number, or
(ii) has been given a declaration, signed by the owner of the land, that states that the reasonable market cost of the labour and materials involved in the work is less than the amount prescribed for the purposes of the definition of ***owner-builder work*** in Section 29 of that Act,

B. A certificate purporting to be issued by an approved insurer under Part 6 of the Home Building Act 1989 that states that a person is the holder of an

insurance policy issued for the purposes of that Part is, for the purposes of this clause, sufficient evidence that the person has complied with the requirements of that Part.

32. Excavations and Backfilling

All excavations and backfilling associated with the erection or demolition of a building must be executed safely and in accordance with appropriate professional standards properly guarded and protected to prevent them from being dangerous to life or property.

33. Erection of Signs

A sign shall be prominently displayed on any site on which building, subdivision or demolition work is being carried out by the builder / developer:

(a) showing the name, address and telephone number of the principal certifying authority for the work;

(b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours; and

(c) stating that unauthorised entry to the work site is prohibited.

34. Toilet Facilities

Toilet facilities are to be provided, at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out, at the rate of one toilet for every 20 persons or part of 20 persons employed at the site.

35. BASIX Commitments

Under Clause 97A of the *Environmental Planning & Assessment Regulation 2000*, it is a condition of this Development Consent that all the commitments listed in each relevant BASIX Certificate for the development are fulfilled.
In this condition:

(a) Relevant BASIX Certificate means:

(i) a BASIX Certificate that was applicable to the development when this development consent was granted (or, if the development consent is modified under Section 96 of the Act, a BASIX Certificate that is applicable to the development when this development consent is modified); or
(ii) if a replacement BASIX Certificate accompanies any subsequent application for a Construction Certificate, the replacement BASIX Certificate; and

(b) BASIX Certificate has the meaning given to that term in the *Environmental Planning & Assessment Regulation 2000*.

36. Erosion and Sediment Control

The following control measures shall be installed to minimise the effect of site disturbance and soil erosion:-

(a) The strategic placement of bales of hay or a geotextile fabric fence to contain soil infiltration and runoff from sites (refer to Council's guidelines for "Erosion and Sediment Control on Building Sites". Sediment control devices shall be installed immediately after any site works have been carried out and prior to construction work commencing and remain in position until disturbed soils are turfed, 70% vegetated or otherwise stabilised.

(b) Restricting vehicles access to one designated point.

(c) The installation of gutters, downpipes, and the connection of downpipes to the stormwater disposal system prior to the fixing of the roof cladding.

37. Erosion Control on Completed Development

Adequate erosion and sediment control measures are to be maintained in place on the development to the satisfaction of Council until site stabilisation and revegetation is finalised.

38. Soil and Water Management - Stockpiles

Stockpiles of topsoil, sand, aggregate, soil or other material are not to be located on any drainage line or easement, natural watercourse, footpath or roadway and shall be protected with adequate sediment controls.

39. Soil and Water Management - Wheel Wash

A vehicle wheel wash, cattle grid, wheel shaker or other appropriate device, shall be installed in accordance with the approved site Soil & Water Management Plan before the commencement of any site works or activities, to prevent mud and dirt leaving the site and being deposited on the street. The device shall be maintained at all times to Council's satisfaction.

40. Soil and Water Management - Site Maintenance

Roads servicing the construction site shall be maintained in a condition free of mud, soil and other construction/demolition materials at all times.

41. Soil and Water Management - Landscape Materials

Landscaping materials (including woodchips, bark etc) are to be stabilised and secured on site to avoid being eroded by stormwater runoff. Alternatively, stormwater protection measures shall be put in place to protect stormwater drains so as not to contravene the *Protection of the Environment Operations Act, 1997*.

42. Stormwater Facilities Maintenance

The creation of a "Positive Covenant" on the title of the proposed development showing the location of stormwater facilities and requiring that the proposed stormwater facilities be maintained in a safe and functional manner. In addition, the Section 88B Instrument shall make provision for Council to conduct maintenance on the subject stormwater facilities at the owner's expense if the stormwater facilities are not maintained to the agreed standard. Details shall be provided for the approval of Council **PRIOR TO ISSUE OF AN OCCUPATION CERTIFICATE.**

43. Stormwater Facilities Alterations

The creation of a "Restriction as to User" on the title of the proposed development to prevent any change in shape or alteration in structure of the proposed stormwater facilities after the final approval of the structure has been given by Council. Details are to be provided for the approval of Council **PRIOR TO ISSUE OF AN OCCUPATION CERTIFICATE.**

44. Landscaping Plan Completed

PRIOR TO THE ISSUE OF AN OCCUPATION CERTIFICATE, the approved Landscaping Plan shall be completed.

45. Advanced Landscaping

Landscape works shall use plantings that are sufficiently advanced and mature to provide immediate landscaping effect. Sufficiently advanced would require plantings that are at a minimum 50% of their expected mature height, as nominated on the approved Landscaping Plan.

46. Street Numbering

Street and house numbers, allocated by Council, shall be prominently displayed so that it is visible from the road, **PRIOR TO ISSUE OF OCCUPATION CERTIFICATE**.

47. Occupation Certificate Inspection

Prior to Occupation Certificate being issued, an inspection by the Principal Certifying Authority shall be undertaken to ensure that all conditions of this development consent have been complied with.

48. Occupation Certificate

The building, or part of the building, shall not be occupied or used until such time as an Occupation Certificate has been issued in respect of it.

49. Water and Sewer Authority Conditions

Prior to issue of a Construction Certificate, the Developer must obtain approval from Council (as the Water Supply Authority and/or as required under Section 68 of the

Local Government Act) for the works to be undertaken by submitting adequate documentation including plans, calculations and specifications which justify that the required works are in accordance with all Council's standards and all other relevant codes and guidelines.

50. Provision of Works and Services

The provision, by the Developer, at their expense, of the following works and services to be documented and constructed in accordance with Council's Engineering Policies, to the satisfaction of the Development Control Engineer. **PRIOR TO THE ISSUE OF A CONSTRUCTION CERTIFICATE** the Developer must obtain approval for the works to be undertaken by submitting adequate documentation including plans, standard notes and completed design checklists, calculations and specifications, to Council which justify that the proposed works are in accordance with all Council's standards and all other relevant Codes and guidelines.

(a) Stormwater Drainage

(i) Connection to Kerb

All stormwater connections to the kerb shall be done using minimum 2mm thick galvanised steel section in accordance with Standard Drawing No SD102.

(ii) Construction of Stormwater

Provision of adequate stormwater drainage infrastructure (pits/pipes/open channels/detention storage) for the conveyance of stormwater passing through the site from upstream, and sourced from the development to a discharge outlet to be approved by the Development Control Engineer.

(iv) Roof/Impervious/Stormwater

All stormwater runoff from the development shall be collected within the property and discharged in a manner approved by the Development Control Engineer and/or Council's Building Surveyor.

(v) Control of Peak Discharge

Adequate and suitable infrastructure is to be provided to ensure the peak discharge from the site is no greater than the pre-developed peak discharge. This infrastructure shall be designed in accordance with Council's Engineering Policies. Calculations to demonstrate that the post-development peak discharge will not exceed the pre-development peak discharge **SHALL BE PROVIDED WITH THE APPLICATION FOR A CONSTRUCTION CERTIFICATE.**

(vi) Control of Water Quality

Provision of adequate infrastructure outlined in the Stormwater Management Plan with Drawing Nos. STW01, STW02 & STW03 – Project No. 15000036 – Rev (01) prepared by SEEC and dated 03 February 2016 is to be provided to guarantee satisfactory discharge quality from the site.

(b) Parking and Access

(i) Driveways and Parking

Internal driveways, turning areas and 8 off street and 2 visitor parking spaces are to be constructed with all-weather surface of reinforced concrete.

The parking spaces are to be line marked.

(ii) Construction of Footway Crossing

Residential vehicular footway crossing in accordance with Standard Drawing Nos SD 107 and SD123, for access to the development.

(iii) Parking Space Near Wall

Parking spaces adjacent to walls or other obstructions which may affect door opening or vehicle manoeuvring to be widened by 300mm on the side of the obstruction(s) to facilitate safe use of these spaces.

(iv) Vehicle Manoeuvring

All vehicles to enter and leave the site driving forwards to ensure traffic/pedestrian safety. A sign worded "No Reversing Across Footpath" is to be provided adjacent to the vehicular entry and clearly visible to users of the car park to inform drivers of this requirement. Sign to be to the satisfaction of the Director Environment and Planning and of approximate dimensions 0.3m x 0.6m.

(v) Disabled Carparking

Carparking spaces shall be provided and shall comply with the requirements for parking in the current version of AS 2890.1 for people with disabilities.

(vi) Approval Required for Work within Road Reserve - *Section 138 Roads Act 1993*

Where works are proposed within the road reserve, the Developer must obtain approval from Council (as the Roads Authority and / or as required under Section 138 of the *Roads Act 1993*) before any works are undertaken. Works within the road reserve may include activities such as erect a structure, dig up or disturb the surface of a public

road, remove or interfere with a structure, or any other activities as defined within the *Roads Act 1993*.

The following details must be submitted to Council in order to obtain the Section 138 approval:

- A copy of approved design plans related to the development and proposed works to be undertaken.

- Traffic Control Plan (TCP) to provide protection for those within and adjacent to the work site, including the travelling and pedestrian public. The TCP must comply with the Roads and Traffic Authority's manual '"*Traffic Control at Work Sites*". Warning and protective devices shall comply with the provisions of AS1742.3 - 2002 *Traffic Control Devices for Works on Roads*. The plan must be prepared and certified by a person holding the appropriate Roads and Traffic Authority accreditation, a copy of which is to be submitted with the plan.

- Insurance details - Public Liability Insurance to an amount of $20 million, to be held by applicant / contractor undertaking the works.

(c) Sewer Mains

(i) Construction of Sewer Sidelines

Sidelines and junctions shall be installed for sewer connections to the development by Council at the Developer's cost.

Council's application form shall be completed by the applicant and the appropriate fee paid.

If sideline is to be extended from a sewer main in adjoining property, written permission of affected landowner allowing work to be undertaken, is to be submitted with the application form.

(ii) Setback from Sewer Manhole

The building shall not be erected within 1.2m of the outside edge of the manhole surround of the sewer manhole.

(iii) Building within Vicinity of Sewer Main

Where a building is constructed within the area of influence of the sewer main, the weight of the building shall be distributed away from the sewer main by pier and beam construction. The piers shall be designed by a Professional Engineer and shall be embedded on firm foundation at least 300mm below the invert of the pipe with a minimum horizontal clearance from the pipe of 600mm.

The area of influence of the sewer main is considered that area within the angle of repose of 45° for normal loam/clay/sand foundations, or

600 for rock foundations measured 600mm from the outside of the pipe from the trench bottom.

Notwithstanding the above, a building shall not be erected within 1.2m of the outside edge of a sewer manhole and unobstructed personal access of minimum width of 900mm shall be provided to any manhole located upon private property.

(d) Water Mains Supply

(i) Construction of Water Service

A water service shall be installed to the development by Council at the Developer's cost.

Council's application form shall be completed by the Developer and the appropriate fee paid.

51. Certification of Internal Civil Works

On completion of works and prior to occupation, certification from a practising appropriately qualified Engineer shall be submitted to Council detailing that all internal civil works (ie, internal driveways, paths and stormwater drainage systems including any onsite detentions) are in accordance with the approved plans and specifications.

52. Section 94 Contributions

Under Section 94 of the *Environmental Planning and Assessment Act 1979*, Council has satisfactorily determined that Development Contributions are applicable to this development consent, as the development is likely to require the provision of or increase the demand for public amenities and public services within the Wingecarribee Local Government Area.

The following Wingecarribee Shire Council Section 94 Developer Contributions Plans are applicable to the Development:

- **Roads & Traffic Facilities 2012 to 2031**
- **Resource Recovery Centre 2009**
- **Central Library Facility**
- **Section 94 Administration 2011 to 2031**
- **Open Space, Recreation, Community & Cultural Facilities 2013 to 2036**

A Developer Charges - Notice of Payment is attached to the back of this consent, and outlines monetary contributions and unit rates applicable at the time of issue of this consent. The contributions listed in the Notice of Payment must be paid prior to the release of ***Construction*** Certificate.

All contributions are indexed quarterly in accordance with upward movements in the Consumer Price Index (All Groups, Sydney) as published by the Australian Bureau of

Statistics (www.abs.gov.au); Section 25I of the *Environmental Planning and Assessment Regulation 2000*; and Council's Developer Contributions Plans.

Copies of the Contributions Plans are available at Wingecarribee Shire Council's Administration building Moss Vale or are available for download from Council's website www.wsc.nsw.gov.au.

53. Certificate of Compliance

A Certificate of Compliance under Division 5 of Part 2 of Chapter 6 of the *Water Management Act 2000* must be obtained prior to the issue of ***Occupation*** Certificate.

Notes:

Section 64 of the *Local Government Act 1993* authorises Council to issue Certificates of Compliance under Section 306 of the *Water Management Act 2000.* Section 64 of the *Local Government Act 1993* also authorises Council to impose pre-conditions to the issuing of Certificates of Compliance.

As a precondition to the issuing of a Certificate of Compliance Council requires the payment of Developer Charges, prior to the issue of ***Construction*** Certificate, as prescribed by Wingecarribee Shire Council's Development Servicing Plans:

- **Water Supply Development Servicing Plan;**
- **Sewerage Development Servicing Plan; and**
- **Stormwater Development Servicing Plan.**

A developer Charges - Notice of Payment is attached to the back of this consent and outlines monetary contributions and unit rates applicable at the time of issue of this consent.

The water, sewer and stormwater head works levies are indexed quarterly in accordance with upward movements in the Consumer Price Index (All Groups, Sydney) as published by the Australian Bureau of Statistics (www.abs.gov.au); and Council's Development Servicing Plans.

Copies of Development Servicing Plans are available at Wingecarribee Shire Council's Administration building Moss Vale or are available for download from Council's website www.wsc.nsw.gov.au.

The Water and Sewerage Development Servicing Plans (DSP's) were adopted by Council on 22 November 2006 and came into effect on 1 January 2007. The Stormwater DSP was adopted on 9 November 2010 and came into effect on 8 December 2010. The current charges under these Plans are listed as follows:

CPI Period	**Water DSP**	**Sewer DSP**	**Stormwater DSP**
1 August 2015 to 31 October 2015	$6,439 per ET	$8,196 per ET	$3,388 per ET
Note: The charges shown above are amounts applicable during the stated time period. These amounts will be subject to adjustment quarterly in accordance with upward movements in the Consumer Price Index (CPI) once they become operational. The CPI is published quarterly by the Australian Bureau of Statistics, www.abs.gov.au.			

Should new DSP's be prepared, it is possible that the charges may increase significantly. Draft DSP's must be advertised by Council for a period of thirty (30) days prior to adoption.

Compliance Certificate

Compliance Certificate fees, in accordance with Council's Revenue Policy are as follows and shall be paid prior to the issue of ***Construction*** Certificate:-

Water $90.00 + Sewer $90.00 + Stormwater $90 = $270.00.

Prior to final release, you will need to contact Council's Infrastructure Services Division for an inspection to ensure that Council will accept the infrastructure constructed. In response the Manager of Water and Sewer will specify requirements which will have to be met.

In the case of subdivision, the title plan of subdivision will not be certified and released by Council until the *Water Management Act 2000* charges have been paid and/or secured and the approval of Council has been obtained for all works related to this infrastructure.

In the case of other forms of development, the Construction Certificate will not be issued until the *Water Management Act 2000* charges have been paid and/or secured and the approval of Council has been obtained.

54. Water NSW

General

1. The site layout and works shall be as shown on the Site Plan prepared by Kathy Barnsley Architect Pty Ltd (Dwg. No. 15-566/01D; Amd D; dated 8 October 2015). No revisions to the site layout or external works that will impact on water quality, shall be permitted without the agreement of Water NSW.

Reason for Condition 1 - Water NSW has based its assessment under State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011 on this version of the development.

Stormwater Management

2. All stormwater management measures as specified in Section 5.2 of the Water Cycle Management Study (dated 8 October 2015) and shown on the Stormwater Management Plans (Project No. 15000036; STW01 and STW02; Rev 01; dated 3 February 2016) both prepared by Strategic Environmental and Engineering Consulting shall be implemented. The stormwater management measures shall include but not limited to:
   - pits and pipes
   - a rainwater collection and reuse system with a minimum total capacity of 24,000 litres above any volume required for mains top-up, supplying water for toilet flushing, laundry and outdoor use, and
   - two raingardens with a combined filter area of 61 square metres.

3. No variation to stormwater treatment and management that impacts on water quality, shall be approved without prior agreement by Water NSW.

4. A suitably qualified stormwater consultant or engineer shall certify in writing to Water NSW and Council that all stormwater management structures have been installed as per these conditions of consent and are in a functional state.

5. An Operational Environmental Management Plan (OEMP) shall be prepared in consultation with Water NSW by a person with knowledge and experience in the preparation of such plans. The OEMP shall include but not be limited:
   - details on the location, description and function of stormwater management structures such as pits, pipes, rainwater collection and reuse system, raingarden, and any other stormwater structures and drainage works
   - an identification of the responsibilities and detailed requirements for the inspection, monitoring and maintenance of all stormwater management structures, including the frequency of such activities
   - the identification of the individuals or positions responsible for inspection and maintenance activities including a reporting protocol and hierarchy, and
   - checklists for recording inspections and maintenance activities.

Reason for Conditions 2 to 5 – To ensure that the stormwater quality management measures and structures for the proposed development have a sustainable neutral or beneficial impact on water quality over the longer term.

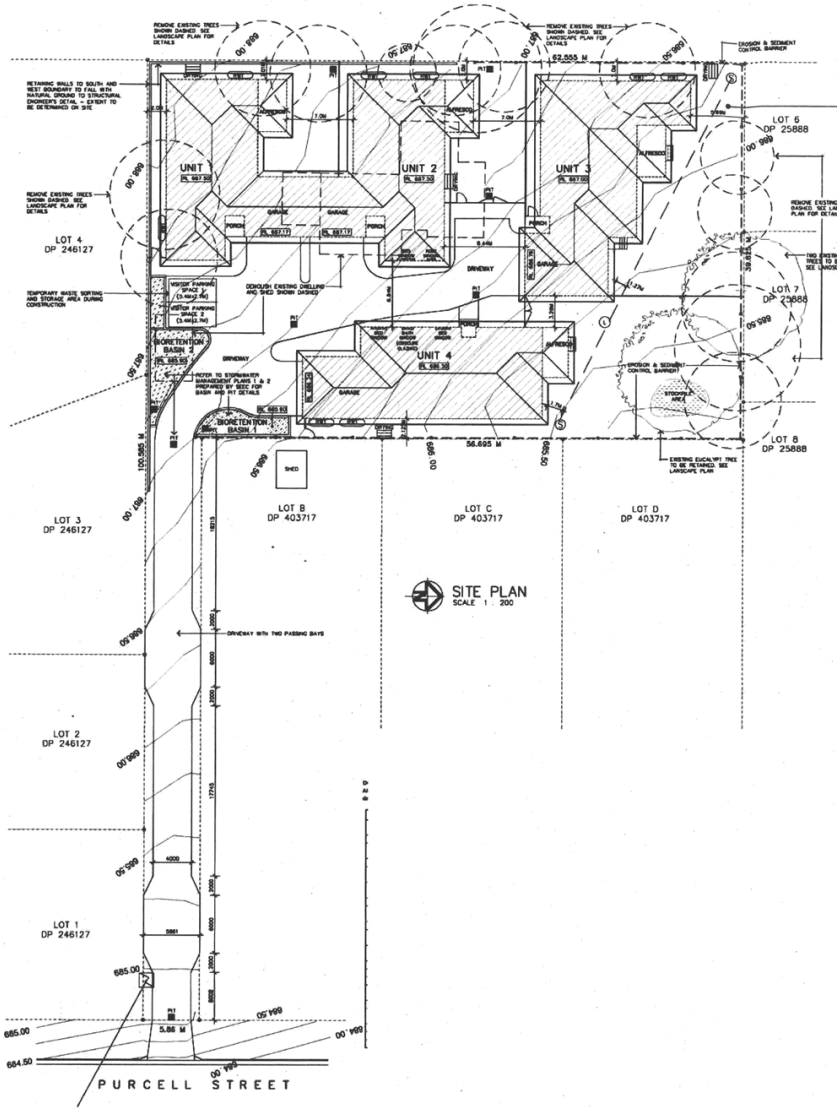
Construction Activities

6. An Erosion and Sediment Control Plan shall be prepared by a competent practitioner and shall meet the requirements outlined in Chapter 2 of NSW Landcom's Soils and Construction: Managing Urban Stormwater (2004) manual - the "Blue Book". The Plan shall be to the satisfaction of Council.

7. Effective erosion and sediment controls shall be installed prior to any construction activity to prevent sediment or polluted water leaving the site or entering any stormwater drain or natural drainage system. The controls shall be regularly maintained and retained until works have been completed and ground surface stabilised or groundcover re-established.

Reason for Conditions 6 & 7 – To manage adverse environmental and water quality impacts during the construction phase of the development so as to minimise the risk of erosion, sedimentation and pollution within or from the site during this phase.

ATTACHMENT 2



LOT A DP 403717
23 PURCELL STREET
BOWRAL NSW 2576

AREAS & CALCULATIONS:

THE SITE: LOT A, DP 403717, 2836.40m² (INCLUDING HANDLE)
2478.80m² (EXCLUDING HANDLE)

ZONED R3 MEDIUM DENSITY RESIDENTIAL
CENTRAL BOWRAL MEDIUM DENSITY PRECINCT
MULTI-DWELLING HOUSING IS PERMISSIBLE

SUB-ZONE IS R3-B, REQUIRING A 0.50:1 FLOOR SPACE RATIO

GROSS FLOOR AREAS (FOR FSR CALCULATION)

UNIT 1:	148.3m²
UNIT 2:	142.8m²
UNIT 3:	174.6m²
UNIT 4:	163.1m²
TOTAL ALL UNITS =	629.8m²

FSR OF 0.25 : 1, COMPLIANT

FLOOR AREAS:

UNIT 1: (2 BEDS + STUDY)	HABITABLE =	118.3m²
	GARAGE =	20.1m²
	ALFRESCO =	16.0m²
	FOOTPRINT =	220.8m² (EXCL. ALFRESCO)
UNIT 2: (3 BEDS)	HABITABLE =	142.8m²
	GARAGE/STORE =	40.0m²
	ALFRESCO =	16.0m²
	FOOTPRINT =	201.8m² (EXCL. ALFRESCO)
UNIT 3: (4 BEDS)	HABITABLE =	174.6m²
	GARAGE =	49.2m²
	ALFRESCO =	18.2m²
	FOOTPRINT =	244.4m² (EXCL. ALFRESCO)
UNIT 4: (2 BEDS + STUDY)	HABITABLE =	163.1m²
	GARAGE/STORE =	36.4m²
	ALFRESCO =	14.1m²
	FOOTPRINT =	220.8m² (EXCL. ALFRESCO)

CARPARKING

2 SPACES/ 2 OR 3 BED UNIT: 2 X 3	=	6
VISITOR 1 SPACE/ 3 UNITS	=	2
TOTAL SPACES REQUIRED	=	8
TOTAL PROVIDED	=	10

BASIX COMMITMENTS:

REFER TO REPORT PREPARED BY EFFICIENCY ASSESSMENTS FOR FURTHER CLARIFICATION

THE FOLLOWING COMMITMENTS APPLY TO EACH DWELLING

WATER:
- MINIMUM 3,000 LITRE RAINWATER TANK COLLECTING 100% OF ROOF ARE WITH CONNECTIONS TO GARDENS, TOILETS AND LAUNDRY
- MIN. 3 STAR RATED TAPS, TOILETS & SHOWERHEADS

THERMAL COMFORT:
- R1.3 INSULATION TO EXTERNAL WALLS (EXCL. GARAGE)
- R3.5 CEILING INSULATION (EXCL. GARAGE)
- R1.5 CEILING INSULATION TO KITCHEN HOUSE AND GARAGE
- SARKING TO UNDERSIDE OF ROOF
- WEATHERSEALS TO EXTERNAL DOORS INCLUDING INTERNAL ACCESS TO GARAGE
- DARK SHELL AND DARK ROOF COLOURS
- FLOOR TILING TO KITCHEN AND ENSUIT
- INSULATION MUST BE INSTALLED IN ACCORDANCE WITH NCC AND RELEVANT AUSTRALIAN STANDARDS
- AN ALLOWANCE HAS BEEN MADE IN THE ENERGY RATING FOR REQUIRED CEILING INSULATION CLEARANCE AROUND LIGHT FITTINGS AND DUCTWORK IN ACCORDANCE WITH THE ELECTRICAL LAYOUT
- ALL WINDOWS AND GLAZED DOORS TO BE SINGLE GLAZED CLEAR WITH ALUMINIUM FRAME (NFRC U 6.57; SHGC 0.74)

ENERGY:
- GAS INSTANTANEOUS 5 STAR HWS
- 3 PHASE REVERSE CYCLE DUCTED ZONED AIR-CONDITIONING WITH EER 2.5-3.0
- DUCTED RANGEHOOD TO KITCHEN WITH MANUAL ON/OFF SWITCH
- DUCTED EXHAUST FAN TO BATHROOM AND ENSUITE WITH MANUAL ON/OFF SWITCH
- GAS COOKTOP AND ELECTRIC OVEN
- REAL MOTIVATED PHENIX SPORTS
- PERMANENT OUTDOOR CLOTHES LINE

NOTES:
STORMWATER:

*REFER TO STORMWATER MANAGEMENT PLANS 1 & 2 PREPARED BY S.W.I.STEVE ENVIRONMENTAL ENGINEERING CONSULTING (SEEC) FOR STORMWATER DETAILS

*ALL DOWNPIPES TO CONNECT TO NEW RAINWATER TANKS, PLUMBED TO LAUNDRY TOILETS AND GARDEN TAPS, WITH OVERFLOW TO NEW PITS & BIORETENTION BASIN SYSTEM/GOING TO THE STREET

*DOWNPIPE LOCATIONS ARE INDICATIVE ONLY. THE SPECIFICATION AND LOCATION OF DOWNPIPES IS TO BE DETERMINED BY THE INSTALLING PLUMBER.

Rev	Date	Amendment
E	03.02.2016	MODIFY DRIVEWAY & ADD PASSING BAYS, RETAIN TREES
D	08.10.2015	DA ISSUE
C	02.10.2015	PRELIMINARY DA ISSUE
B	13.08.2015	CLIENT ISSUE
A	01.08.2015	CLIENT ISSUE

Check all dimensions on site.
If in doubt, clarify with architect.
Written dimensions take precedence over drawn.
This drawing is subject to copyright.

KATHY BARNSLEY ARCHITECT

Project: Proposed New Residential Unit Development at Lot A DP 403717 23 Purcell Street BOWRAL for Joer Pty Ltd

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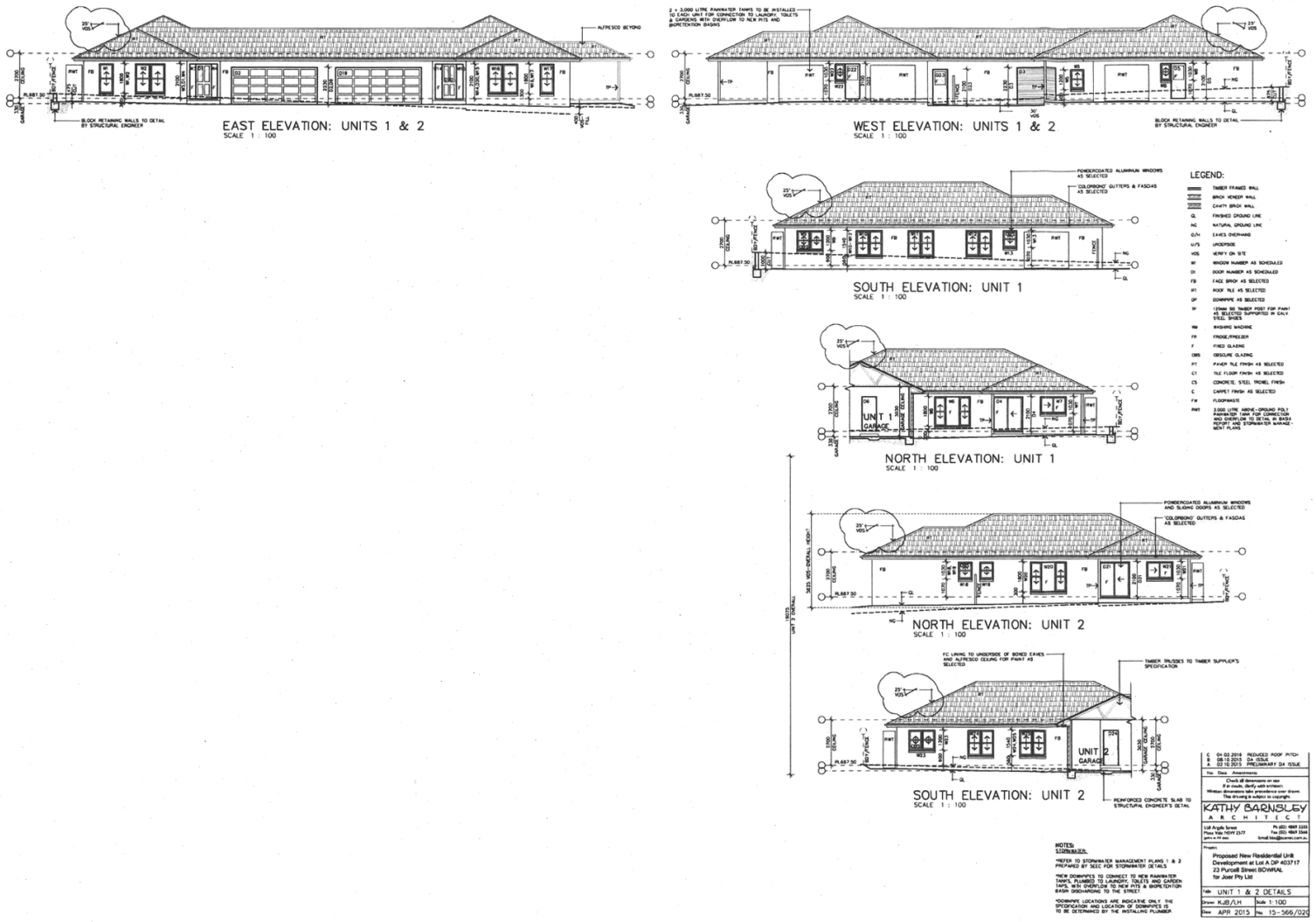
Drawn: KJB/LH | Scale: 1:200
Date: APR 2015 | No. 15-566/01E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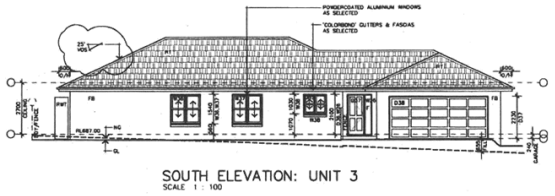
SCALE 1 : 100
WEST ELEVATION: UNITS 1 & 2
SCALE 1 : 100
SOUTH ELEVATION: UNIT 1
SCALE 1 : 100
LEGEND:
NORTH ELEVATION: UNIT 1
SCALE 1 : 100
NORTH ELEVATION: UNIT 2
SCALE 1 : 100
SOUTH ELEVATION: UNIT 2
SCALE 1 : 100
KATHY BARNSLEY
ARCHITECT
Proposed New Residential Unit Development at Lot A DP 403717
23 Purcell Street BOWRAL
for Joer Pty Ltd
UNIT 1 & 2 DETAILS
APR 2015
15-566/02D



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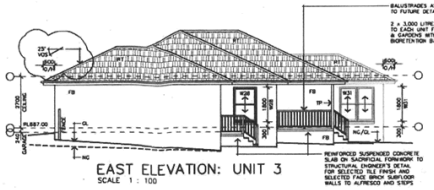

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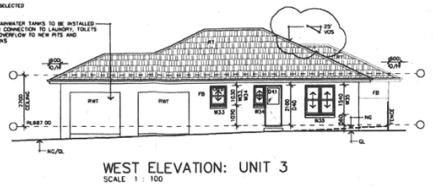

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NORTH ELEVATION: UNIT 3
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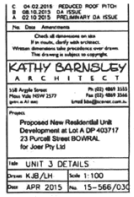

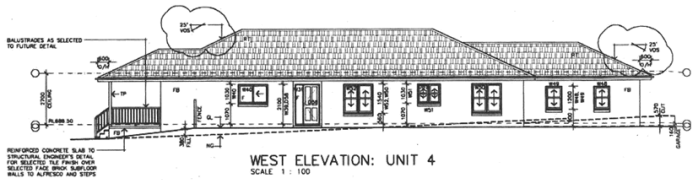

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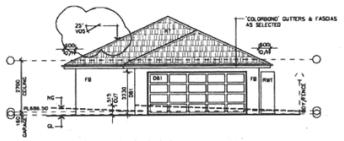

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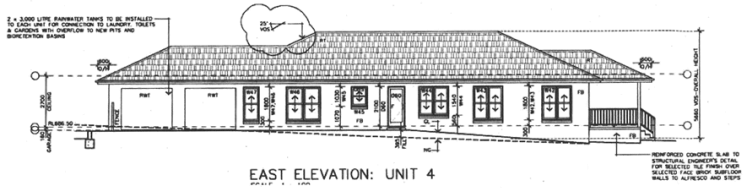

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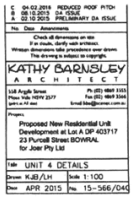
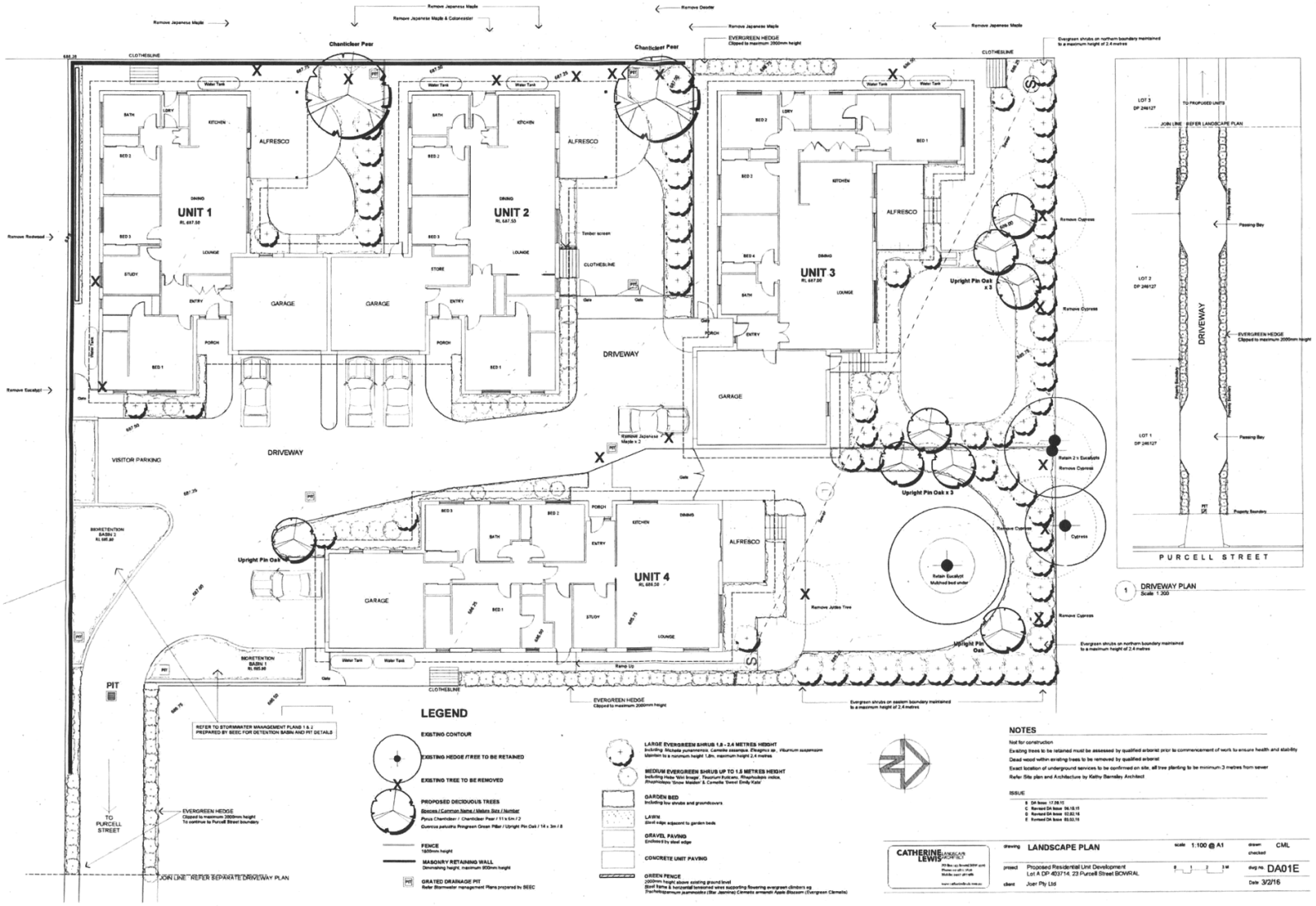
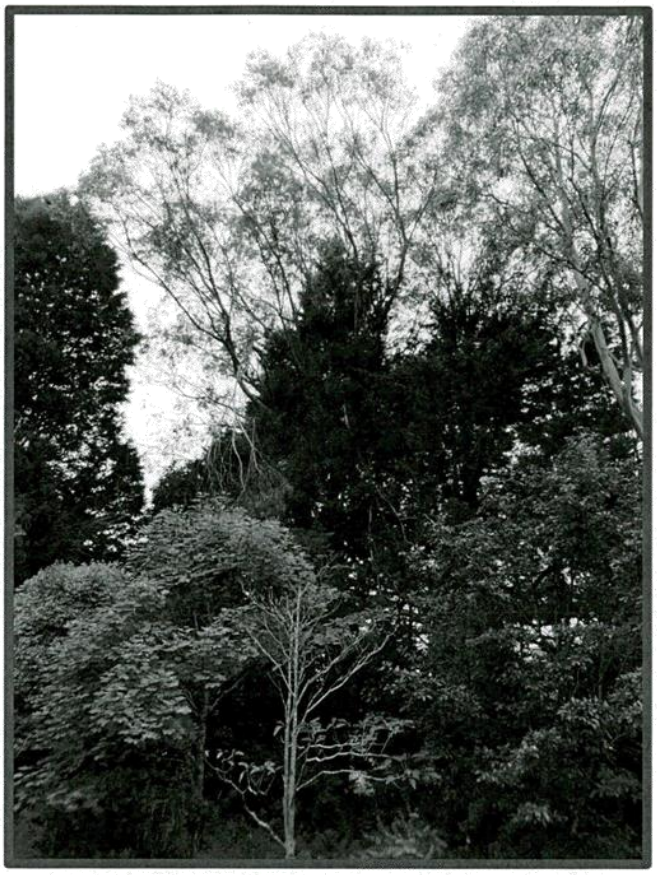
NORTH ELEVATION: UNIT 4
SCALE 1 : 100




UNIT 1
UNIT 2
UNIT 3
UNIT 4
ALFRESCO
GARAGE
DRIVEWAY
VISITOR PARKING
PURCELL STREET
DRIVEWAY PLAN
LEGEND
NOTES
LANDSCAPE PLAN
Proposed Residential Unit Development
Lot A DP 403714, 23 Purcell Street BOWRAL
DA01E

ATTACHMENT 3

ARBORICULTURE REPORT



23 PURCELL STREET BOWRAL

Prepared for:

Mr. John Dick
Joer Pty Ltd
P O Box 2364
Bowral NSW 2576

Prepared by:

Paul D'hondt
Summit Tree Services
PO Box 3283
Robertson NSW 2577
February 2016

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1.	Introduction	3
2.	Methodology	3
3.	Site description	3
4.	Observations	4
5.	Conclusions	5
6.	Recommendations	5
7.	Glossary	6
8.	Bibliography & References	6

APPENDIX A: Table explanatory notes and Tree Inspection Schedule.
APPENDIX B: Technical explanations
APPENDIX C: Photos of the site
APPENDIX D: cv of Paul D'hondt

Arboriculture Report ***23 Purcell Street Bowral***

1. Introduction

Mr. John dick requested a tree assessment undertaken on five (5) conifers located on the northern boundary of his property at 23 Purcell Street Bowral. Mr Paul D'hondt of Summit Tree Services visited the site and inspected the trees on 29th January 2016.

2. Methodology

The trees were assessed from ground level with no soil excavations carried out to assess the underground root systems.

The total height and other relevant height measurements of the trees were taken with a clinometer.

Diameter at Breast Height (DBH) was measured at 1.4 metres from soil level with a diameter measuring tape.

The current health conditions of the tree is based on the quality of features such as live bud cover, extension growth, trunk damage, quantity and size of deadwood, presence and age of epicormic shoots and, observed pests and diseases.

Decay was assessed on the presence of fungal fruiting bodies, the presence of exudates, visible cavities, and reaction wood. The extent of internal decay was not assessed.

The structural stability of the tree was assessed on the presence of included bark, splits, or cracks, the formation of reaction wood such as swellings or sunken areas in the trunks and major branches. Physical structure was assessed using the VTA (Visual Tree Assessment) (Mattheck & Breloer, 1994. *The Body Language of Trees*.)

The assessed trees where marked on the site with numbered yellow flagging tape. The numbers correspond with the numbers in the Tree Inspection Schedule.

3. Site description

The site is a battle axe block with a well-established garden surrounding a dwelling. Only three (3) native trees are on the site with all other trees and shrubs being introduced species. The Eucalypts are two (2) *Eucalyptus radi*ata subspecies *radiata* (Narrow-leaved Peppermint) and one (1) *Eucalyptus maidenii* (Maiden's Gum). The assessed trees are located on the northern boundary fence of the property with part of tree No.5 overhanging the boundary fence on the eastern side of the property.

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3
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4. Observations

Tree No.1 *Cupressus macrocarpa* (Monterey Cypress) (Refer photos No.1 and 2)

- Is an over mature specimen with a reduced canopy density.
- Decay is evident in the base of the tree where a trunk was removed or has broken out some time in the past.
- Included bark is present between trunks at the base of the tree.

Tree No.2 X *Cupressocyparis leylandii* (Leyland Cypress) (Refer photo No.3 and 4)

- Is a mature specimen with a large amount of deadwood in the canopy.
- Decay is visible in the base of the tree between two trunks.
- A large number of branches and two trunks have included bark present at their junction.
- Some of the branches are overlong with the foliage concentrated at the tips.
- One trunk on the northern side of the tree has sap weeping at the site of a Cypress Bark Weevil attack.
- A large amount of major and minor deadwood is present in the canopy.

Tree No.3 *Cupressus macrocarpa* (Monterey Cypress) (Refer photos No.5, 6 & 7)

- Is an over mature specimen with a reduced canopy density.
- Decay is visible in the root crown of the tree.
- Some of the branches have included bark present at the junction with a trunk.
- Some of the branches are overlong with the foliage concentrated at the tips.
- A large amount of major and minor deadwood is present in the canopy.
- This tree is impacting on a *Eucalyptus radi*ata subspecies *radiata* (Narrow-leaved Peppermint) with branches rubbing and damaging the cambium and phloem area of the Eucalypt.

Tree No.4 *Cupressus macrocarpa* (Monterey Cypress) (Refer photo No.8 and 9)

- Is an over mature specimen with a greatly reduced canopy density.
- Some of the trunks have included bark present at their junction.
- Some of the branches are overlong with the foliage concentrated at the tips.
- A large amount of major and minor deadwood is present in the canopy.
- This tree is impacting on a *Eucalyptus radi*ata subspecies *radiata* (Narrow-leaved Peppermint) with branches and one trunk rubbing and damaging the cambium and phloem area of the Eucalypt.

Tree No.5 *Cupressus macrocarpa* (Monterey Cypress) (Refer photo No.10 and11)

- Is an over mature specimen in poor health with a greatly reduced canopy density.
- Decay is visible in the root crown of the tree.
- Most of the branches and trunks have included bark present at their junction.
- A large amount of major and minor deadwood is present in the canopy.

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5. Conclusions

It is considered that **tree No.1** is a major hazard with a high risk of failure due to the large amount of decay in the lower trunk and root crown.

Tree No.2 is in a fair condition but shows some reduction in vigour indicated by the large amount of deadwood present and the presence of Cypress Bark Weevil. This tree could have some of the overlong branches failing.

Tree No.3 is in a fair condition but shows some reduction in vigour indicated by the large amount of deadwood present and the reduction in canopy density. This tree is suppressed by and impacting on a Narrow-leaved Peppermint. The risk of whole or part tree failure due to the decay in the root crown, overlong branches or weak attachments where included bark is present, is considered medium because of the close proximity of neighbouring supporting trees.

Tree No.4 is in a fair condition but shows a reduction in vigour indicated by the large amount of deadwood present and the greatly reduced canopy density. This tree is suppressed by and impacting on a Narrow-leaved Peppermint. The risk of whole or part tree failure due to overlong branches or weak attachments where include bark is present is considered medium because of the close proximity of neighbouring supporting trees.

Tree No.5 is in a poor condition with a major reduction in canopy density and the large amount of deadwood present. The decay in the root crown and the weak attachments where included bark is present between trunks and branches render this tree a major hazard with a high risk of causing damage to the neighbouring property on the eastern side.

6. Recommendations

It is recommended that the five (5) assessed trees are removed from the site for the following reasons.

Trees No.1 and 5 are considered major hazards with a high risk of failure causing damage to the neighbouring properties.

Trees No.3 and 4 are having a detrimental impact on two Narrow-leaved Peppermints which are considered a more desirable species to be retained.

The removal of trees No.1, 3, 4 and 5 will expose tree No.2 to changed wind dynamics rendering the tree more likely to experience failure in the overlong branches. In addition Leyland Cypress is listed as an environmental weed in the Wingecarribee Shire area.

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7. Glossary

Cambium: A layer of cells under the outer bark that initiates xylem cells on the inside allowing the tree to expand in girth and callous over wounds and Phloem on the outside which is required for the vertical transportation of organic substances in the tree.

Canopy: The part of the crown composed of leaves and small twigs.

Co dominant stems: Trunks or branches originating at the same point and being of a similar size.

Hazard: Anything with the potential to harm life, health, or property.

Included bark: Inwardly turned bark within the junction of branches or co-dominant stems.

Phloem: conducting tissue that transports organic substances from mature leaves to other parts of the tree.

Poor condition: Dangerous or severely declined trees that cannot be improved with remedial treatment.

Reaction wood: The formation of reaction wood is the trees attempt to strengthen a weak area by locally adding wood at an increased rate. Reaction wood can be identified through local swellings or the opening of bark striations.

Risk: Is the likelihood that a hazard will cause injury, illness, or damage.

Root crown: Area at the base of the tree where the roots and stem merge.

Suppressed: Trees that are reduced in vigour by being overshadowed by adjacent trees.

Vigour: Is a genetic feature that will determine a trees capacity to resist stress.

Deadwood: **Major** is greater than 5cm diameter; **Minor** is smaller than 5 cm diameter

8. Bibliography & References

Harris, R.W., Clark, J.R., Matheny, N.P. 2004. *Arboriculture: Integrated Management of Landscape Trees, Shrubs, and Vines.* (4th Ed.) Prentice Hall. New Jersey.

Matheny, N.P. & Clark, J.R.1994. *A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas.* (2nd Ed.) International Society of Arboriculture. Champaign, Illinois.

Mattheck, C. & Breloer, H. 1994. *The Body Language of Trees – A Handbook for Failure analysis.* (Research for Amenity Trees 4). Her Majesty's Stationery Office. Norwich. England.

Schwarze. F.W.M.R., Engels. J., Mattheck. C. 2004. *Fungal Strategies of Wood Decay in Trees.* Springer-Verlag, Berlin Germany

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APPENDICES

APPENDIX A:

TABLE EXPLANATORY NOTES

AND

TREE INSPECTION SCHEDULE

TABLE EXPLANATORY NOTES

Bold letters are used to indicate the presence of each feature assessed.

Blank cells indicate the assessed feature is not relevant to the tree.

Tree number - relates to the number on the green flagging tape attached to the trees at the time of the assessment.

Tree species:

Cl	X *Cupressocyparis leylandii*	Leyland Cypress
Cm	*Cupressus macrocarpa*	Monterey Cypress

Trunk diameter is measured at 1.4 metres above soil level.

Age Class Categories

Y = Young (are less than 20% of life expectancy), **M** = Mature (between 20% and 80% of life expectancy), **O** = Over Mature (is more than 80% of life expectancy)

Deadwood - Major = greater than 50mm diameter, Mi**N**or = smaller than 50mm diameter.

Large = large amount present, **S**mall = small amount present.

TREE INSPECTION SCHEDULE

Tree Number	1	2	3	4	5
Tree species Botanic name	Cm	Cl	Cm	Cm	Cm
Tree height in metres	14	22	25	20	23
Canopy weighted towards	NW	SE		S	E
Trunk lean towards				S	
Diameter at 1.4 metres in centimetres	Multiple	Multiple	Multiple	Multiple	Multiple
Health of tree					
Age Young / Mature / Over mature	O	M	O	O	O
Leaf density % of normal for species	80	100	80	60	40
Deadwood: Major / miNor Amount : Large / Small	M N S	M N L	M N L	M N L	M N L
Insects / Disease		Cypress bark Weevil			
General health : Good / Fair / Poor	F	F	F	F	P
Structure of tree					
Damage Root / Trunk / Branch	T	B	T		
Decay in Root / Trunk / Branch	R T	T	R T		R T
Included bark between Branch and trunk / Trunks	T	B T	B	T	B T
Swelling or sunken area in Trunk / Branches					
Splits in Trunk / Branches	T	B		T	T
Overlong branches with excessive end weight		✓	✓	✓	
Previous branch failures Severe / Minor					
General structure: Good / Fair / Poor	P	F	F	P	P
Site usage: Low, Medium, High	H	H	H	H	H
Hazard rating; Low, Medium, High	H	M	M	M	H
Remedial work recommended: Deadwood, Prune, Remove tree	R	R	R	R	R

APPENDIX B:

TECHNICAL EXPLANATIONS

TECHNICAL EXPLANATIONS

Following are explanations of the observed defects as listed in the Tree Inspection Schedule and/or referred to in the body of the report.

Included bark between stems is structurally weak when compared with stems that have connective wood in the attachment. (Harris et. al. 2004, pg. 38). Limbs or stems with included bark are usually quite upright and can grow to a large size before their canopies begin to spread and increase the stress on weak attachments. It is usually only a matter of time before failure occurs with the trunks splitting apart and the tree or branches collapsing. (Harris et. al. 2004 pg.349)

Overlong branches form a long leverage arm in trees. The risk of branch breakout increases with the length of the leverage arm and the concentration of foliage near the tips. (Mattheck & Breloer. 1994, pg. 17 and Harris. 2004, pg. 432).

Longitudinal splits occur when stems or branches are bend by external forces, for example wind, causing a partial failure. Transverse fractures tend to follow causing the stem or branch to fail. (Mattheck & Breloer 1994 pg. 44)

Decay will degrade wood strength resulting in localised overloaded areas. Degradation of wood strength by white rot decay can usually be detected in the body language of the tree by the formation of reaction wood. Brown rot however can seldom be detected by external symptoms. (Schwarze et. al. 2004. pg. 16 and Mattheck & Breloer 1994 pg. 124)

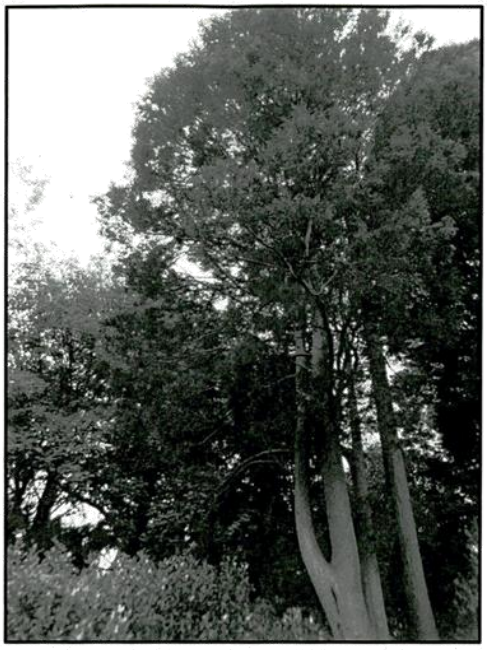
Deadwood can remain in trees for many years, it will however fall at some time in the future when the timber is weakened by decay fungi. (Harris et. al. 2004 pg. 415) Even smaller deadwood can pose a substantial hazard when it falls from a great height. Deadwood in a tree can be a sign of stress but can also be caused by a lack of light.

Canopy distribution and trunk lean

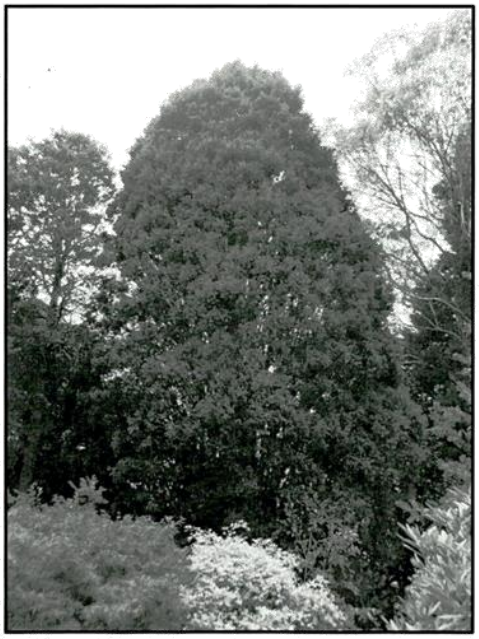
Trees often have an unbalanced canopy or develop a lean caused by competition for light from neighbouring trees. This is compensated for structurally but it then makes them more prone to failure or branch dropping during high wind and heavy rain. (Matheny & Clark, 1994. pg. 8.)

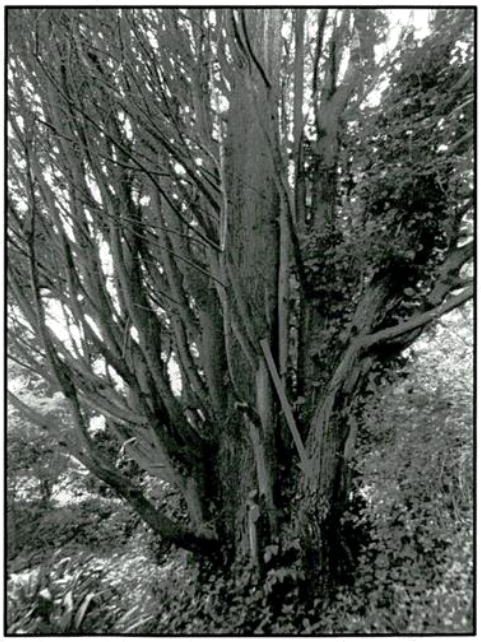
APPENDIX C:

PHOTOS OF THE ASSESSED TREES



Photos No.1 and 2 Showing tree No. 1 and the decaying area in the lower trunk of this tree.





Photos No.3 and 4 Showing tree No.2 and the base of this tree. The area of Cypress Bark Weevil attack is indicated with a red arrow.

Photo No.5 Showing tree No.3 indicated with a red arrow.

Photo No.6 shows the base of the tree with the red arrow indicating the location of visible decay in the root crown.

Photo No.7 Showing tree No.3 indicated with a blue arrow impacting on one of the Narrow-leaved Peppermints indicated with a red arrow.

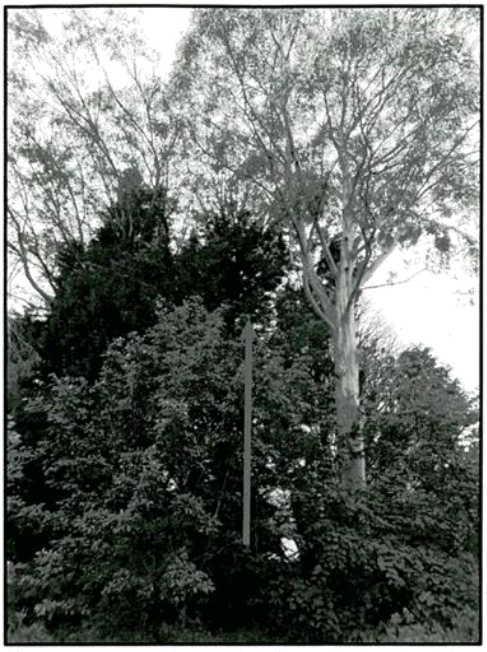


Photo No.8 Showing tree No.4 indicated with red arrow.

Photo No.9 Showing tree No.4 indicated with a a blue arrow impacting on one of the Narrow-Leaved Peppermints indicated with a red arrow.

Photo No.10 Showing the dead branches on the eastern side of tree No.5 indicated with a red arrow.

Photo No.11 Showing the multiple trunks with included bark at the base of tree No.5.

APPENDIX D:

CV OF PAUL D'HONDT

Summit Tree Services

Tree Care & Land Management Specialists

Paul D'hondt
Dip. of Hort. (Arboriculture AQF5)
Cert. of Arboriculture
Cert. of Tree Surgery
Member of Arboriculture Australia
Member & Certified Arborist
of ISA AU-0031A

Sandy Morse
Assoc. Dip. Landscape
Grad. Dip. Land Rehabilitation
Member of
Aust. Inst. L'scape Designers &
Managers & Aust. Inst. Hort.

Fully Insured

CV - Paul D'hondt

Professional qualifications

- **Tree Risk Assessment qualification -** International Society of Arboriculture – June 2015
- **Diploma of Horticulture (Arboriculture AQF5)** with **Distinction -** Ryde TAFE, Sydney, 2008.
- **Certified Arborist Accreditation -** International Society of Arboriculture – October 2005
- **Chainsaw Operations (Level 3) Certificate –** TAFE Riverina Institute - October 2001
- **Work Place Training Category I Certificate -** Excelsior Consulting Workplace Training - July 1998
- **Arboriculture Techniques Certificate** Ryde TAFE, Sydney – June 1992
- **Certificate of Tree Surgery** Ryde TAFE, Sydney - July 1990
- **Diploma of Teaching Technical Education -** Sydney College of Advanced Education – May 1987
- **Certificate of Tree Care** Phil Hadlington - May 1987

Training

- **Tree Hollow Surveying Workshop –** Feb. 2010 - Ecological Consultants Association of NSW
- **Traffic Control Worksite Planning Training** – June 2004
- **OH & S Training,** WorkCover - January 2004
- **Risk Management Training,** BTM Quality Management Systems - November 2002
- **WIRES** – Reptile, Wombat & Bird handling training - 1998 to 2000
- **WIRES** Basic Training - 1995
- **High Climbing Course** Vertical World, Blackheath 1988

Professional Memberships

- **Local Government Tree Resource Association** since 2008.
- **International Society of Arboriculture**
- **Arboriculture Australia**

Holds

- **Current St. Johns Senior First Aid Certificate**
- **Current MR Drivers Licence.**
- **Current Greencard**

Insurance Cover

- **Professional Indemnity**
- **Public Liability**
- **Workers Compensation**
- **Accident & Sickness Policy**

PO Box 3283, Robertson 2577
Ph/Fax: (02) 4885-2036 Mob: 0409-129165
ABN: 63 866 786 730
email: sumtrees@bigpond.net.au

Projects and experience

Paul D'hondt has run a registered tree management business since 1990, 6½ years in the Sydney area trading as Paul's Arboriculture & Garden Services, relocating to the Snowy-Monaro area as Summit Tree Services in 1996 and in the Southern Highlands since 1998.

- **Part-time teacher** from 2001 - Arboriculture Certificate III at Yallah TAFE, Dapto, and Chainsaw Accreditation Courses.

- **Expert witness** in the District Court Sydney on a civil claim, 2006 and in the Land & Environment Court on behalf of Wingecarribee Shire Council, 2009, 2008 and 2004.

- **Consulting arborist –**
  *Annual Insurance risk assessment of trees in outdoor activities area, Tallong Campus of Santa Sabina College from 2004 to present & Jindabyne Sport & Recreation Centre in 1997.

  *Carried out consultations, assessments, reports, advice and works on Council managed lands, for the Wingecarribee Shire Council, Cooma Shire Council and Snowy River Shire Council.

  *Member of Wingecarribee Shire Council Landscape Advisory Committee for 3 years as a consulting arborist.

  *Carried out consultations and SULE assessments, and provided specifications for tree retention and protection pre-development to adhere to Council requirements, in the Southern Highlands, Wollongong, Nowra, Liverpool, Blacktown, Goulburn and Sydney areas.

  *Clients include Goulburn TAFE; DECC - National Parks & Wildlife, Fitzroy Falls Visitor Centre& Guthega hydro pipeline; Hayes Environmental – Environmental Consultant; Stocklands West Dapto housing development; Seniors Living complexes; public and private schools.

  *Consultation, advise and works on historic and significant trees in heritage-listed properties.

  *Inspection of hollow bearing trees and evidence of fauna with Richard Mason of Molino Stewart, prior to the construction of Kangaroo Valley Waste Water Treatment Plant during 2012.

- **Supervising Arborist**
  *Supervised staff of Cooma-Monaro Shire Council during tree pruning activities and prepared a training course for Cooma-Monaro Shire Councils Parks outdoor staff.

  *Supervised protection of trees during earth works for Stocklands, West Dapto housing development.

- **Tree works**
  *All facets of tree works including corrective pruning, crown lifting and thinning, cabling and bracing and, installation of root barriers.

- **Miscellaneous**
  *Carried out numerous rescues of native and non-native fauna whilst undertaking tree works with safe removal of fauna to ensure fauna, human and domestic animal safety.

PO Box 3283, Robertson 2577 **ABN: 63 866 786 730**
Ph/Fax: (02) 4885-2036 Mob: 0409-129165 email: sumtrees@bigpond.net.au

*Conducted courses on Tree Management and Pruning Fruit Trees for the Monaro Continuing Education Group.

*Presented tree management talks (on invitation) to local Garden Clubs in the Southern Highlands, the North Shore Society for Growing Australian Plants, Sydney and the Ku-ring-gai State Emergency Services, Wahroonga.

PAUL D'HONDT
July 2015

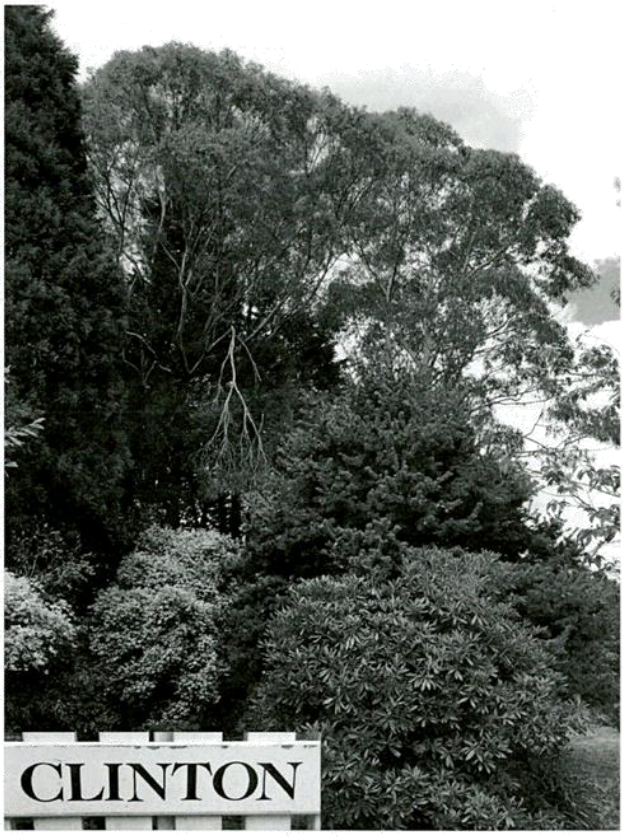
PO Box 3283, Robertson 2577
Ph/Fax: (02) 4885-2036 Mob: 0409-129165

ABN: 63 866 786 730
email: sumtrees@bigpond.net.au

ATTACHMENT 4

Heritage Landscape Report

"Clinton"
23 Purcell St BOWRAL NSW 2576



Client:
Kathy Barnsley Architect
558 Argyle Street MOSS VALE NSW 2577

Date:
3/2/2016

Chris & Charlotte Webb Pty Ltd
A.B.N.: 86 085 467 750

443b Moss Vale Rd, BOWRAL 2576 | P.O. Box 707, MOSS VALE NSW 2577

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Summary

Assessment has been carried out on the existing vegetation of the garden with the following recommendations:

- No exceptionally significant trees were identified
- Two eucalypts are identified as highly significant and should be retained
- Seven trees are identified as significant and may be retained or transplanted if size permits
- Recommendations are included to conserve potentially important horticultural material

Charlotte Webb
Masters Heritage Conservation,
B.Sc.Ag (Hort), Dip LD

3 February 2016

1 Introduction

The purpose of this report is to review the heritage significance of the existing vegetation at 23 Purcell St, BOWRAL. Refer to Appendix 1 for the identification and location of the trees assessed.

2 Site

2.1 Identification

The property, known as 23 Purcell St, Bowral, identified as Lot A DP 403717. The Battle axe property is located on the western side of Purcell Street, with 14 neighbouring properties, as shown in Figure 1.

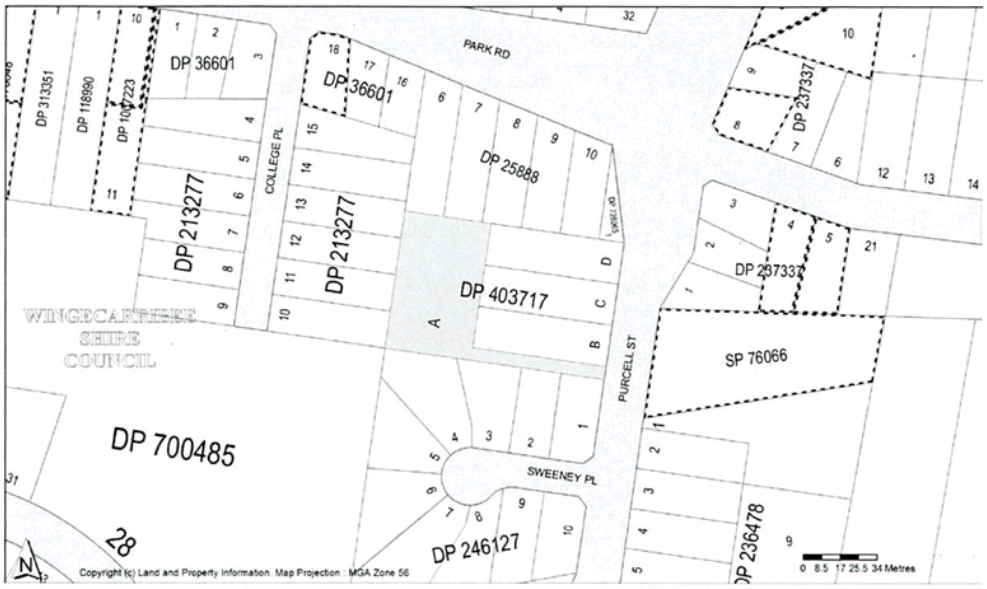


Figure 1 Location of Site (hatched yellow)

2.2 Property Description

A long narrow driveway, nearly 5.86 metres wide and 60.96 metres long leads to the rectangular battle axe block. The existing house is located in the centre of the rectangle, surrounded by garden on all sides. A small separate garage is located on the southern boundary.

The aerial photograph in Figure 2 shows the property outlined in red.

The property has previously been owned by the Mills family. Geoff Mills was an avid plant enthusiast, visiting China and other Asian countries on plant expeditions. Whether plants in the garden came from these expeditions or were influenced by plants seen on these trips is unknown. It is evident by the collections present in the garden, particularly the more unusual plants, that there is a strong Asian influence.[1]

[1] Author's personal knowledge of Geoff Mills

3 Garden Description

The garden is comprised of predominantly exotic trees, shrubs and groundcovers with extensive garden beds surrounding the house. Occasional mature trees are scattered along the south, western and northern boundaries.

Plantings show two distinct stages of plantings. The first includes the few mature boundary trees. The second stage appears to be under 30 years old.

Appendix 3 provides a list of plants identified in the garden, according to general areas around the house.

Figure 2 Aerial photograph with the site outlined in red

3.1 Significance of Trees

The trees on the site have been assessed according to their significance. Significance is based on tree maturity, size and rarity. See Appendix 1 and Appendix 2 for the location and key to the tree identification, along with their significance.

3.1.1 Exceptionally Significant Trees

No trees on the site were found to be of exceptional significance, worthy of listing as individual heritage items or on any significant tree register.

3.1.2 Highly Significant Trees

Highly significant trees are those considered important due to exceptional age, size and/or rarity. These trees are a significant asset to the site and should be retained.

The two eucalypts in the north eastern corner, *Eucalyptus bicostata* (tree 14) and *Eucalyptus radiata* (tree 15), are significant due to size, age. Unfortunately these trees are now becoming overcrowded by maturing *Cupressus macrocarpa* growing directly underneath.

The *Sequoia sempervirens* (tree 2) may have been considered highly significant, however it is **not** included due to the compromised structure of the tree. From the ground the tree appears to have lost a significant portion of its terminal growth.

The large *Cedrus deodara* (tree 7) is **not** included in this category as the age and size is not outstanding compared to the numerous other examples of this tree throughout the Southern Highlands.

3.1.3 Significant Trees

Significant trees are those considered important due to age, size and/or rarity. It would be desirable to retain or transplant if size permits or to propagate from those considered rare.

As many of these trees are not included on the survey, a description of their location is provided.

Tree	Location	Reason for inclusion	Recommendation
Arbutus glandulosa	(tree 1)	Rarity particularly at this size	Not transplantable. Propagation material
Magnolia macrophylla	South west of house	Rarity particularly at this size	Not transplantable. Propagation material
Acer palmatum dissectum (green)	West of house	Age and size	Transplant
Acer palmatum dissectum (red)	West of house	Age and size	Transplant
Lindera obtusiloba	North of house near boundery	Rarity particularly at this size	Not transplantable. Propagation material
Styrax japonica	East of house	Rarity particularly at this size	Not transplantable. Propagation material
Chionanthus retusus	East of house	Rarity particularly at this size	Not transplantable. Propagation material

3.1.4 Not Significant Trees

The remainder of the trees on the site has been assessed as not significant based on age, size and rarity.

3.1.5 Plants of Interest

A number of plants on the site are of interest botanically particularly due to their rarity. These plants may be conserved ex-situ.

These plants include the collections of Camellias, Magnolias, Viburnum, Conifers and possibly many of the lower understory plants that are not evident at the moment including bulbs and the known collection of Ariseama[2].

[2] Personal knowledge of the Author

4 Recommendations

1) Transplant plant and reuse plants wherever possible, in particular the weeping Japanese Maples (*Acer palmatum dissecctum*), Cornus and Camellias.
2) Consider incorporating compact trees and shrubs in the future landscape plan such as the Forest Pansy (*Cercis canadensis)*, Camellias and Hydrangeas, in situ, where ever possible
3) Invite interested groups such as the Australian Garden History Society (AGHS) and the Friends of the Southern Highlands Botanic Gardens (SHBG) to take material for propagation from the rare and unusual plants included in the plants of interest.

Acer palmatum dissectum (green) can be transplanted

Acer palmatum dissectum (red) can be transplanted

Part of the conifer collection

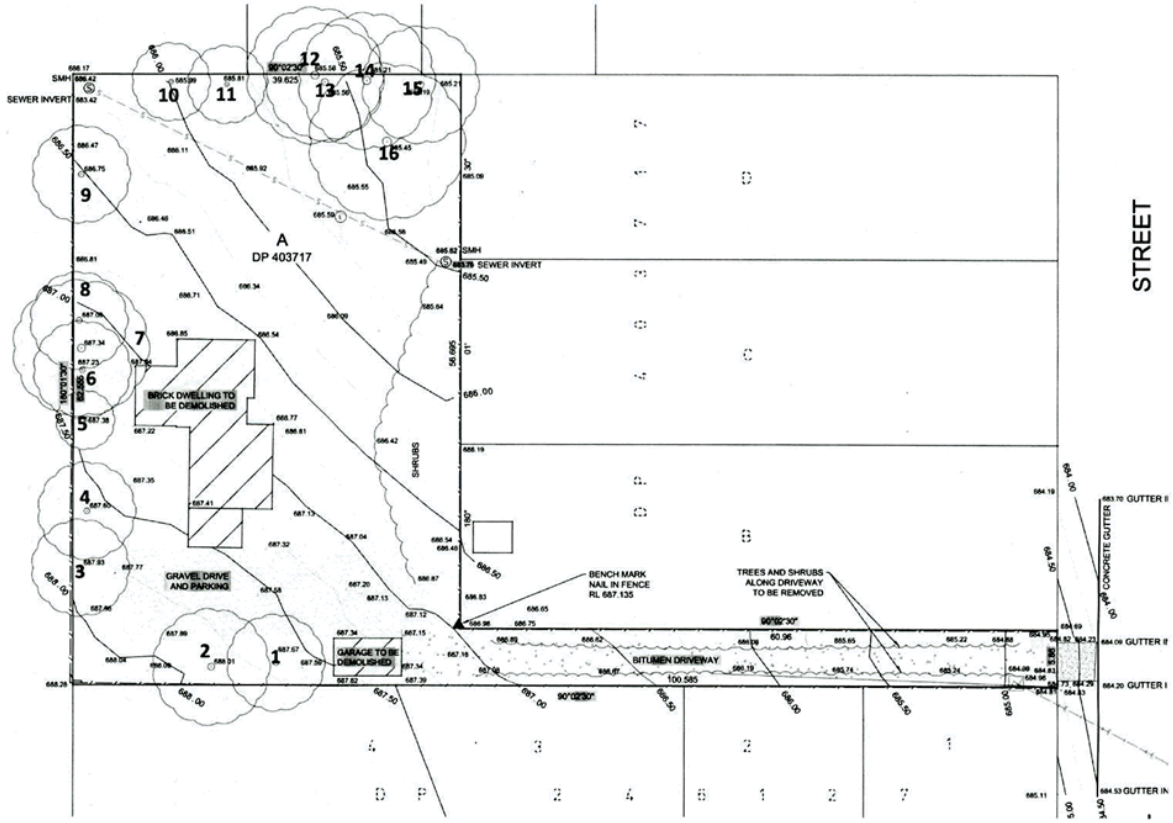
Chionanthe retusus – significant for its rarity

Figure 3 Images of plants in the garden

6

Appendix 1 Survey with trees numbered for identification

See Appendix 2 for identification table



Appendix 2 Tree identification and significance as identified on the survey

Number	Botanical Name	Common Name	Significance*
1	Arbutus glandulosa	Mexican Strawberry Tree	High
2	Sequoia sempervirens	Redwood	High
3	Acer palmatum	Japanese Maple	Low
4	Acer palmatum	Japanese Maple	Low
5	Acer palmatum	Japanese Maple	Low
6	Acer palmatum	Japanese Maple	Low
7	Cedrus deodara	Himalayan Cedar	Low
8	Acer palmatum	Japanese Maple	Low
9	Acer palmatum	Japanese Maple	Low
10	Chamaecyparis pisifera	Sawara Cypress	Moderate
11	Cupressus	Cypress	Moderate
12	Cupressus macrocarpa	Monterey cypress	Low
13	Eucalyptus radiata	Peppermint Gum	High
14	Cupressus macrocarpa	Monterey cypress	Low
15	Cupressus macrocarpa	Monterey cypress	Low
16	Eucalyptus bicostata	Blue Gum	High

8

Appendix 3 Other plants within the garden

All plants are listed in a clockwise direction around the garden

Bed 1 north of shed
Cornus florida
Daphne odora
Callistemon
Rosa – Iceberg
Viburnum
Nandina nana
Centaurea
Rosemary
Lychnis
Aquilegia
Stachys
Leucanthemum

Bed 2 west of shed
Hibiscus
Agapanthus
Arbutus glandulosa
Aucuba
Arisaema
Helleborus
Sequoia sempervirens
Nandina nana
Clivea
Ilex variegated
Michelia
Pittosporum James Stirling
Laurus nobilis
Cupressus Nitchke's Needle
Iris bearded
Convolvulus mauritanica

Bed 3 adjacent to house
Mahonia aquifolium
Mahonia lomariifolia (to be confirmed)
Magnolia macrophylla
Euonymous variegata
Magnolia
Aquilegia
Geranium pheum
Rosa

Bed 4 western boundary
Camellia sasanqua
Chenomeles
Jasminium

Acer palmatum
Acer palmatum dissectum, red and green
Rhododendron
Hydrangea
Camellia japonica
Azalea indica
Bergenia
Azalea mollis
Sarcococco confuse
Ilex
Helleborus
Salvia
Stachys White Nancy
Arisaema

Bed 5 Northern boundary
Camellia japonica
Camellia sasanqua
Ligustrum rotundifolia
Lindera obtusiloba
Acer pentaphyllum
Acer palmatum
Azalea (unusual)
Ligustrum variegata
Chamaecyparis
Ulmus parvifolia
Cupressus
Cotoneaster
Eucalyptus radiata
Eucalyptus bicostata
Pittosporum
Arisaema
Pittosporum Tom Thumb
Acer pseudoplatanus
Berberis thunbergii Aurea
Cercis Forest Pansy
Juniperus
Euphorbia
Clivia
Vinca

Northern beds in lawn and against house
Tibouchina
Lavandula
Azalea indica
Cupressus sempervirens
Corylus
Cotoneaster
Buxus

Aquilegia (large leaves)
Rhododendron
Clivia
Helleborus
Ajuga
Erigeron
Iberis
Lychnis
Prunus serrata
Pinus (blue)
Buxus sempervirens Variegata
Rosa – standard
Acer palmatum

Eastern Garden
Picea (various x 9)
Chamaecyparis (various x 5)
Thuja (various x 3)
Pittosporum eugenioides
Corokia cotoneaster
Cercis
Plectranthus
Cornus florida
Acer
Cedrus deodara weeping
Viburnum (various, including lantana & lantana aurea)
Philadelphis
Pieris forestii
Chenomeles
Erigeron
Anemone hybrid
Styrax japonica
Michelea
Chionanthe
Abelia grandiflora
Quercus robur
Magnolia (various x 5)

Driveway plants
Camellia japonica
Camellia sasanqua
Pittosporum James Stirling
Cotoneaster
Ligustrum
Prunus

AGENDA FOR THE ORDINARY MEETING OF COUNCIL
Wednesday 09 March 2016
REPORT DEPUTY GENERAL MANAGER CORPORATE, STRATEGY & DEVELOPMENT SERVICES

10.1 DA 15/1005 Construction of a Four Multi Dwelling Development - 23 Purcell Street, Bowral

ATTACHMENT 5

Reference:	**15/1005**
Report Author:	**Acting Team Leader Town Planning**
Authoriser:	**Group Manager Planning, Development & Regulatory Services**
Applicant:	**Kathy Barnsley Architect Pty Ltd**
Owner:	**Joer Pty Ltd**
Link to Corporate Plan:	**Provide for higher density development within the towns of Mittagong, Bowral, Moss Vale and Bundanoon**

PURPOSE

The purpose of this report is to consider Development Application 15/1005, which seeks consent to construct a four multi-dwelling housing development at 23 Purcell Street, Bowral. The application has been requested by Councillors to be determined at a Council meeting. Consequently, this report is prepared for determination, and recommends approval, subject to conditions.

VOTING ON THE MOTION

Councillors are required to record their votes on this matter.

RECOMMENDATION

THAT development application DA15/1005 for a four multi dwelling development at Lot A DP403717, 23 Purcell Street, Bowral be approved subject to conditions as described in Attachment 1 to the report.

REPORT

Subject Site and Locality

The site is known as Lot A DP403717, 23 Purcell Street, Bowral and is located approximately 1.5km south east of the Bowral central business district. The site is predominantly rectangular with an area of 2,835.2m^2 and an access handle to the body of the lot from Purcell Street. There is an existing single storey dwelling within the centre of the property and a variety of established introduced mature species of trees in proximity to the dwelling and surrounding the perimeter of the site. The land falls to the north east and sits at a height above sea level of 685-688m. The northern portion of the site is traversed by a sewer main.

Residential land uses dominate the immediate locality. Surrounding lot configurations are predominantly long rectangular shapes and are found in the surrounding streets of College Place, Park Road, Purcell Street and Sweeney Place. This lot configuration has resulted in

a low density style locality with dwellings fronting, and in close proximity to their respective street with large long rear backyards. Westwood Park in Westwood Drive is located to the south west of the site and Annesley Bowral Lifestyle Centre and Bowral High School lie further west. Stephens Park and Anthem Care Retirement Village lie further east of the site with the Mittagong Rivulet 500m to the north and Kangaloon Road 500m to the south.

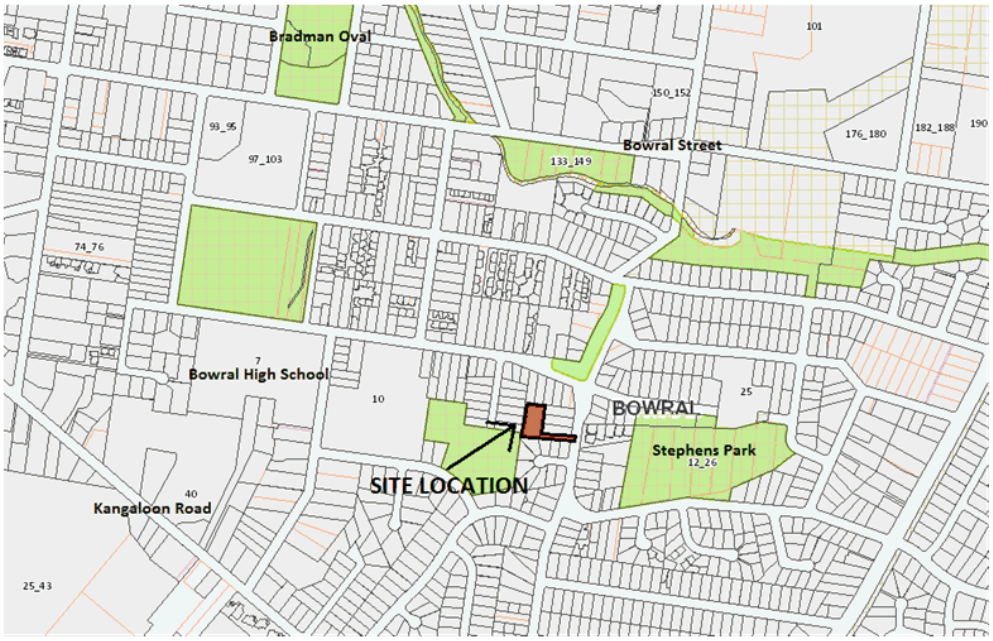


Figure 1: Site Location

(This Figure has been reproduced under separate cover - see Attachment 5)

Figure 2: Aerial Image of Site

Details of Proposal

Development Application 15/1038 was lodged with Council on 12 October 2015 seeking development consent to construct a four multi dwelling housing development at 23 Purcell Street, Bowral. Plans of the proposed development are at **Attachment 2** to this report. The development would comprise the following:

- Demolition of the existing single storey dwelling;
- Removal of trees on the property, with retention of two eucalypt trees in the north eastern corner;
- Construction of four single storey dwellings (two attached and two detached) each with their own attached two car garage;
- Provision of two visitor parking spaces;
- Access to the site via a formed 4m driveway along a 60m access handle with two passing bays within the driveway 8m long and 5.861m wide;
- Provision of landscaping to the site, within private open space areas, communal entrance/driveway areas and along the access handle; and
- Construction of stormwater quantity and quality measures.

STATUTORY PROVISIONS

State Environmental Planning Policies

State Environmental Planning Policy No 55 – Remediation of Land

Clause 7 of SEPP 55 requires the consent authority to consider whether land is contaminated prior to granting consent to the carrying out of any development on that land, and to be satisfied that the land is suitable for the proposed use. After undertaking a desktop search using Council's Property and Rating database, Council is satisfied the land is not a site of possible contamination and therefore no further assessment of this SEPP is required.

State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011

The site is located within the Wingecarribee River Sub-catchment. Compliance with the provisions of the SEPP and associated guidelines is therefore required to consider water quality. The development is a Module 3 under the NorBE Guidelines and requires concurrence from Water NSW (four or more multi dwelling development connected to sewer). On 19 February 2016, Council received Water NSW concurrence advising they are satisfied the development can achieve a neutral or beneficial effect on water quality subject to stormwater management and construction activities conditions. (**Condition 54**)

Local Environmental Plans

Wingecarribee Local Environmental Plan 2010

The applicable LEP is the *Wingecarribee Local Environmental Plan 2010*, and the relevant provisions of the LEP are discussed as follows.

Clause 2.3 Zone objectives and land use table

The site is zoned R3 Medium Density Residential. Pursuant to section 2.3(2) of the LEP, Council must have regard to the objectives of the zone. The objectives of the R3 Medium Density Residential zone, and their consideration, are discussed below.

- *To provide for the housing needs of the community within a medium density residential environment.*
- *To provide a variety of housing types within a medium density residential environment.*
- *To enable other land uses that provide facilities or services to meet the day to day needs of residents.*

The proposed development is in accordance with the nominated objectives as it would contribute to the diversity of housing options in Bowral.

Clause 5.9 Preservation of trees or vegetation

The application proposes the removal of all vegetation on the site except for two eucalypt trees in the north eastern corner of the site. Consequently, the following documentation was requested to be submitted to assess the removal of vegetation on the property:

- Arboriculture Report prepared by Summit Tree Services, dated February 2016 – This report (**Attachment 3**) provides a tree assessment of five conifers on the northern boundary of the site. The report advises that all five trees require removal

for reasons such as high risk of failure and crowding of other more desirable species.

- Heritage Landscape Report prepared by Chris & Charlotte Webb Pty Ltd, dated 3 February 2016 – This report (**Attachment 4**) reviews the heritage significance of the existing vegetation onsite and categorises trees onsite into 'exceptionally significant', 'highly significant', 'significant', 'not significant' and 'plants of interest'. The report recommends the transplanting and reuse of Japanese Maples, Cornus and Camellias (where possible), the incorporation of compact trees and shrubs in any future landscaping and to invite specific interested groups to take material for propagation from rare and unusual plants from the plants of interest. It is noted that two Eucalyptus (Peppermint Gum and Blue Gum), a Mexican Strawberry Tree and a Redwood were considered to be of high significance.
- Landscaping Plan prepared by Catherine Lewis Landscape Architect, dated 3 February 2016 – The plan (**Attachment 2**) retains the two highly significant Eucalyptus, proposes a variety of large and medium evergreen compact shrubs and trees such as Magnolias, Camellias, Elagnus, Shrubby Germander and Snow Maidens. It is noted the plan does not propose the transplant/reuse of Japanese Maples or Cornus in the plan, however does propose to plant Camellias.

Whilst the application did not require referral to the Heritage Committee, the application was raised as a General Business matter on 13 November 2015 and the following resolution was made:

> *THAT in relation to the multi dwelling development proposal at 23 Purcell Street, Bowral (DA 15/1005), the Heritage Land Use Planner request that a heritage landscape assessment of the landscape and the plant material (including a proper survey and recording of items and information about the owner and the original plantings and their significance) by a suitably qualified consultant be undertaken before the application is considered AND THAT copies of the assessment report be provided to the Heritage Committee for viewing and comment.*

On 4 February the applicant provided Council with a Heritage Landscape Report, Arboriculture Report and an amended Landscaping Plan which took into consideration some of the recommendations of those reports. The reports were considered at the Heritage Committee's 19 February 2016 meeting and the following comments were provided:

> *The arborist's report recommends the removal of the 5 old cupressus because of their condition and impact on other trees. I agree with this recommendation.*
>
> *Their removal would enable the adjacent eucalyptus radiata to be retained.*
>
> *The Heritage Landscape Report notes the high significance of the eucalyptus radiata, and that there are 7 other trees that are significant on the site and should be retained on the site, where possible. Buildings proposed would affect most of these and it recommends that those that can be, be moved so that they continue to contribute to the landscape. Supplementary planting should incorporate trees and shrubs that would add to this character. I agree with these recommendations.*
>
> *Parts of the garden were developed by a plant collector, Geoff Mills, who lived there around 20 years ago. There are therefore some rare and unusual plants, and we suspect, bulbs, that should be retained either on the site, or in the area generally. I agree that the Australian Garden History Society (Southern Highlands Branch) (AGHS-SH) and the Friends of the Southern Highlands Botanic Gardens should be*

given the opportunity to remove those that are not being used in landscaping the site, and propagating from the plant material that is there. The Chair of AGHS-SH has indicated that she is happy for members to work with the Friends of the Botanic Gardens on this project.

The Heritage Committee agree with the recommendations from both reports, specifically the ability for the AGHS to remove plants for propagating. **Condition 10** facilitates this recommendation.

It is acknowledged that significant established and mature vegetation would require removal to facilitate the development. Whilst no real effort has been made to incorporate some of the existing trees into the landscaping plan, the ensuing landscaping proposal would still result in an environmental outcome, with plantings more suitable for a medium density locality. Any green waste associated with the removal of the trees would either be chipped and stored onsite for landscaping or taken offsite by a landscaper for use elsewhere, in accordance with the Waste Management Plan (**Condition 29**).

Clause 7.1 Development on existing lots in Zones R2, R3 and R5

The minimum lot size for the erection of multi dwelling housing on this site is 700m^2. As the lot in question would result in a size greater than this (2,835.2m^2), the development satisfies the requirements of this clause.

Clause 7.3 Earthworks

The proposed development would result in an alteration to the existing ground level by more than 800mm, with the south western corner proposing 1m of cut and therefore this clause applies to the assessment of the application. Other areas of the site would be affected by cut/fill ranging from 655mm fill (Dwelling 3) to 1m cut (Dwelling 1). The objectives of this clause are to ensure that any earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses or heritage items and features surrounding land, and to allow earthworks of a minor nature without separate development consent. Before granting development consent for earthworks, the consent authority must consider the following matters:

a) the likely disruption of, or any detrimental effect on, existing drainage patterns and soil stability in the locality,

The proposed earthworks would result in the disruption of existing drainage patterns currently unformalised throughout the site. The proposed development would formalise and facilitate stormwater so it is collected within the site and discharged to Purcell Street. It is unlikely the proposed management of stormwater would have a detrimental impact on existing drainage patterns. Similarly, it is unlikely the development would have an impact on soil stability due to the formal drain and pipe catchment system proposed.

b) the effect of the proposed development on the likely future use or redevelopment of the land,

The proposed development would alter the ground level of the site, however it is considered its effect would have negligible impact on any future use to the site as future uses would more than likely result in residential or uses ancillary to residential.

c) the quality of the fill or of the soil to be excavated, or both,

The quality of the soil to be excavated would be a mix of spoil excavation and excavated natural material (ENM). ENM is recognised in light of the fact that some materials do not qualify as "virgin" (VENM) but are nevertheless reusable.

d) the effect of the proposed development on the existing and likely amenity of adjoining properties,

The earthworks propose a retaining wall to the southern boundary ranging from 1.0m in the south western corner to 475mm along the length of the southern elevation of the Dwelling 1 and a retaining wall to the western boundary ranging from 1m in the south western corner to 330mm along the length of the western elevation of Dwellings 1 & 2. This retaining wall would be constructed with ag line to capture overland flow from the upper catchment. The stormwater plans demonstrate that a 100 year and 10 year stormwater overland flow events would not impact on the finished floor levels of Dwellings 1 & 2. The proposed infrastructure is also considered to benefit surrounding properties as it would formalise an existing unformalised situation.

e) the source of any fill material or the destination of any excavated material,

The submitted Waste Management Plan advises any excavated material would be kept onsite and reused as topsoil for landscaping/reshaping works with the remainder to be sent to Moss Vale Resource Recovery Centre. Recommended conditions would require any fill material brought onsite to be virgin excavated natural material (VENM) (**Condition 24**) and any excavated material not used onsite to be taken to an appropriately licensed facility (**Condition 25**).

f) the likelihood of disturbing Aboriginal objects or other relics,

Considering the existing disturbed nature of the site, it is unlikely the excavation would result in the disturbance of Aboriginal objects or other relics.

g) proximity to and potential for adverse impacts on any watercourse, drinking water catchment or environmentally sensitive area.

The site is not nearby to any formal water course or environmentally sensitive area. As mentioned previously, the site is within the Warragamba drinking water catchment. Water NSW has determined that the development would have a neutral or beneficial effect on water quality, pending compliance with the imposed concurrence conditions (**Condition 54**). Consequently, the potential for adverse impacts is considered negligible.

Development Control Plans

Bowral Development Control Plan

Below is an assessment against the relevant sections of the DCP.

DCP Control	Assessment
Part A – ALL LAND	
Section 2 - Objectives of the Plan	The proposal is generally in accordance with the nominated objectives in that it would provide appropriate urban function, residential diversity and amenity

DCP Control	Assessment
Section 3 – Ecologically Sustainable Development	Whilst there is vegetation to be removed, replacement vegetation is proposed so as to provide an appropriate environmental outcome. Water NSW concurrence has been provided ensuring a neutral or beneficial effect on water quality is achieved as a result of the proposed development. A Stormwater Management Plan has been provided and would adequately manage stormwater to Purcell Street from overland flow and that generated from new hardstand areas associated with the development.
Section 4 – Flood Liable Land	The subject site has not been identified as flood prone land.
Section 5 – Vegetation Management & Landscaping	Council's Vegetation Communities Map indicates that the site does not comprise any endangered ecological communities. Existing vegetation on site comprises a mix of exotic and native species of trees, shrubs and managed grassed areas. Conditions nominated in **Attachment 1** would ensure the implementation of the proposed landscaping plan prior to the issue of an occupation certificate (**Condition 44**). It is considered the proposed landscape planting would not result in overshadowing of neighbouring properties. Recommended conditions would require plantings that are sufficiently advanced to provide immediate landscaping effect (**Condition 45**).
Section 6 – Subdivision, Demolition, Siting and Design	The demolition of the existing building would require compliance with relevant Australian Standards (**Condition 5**). A site analysis plan was submitted which identified that residences on surrounding properties address the front of their sites and are located towards the middle or front of the sites. It was found that there was existing mature landscaping on most of the adjacent properties which creates supplementary natural screening for the proposed development. Similarly, the site analysis identified that the location of the sewer main would keep the development to the southern side allowing for large areas to the north for landscaping. The development proposes to cut the site greater than 500mm (different to the control in the LEP), at a maximum of 1.0m in the south western corner of the site, with the average cut over the site approximately 350mm and fill 550mm. When measured over the building footprint, the overall cut and fill impact of the development is considered negligible. Recommended conditions would require retaining wall details to be designed by a professional engineer prior to the issue of a construction certificate (**Condition 11**).
Section 8 – Construction Standards and Procedures	The development would not be building over an existing sewer main and Council's Development Engineer is satisfied the development achieves stormwater controls. The building proposes to be in close proximity (i.e. approximately 1.2

DCP Control	Assessment
	metres from the sewer main that traverses the site. Consequently, Council's Development Engineer has recommended standard conditions to facilitate construction that would occur near to the sewer main (**Condition 50(c)(ii) & (iii)**). A Waste Management Plan was provided with the application. In light of the quantity of excavation/green waste/building materials etc required to be taken offsite facilitate the development, compliance with A8.12.3(f) requiring retainment of receipts from the disposal of waste would be imposed (**Condition 25**). This would reduce the likelihood of illegal dumping and would confirm the lawful disposal of materials. At completion of the construction works, **Condition 46** of the draft Notice of Determination would ensure the development is adequately identified with street numbering.
Section 10 – Outdoor Lighting	No lighting plan was provided with the application however it was advised in the addendum to the Statement of Environmental Effects prepared by Lee Environmental Planning, dated 2 February 2016 lighting would be provided to the visitor parking areas, dwelling entrances and along the access handle. A formal lighting plan would need to be submitted to, and approved by Council, and be in accordance with A10.3 of the DCP, prior to the issue of a Construction Certificate (**Condition 12**).
Part C – RESIDENTIAL ZONED LAND	
Section 3 – Medium Density Development	
C3.2 Site Amalgamation	***Council will not grant consent to the carrying out of multi dwelling development unless it is satisfied that the area and configuration of the allotment on which the development is proposed is such that it:*** ***(a) Has at least 25 metres of site frontage to a public street or other appropriate public place;*** The objectives of this control are to encourage the efficient use of existing residential land in urban areas to provide a high level of amenity for dwellings in medium density development, design the position and orientation of dwellings to maximise the integration of the higher density development into the existing neighbourhood character, and minimise the loss of mid-block tree canopy and other vegetation on site. Whilst the site does not have a direct street frontage to Purcell Street of 25 metres, it does have sufficient lot width within its body to ensure the objectives of this control can be achieved. The lot is approximately 40m (east-west) x 60m (north-south) and would therefore have a suitable lot width to enable a development to have sufficient light and ventilation to dwellings, private open space areas, safe forward in/forward out vehicular manoeuvrability whilst providing a development that provides a suitable integration between low density and medium density zoning. It is important to note that whilst the lot doesn't have a direct 25m frontage, the four dwellings proposed are not seeking

DCP Control	Assessment
	to vary any numerical controls such as setbacks or private open space provisions. This is a strong indicator that the site is adequately configured to consider a medium density development upon it. ***(b) Does not unreasonably compromise the development potential of adjoining allotments;*** The site is within the R3 Medium Density zone, but abuts the R2 Low Density zone on its southern boundary. The orientation, siting and bulk/height of the proposed dwellings would not result in a reduction of the development potential of these adjoining lots as each of these lots, particularly 8 Sweeney Place, have sufficient space to enable a maintained amenity, visual and acoustic privacy and landscaping spaces. ***(c) Allows for an acceptable level of amenity for residents and neighbours of the proposed development at the density proposed.*** Amenity related issues such as privacy, siting and orientation, visual impacts, traffic etc are discussed throughout this report. The report finds the development would not unreasonably or adversely impact on the amenity of neighbours or residents within the development, in the context of a R2/R3 zone interface. The development proposes a density of 0.30:1 which is half of the permitted density of 0.5:1. Whilst the development is sited predominantly in the southern portion of the site, the proposed density would provide a suitable transitional development at the zone interface.
C3.3 Site Planning	***(a) Maximise the number of dwellings that address a public street rather than internal driveways.*** The lot configuration does not allow the lot to address a public street. The proposed landscaping of the access handle would soften the driveway similar to the current street elevation of this site from Purcell Street. It is noted that the view up the driveway would be of Dwelling 1 and not a driveway which is considered to be a good outcome. ***(b) Minimise the dominance of areas set aside for the vehicular circulation and storage.*** The development proposes an internal vehicular movement area with driveways to each dwelling from the centre of the lot. The areas set aside for circulation would not be excessive or unnecessary in terms of the size of the development. ***(c) Maintain existing patterns of dwelling fronts and backs.*** The existing pattern of dwelling fronts is irrelevant due to the configuration of the lot. The site is the first in this area to take advantage of the medium density zoning and as such dwelling backs predominantly that of the existing single residential dwelling layout seen in **Figure 2**. Rear setbacks from the adjoining dwellings in College Place, Park and Purcell Streets are approximately 30m. The proposed dwelling backs would not result in an adverse visual or acoustic impact due to their distance from surrounding

DCP Control	Assessment
	adjacent dwellings. ***(d) Avoid long, unbroken building forms greater than 25 metres in length.*** The development provides articulation to the length of the development providing areas of depth, insets, and variations of materials. There are no areas greater than 25m that are unbroken building forms. ***(e) Limit the proportion of dwellings which are more than 50m from a public street.*** Due to the lot configuration all dwellings are more than 50m from Purcell Street. This is not considered to be a matter which would result in an undesirable development as strict compliance with this clause would result in the loss of battle-axe style lots for suitable in-fill development opportunities. ***(f) Locate dwellings, driveways and open space so as to allow for the retention of existing natural and cultural features on the site.*** The development has sited dwellings off the northern boundary to enable good light and ventilation and open space/vegetation opportunities. Whilst the majority of existing vegetation would be removed to facilitate the development (as discussed previously), two significant, established and mature eucalypt trees shall be kept. These would be incorporated into the landscaping plan and surrounded by new private open space areas and landscaping. ***(g) Orientate and configure dwellings to respond to opportunities for good solar access.*** The development has been designed to give living areas and private open space areas acceptable solar access, particularly with the setback from the northern boundary from Dwellings 3 & 4. ***(h) Use landscape plantings to reduce the apparent bulk of new dwellings when viewed from the street or adjoining land.*** The landscaping plan proposes 1.8-2.4m hedging along the eastern northern and southern boundaries with hedging also on the western elevation of Dwelling 3 and between Dwellings 1, 2 & 3. In accordance with the DCP, advanced plantings shall be placed to provide to immediate landscaping effect. The development is single storey and less than the permitted 6m in height (as a result of reducing the roof pitches from 30 to 25 degrees). Larger trees would be planted along the western and northern boundaries to reduce the introduced bulk and scale of the development into the locality when viewed from these elevations. In terms of the southern elevation, there is the potential for roof bulk to be viewed primarily by 8 Sweeney Place and to a lesser extent 12 College Place. Dwelling 1 would be set down into the site approximately 500mm along the southern boundary (retaining wall along this boundary 1m to 475mm) and is setback 2m from both the southern and western boundaries.

DCP Control	Assessment
	Whilst the development would be set down into the site, no landscaping is proposed in the south western corner to soften the development. From both 8 Sweeney and 12 College, (8 Sweeney in particular), this would result in the bulk of the roof form only being visible from the private open spaces of these respective properties (after fencing installation). In terms of visual privacy this is considered acceptable. However, there would be no space (in a 2m setback) to place any landscaping to embellish these elevations. Notwithstanding, other proposed landscaping onsite (trees of heights 11m and 14m) would act to soften the development. It is not the purpose of landscaping to shroud or completely block a development from view. On balance, The proposed landscaping would reduce the bulk of the development into the locality.
C3.4 Density and Site Coverage	***(a) Respects the maximum density permissible for multi dwelling housing within the relevant sub-zone, being:*** ***(ii) 0.5:1 for sub zone R3-B*** The following calculation was made to determine floor area: Total GFA = 630m^2 Site Area = 2,835m^2 Floor Space Ratio = (Total GFA / Site Area) / 100 = 22% Consequently, with an FSR of 0.22:1, the development has a modest floor space ratio.
C3.5 Street Presentation	The development would not result in a visual presentation to Purcell Street due to the configuration of the lot. The anticipated street presentation with respect to driveway, letterboxes and landscaping is what is existing and is considered acceptable from a street presentation perspective.
C3.8 Front Setbacks	Again, due to the lot configuration, the development does not have any front setbacks.
C3.9 Side Setbacks *& 3.10 Rear Setbacks*	The DCP discusses consistency with existing developments' side setbacks. However, where there is an inconsistency, Council would assess the proposed setbacks of the new development on its merits, taking into consideration potential impacts on streetscape character, privacy and solar access of proposed and surrounding dwellings, as well as BCA matters such as fire safety. As the surrounding development's side and rear setbacks are somewhat irrelevant considering their distance from the subject site (20-30m – 8 Sweeney Place is approx.. 11m), and the nature of the lot being predominantly surrounded by land with no road frontage, the proposed side setbacks shall be considered on their merits. The proposed setbacks (at their closest point to each boundary) are as follows:

DCP Control	Assessment
	North 5.69m East 2.00m South 2.00m West 2.13m It is noted that the northern boundary is a stepped setback starting from 5.69m at Dwelling 3 to 21m at Dwelling 4. The nominated setbacks would be acceptable in terms of amenity to adjoining and adjacent landowners particularly due to the distance of surrounding dwellings from the property. It is not envisaged that visual or acoustic privacy of neighbours would be adversely affected by the proposed development. Proposed landscape embellishment has been discussed previously as being suitable. Setbacks proposed would provide suitable areas for further deep soil planting opportunities, as well as opportunities for active and passive open space areas that are both private and allow good solar access. Notwithstanding, the DCP provides general numerical controls for instances that are more generic. As the development would have a height greater than 3m above natural ground level, side setbacks of 3.5m would be the standard control, with rear setbacks being generally consistent with surrounding. The varying setback of the northern boundary would act as a rear boundary for the purpose of the DCP in this instance.
C3.11 Dwelling Orientation	***(a) For any new dwelling, a living area and 50% of the primary private open space of that dwelling must receive a minimum of 3 hours of direct sunlight on June 21st.*** The dwellings have been sited to ensure adequate solar access. Living, dining and kitchen areas all face north and alfresco areas are located off dining/living areas. There is a 7m distance between Dwellings 1 & 2 and similarly for Dwellings 2 & 3 which would not result in adverse shadow impacts on private open space areas of Dwellings 1 & 2. No solar impacts are envisaged for Dwellings 3 & 4. *(b) Any new development must not reduce the solar access currently enjoyed in living areas and 50% of the primary private open space of adjacent dwellings so be less than 3 hours of direct sunlight on June 21st.* Considering the significant distance of the development from surrounding dwellings on adjacent lots (20-30m – 8 Sweeney Place is approx.. 11m), and the single storey height of the dwellings (Dwelling 1 also being set down into the site), it is not envisaged there would be unreasonable solar impacts to adjoining properties.
C3.13 Private Open Space	***(a) All dwellings must have a consolidated principal (main) private open space area;*** Each of the dwellings has a main private open space area. ***(b) All dwellings must provide a minimum private open space area of 50m² with a minimum length of 5 metres;***

DCP Control	Assessment
	Each dwelling has a useable private open space area greater than 50m^2 and a length minimum 5m wide: Dwelling 1 147.84m^2 Dwelling 3 313.06m^2 Dwelling 2 157.89m^2 Dwelling 4 375.11m^2 ***(c) Private open space must be located to maximise solar access;*** All private open space areas are oriented to ensure adequate solar access. ***(d) Private open space must allow for a variety of activities by providing a combination of hard surface, landscaping and deep soil areas.*** ***(e) The primary private open space should be located adjacent to, and be immediately accessible from, the primary living area.*** The proposed private open space areas would comply with (d) & (e).
C3.14 Landscaping and Communal Private Open Space	***a) 50 per cent (50%) of any site developed for multi dwelling housing shall be landscaped to the satisfaction of Council. Landscaping shall be in accordance with a detailed landscaping plan submitted to Council at the Development Application stage and approved by Council prior to the issue of a Construction Certificate;*** Amended plans were provided on 5 February 2016 which advised that exactly 50% of the site (excluding the access handle) shall be landscaped. If the access handle was included in the calculations, the overall landscaping to the site would exceed 50%. ***d) Landscaped open space shall provide outdoor entertainment areas for resident use;*** The open space areas proposed would provide for a variety of activities, with each dwelling having grassed areas and alfresco decks. It is noted that no communal entertainment/open space areas are proposed. Use of the private open space to the north of Dwellings 3 & 4 is considered to be more beneficial as private open space rather than communal open space for the purposes of management, potential entertaining noise impacts and visual impacts. ***h) Garbage collection receptacles are to be located to the satisfaction of Council and are to be designed and screened so as to be screened from any public road, public place or public open space;*** Garbage bins would be stored in each dwelling's site area; in the garage or private open space area.

DCP Control	Assessment
C3.15 Privacy	The development has been designed to maintain privacy between the dwellings within the development and land adjoining. This has been achieved by minimising the opportunity for direct overlooking and direct sight lines between dwellings, designing suitable side and rear setbacks, landscape design (particularly along the eastern boundary), controlling visitor access to restrict the general public from entering the site, and double glazing all windows and doors in the development.
C3.16 Materials and Colours	Proposed colours and material finishes would be face brick walls of brown/grey and tiled roofs of dark grey. The colours and textures of the external finishes are considered to be of earthy tones consistent with the hues of the surrounding landscape and suitable for compliance with the control.
C3.17 Car Parking, Garaging and Driveways	***(a) Off street parking will be provided at the following rates:*** ***(ii) Dedicated resident parking at a rate of 2 spaces per 3 or more bedroom dwellings*** ***(iii) Dedicated visitor parking at a rate of 1 space per 3 dwellings (rounded up to the nearest whole number)*** The development involves four three bedroom dwellings each with a two car garage and two visitor spaces which complies with the above control. ***(b) Council shall require additional visitor parking spaces to be provided in areas where opportunities for on-street visitor parking are deemed to be insufficient.*** On street visitor parking is not in demand and is available. Therefore no additional visitor spaces would be required.
C3.18 Pedestrian Access	***(a) External common areas such as pathways and entrances shall be provided with appropriate artificial lighting at low levels to provide safe access at night.*** As discussed previously, a formal lighting plan would need to be submitted to, and approved by Council, and be in accordance with A10.3 of the DCP, prior to the issue of a Construction Certificate (**Condition 12**). Pedestrian access into and throughout the site is considered safe and appropriate for the scale of the development. Prior to the issue of a construction certificate, a plan showing the location of letterboxes, their dimensions and materials shall be submitted to Council for consideration (**Condition 13**). It is anticipated that this could be provided either side of the entrance driveway.
C3.19 Waste Collection	On garbage collection day, bins would be placed to the south of the driveway on the eastern boundary of 2 Sweeney Place. Considering this property is oriented to Sweeney Place and does not gain access or view over this location, it would be a suitable area to place bins for collection.

DCP Control	Assessment
Section 5 – Universal Design for Adaptable Housing	
Section 5	***(a) For all medium density developments, not less than one for every three dwellings, or part thereof, will be constructed to comply with not less than Class C level of Australian Standard 4299 – Adaptable Housing.*** Recommended conditions would require two units to demonstrate they can comply with this control, prior to the issue of a construction certificate. (**Condition 14**).
Section 18 Central Bowral Medium Density Precinct	
Preferred Development Outcomes	***(a) provides integrated development which takes advantage of site amalgamation opportunities.*** No site amalgamation opportunities have been sought. ***(b) provides sensitive redevelopment that reflects the scale of surrounding existing development.*** It is considered the low scale proposal adequately demonstrates a suitable transitionary development at a zone interface. ***(c) maintains and develops the mature landscape character including both street trees and private gardens.*** The majority of mature trees on the site would be removed as they have outgrown their residential locality and are at the end of their lifespan, in particular the five conifers on the northern boundary as concluded by the Arboriculture Report. Notwithstanding two significant eucalyptus trees shall be maintained and incorporated into the proposed site landscaping.
Additional Specific Controls	***(a) ensure that the layout of future development complies with the objectives and guidelines set out within the Site Analysis section in Part A of this Plan.*** The submitted Site Analysis drawing identified the required features. ***(c) ensure that the extent, scale and configuration of new residential development reflects a discrete and unobtrusive architectural outcome, to remain compatible with the established spatial pattern of development within the precinct.*** The single storey nature of the development with modest roof design is considered suitable for the locality. Whilst the surrounding spatial pattern of dwellings is of a significantly lower density than the proposed, the majority of the surrounding sites are zoned R3 Medium Density which, in future, could be developed to a similar density and spatial pattern of the proposed development. ***(d) avoid large and unarticulated massing of walls and roofs.*** The eastern and western elevations of Dwellings 1 & 2 would be large and unarticulated without the proposed landscaping.

DCP Control	Assessment
	(e) incorporate simple architectural design treatments, materials, colours and finishes that result in a harmonious relationship with existing development on adjoining and nearby land The development takes into consideration the surrounding common roof pitches and materials and is not considered to be inconsistent with surrounding design treatments. ***(f) retain existing landscape features that contribute positively to streetscape quality and the overall garden character of the neighbourhood.*** As discussed above, the existing landscaping on the property shall be removed to facilitate the development. Maintaining the two eucalypts which have height and maturity shall maintain the overall garden character of the locality and soften the introduction of the proposed development.

Section 79C Evaluation

(1) Matters for consideration—general

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

(a) the provisions of:

(i) any environmental planning instrument, and

It has been demonstrated the DA complies with the *Wingecarribee Local Environmental Plan 2010*.

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

Not applicable in this instance (no relevant draft plans).

(iii) any development control plan, and

It has been demonstrated the development satisfactorily complies with Council's controls. The minor non-compliances (such as cut/fill) discussed throughout the DCP assessment are not substantial or significant enough to warrant refusal of the application.

(iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and

Not applicable.

(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and

Condition 5 requires compliance with relevant Australian standards for demolition.

(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,

Not applicable.

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

The likely impacts of the development have been considered in detail throughout this report, particularly during the consideration of the DCP and submissions.

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

The site is considered to be suitable for development: water quality and quantity management, visual impacts, traffic, servicing etc subject to compliance with recommended conditions.

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

Refer to the Consultation section of this report.

(e) the public interest.

The appropriate use of residential lands is in the public interest. There are no covenants and/or restrictions on the title that are relevant to the development, and there are no relevant planning studies or strategies associated with a development of this nature that require consideration. Further, the application is considered to be suitably compliant with the *Wingecarribee Local Environmental Plan 2010* and the Bowral DCP. Consequently, the development would not contravene the public interest.

CONSULTATION

Meetings

- A pre lodgement meeting was held with the architect acting on behalf of the landowner prior to the development application being lodged.
- A meeting was held on 21 January 2016 between the landowner, the applicant and Council staff (Acting Team Leader Town Planner and Development Engineer) to discuss matters raised during the submissions period.

External Referrals

Referrals	Advice/Response/Conditions
Water NSW	The application was referred to Water NSW as the development would be a Module 3 under the NorBE Guidelines. Water NSW concurrence was granted on 19 February 2016 imposing conditions relating to stormwater management and construction activities.

Internal Referrals

Referrals	Advice/Response/Conditions
Development Engineer	Council's Development Engineer raises no objection to the development as amended. Initial concerns were raised regarding stormwater drainage and the overland flow from public land to the south west. Amended plans were provided that demonstrated this overland flow would be captured and discharged to Purcell Street. Concern was also raised with regard to the width of the access handle (being less than 6m) and its length (being 60m) and how this would operate in reality specifically with regard to vehicle safety and pedestrians. During a meeting with the applicant, it was suggested that a 4m driveway width with two passing bays (the full width of the access handle, being 5.86m) along the length of the access handle would be a satisfactory outcome. Council engineers are satisfied with this variation to the minimum width of 4.5m in this instance considering the proposed driveway treatment.
Accredited Certifier	Council's Accredited Certifier does not object to the development, subject to standard building conditions being imposed (various conditions throughout **Attachment 1**)
Contributions	Conditions relating to contributions, both section 94 and water, sewer and stormwater contributions, have been imposed (**Condition 52 & 53**).

Neighbour Notification (or Advertising)/Public Participation

The development application was initially notified for a period of 14 days between 16 October 2015 and 2 November 2015. The application was then correctly advertised for a period of 30 days (in accordance with Council's Consultation and Community Engagement Policy) between 18 November 2015 and 18 December 2015. During both notification periods, Council received 17 submissions all objecting to the proposal. The applicant was given a list of the issues raised during the submission period in an email on 20 January 2016 and a meeting was held on 21 January 2016 to discuss these issues. The applicant was given the opportunity to respond to these issues. Amended plans and documents were submitted to Council on 4 February 2016.

The issues raised in the submissions are considered and responded to below:

1. Vegetation loss

The submissions raise significant concern regarding the removal of trees onsite that are not only rare, but very old and established. The submissions consistently raised how surrounding neighbours rely upon the mature and established vegetation which overhangs their properties. It was said that the trees provide canopy height and habitat/birdlife in the locality and increases the amenity of their property and private open space areas.

The application as submitted did not provide an Arborist Report or any information supporting the request for tree removal on the property. The applicant provided an Arboriculture Report and Heritage Landscape Assessment at Council's request. The

content and recommendations of these documents have been discussed previously in this report.

2. ***Emergency Vehicular access to site***

Concern was raised with regard to the width and length of the driveway and whether a NSW Fire Brigade vehicle would have sufficient width to drive down the driveway. The minimum width for a standard RFS general appliance vehicle would require 4m, which the development proposes, with a width of 5.86m at two passing bays along the access handle. The submissions raised concern with the inability of an aerial appliance vehicle (which expands arms from the body of the vehicle to an overall width of 6m to stabilize the truck before extending a crane on the top of the vehicle) to be able to use the driveway if it is 4m. As the vehicle does not drive with the arms of an aerial appliance vehicle extended, it could fit down the driveway and expand its arms to stabilize within the confines of the site. In any event, not only are the chances of requiring an aerial appliance vehicle slim (predominantly used in two storey situations and commercial/industrial emergencies), the vehicle could use Westwood Park or the rear of adjacent properties as an alternative, should setting up be an issue.

3. ***Loss of privacy and diminished amenity***

The submissions raised concern with regard to a poor level of amenity as a consequence of the development such as outlook onto roofs, poor level of amenity for occupants as well as surrounding existing development, noise and lighting associated with visitor parking and vehicular movements and vegetation removal.

As a consequence of vegetation removal and subsequent development of the site, concern was raised with regard to the potential for a loss of privacy and amenity. The submissions allude to having direct visual impact into and from windows on the southern elevation of Dwelling 1. Visual impact is not considered to be a significant issue on this boundary as the dwelling is set down between 1m and 475mm along this boundary. On top of this, fencing to a height of 1.8m is proposed which would result in more than 2.75m of the house being shrouded and no ability for people to view into the rear yard of adjoining residences on this boundary. It is noted the finished ceiling height of the dwellings is 2.7m. A similar situation would occur on the western boundary.

In terms of level of amenity for occupants, it has been demonstrated that the development has more than adequate private open space for a medium density development (in most cases three times the requirement), with all living areas fronting these spaces which all face north. It is not considered the amenity of occupants would be adverse or unpleasant as a result of the spatial configuration of the development.

As discussed previously, landscaping would be provided to the site to soften the development into the locality, particularly with reference to roof design. Advanced vegetation would be planted to provide a more immediate landscaping effect (**Condition 45**).

In terms of concerns regarding noise and light shed, it is expected there would be a minor increase in noise associated with the occupation of the development resultant from vehicular movements, but not significant enough to result in an undesirable acoustic impact on the surrounding residential locality.

It is noted the proposal is the first medium density development within the immediate locality. It is normal for uncertainty and apprehension to occur with a development of this nature (at a zone interface and the first of its nature in the immediate locality). The proposal is considered to be a suitable transitional development at the zone interface, lower in density than what is possible on the property and consequently an appropriate outcome for the site and the surrounding neighbourhood.

4. ***Unsatisfactory private open space areas***

It has been demonstrated that the development has more than adequate private open space for a medium density development (in most cases three times the requirement), with all living areas fronting these spaces which all face north.

5. ***Documents appear deficient and incomplete***

The submissions used Schedule 1 and a number of Council fact sheets and guidelines to demonstrate the void in information in the application. It was reiterated to the applicant that future developments of this nature should provide such information as standard. This was noted, and the applicant provided an Arboriculture Report, a Survey Report, Site Analysis Plan and an addendum to the Statement of Environmental Effects. Whilst the Statement of Environmental Effects did not detail each relevant clause in the Bowral DCP, the concerns raised in the submissions regarding non compliances with the development were referred to.

6. ***Natural spring on Westwood Park***

The submissions advised that in heavy rain events, a natural spring appears to form in Westwood Park, causing overland flow effects to the rear of 8 Sweeney Place and 23 Purcell Street, which then flows along 23 and 21 Purcell Street and into the road reserve. Whilst there may be observations of stormwater flowing through the site from Westwood Park during heavy stormwater events, it is unlikely that it is a natural spring. If there were a natural spring on Westwood Park it would have a consistent flow outside of stormwater events. In any event, stormwater plans have been provided which demonstrate overland flow catchment and dispersal.

7. ***Is development for over 55s? if so has playing area for children been considered***

The development is not a nominated seniors living development.

8. ***Stormwater drainage concerns***

Submissions raised concern with the existing stormwater flow which occurs through 23 Purcell Street from Westwood Park and 8 Sweeney Place through to Purcell Street. The development was initially not provided with stormwater plans that included the calculation of stormwater overland flow from Westwood Park. Additional information was consequently provided demonstrating the overland flow would be captured within the formalised stormwater infrastructure proposed onsite.

9. ***Battle-axe is not adequate, inadequate parking and vehicular movement areas***

The access handle is not in strict compliance with the 6m required minimum for a driveway. It proposes a 5.86m width, being a 3% variation to the standard. Council has been flexible in reducing carriageway widths on a case by case basis depending on the alternative solutions proposed by applicants. In this instance, Council's Development Engineers consider the proposed alternative solution of two 8m long passing bays as a suitable and functional option for vehicular safety to and from the

site. The passing bays would allow a vehicle to pull to the side if another car is seen coming in the opposite direction.

Council's Development Engineers are also satisfied with the turning circle arrangements within the body of the site as they enable vehicles to enter and exit the site in a forward direction.

Finally, car parking provisions have been discussed previously and have been deemed adequate for the number of dwellings proposed on the site.

10. Various DCP non compliances not adequately justified or acknowledged such as site access length and width, frontage 25m, car parking, building height

The originally advertised development had a building height of 6.2m at some points across the site. The amended plans reduced the roof pitch from 30 to 25 degrees and consequently the dwellings on the site were reduced in height to less than 6m. In terms of the other non-compliances raised, these have been discussed previously in this report and are not considered to be non-compliances.

11. Extra traffic near residential dwellings

Concern was raised by objectors regarding the increased traffic movements along the battleaxe and the potential for noise generation and amenity disruption as a consequence. The current vehicular movements associated with the single residential dwelling on the property can be assumed at 10 per day (RMS Guide to Traffic Generating Developments). With respect to the proposed development, four dwellings would be constructed on the property, resulting in a potential for 40 vehicular movements per day. Whilst the development would result in an increased number of vehicular movements to the surrounding neighbours, the impact is considered acceptable in light of the zone interface and lower medium density outcome of the proposed development.

12. Density and site coverage relating to prohibited development and proximity to sewer

The submissions refer to the calculation of the floor space ratio for the site and ask whether the sewerage line has been taken into consideration when working out the FSR for the site. The submission is confusing prohibited land uses with a Council policy which seeks to avoid building over sewer mains. Whilst there may be a sewer main traversing the site, it is to be made clear that this area of the property does not require exclusion from calculation in the FSR for the site.

13. Overdevelopment

Whilst the objectors believe the development is an overdevelopment of the site, the development complies with Council's FSR, setbacks on a merits basis and provides adequate landscaping to the site to embellish and soften the development into the landscape. For the purposes of the Bowral DCP, the development is not considered to be overdevelopment. It is believed the comments regarding the site being overdeveloped relate to the spatial clustering of the dwellings to the south of the sewer main (a heavy constraint to the site). The

14. Property value concerns

Property values are not a consideration under section 79C of the *Environmental Planning and Assessment Act 1979*.

15. Construction Impacts

Construction of the development would be temporary and consequently no permanent amenity impacts are envisaged. It is expected that for an interim period there would be a reduced level of amenity to surrounding neighbours however, demolition and construction works would be mitigated by way of standard hours of construction, amenity and waste conditions (various conditions in **Attachment 1**).

SUSTAINABILITY ASSESSMENT

- **Environment**

Environmental impacts associated with this development application predominantly relate to tree removal. As discussed throughout this report, the proposed landscaping plan would result in a neutral environmental outcome for the site.

- **Social**

It is considered the development would have a social benefit to the locality by increasing population in the locality which can generate a sense of place, community and opportunities for fostering social cohesion. Further, the development increases the supply of mixed housing opportunities within the Bowral township.

- **Broader Economic Implications**

Broader economic implications are largely beneficial and relate to generating population growth and contributing to the variety of housing stock in the region.

- **Governance**

The development application has been considered in accordance with the *Wingecarribee Local Environmental Plan 2010*, the *Environmental Planning and Assessment Act 1979* and any matters relevant to the development.

- **Culture**

There are no cultural issues in relation to this report.

RELATIONSHIP TO CORPORATE PLANS

The Operational Plan 2015 – 2016: OP:117 Provide development, building assessment and certifications services.

COUNCIL BUDGET IMPLICATIONS

The financial implications of Council's decision in this matter are directly related to the legal implications. The possibilities are detailed as follows:

- Should the applicant choose to appeal a refusal, or pursue a deemed refusal, by Council through the Land and Environment Court and lose, the question of cost with regard to Council's legal representation would be determined by the extent of the reasons for refusal;

- Should the applicant choose to appeal a refusal, or pursue a deemed refusal, by Council through the Land and Environment Court and win, the question of cost would be dependent upon the extent of the reasons for refusal;
- Should any person choose to take out Class 4 proceedings against Council to the Land and Environment Court and lose, the question of cost with regard to Council's legal representation would be calculated at the appropriate time;
- Should any person choose to take out Class 4 proceedings against Council to the Land and Environment Court and win, the question of cost would still be calculated at the appropriate time;
- Should the applicant make no appeal, or proceedings not be taken out by another party, to the Land and Environment Court regardless of the determination, the application would result in no further financial implication to Council.

RELATED COUNCIL POLICY

An assessment of the proposals has been made against the *Wingecarribee Local Environmental Plan 2010* and Council's Bowral Development Control Plan.

OPTIONS

The options available to Council are:

Option 1

Approve the development application.

Option 2

Refuse the development application, in which case, Council would need to provide reasons for refusal.

Option 1 is the recommended option to this report.

CONCLUSION

DA15/1005 seeks consent to construct a four dwelling 'multi-dwelling housing' development and undertake ancillary works such as landscaping, visitor parking, internal driveways, stormwater quantity and quality measures at 23 Purcell Street, Bowral.

This report has demonstrated the landscape setting and neighbourhood amenity would not be detrimentally impacted by the proposed development. Aside from two exceptionally significant Eucalyptus (Peppermint Gum and Blue Gum), no other or landscape features on the site warrant retention. Walls and roof lines of the buildings are satisfactorily articulated and broken up, particularly with the introduction of advanced landscaping.

Submissions received from the public raised issues relating to carriageway width, DCP compliance regarding site frontage, fire safety and emergency vehicular access, stormwater drainage, loss of privacy and amenity, glare, traffic, design (including overdevelopment), vegetation loss and noise and have been addressed and are considered to result in an acceptable impact on the locality, subject to recommended conditions.

All relevant matters attributed to the application have been addressed in this report. It is considered this report adequately considers the merits of the development in terms of

legislative compliance and its potential impact on the locality. The development application has been assessed in accordance with the matters for consideration under section 79C of the *Environmental Planning & Assessment Act 1979*, and all relevant environmental planning instruments and Council policies.

On balance, it is recommended the application be determined by way of approval, subject to the conditions nominated in **Attachment 1**.

ATTACHMENTS

1. Draft Notice of Determination - *circulated under separate cover*
2. Plans of Proposed Development - *circulated under separate cover*
3. Arboriculture Report - *circulated under separate cover*
4. Heritage Landscape Report - *circulated under separate cover*
5. Figure 1: Site Location - *circulated under separate cover*

KATHY BARNSLEY
ARCHITECT

ATTACHMENT 6

10 March 2016

The General Manager
Wingecarribee Shire Council
PO Box 141
MOSS VALE NSW 2577
Attention: Ellie Varga, Department of Environment & Planning

Dear Ellie,

LUA 15/1005 for PROPOSED NEW FOUR (4) STRATA UNIT MULTI-DWELLING DEVELOPMENT to LOT A DP 403717, 23 PURCELL STREET BOWRAL for JOER PTY LTD

Thank you for the opportunity to consider this matter further. On reflection the owner does not wish to amend his proposal and would like to request that the matter be put to the next available council meeting in its current format.

If the opportunity will be available, we would like to address the Council at that meeting.

Please contact this office if further information is required.

Kind regards,

KATHY BARNSLEY, AIA
Ref. 15-566/wsc-no to amend

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Figure 1: Site Location