

Godden Mackay Logan

Heritage Consultants



# ANU Heritage Study

## Acton Campus

### Volume 1: Heritage Study

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## Report Register

The following report register documents the development and issue of the report entitled ANU Acton Campus—Heritage Study, undertaken by Godden Mackay Logan Pty Ltd in accordance with its quality management system. Godden Mackay Logan operates under a quality management system which has been certified as complying with the Australian/New Zealand Standard for quality management systems AS/NZS ISO 9001:2008.

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## Executive Summary

This Heritage Study is the first comprehensive and integrated assessment of the built, natural and Indigenous heritage values of the Acton Campus of ANU against the Commonwealth and National Heritage criteria.

This assessment has identified Commonwealth Heritage values against eight of the criteria and that it meets the threshold for National Heritage listing for historic heritage values. The heritage values of the campus are embodied in the layered cultural landscape of the campus, and its various elements and places, some of which are already listed individually in the Commonwealth Heritage List.

The Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and its accompanying regulations require all government agencies to conserve and manage the heritage values of places in their control. The ANU has committed to the identification, protection and conservation of the heritage values it manages through its Heritage Strategy 2010–2012.

The ANU's commitment to managing its heritage values is illustrated by the range of heritage management tools it has developed and in the active role of the ANU Heritage Officer within the Facilities and Services Division.

This Heritage Study is one such tool and satisfies an obligation of the EPBC Act to identify the heritage values of the whole of the Acton campus.

The cultural landscape of the campus reflects all the phases of the history of the University. The layers of history and importance begin with Indigenous occupation of the site and extend to Griffin's plans for the development of Canberra as the national capital of Australia and the formation and growth of the University. The influence of the various strong personalities—Academic Advisers, architects and planners—and ANU's unique contribution and international standing in fields of scientific research and endeavour are also visible. These places, values and achievements are to be recognised, celebrated and conserved as the University plans its future development up to 2030.

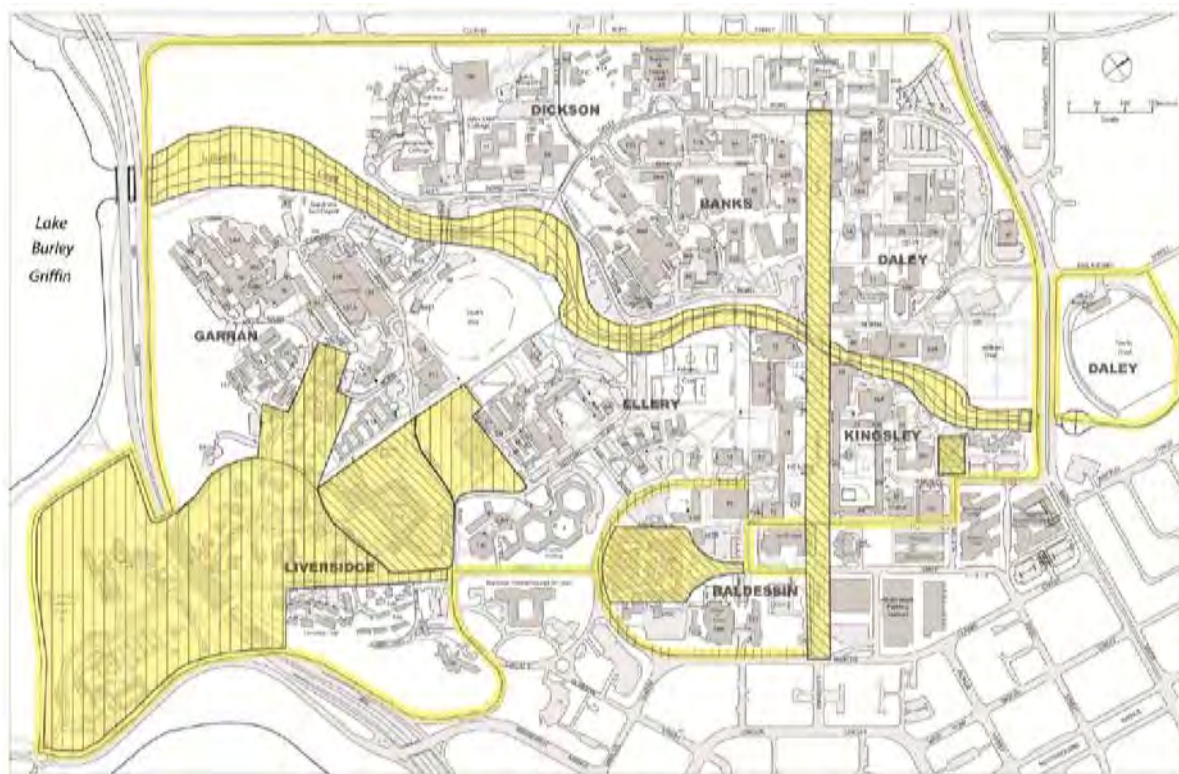
To conserve the ANU's heritage values, the Facilities and Services Division will continue to actively develop, revise and implement its heritage management tools which support the conservation of the array of heritage values and





places. This study acknowledges the obligations on the site's managers that arise from the heritage values of the campus and emphasises the need for rigorous internal self-assessment and peer-review processes in any future development proposals.

This report forms Volume 1 of the Heritage Study. Volume 2, the Heritage Inventory, contains a series of heritage inventories for individual elements, buildings and sites of the campus to be assessed against the Commonwealth and National Heritage criteria. Using a template developed by Godden Mackay Logan, these include descriptions, historical overviews and heritage assessments of the individual places of the Acton campus to be recognised for their heritage value and contribution to the campus as a whole.



**Figure ES1:** ANU Acton campus. The boundary of the campus is marked in yellow and is a place identified in this Heritage Study as having exceptional heritage value. Individual elements within the site contribute to the cultural landscape of the site's exceptional value and/ or have exceptional value in their own right. These elements are indicated in yellow and hatched, including the Acton Conservation Area, University House and setting, Menzies Library and setting, Sullivans Creek, ANU School of Art, Ellery Crescent, University Avenue and Toad Hall. (Refer to Section 7.0 for further information).



# Contents

# Page

<b>Executive Summary .....</b>	<b>i</b>
<b>1.0 Introduction .....</b>	<b>1</b>
1.1 Background .....	1
1.2 Study Area .....	1
1.3 ANU Administrative Precincts .....	1
1.4 Structure of the Report .....	2
1.5 Listings .....	3
1.5.1 <i>Statutory Listings</i> .....	3
1.5.2 <i>Other Heritage Listings</i> .....	4
1.6 Previous Studies .....	6
1.7 Current and Future Studies .....	6
1.8 Authorship .....	7
1.9 Acknowledgements .....	7
1.10 Endnotes .....	12
<b>2.0 ANU Acton Campus—Setting the Scene .....</b>	<b>13</b>
2.1 Introduction .....	13
2.2 History of the Site .....	13
2.2.1 <i>Historic Phases used in the Report</i> .....	13
2.2.2 <i>Early Canberra</i> .....	13
2.2.3 <i>The Australian National University</i> .....	20
2.3 Site Context—Surrounding Institutions .....	22
2.3.1 <i>Background</i> .....	22
2.3.2 <i>Black Mountain to the West of the ANU</i> .....	22
2.3.3 <i>Acton Peninsula and Lake Burley Griffin</i> .....	26
2.3.4 <i>Civic and the City Boundary of ANU</i> .....	28
2.3.5 <i>Overview Description of the Site</i> .....	32
2.4 Endnotes .....	38
<b>3.0 Environmental Context .....</b>	<b>41</b>
3.1 Environmental Overview—Historic Background .....	41
3.1.1 <i>The Natural Environment</i> .....	41
3.2 Geology and Geomorphology .....	41
3.2.1 <i>Background</i> .....	41
3.2.2 <i>Geological and Geomorphological Features in the Landscape</i> .....	43
3.3 Biodiversity .....	44
3.3.1 <i>Flora</i> .....	44
3.3.2 <i>Remnant Vegetation in the Landscape</i> .....	49
3.3.3 <i>Fauna</i> .....	58
3.3.4 <i>Wildlife in the Landscape</i> .....	59
3.3.5 <i>Diversity and Values</i> .....	60
3.4 Endnotes .....	61
<b>4.0 Indigenous Context .....</b>	<b>63</b>

4.1	Introduction.....	63
4.2	Consultation.....	64
4.2.1	<i>Methodology and Process.....</i>	64
4.2.2	<i>ACT Representative Aboriginal Organisations.....</i>	64
4.2.3	<i>Indigenous Engagement with the Process.....</i>	65
4.3	Historic and Cultural Background .....	65
4.4	Archaeological Background .....	67
4.4.1	<i>Contextual Data .....</i>	67
4.4.2	<i>Archaeological Site Predictive Model .....</i>	68
4.4.3	<i>ACT Heritage Register Search .....</i>	68
4.5	Summary of the Archaeological Potential.....	70
4.6	Observations from the Indigenous Community .....	71
4.7	Endnotes.....	72
<b>5.0</b>	<b>Historic Heritage Values Discussion.....</b>	<b>75</b>
5.1	Introduction.....	75
5.2	The Built Environment: Planning and Architecture of the ANU .....	75
5.2.1	<i>Phase 1: Early Canberra and Genesis—Griffins’ Plan and the Location of the Australian National University (1912–1947).....</i>	75
5.2.2	<i>Phase 2: Age of Masters, Academic Advisers &amp; Brian Lewis (1948–1954).....</i>	81
5.2.3	<i>Phase 3: From Garden City to ‘Disneyland’ (1954–1968).....</i>	86
5.2.4	<i>Phase 4: ‘Ensemble and Interaction’ (1968–1971) .....</i>	92
5.2.5	<i>Phase 5: Consolidation and the ‘Quiet Years’ (1972–1990).....</i>	97
5.2.6	<i>Phase 6: Strategic Planning on Campus (1990–Present).....</i>	100
5.2.7	<i>Summary: Key Historic Periods of Site Development.....</i>	103
5.3	Research Potential in the Cultural Environment.....	104
5.3.1	<i>Historic Archaeological Potential .....</i>	104
5.3.2	<i>Sustainability and Energy Efficiency.....</i>	105
5.4	Other Values of the Cultural Environment.....	106
5.4.1	<i>Introduction.....</i>	106
5.4.2	<i>Research Achievements .....</i>	106
5.4.3	<i>Collections and Movable Heritage.....</i>	107
5.4.4	<i>Public Art and Sculpture in the Landscape .....</i>	109
5.5	Endnotes.....	110
<b>6.0</b>	<b>Acton Campus as a Cultural Landscape.....</b>	<b>113</b>
6.1	Introduction.....	113
6.2	Landscaping the Campus .....	113
6.2.1	<i>Trees Pre-Dating European Settlement.....</i>	113
6.2.2	<i>Pre- and Early University Planting .....</i>	113
6.2.3	<i>Continuing the Planting Tradition.....</i>	114
6.3	Cultural Plantings in the Landscape .....	115
6.3.1	<i>ANU Tree Database .....</i>	115
6.3.2	<i>Cultural Heritage Value of Trees in the Landscape.....</i>	115
6.3.3	<i>Commemorative and Memorial Trees at ANU .....</i>	130
6.4	Key Character Areas of the Landscape .....	131
6.4.1	<i>The Acton Campus .....</i>	131
6.4.2	<i>Evidence of Griffin’s Plans.....</i>	132

6.4.3 Acton Ridge.....	132
6.4.4 Sullivans Creek .....	134
6.4.5 University Avenue.....	135
6.4.6 Other Landscape Areas .....	137
6.4.7 Views and Site Boundaries .....	139
6.5 Endnotes .....	147
<b>7.0 Assessment of Heritage Values .....</b>	<b>149</b>
7.1 Assessment Methodology.....	149
7.1.1 Understanding Heritage Values.....	149
7.1.2 Indigenous Heritage Values.....	149
7.1.3 Natural Heritage Values .....	150
7.2 Commonwealth and National Heritage Criteria .....	150
7.2.1 Environment Protection and Biodiversity Conservation Act 1999 (Cwlth).....	150
7.3 Historic Themes.....	151
7.4 Application of Heritage Values Criteria .....	153
7.4.1 Assessment of Heritage Value .....	153
7.4.2 Summary Statement of Heritage Values .....	161
7.5 Ranking Significance at the Acton Campus .....	162
7.5.1 Cultural Heritage Values .....	162
7.6 Tolerance for Change Applied to the Site.....	166
7.6.1 Explanation of Tolerance for Change.....	166
7.6.2 Application to the Site.....	166
7.7 Heritage Trees, Plantings and Landscape Features .....	167
7.7.1 Ranking/Classification Criteria of Natural and Cultural Plantings.....	167
7.7.2 Ranking of Natural Landscape Values.....	168
7.7.3 Ranking of Cultural Plantings.....	171
7.8 Endnotes .....	175
<b>8.0 Opportunities and Constraints for Management.....</b>	<b>177</b>
8.1 Introduction.....	177
8.2 Identified Heritage Values of the ANU Acton Campus .....	177
8.2.1 Summary of the Heritage Values and Attributes .....	177
8.2.2 Heritage Opportunities Arising from the Significance.....	178
8.3 Statutory Obligations and Legislation.....	179
8.3.1 Introduction.....	179
8.3.2 Obligations under the EPBC Act .....	180
8.3.3 National Capital Plan .....	180
8.3.4 ACT Nature Conservation Act 1980.....	181
8.4 ANU Facilities and Services—Management Tools and Processes.....	181
8.4.1 ANU Heritage Strategy 2010–2012.....	181
8.4.2 ANU Heritage Register/Database .....	182
8.4.3 Individual Management Plans for the Campus.....	182
8.4.4 The ANU Heritage Management Manual .....	182
8.4.5 A Single Site Management Plan.....	183
8.4.6 The Environmental Management Plan (EMP).....	183
8.4.7 Managing the ANU Treescape .....	183
8.4.8 ANU Heritage Management Procedure—Self-Assessment Process.....	184

8.4.9 <i>Determining Significant Impacts under the EPBC Act</i> .....	186
<b>8.5 National Capital Authority Role and Works Approvals</b> .....	<b>187</b>
8.5.1 <i>Development and Work Approval within Designated Areas</i> .....	187
8.5.2 <i>Consultation with the NCA</i> .....	187
8.5.3 <i>The Griffin Legacy</i> .....	188
<b>8.6 ANU Campus Master Plan 2030</b> .....	<b>189</b>
8.6.1 <i>Role of the Master Plan</i> .....	189
8.6.2 <i>Development Control Guidelines</i> .....	189
<b>8.7 Conclusions</b> .....	<b>190</b>
<b>8.8 Endnotes</b> .....	<b>190</b>
<b>9.0 Preliminary Management Recommendations</b> .....	<b>191</b>
9.1 <i>Managing the ANU's Heritage Values</i> .....	191
9.2 <i>ANU's Heritage Management Principles</i> .....	192
9.2.1 <i>Background</i> .....	192
9.2.2 <i>ANU Heritage Management Principles</i> .....	192
9.3 <i>Commonwealth Heritage Management Principles</i> .....	194
9.4 <i>Management Plans and Key Policy Areas</i> .....	195
9.5 <i>Managing the Landscape</i> .....	196
9.5.1 <i>Managing Natural and Cultural Heritage Values</i> .....	196
9.5.2 <i>Program for Routine Maintenance</i> .....	196
9.5.3 <i>Program for Development Control Impacting the Landscape</i> .....	196
9.5.4 <i>Heritage and Landscape Values Management</i> .....	197
9.6 <i>Conclusion</i> .....	197
9.6.1 <i>Next steps for Managing the Heritage Values</i> .....	197
<b>10.0 Appendices</b> .....	<b>199</b>
Appendix A .....	201
<i>Essay on Architectural Influences of the Acton Campus, 2011, Dr Milton Cameron</i> .....	201
Appendix B .....	203
<i>Glossary of Heritage Terms</i> .....	203



## Figure Index

## Page

<b>Figure ES1:</b> ANU Acton campus. The boundary of the campus is marked in yellow and is a place identified in this Heritage Study as having exceptional heritage value. Individual elements within the site contribute to the cultural landscape of the site's exceptional value and/ or have exceptional value in their own right. These elements are indicated in yellow and hatched, including the Acton Conservation Area, University House and setting, Menzies Library and setting, Sullivans Creek, ANU School of Art, Ellery Crescent, University Avenue and Toad Hall. (Refer to Section 7.0 for further information).....	ii
<b>Figure 1.1</b> Site Plan showing ANU Acton campus in broader Canberra area with important landmarks. (Source: GML based on Google Earth Image) .....	8
<b>Figure 1.2</b> ANU Acton campus Heritage Study Area plan. (Source: GML based on Google Earth Image).....	9
<b>Figure 1.3</b> Location of Commonwealth Heritage Listed places within the ANU Acton Campus. Note the Acton Conservation Area boundary is dashed. (Source: GML, based on Google Earth plan) .....	10
<b>Figure 1.4</b> Precinct Plan of the ANU Acton campus. (Source: GML, based on plan provided by the ANU).....	11
<b>Figure 2.1</b> The Acton area in 1912 showing Acton Homestead, Commonwealth Offices and early cottages and quarters. (Source: NLA 11743).....	17
<b>Figure 2.2</b> Tents at Acton 1913. (Source: NLA 3347353).....	17
<b>Figure 2.3</b> Tents and buildings of the Bachelors' Quarters, 1926. (Source: NAA A3560, 46).....	17
<b>Figure 2.4</b> Acton in 1933 showing Old Canberra House, the hospital buildings and Acton cottages. (Source: Property and Survey Branch of the Interior, Canberra) .....	18
<b>Figure 2.5</b> Lennox House c1964. (Source: ANU Archives 16-07).....	18
<b>Figure 2.6</b> Old Hospital Building in Acton 1929 . (Source: NAA 16-07).....	18
<b>Figure 2.7</b> CHL boundary for the Acton Conservation Area. The boundary is incorrect and acknowledged as such by the Heritage Division of the Department responsible for the EPBC Act. This image should be replaced once the Department has prepared a new boundary map. The official CHL citation includes No. 8 Liversidge Street (GML has added a dashed line to show where No. 8 Liversidge Street is located). (Source: Heritage Division CHL Boundary Map).....	19
<b>Figure 2.8</b> View toward Black Mountain from the Old Hospital 1935 (Source: NAA 3212668) .....	24
<b>Figure 2.9</b> CSIR Offices building under construction 1929 (Source: NAA 3151395).....	24
<b>Figure 2.10</b> CSIR Offices and Laboratories with Black Mountain in background 1929 (Source: NAA 3174982) .....	24
<b>Figure 2.11</b> Current day view over Black Mountain Tower towards Acton (Source: Google Images) .....	24
<b>Figure 2.12</b> Black Mountain Tower under construction 1975 (Source: CDHS 16359).....	25
<b>Figure 2.13</b> Black Mountain Tower under construction 1976 (Source: CDHS 14856).....	25
<b>Figure 2.14</b> Black Mountain Tower under construction 1975 (Source: NAA 11731438).....	25
<b>Figure 2.15</b> Canberra Botanic Gardens 1970 , which were later renamed the 'National Botanic Gardens' (Source: NAA 11701393).....	25
<b>Figure 2.16</b> Botanic Gardens 1971 (Source: NAA 11701247) .....	25
<b>Figure 2.17</b> Botanic Gardens 1973 (Source: NAA 11701307) .....	25
<b>Figure 2.18</b> Royal Canberra Hospital Buildings 1947 (Source: NAA 8852147 ) .....	27
<b>Figure 2.19</b> Aerial of Royal Canberra Hospital 1957 (Source: NAA 8363672 ) .....	27
<b>Figure 2.20</b> Royal Canberra Hospital view across Lake Burley Griffin 1966 (Source: NAA 11224931 ).....	27
<b>Figure 2.21</b> National Museum of Australia on foreshore of Lake Burley Griffin (Source: National Museum of Australia website).....	27
<b>Figure 2.22</b> View of Acton Racecourse and early research buildings of the ANU 1961. (Source: ANU Archives.) .....	27

<b>Figure 2.23</b> View of West Basin of Lake Burley Griffin and Acton Peninsula 1964. (Source: NLA.).....	27
<b>Figure 2.24</b> Canberra High School 1947 (Source: NAA 6816714) .....	30
<b>Figure 2.25</b> Current day Canberra School of Music (Source: ANU Website).....	30
<b>Figure 2.26</b> Canberra School of Music (foreground) and Canberra High School 197 7 (Source: NAA 11720868).....	31
<b>Figure 2.27</b> Institute of Anatomy 1931 (Source: NAA 3197916).....	31
<b>Figure 2.28</b> Academy of Science 1959 (Source: NAA 7801951).....	31
<b>Figure 2.29</b> Academy of Science 1963 (Source: NAA 11680279).....	31
<b>Figure 2.30</b> Hotel Acton 1927 (Source: NAA 3059374).....	31
<b>Figure 2.31</b> Ian Potter House (formerly Beauchamp House) 1927 (Source: NAA 3064973).....	31
<b>Figure 2.32</b> Aerial view of Hotel Acton and Ian Potter House 1928 (Source: NAA 3149703).....	32
<b>Figure 2.33</b> The Drill Hall 1951 (Source: NAA 11713702).....	32
<b>Figure 2.33</b> Griffin's 1911 competition entry for the Federal Capital. (Source: Reid 2002, p 19).....	33
<b>Figure 2.34</b> Detail of 1914-1915 Preliminary Griffin Plan showing Land, Water and Municipal Axes. (Source: NLA, MAP NIC 22) .....	34
<b>Figure 2.35</b> Detail of 1912 Griffin Canberra Plan. Contour Survey of the Site. Area of ANU outlined in red. (Source: NCA. The Griffin Legacy. 2004).....	34
<b>Figure 2.36</b> Detail of 1913 Griffin Canberra plan, area proposed for the University is outlined in red. Note the grid like organisation of the buildings. (Source: National Library of Australia) .....	35
<b>Figure 2.37</b> Detail from the 1918 Griffin plan showing the area of ANU outlined in red. (Source: NCA The Griffin Legacy 2004.) .....	35
<b>Figure 2.38</b> Plan view of ANU, 2010. (Source: Google Earth Image).....	36
<b>Figure 2.39</b> Location of major institutions within and surrounding the campus. (Source: GML based on Google Earth Image) .....	37
<b>Figure 3.1:</b> Geology of the ANU (Source: Data reproduced from 1:50,000 Geology of Canberra, Queanbeyan and Environs Sheet, 1980) .....	42
* Source: Neil Urwin, Griffin Associates Environment, 2011. ....	44
<b>Figure 3.2:</b> Modelled Pre-European Vegetation over the Acton Peninsula and Surrounding Areas (Source: GML 2010).....	45
<b>Figure 3.3:</b> Scrivener's map of 1909 showing timber on the high ground of the central campus area, and detail with present ANU buildings and road network superimposed. (Source: GML 2010) .....	46
<b>Figure 3.4:</b> 1929 Aerial showing (left) the distribution of remnant woodland on site, and (right) present ANU buildings, road network and lake superimposed (purple). (Source: National Library of Australia) .....	47
<b>Figure 3.5:</b> Oblique aerial dated 1923 looking north over Acton Ridge, with the Molonglo River in the foreground and Mt Majura and the western slopes of Mt Ainslie in the top right of the picture. (Source: National Library of Australia) .....	47
<b>Figure 3.6:</b> 1960 Aerial showing (left) the areas of surviving remnant woodland on site, and (right) present ANU buildings, road network and lake superimposed (blue). This figure also shows the realignment of Sullivans Creek referred to in Section 3.2.2. (Source: National Library of Australia).....	48
<b>Figure 3.7:</b> Main wildlife habitats (Sullivans Creek, lakeshore and remnant woodland) and native fauna of the campus (Water Dragon, Water Rat, Echidna and Brush-tailed Possum). (Source of photographs: Neil Urwin, 2011 and Biodiversity Management Plan, Acton Campus ACT.).....	61
<b>Figure 4.1</b> Location plan showing sites recorded in the ACT Heritage Register in and around the study area. (Source: ACT Heritage Unit).....	70

<b>Figure 5.1</b> Walter Burley Griffin, "University Group". Griffin, "The Federal Capital, Report Explanatory of the Preliminary general Plan", 1913 (Source: S. G. Foster & Margaret M. Varghese, <i>The Making of the Australian National University 1946-96</i> ).....	76
<b>Figure 5.2</b> Oliphant, Hancock and Florey inspect the ANU site, Easter 1948. (Source: Oliphant Papers, Barr Smith Library, University of Adelaide).....	78
<b>Figure 5.3</b> Key extant buildings on the ANU campus developed during Phase 1 (1912–1947) are highlighted in black. (Source: GML, using a base plan courtesy of the ANU).....	80
<b>Figure 5.4</b> Brian Lewis' ANU masterplan in the Beaux Arts style, April 1948. (Source: ANU collection).....	81
<b>Figure 5.5</b> Brian Lewis, perspective rendering of University House. (Source: ANU collection).....	83
<b>Figure 5.6</b> Key extant buildings on the ANU campus developed during Phase 2 (1948–1954) are highlighted in black. Existing buildings from previous phase highlighted in grey. (Source: GML, using a base plan courtesy of the ANU).....	85
<b>Figure 5.7:</b> Denis Winston and Grenfell Ruddock's ANU sketches, c1961. (Source: ANU collection).....	87
<b>Figure 5.8</b> Grounds, Romberg and Boyd. Botany and Zoology School of Life Sciences Building (44) 1968. (Source: Milton Cameron 2009) .....	88
<b>Figure 5.9</b> Key extant buildings on the ANU campus developed during Phase 3 (1954–1968) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU).....	91
<b>Figure 5.10</b> Roy Simpson (right) explaining his ANU plan to David Dexter, 1974. (Source: Photo by Gabe Carpay. Foster & Varghese, 1996, p.195) .....	92
<b>Figure 5.11</b> View west along University Avenue (Source: GML 2011) .....	94
<b>Figure 5.12</b> Key extant buildings on the ANU campus developed during Phase 4 (1968-1971) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU).....	96
<b>Figure 5.13</b> Toad Hall by John Andrews International. (Source: ANU Toad Hall HMP 2010).....	97
<b>Figure 5.14</b> Key extant buildings on the ANU campus developed during Phase 5 (1972–1990) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU).....	99
<b>Figure 5.15</b> Key extant buildings on the ANU campus developed during Phase 6 (1990–present) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU) .....	102
<b>Figure 6.1</b> Detail contemporary aerial photograph showing locations of early cultural plantings associated with agricultural use and site settlement (before 1920s). (Source: Base image Google Earth) .....	116
<b>Figure 6.2</b> Detail of the 1960 aerial photograph (northern corner of campus) showing four areas of experimental plantings, with present ANU buildings and road network superimposed. (Source: base image Google Earth) .....	118
<b>Figure 6.3a</b> Detail contemporary aerial photograph showing locations of early cultural plantings associated formal and informal <u>exotic</u> landscape plantings. (Source: base image Google Earth) .....	121
<b>Figure 6.3b</b> Detail contemporary aerial photograph showing locations of early cultural plantings associated formal and informal <u>exotic</u> landscape plantings. (Source: base image Google Earth) .....	122
<b>Figure 6.4</b> Detail of a contemporary aerial photo showing locations of historic formal and informal <u>native</u> landscape plantings on campus (1930–1960). (Source: base image Google Earth).....	128
<b>Figure 6.5</b> Black Mountain and the tower providing a backdrop to the University (from the junction of Fellows Road and Sullivans Creek Road). (Source: GML 2011) .....	133
<b>Figure 6.6</b> Black Mountain and CSIRO buildings located adjacent to the Campus, view across Clunies Ross Road. (Source: GML 2011) .....	133
<b>Figure 6.7</b> The northern side of Old Canberra House in the Acton Conservation Area. (Source: GML 2011) .....	133
<b>Figure 6.8</b> Old Hospital Building (61A) in the Acton Conservation Area. (Source: GML 2011).....	133
<b>Figure 6.9</b> 16 Balmain Lane Cottage (67), in the Acton Conservation Area, view. (Source: GML 2011) .....	134
<b>Figure 6.10</b> 3 Liversidge Street Cottage (68), in the Acton Conservation Area. (Source: ANU 2009) .....	134

<b>Figure 6.11</b> Rear of the Brian Lewis Cottages in Brian Lewis Crescent. (Source: GML 2011).....	134
<b>Figure 6.12</b> Constable's Cottage (Building 28), in the Acton Conservation Area. This is the rear of the building where it overlooks Lawson Crescent and Lake Burley Griffin. (Source: GML 2011).....	134
<b>Figure 6.13</b> Sullivans Creek to the south of McPhersons Bridge (Source: GML 2011).....	135
<b>Figure 6.14</b> Stepping stone crossing of Sullivans Creek near South Oval, between McPhersons Bridge and Canberra Bridge. (Source: GML 2011) .....	135
<b>Figure 6.15</b> University Union Building crossing over Sullivans Creek. (Source: GML 2011).....	136
<b>Figure 6.16</b> Sullivans Creek behind the Drill Hall Gallery. (Source: GML 2011) .....	136
<b>Figure 6.17</b> Chifley Library elevated above the 'Chifley Meadow', where Sullivans Creek used to meander and was diverted for the construction of the Library. (Source: GML 2011) .....	136
<b>Figure 6.18</b> View of Pauline Griffin Building (1964, Ancher, Mortlock, Murray and Woolley) on the left from Chifley Meadow. (Source: GML 2011) .....	136
<b>Figure 6.19</b> Looking west down University Avenue with Bruce Hall punctuating the vista. (Source: GML 2011) .....	136
<b>Figure 6.20</b> University Avenue with context of Black Mountain. (Source: GML 2011) .....	136
<b>Figure 6.21</b> South Oval, view toward Sullivans Creek (Source: GML 2011).....	137
<b>Figure 6.22</b> Menzies Meadow, the area south of Menzies Library. (Source: GML 2011).....	137
<b>Figure 6.23</b> Courtyard of Haydon-Allen Building (1960 and 1961, Bunning & Madden), view of the landscaped area by Kath Wellman. (Source: GML 2011).....	138
<b>Figure 6.24</b> The courtyard of the HC Coombs Building (1964, 1968, Mockridge, Stahle and Mitchell and 1971, 1975, Anthony Cooper & Assoc). (Source: GML 2011) .....	138
<b>Figure 6.25</b> Landscaped internal courtyard and pond of the School of Botany and Zoology (1964–69, Grounds, Romberg and Boyd) (Source: GML 2011) .....	138
<b>Figure 6.26</b> Landscaped courtyard and pond of the Psychology Building (c1960, Eggleston, Macdonald and Secomb). (Source: GML 2011) .....	138
<b>Figure 6.27</b> Lindsay Pryor planted stand of Eucalypts near the Forestry building on the corner of Dickson and Daley Roads (Source: GML 2011) .....	138
<b>Figure 6.28</b> Track through the International Sculpture Park, view toward Lennox Crossing. (Source: GML 2011) .....	138
<b>Figure 6.29</b> View northwest taken from Daley Road of the ANU boundary on Barry Drive, west of the Fulton Muir building (Source: GML 2011) .....	141
<b>Figure 6.30</b> View west of University Avenue taken from the Childers Street junction. The Family Law Court is on the left (and street theatre out of the frame is on the right) (Source: GML 2011).....	141
<b>Figure 6.31</b> View west along curved McCoy Circuit. The National Film and Sound Archive is located at the right. (Source: GML 2011).....	141
<b>Figure 6.32</b> Views from Lawson Crescent to West Basin of Lake Burley Griffin, where access to the lake edge from the ANU is possible. (Source: GML 2011).....	141
<b>Figure 6.33</b> View out over West Basin to Commonwealth Bridge from Lawson Crescent. (Source: GML 2011) .....	141
<b>Figure 6.34</b> View out to Commonwealth Bridge and the National Library from Liversidge Street. (Source: GML 2011).....	141
<b>Figure 6.35</b> View to West Lake of Lake Burley Griffin from the Research School of Physical Sciences. (Source: GML 2011) .....	142
<b>Figure 6.36</b> Elevated views across Lake Burley Griffin toward Government House and the Brindabella ranges from the International Sculpture Park. (Source: GML 2011) .....	142
<b>Figure 6.37</b> View of Black Mountain Tower from the International Sculpture Park. (Source: GML 2011).....	142
<b>Figure 6.38</b> View to West Lake of Lake Burley Griffin, from the International Sculpture Park. (Source: GML 2011) .....	142



<b>Figure 6.39</b> View southwest from Sullivans Creek toward the Wallaby enclosure and the ANU land referred to as 'Section 86'. (Source: GML 2011) .....	142
<b>Figure 6.40</b> View of ANU Acton campus (left with the '14UD tower' evident in the foreground), Acton Peninsula and Lake Burley Griffin (West Lake is in the foreground) from Black Mountain, 1981. (Source: NLA).....	142
<b>Figure 6.41</b> Indicative views to, from and within the University. Characteristic views are shown indicatively by the hatched 'view' corridors. The direction of the view is from the narrow end to the wider area and beyond, or where they are parallel the direction of the view goes both ways. (Source: GML 2011, overlaid on a Google Earth map). .....	143
<b>Figure 6.42</b> Viewsheds to the Acton campus (shown in the rectangle) from three locations on Lake Burley Griffin (Source: Neil Urwin, 2011). .....	144
<b>Figure 6.43</b> Viewsheds to the Acton campus (shown in the rectangle) from three Canberra lookouts; Black Mountain, Red Hill and Mount Ainslie (Source: Neil Urwin, 2011). .....	145
<b>Figure 6.44</b> Viewsheds to the Acton campus (shown in the rectangle) from Commonwealth Avenue Bridge (Source: Neil Urwin, 2011). .....	146
<b>Figure 7.1.</b> ANU Acton campus. The boundary of the campus is marked in yellow and is a place identified in this Heritage Study as having exceptional heritage value. Individual elements within the site contribute to the cultural landscape of the site's exceptional value and/ or have exceptional value in their own right. These elements are indicated in yellow and hatched, including the Acton Conservation Area, University House and setting, Menzies Library and setting, Sullivans Creek, ANU School of Art, Ellery Crescent, University Avenue and Toad Hall. Other individual elements of the site have heritage value and this will vary. The levels of significance applied to the individual elements will be identified and assessed in Volume 2, the Heritage Inventory. (Source: GML, base plan provided by the ANU). .....	165
<b>Figure 8.1</b> Decision-making process to ensure Commonwealth and National Heritage values are considered when planning developments, activities and other proposals at the ANU. ....	185



## 1.0 Introduction

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### 1.1 Background

In March 2011 Godden Mackay Logan Pty Ltd (GML) was commissioned by the Australian National University (ANU) to prepare a Heritage Study for the ANU Acton campus in the Australian Capital Territory (ACT).

The Heritage Study is a requirement of the *Environmental Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act).

The ANU's brief outlined the main aims of the Heritage Study as:

1. Undertake a whole of site heritage assessment of the natural, cultural and Indigenous heritage of the campus against the Commonwealth Heritage criteria of the EPBC Act.
2. Review and update (where required) the 1993–95 ANU Heritage Study to ensure consistency with the EPBC Act.
2. Identify potential heritage items, places and/or conservation areas within the ANU's Acton Campus. These are to include those places with Indigenous, historic, aesthetic, social or creative heritage values, as well those places associated with notable research or artistic achievement.
3. Prepare a statement of significance for the Acton campus and other statements of significance for individual sites where necessary.
4. Provide appropriate recommendations for the future management of the heritage values identified on the Acton campus.

The findings of this Heritage Study will be incorporated into the 'ANU Campus Master Plan 2030' (the masterplan).

### 1.2 Study Area

The ANU Acton campus is located in the city of Canberra in the area historically known as Acton (Figure 1.1).

The study area for this report is shown in Figure 1.2. The landscape areas to the southwest of the site and the North Oval, which is separated physically from the campus by Barry Drive to the north, are included in the study area.

The immediate setting of the campus, including Black Mountain, the city and important institutions such as the CSIRO, the National Film and Sound Archives, the Australian Academy of Science, the National Botanic Gardens and Black Mountain, are referred to in this report, but are not within the study area.

### 1.3 ANU Administrative Precincts

The Heritage Study refers to the administrative precincts used by the ANU (Figure 1.4). The contemporary precincts differ from those used in the previous 1993–95 Heritage Study prepared by Richard Ratcliffe and John Armes.

The current ANU administrative precincts are as follows:

- Liversidge Precinct;

- Garran Precinct;
- Ellery Precinct;
- Baldessin Precinct;
- Kingsley Precinct;
- Daley Precinct;
- Banks Precinct; and
- Dickson Precinct.

## 1.4 Structure of the Report

The nine sections of Volume 1, listed below, complete stage one of the Heritage Study project. Stage two of the Heritage Study will contain a series of heritage inventories for elements, buildings and sites of the campus. The Heritage Inventory forms Volume 2 of the Heritage Study.

Aside from this introductory section, Volume 1 of the Heritage Study includes:

- **Section 2.0**—This section sets the scene for the study area. It defines the overall physical context and the historic development of the ANU Acton campus.
- **Section 3.0**—This section provides the environmental context. It outlines the natural landscape, including the geology, topography, soils and flora/fauna of the study area.
- **Section 4.0**—This section describes the Indigenous context and cultural values, and describes the historic Indigenous use and occupation of the campus landscape. It explores the archaeology and ethnohistory of the site, and includes a brief section on Indigenous values and archaeological potential.
- **Section 5.0**—This section is the discussion of historic heritage values. It provides the historic context which created the built environment—the development, architecture and planning of the ANU. It also discusses the research values and the movable heritage and art collections of the campus.
- **Section 6.0**—This section describes the cultural landscape of the Acton campus. It explains the landscape value of cultural plantings and describes key character areas of the campus.
- **Section 7.0**—This section includes an assessment of the heritage values of the ANU Acton campus as a whole site (rather than as individual elements) against the Commonwealth Heritage criteria. The assessment integrates the natural and cultural values of the site (identified in the previous sections).
- **Section 8.0**—This section discusses the constraints and opportunities arising from the heritage values of the site. It also includes the ANU's operational requirements for the campus as a whole and identifies opportunities and constraints for managing the heritage values of the study area.
- **Section 9.0**—This section contains the preliminary management recommendations for conserving and managing the heritage values of the Acton campus.



- Section 10.0—This section contains the appendices. Appendix A—Architectural Influences of the Acton Campus and Appendix B—Glossary of Heritage Terms.

## 1.5 Listings

### 1.5.1 Statutory Listings

#### Commonwealth

The Commonwealth Heritage List (CHL) was created under the EPBC Act to recognise places of Commonwealth Heritage value which are owned by the Commonwealth Government. The following sites located in the ANU Acton campus study area are listed or nominated as items on the CHL. Figure 1.3 shows the location of the listed items in the campus.

Place	Location	Class	Status	Place ID.
Acton Conservation Area	Liversidge Street, Acton, ACT (located in Liversidge Precinct)	Historic	Listed	105340
Canberra School of Music	William Herbert Place, Canberra, ACT (located in Baldessin Precinct)	Historic	Listed	105636
Canberra School of Art	Childers Street, Canberra, ACT (located in Baldessin Precinct)	Historic	Listed	105765
Drill Hall Gallery	Kingsley Street, Acton, ACT (located in Kingsley Precinct)	Historic	Listed	105635
Lennox House Complex	Lennox Crossing, Acton, ACT (located in Liversidge Precinct)	Historic	Listed	105307
R G Menzies Library	McDonald Place, Acton, ACT (located in Ellery Precinct)	Historic	Listed	105685
Toad Hall	Kingsley Street, Acton, ACT (located in Kingsley Precinct)	Historic	Listed	105637
University House and Garden	Balmain Crescent, Acton, ACT (located in Liversidge Precinct)	Historic	Listed	105190
Zoology Building	Daley Road, Acton, ACT (located in Banks Precinct)	Historic	Nominated	106183

The following sites in the vicinity of the campus that are included in the National Heritage List, Commonwealth Heritage List or the Register of the National Estate (RNE) are listed below.

#### Heritage Listed Places in the Vicinity of the Study Area

Place	Location	Class	Status	Place ID.
Australian National Botanic Gardens (part)	Clunies Ross Street, Acton, ACT	Historic	Listed (Cwlth)	105345
Blowfly Insectary Numbers 1 and 2 (CSIRO)	Silo Road, Acton, ACT	Historic	Listed (Cwlth)	105559
CSIRO Main Entomology	Clunies Ross Street, Acton, ACT	Historic	Listed (Cwlth)	105348

Place	Location	Class	Status	Place ID.
Building				
Former Institute of Anatomy (National Film and Sound Archive)	McCoy Circuit, Acton, ACT	Historic	Listed (Cwlth)	105354
Phytotron (CSIRO)	Julius Street, Acton, ACT	Historic	Listed (Cwlth)	105560
Acton Peninsula Building 1	Lennox Crossing, Acton, ACT (located in Liversidge Precinct)	Historic	Listed	105341
Acton Peninsula Building 2	Lennox Crossing, Acton, ACT (located in Liversidge Precinct)	Historic	Listed	105343
Acton Peninsula Building 15	Lennox Crossing, Acton, ACT (located in Liversidge Precinct)	Historic	Listed	105342
Australian Academy of Science (Shine Dome)	Gordon Street, Canberra, ACT	Historic	Listed (National)	105741
Ian Potter House & Surrounds	27-37 Marcus Clarke St, Canberra, ACT	Historic	Listed (RNE)*	13288
Hotel Acton	Edinburgh Ave, Canberra, ACT	Historic	Listed (RNE)*	100943

\* The Register of National Estate (RNE) will cease to have statutory effect in February 2012. Inclusion in the RNE does not provide direct legal protection or prescriptive requirements for management, but it is a relevant matter for other decision making under the EPBC Act.

## 1.5.2 Other Heritage Listings

### ACT Heritage Register

The ACT Heritage Register legally recognises and protects significant heritage places within the Australian Capital Territory. The following places located within the ANU Acton campus study area are on the ACT Heritage Register or have been nominated and accepted under the previous ACT heritage legislation. As these places are all located on National Land, under the control of the Commonwealth, the ACT Heritage Register has no statutory legal effect.

- 16 Lennox Crossing (Cottage 3);
- Balmain Crescent (Acton Housing) Nos. 16,18,20, 22, 26 and 28;
- Liversidge Street (Acton Housing) Nos. 3, 5, 7 and 8;
- Centre for Continuing Education (Isolation Ward, Canberra Community Hospital);
- Research School of Earth Sciences (Canberra Community Hospital);
- University House;
- RG Menzies Library;
- HC Coombs Building;
- Jaeger Building;
- Former Canberra Hospital, Administration Building;
- Research School of Biological Sciences (Research School of Earth Sciences Mills Road);

- Toad Hall;
- Lennox House;
- ANU Drill Hall;
- Old Canberra House (ANU Staff Centre); and
- Acton Peninsula.

### **National Trust of Australia (ACT)**

The National Trust of Australia (ACT) maintains a Register of Significant Heritage Places. The places included on the register are places the National Trust considers to be valued by the community. National Trust listing is not a statutory listing. Listing by the National Trust is non-statutory; it provides recognition of heritage value.

The following sites located within the ANU Acton campus study area are classified and included in the National Trust's Register:

- ANU Staff Centre
- Canberra School of Music
- Canberra High School (Canberra School of Art Façade)
- Lennox House
- Research School of Earth Sciences
- University House

### **Australian Institute of Architects Register of Significant Twentieth Century Architecture**

The Australian Institute of Architects (AIA) maintains a National Register of Significant Twentieth Century Architecture and a local ACT Chapter Register of Significant Twentieth Century Architecture. Additionally, there is an International Union of Architects (UIA) World Register. Listing by the AIA and UIA are non-statutory and provide recognition of their architectural heritage value.

The following identifies the architecturally significant registered sites located within the study area and vicinity of the ANU Acton campus:

- Canberra School of Art R005 – National, ACT
- Canberra School of Music R031 – National, ACT
- Former Canberra Hospital Administration Building, R003 – ACT
- University House R024 – ACT
- RG Menzies Building R056 – ACT
- Research School of Biological Science R057 – ACT
- Toad Hall R058 – ACT
- ANU Drill Hall R059 – ACT

- Burgmann College, ANU R086 – ACT
- ANU Cottage No. 3 (Constable's Cottage, 16 Lennox Crossing) R112 – ACT
- The Shine Dome (Australian Academy of Science) R026 – UIA, National, ACT
- The National Film and Sound Archive R022 – National, ACT
- Ian Potter House R002 - ACT

## 1.6 Previous Studies

A number of previous heritage studies and documents relevant to the study area were used as references in the development of this heritage study. They are as follows:

- The Australian National University, February 1968, University Site Planning Historical Documents;
- The Australian National University, October 1992, Development Policy Plan;
- Ratcliffe, R, and Armes, J 1993, Australian National University, Heritage Study;
- Freeman Collett & Partners Pty Ltd, Malcolm Munro & Associates, Roger Hobbs, Vivid Histories Canberra August 1993, Acton/West Basin Canberra, Cultural Heritage Study;
- Knox & Tanner, R.A Young & Associates, Gregory Hill Lighting June 1994, The Australian National University, Strategic Landscape Plan;
- The Australian National University March 2010, Pauline Griffin Building Heritage Study;
- The Australian National University January 2011, Old Administration Area, ANU Heritage Study; and
- ANU Campus Master Plan 2030 prepared by GHD, 2011.

## 1.7 Current and Future Studies

The ANU has prepared a Heritage Strategy (2010-2012) and Heritage Management Manual, July 2010, to comply with the requirements of the EPBC Act. Section 8.0 provides further detail on these documents and resources.

The ANU has prepared a number of heritage management plans for places within the campus. There are three completed plans for individual places at the ANU (Toad Hall, Lennox House, Drill Hall Gallery) and two draft HMPs including one for the Acton Conservation Area and the other for the Menzies Library.

A site inventory, which includes data on individual buildings and/or site areas of the campus, is being developed by the ANU, in association with GML and this heritage study.

The ANU Master Plan 2030 includes a discussion on the forward planning of the University—ensuring compatible development with the heritage values of the site. It aims to celebrate all the layers of occupation and the legacies of its scientific and teaching heritage, its layer of architectural expression, cultural landscape and evidence of Canberra's early settlement.

The masterplan provides a framework for future development over the next 20 years. It outlines aims and objectives for development across the ANU campus to 'guide ongoing development and

## **2.0 ANU Acton Campus—Setting the Scene**

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### **2.1 Introduction**

This section describes the history of the development of the site and the physical context of the ANU Acton campus. It refers to the key institutions in its vicinity (CSIRO, National Botanic Gardens, Academy of Science and National Film and Sound Archives) and contextual elements (Black Mountain, Lake Burley Griffin and Civic) surrounding the campus, which form the setting and development context of the ANU.

### **2.2 History of the Site**

#### **2.2.1 Historic Phases used in the Report**

The history of the ANU has been well documented as an educational institution. The research undertaken by the University, its people and the significant research events that have taken place are less well known. The historic phases discussed in this report are as follows:

- Phase 1: Early Canberra and Genesis—Pastoral Use, Griffins' Plan and the location of the Australian National University (1912–1947);
- Phase 2: The Age of Masters, Academic Advisers and Brian Lewis (1948–1954);
- Phase 3: From Garden City to 'Disneyland' (1954–1968);
- Phase 4: Ensemble and Interaction (1968–71);
- Phase 5: Consolidation and the Quiet Years (1972–1990); and
- Phase 6. Strategic Planning on Campus/Current (1990–present).

The Indigenous history prior to the pastoral use and early Canberra development phase, and the cultural connection by Indigenous groups to the study area, is discussed in Section 4.0.

This history of the ANU draws on existing secondary sources and should not be read as a definitive history of the site.

#### **2.2.2 Early Canberra**

##### **Pastoral Use**

The ANU Acton campus spans what was once two early pastoral settlements established in the late 1820s—'Acton' and 'Springbank'.

In 1826, Joshua John Moore, an executive officer with the Sydney Supreme Court, purchased 1,000 acres of land on the Limestone Plains for a pastoral station.<sup>1</sup> This land is now part of the eastern side of the ANU campus. Moore occupied the land only as an absentee landlord but still set about building a homestead, sited at the end of what is now known as Acton Ridge, now demolished. In 1843 the property was sold to Lieutenant Arthur Jeffreys RN, who renamed the land after his home in Acton, Wales.<sup>2</sup>

The neighbouring property, Springbank, was located between the Molonglo River and eastern side of Black Mountain. It was formally purchased in 1831 by John MacPherson, who had lived there since 1829.

MacPherson sold the property in 1844 to Joseph Kaye and his family, their land taking in much of the area to be the ANU campus. The Kayes left Springbank to move to a less swampy location away from the Molonglo River and the farm was taken over by the Sullivan family, who are commemorated by the naming of Sullivan's Creek on the western boundary of ANU. The Sullivans left in 1913 after the Commonwealth Government resumed the land.<sup>3</sup>

Both properties were resumed by the Commonwealth in 1911 and 1912. Acton Estate homestead was occupied in an official Government capacity by Charles R Scrivener, Director of Commonwealth Surveys, while Springbank was leased to the Kayes family who ran a dairy farm and continued to work the land until 1961.<sup>4</sup>

The pastoral activity on these properties included the farming of sheep, dairy cattle, and the growing of wheat, maize, barley, oats and potatoes. This activity was reflective of the general pastoral use of the Molonglo area. The Limestone Plains country was generally used for pastoral holdings with scattered farms in a yellow box, red gum woodland and grassy plains until Federation, which brought with it new plans and grand designs for an Australian Capital city.

### **A Federal National Capital**

American architect Walter Burley Griffin, with his wife Marion Mahony Griffin, won the international design competition in 1911 for the new capital that specified, among other things, the site for a university.

Griffin's 1911 plan for the National Capital (refer to Figure 2.33) was based on a geometry dictated by the landscape rather than the principal points of the compass, with a water axis formed from the flow of the Molonglo River at right angles to a land axis between two hill summits. A municipal axis lay just to the north of, and parallel to, the water axis. A site located on one end of the water axis towards Black Mountain, near a forest reserve with 'botanical garden', was set aside for a university. At the other end of the water axis was the military barracks. The proposed university and the military barracks (which later became the educational Royal Military Training College at Duntroon) were the 'federal group'; the only two main national functions Griffin located north of his water axis.<sup>5</sup> (Figure 2.34)

The design of Canberra has very strong pre-cursor influences arising from the history of town planning and landscape design in Britain and America, and to more specific personal influences from Griffin himself.<sup>6</sup> The history of Canberra's design coincides with two important periods of worldwide creative city development: the Garden City and City Beautiful dialogue of the early nineteenth century; one centred in Britain and one in the USA. These were key periods in the development of the professions of town planning, landscape architecture and architecture. Griffin, an American, mainly employed the theories of 'City Beautiful' with 'Garden City overtones' to match the Australian vision for an ideal city. Professor Ken Taylor AM, of the ANU, writes:

*Here [Canberra] was the inspiration for the creation of a grand capital that grasped the idea of a landscape as the structure for a city where social reform through healthy living was integral to the structure and life of the city.<sup>7</sup>*

Despite their similarities and differences, both the City Beautiful movement and the Garden City movement shared the physical planning ideas of circular avenues, radiating boulevards and separated land uses that are evident in Canberra.<sup>8</sup>

The early planning and development of Canberra saw the use of the Acton and Springbank properties for the establishment of early administration and first residential buildings as the city was laid out and constructed.

While the development of the University was still three decades away, Griffin's proposed location and notional layout for the University were shown in the 1912, 1913 and 1918 plans for Canberra (refer to Figures 2.35, 2.36 and 2.37).

### **Acton Village and the Old Hospital**

Acton was the first property to be resumed by the Commonwealth on 25 February 1911, with Springbank resumed in 1912. These resumptions allowed for the start of the construction of the Capital city.<sup>9</sup> (Figure 2.1)

The first Lands and Survey Camp, which had been pitched near Capital Hill in March 1909, was transferred to the eastern side of Acton Ridge, to the north of Acton homestead, in June 1911. By the end of 1912, a mess hall and more 'temporary' accommodation had been constructed in a number of weatherboard buildings above the slope to the west of the camp. Together referred to as the Professional Officers' Mess (today Lennox House), these buildings became the hub of social activities, and set in place an upgraded standard of accommodation for government employees and workmen who had formerly been accommodated in a number of tent camps.<sup>10</sup> (Figures 2.2, 2.3 and 2.5). In the meantime Charles Scrivener, Director of Commonwealth Surveys, took up residence in nearby Acton Homestead. Further accommodation was soon provided with the construction in late 1912 and 1913 of five weatherboard cottages for married staff, situated above the Bachelors' Quarters to the north (today part of the Acton Cottages zone of the Acton Conservation Area, discussed below).

A hospital was also established at Acton in May 1913 after a diphtheria outbreak in the Duntroon workers camp that overwhelmed the small Duntroon military, and the more distant Queanbeyan, hospitals.<sup>11</sup>

The early administrative functions of Canberra began on the University site. To house the Administrator of the Federal Capital, Colonel David Miller, a grand official 'Residence' (today Old Canberra House) was designed by the Commonwealth architect John Smith Murdoch in 1912–1913. Outbuildings, tennis court and a garden designed by Thomas Charles George (TCG) Weston completed its domestic setting. It was the first substantial brick house constructed in the newly formed Territory and the centre of the small residential and administrative hub known locally as Acton Village. From 1921 to 1930 this Residence provided headquarters for the Federal Capital Advisory Committee (FCAC) and the Federal Capital Commission (FCC) and so was effectively the administrative centre from which all the early major planning and buildings works of the Territory were directed.<sup>12</sup>

The early plans for landscaping the capital city to implement Griffin's plans were undertaken by Weston under the FCC. Weston was a horticulturalist and the Officer-in-Charge of Afforestation<sup>13</sup> from 1912 until 1926 and his work is discussed further in Section 6.0.

These early Acton buildings were sited to overlook the Molonglo River below, taking full advantage of the existing track along the Ridge (Acton Road/Lennox Crossing). They were also situated to overlook the nascent city and were above the flood line.

Socio-economic segregation was a defining aspect of the Acton accommodation area. The Bachelors' Quarters, providing barracks-style accommodation for low-level single employees, was located on the lowest reaches of Acton Ridge. The cottages for married administrative staff sat slightly uphill to the northwest and the 'Residence' at the top of the ridge.<sup>14</sup> (Figure 2.4)

By the beginning of 1914, the temporary camp at Acton had become the 'Village of Canberra', with its boundaries defined by fences to the north and south.

According to the 2011 Acton Conservation Area HMP:

*Administrative and cultural events were to impact on the implementation of Griffin's plan and resulted in Acton becoming, by default, the social and cultural centre of the city; it was the only site adjacent to the future civic centre with a full view of the city area. It was above floodlevel, had established tree cover, existing accommodation, tracks and a plentiful supply of water available from rainwater tanks or direct from the Molonglo River.<sup>15</sup>*

Acton Village was supported by the temporary hospital complex constructed in 1913. The hospital buildings were a series of weatherboard structures joined via covered walkways, located to the northwest of the Acton residential area. (Figure 2.6) Their overall style was similar to the Bachelors' Quarters and Administration Offices. They were upgraded in 1928 through a program of expansion and building replacement. A complete replacement of the complex was prepared and constructed in 1941 at a new site on lower Acton Peninsula.<sup>16</sup>

In 1943 the old Hospital buildings were temporarily adapted for a new use by Herbert Cole ('Nugget') Coombs, Director-General of the Commonwealth Ministry of Post-War Reconstruction who used the buildings for the offices of the Ministry of Post-War Reconstruction until its abolition in 1946.

These buildings of the Acton Village and the old hospital were incorporated into the ANU campus and those that remain are the site's oldest buildings on campus (within the Acton Conservation Area/Liversidge Precinct).

### **Acton Conservation Area**

The Acton Conservation Area was included in the Commonwealth Heritage List (Place ID: 105340) in 2004. (Figure 2.7) The area, comprising of four zones in the southern part of the Acton campus, contains historic fabric and natural and introduced landscape features from the early establishment of the Acton Village as discussed above.

The CHL citation for the Acton Conservation Area recognises the significance of the Old Canberra House zone, Lennox House zone, Old Community Hospital (old hospital buildings) zone and Acton Cottages zone. Together they form the most extensive surviving cultural landscape from the development of Canberra, as the early administrative, residential and social centre from 1911 to the 1920s.<sup>17</sup>

### **Canberra University College**

By the early 1870s Australia had developed three universities at Sydney (1850), Melbourne (1853) and Adelaide (1874), all based on a traditional British model and primarily for teaching.



The growth of the population and public service in Canberra demanded the development of national research and educational institutions. The Council for Scientific and Industrial Research (CSIR) (the forerunner to CSIRO) was set up in 1927 under the leadership of David Rivett who advocated a research-based university, based on a model provided by the Johns Hopkins University in Baltimore. However, it was still too early for such a national research institution and tertiary undergraduate teaching in Canberra was formalised in 1929 with the establishment of the Canberra University College (CUC), chaired by Sir Robert Garran and affiliated to the University of Melbourne. The first students, almost exclusively part-time, enrolled the next year.<sup>18</sup>



**Figure 2.1** The Acton area in 1912 showing Acton Homestead, Commonwealth Offices and early cottages and quarters. (Source: NLA 11743)



**Figure 2.2** Tents at Acton 1913. (Source: NLA 3347353)



**Figure 2.3** Tents and buildings of the Bachelors' Quarters, 1926. (Source: NAA A3560, 46)

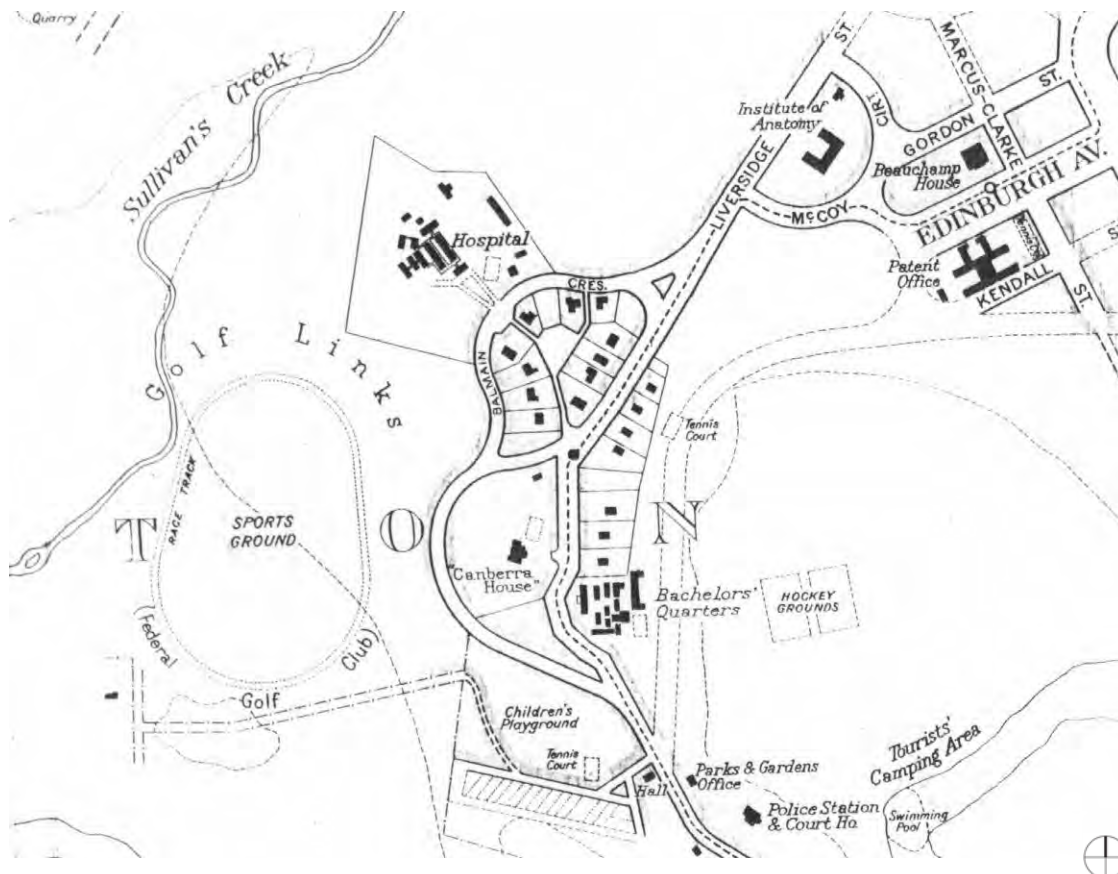


Figure 2.4 Acton in 1933 showing Old Canberra House, the hospital buildings and Acton cottages. (Source: Property and Survey Branch of the Interior, Canberra)

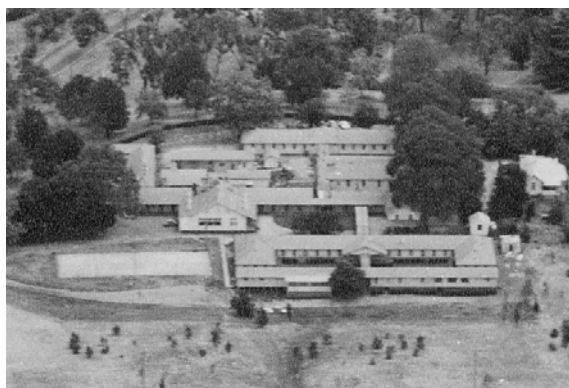
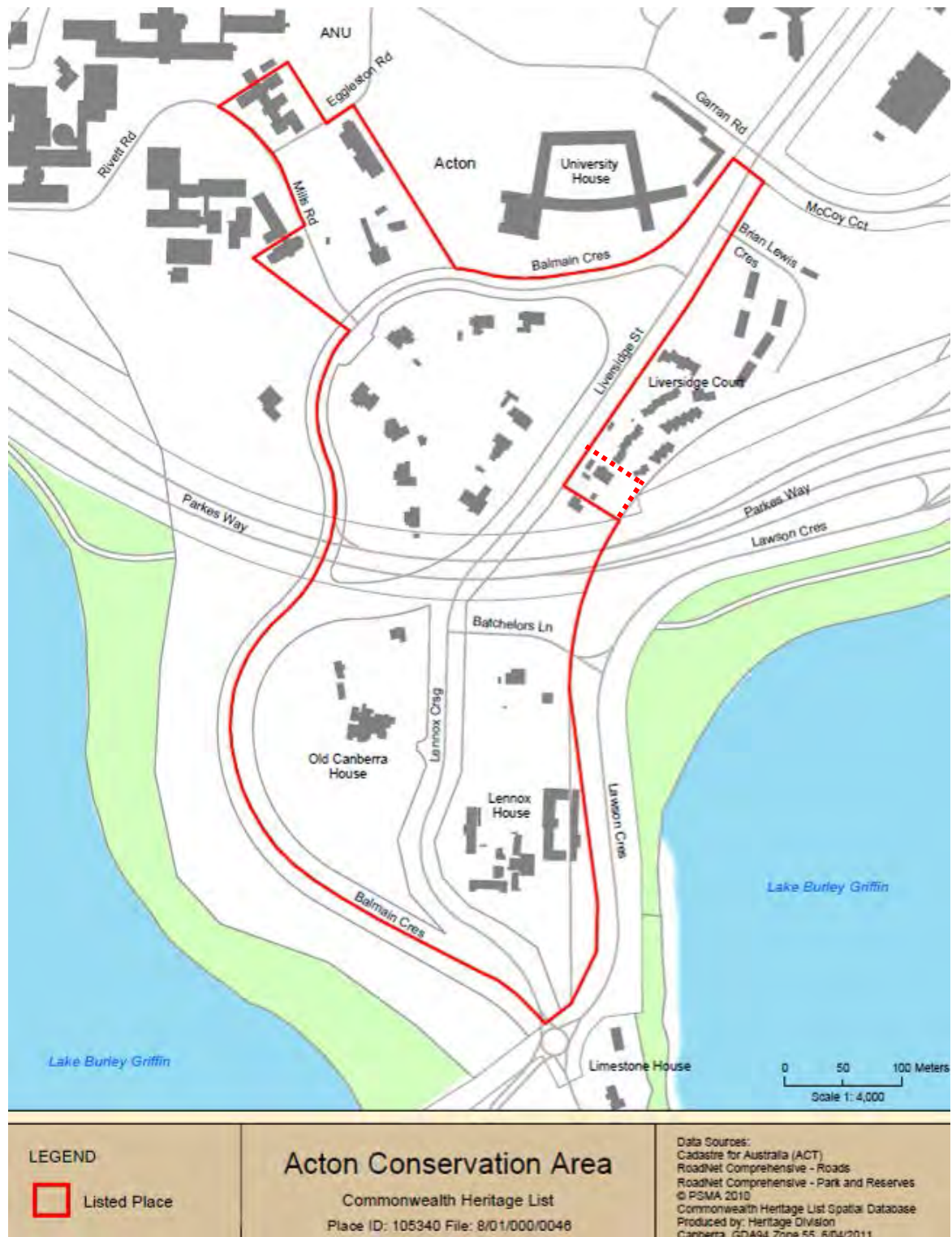


Figure 2.5 Lennox House c1964. (Source: ANU Archives 16-07)



Figure 2.6 Old Hospital Building in Acton 1929. (Source: NAA 16-07)





**Figure 2.7** CHL boundary for the Acton Conservation Area. The boundary is incorrect and acknowledged as such by the Heritage Division of the Department responsible for the EPBC Act. This image should be replaced once the Department has prepared a new boundary map. The official CHL citation includes No. 8 Liversidge Street (GML has added a dashed line to show where No. 8 Liversidge Street is located). (Source: Heritage Division CHL Boundary Map)

## 2.2.3 The Australian National University

### Australian National University Act 1946

The emergency requirements of World War II highlighted the paucity of trained Australian personnel in the social, physical and biological sciences, and stimulated the Curtin and Chifley Cabinets to cultivate a higher education and research programme in wartime and postwar reconstruction and training, in which the *Education Act* of 1945 was key legislation.<sup>19</sup>

Despite the early intention for a university in Canberra, this had not truly come into fruition and the educational gap had been only temporarily filled by the establishment of the CUC in 1930 in affiliation with Melbourne University. With only temporary premises, the CUC was not the permanent solution to the vacuum in higher educational opportunities.

The Department of Post-War Reconstruction under the visionary Directorship of HC Coombs investigated means to arrest the brain drain of Australia's brightest and best young scientists, and to attract back those who had left for overseas research opportunities and money, by setting up a university funded directly with Federal funds to operate at an International level.

In August 1946 the *Australian National University Act 1946* was passed, establishing the ANU as the only Australian university instituted by a Commonwealth Act of Parliament.

An Interim Council was created (pending the formation of the University Council) and an Academic Advisory Committee based in the UK began to recruit University personnel. The members of this Committee, referred as the 'Academic Advisers', were HW Florey (medical research), ML Oliphant (physical science), RW Firth (Pacific studies) and WK Hancock (social studies).

The University was established to be of enduring significance in the postwar life of the nation—to support the development of national unity and identity, to improve Australia's understanding of itself and its neighbours, and to contribute to economic development and social cohesion. Its mandate was to undertake 'postgraduate research and study both generally and in relation to subjects of national importance.' Further discussion about the historic development, planning, architecture, art works and moveable heritage of the Acton campus is included in Section 5.0 of this report and the cultural landscape is discussed in Section 6.0. The University Act outlined the ANU's organisation and structure: it was to be divided into two groups: the Institute of Advanced Studies (IAS) and the 'Faculties'. The structure of the ANU's IAS was further defined with four institutes to be devoted to medical science, the physical sciences, the social sciences and Pacific studies, and it was the country's only full-time research university. Sir Douglas Copland was appointed vice-chancellor in 1948 with active recruitment of academic staff in the following 2 years.

The Faculties did not form until 1960 when there was a significant expansion, the CUC was amalgamated with the IAS and the University took on undergraduate students. The Faculties comprised undergraduate and graduate teaching, as well as research responsibilities, and the IAS research schools had research and graduate training responsibilities.

The IAS grew to incorporate 12 Research Schools, which were augmented over time as follows:

- Research School of Physical Sciences (1948) and Engineering (1991) is currently referred to as the Research School of Physics and Engineering;
- John Curtin School of Medical Research (1948);

- Research School of Social Sciences (1954);
- Research School of Pacific Studies (1954) currently referred to as the Research School of Asia and the Pacific;
- Research School of Biological Sciences (1967), currently referred to as the Research School of Biology;
- Research School of Chemistry (1967);
- Research School of Earth Sciences (1971);
- Mathematical Sciences Institute (1989);
- Research School of Information Sciences and Engineering (1994);
- Research School of Astronomy and Astrophysics (1998);
- Research School of Humanities and the Arts (2007); and
- Fenner School of Environment and Society (2007).

Among the combined goals of these schools and the University is the aim to engage in research and scholarship at the highest international standards.<sup>20</sup>

The Research Schools were grouped together with the Faculties and Centres in 2006 under seven ANU Colleges; Arts and Social Sciences, Asia and the Pacific, Business and Economics, Engineering and Computer Science, Law, Medicine Biology and Environment, and Physical and Mathematical Sciences.

### **Planning the Campus**

Initially, the fundamental design influence on the planning of the campus was from the academic advisers. The academic advisers and directors of the new University faculties seized their preferred locations for their four foundation research schools and held them in the face of the objectives of the architect/planners who aimed for a more ordered campus. The campus planning reflects these powerful personalities. Each of the research schools had its own academic autonomy and the University administration established to protect and nurture the schools; defending and promoting them without interfering with their structures and development decisions.

Architect Professor Brian Lewis's 1948 Beaux Arts design planning attempts to relate to the Griffin axes and future lake were not supported by the academic advisers and Lewis gave in in 1955 to planner Professor Denis Winston's pragmatic garden planning precinct functionalism and architectural diversity. Winston gave in to the demands of the powerful academics and set the standards for individual precincts, rather than a unified campus plan. The independent precincts tied with landscaping, without a guiding structural layout or visual identity became the predominant pattern of the campus development.

The role of the architects and planners in the various historic phases of the University are described further in Section 5.0.

## **Old Administration Area**

Construction began in the early 1950s on temporary accommodation for the administrative headquarters and early research facilities and laboratories for the University. It was important that the siting of these temporary pre-fabricated structures was away from the south of the Acton campus where the majority of the permanent University buildings were planned. The complex was built in two phases with the administrative buildings for the University, and the 'temporary' laboratories for the Medical School and the Department of Geophysics. These structures served the University for over 40 years until more permanent facilities were available. Some of the laboratories and a garage survive and have since been adapted internally for use as offices.

While some of the temporary buildings have undergone internal alterations others have been demolished to make way for new buildings. The remaining structures are physical evidence of the earliest administration complex of the fledgling University.<sup>21</sup>

## **2.3 Site Context—Surrounding Institutions**

### **2.3.1 Background**

The ANU was planned to become the centre of scientific and institutional precincts, a concept derived from the Griffin Plan. By the time the University was established, other major institutions were constructed in the general area of the ANU, including:

- the CSIR, established in 1926 (later it became the Commonwealth, Scientific, Industrial and Research Organisation (CSIRO)), with the entomology buildings on the terminus of University Avenue constructed in 1929;
- the Australian Institute of Anatomy (later the National Film and Sound Archive) built in 1931;
- the Canberra High School (now the ANU School of Art) in Ellery Crescent in 1939;
- the Royal Canberra Hospital, founded in 1941 at the site of former Acton House on Acton Peninsula (now the National Museum of Australia); and
- the Drill Hall, 1940 (now the Drill Hall Gallery).

A detailed historical examination of Canberra's institutions surrounding the ANU is included in David Dexter's 1991 report *'The ANU Campus'*. A summary of the institutions and their characteristics important to the ANU have been described below. Refer to Figure 2.39 for the location of major institutions around the Acton campus today.

### **2.3.2 Black Mountain to the West of the ANU**

#### **Canberra Nature Park: Black Mountain Nature Reserve**

Canberra Nature Park consists of 33 Nature Reserves throughout the capital, containing a range of vegetation from bushland to lowland native grasslands. Areas of the endangered ecological community Yellow Box-Red Gum Grassy Woodland is found within the Canberra Nature Park, and is home to many rare and threatened species.<sup>22</sup>

The Black Mountain Nature Reserve is bordered by Caswell Drive and Aranda Bushland Nature Reserve to the West, Belconnen Way and Bruce Ridge Nature Reserve to the North, Parkes Way

and Lake Burley Griffin to the south, and the Australian National Botanic Gardens and CSIRO share the base of the Mountain to the east.

Black Mountain, at 813m above sea level (ASL) (256m above the water level of Lake Burley Griffin), provides views over the Nation's Capital and has one of the most commonly visited lookouts in Canberra. This significant landscape feature acts as a backdrop to many views and vistas around the city, as well as offering numerous bushwalking trails and nature paths. (Figure 2.8)

### **CSIR/CSIRO**

The CSIR was established by the Commonwealth in 1926 to support scientific research. It was deliberately located on Black Mountain adjacent to the University site in 1929. (Figures 2.9 and 2.10) In 1949 the CSIRO was created to succeed the CSIR.

The buildings of the CSIRO are located at the base of Black Mountain, surrounded by native trees. The CSIR located two Divisions, Economic Entomology (now Entomology) and Economic Botany (now Plant Industry) on the Black Mountain site. Two building wings, together with glasshouses, were completed in 1929 and 1930 for the CSIR, and the central Entomology Building was constructed in 1956. The facility housed a number of functions over time, including a library, research staff and administrative offices. A range of CSIRO functions continue to occur on the site and in purpose-built facilities, including laboratories, libraries, collection areas and administrative offices.

The architectural character of the central Entomology Building is similar in style to the Canberra High School.

### **Black Mountain Tower (Telstra Tower)**

In April 1970, the then Postmaster General (PMG) commissioned the Commonwealth Department of Housing and Construction to carry out a feasibility study in relation to a tower on Black Mountain accommodating both communication services and facilities for visitors. The tower was to replace the microwave relay station on Red Hill and the television broadcast masts already on Black Mountain.<sup>23</sup>

Telecom Tower on Black Mountain was opened on 15 May 1980 by the then Prime Minister, Malcolm Fraser. The design of the tower was the responsibility of the Department of Housing and Construction; however, a conflict arose with the National Capital Development Commission (NCDC) which, at the time, had complete control over planning within the Australian Capital Territory (Figures 2.11-14).

During the approval process of the tower, protests arose on aesthetic and ecological grounds. Some people felt the tower would dominate other aesthetic Canberra structures due to its location above Black Mountain and within a nature reserve. A case was brought before the High Court of Australia arguing that the Federal Government did not have the constitutional power to construct the tower. The decision was made in favour of the government and construction was able to commence.<sup>24</sup>

### **Australian National Botanic Gardens**

The creation of botanic gardens in Canberra was first recommended in 1933 by the Advisory Council for the then Federal Capital Territory, and the site on the lower slopes of Black Mountain

was suggested. It is located between parallel axes of Griffins Plan; the Water Axis and the Municipal Axis.

The project was deferred initially because of the Depression and later because of World War II. Lindsay Pryor, Superintendent of Parks and Gardens, began development of the National Botanic Gardens shortly after World War II. Planning for the gardens and planting continued throughout the 1950s, with the first building constructed on the site in 1966 for scientific research, a herbarium and library. The gardens were first opened to the public in 1967 and were formally opened by Prime Minister Gorton in 1970.<sup>25</sup> (Figures 2.15-17)

A laboratory for horticultural research was built in 1970. A key part of the work of scientific staff was, and continues to be, associated with field collecting expeditions. A policy was adopted giving priority to native Australian flora in the gardens, which reflected the increasing community appreciation of Australian flora in the late 1950s and 1960s.<sup>26</sup>



**Figure 2.8** View toward Black Mountain from the Old Hospital 1935 (Source: NAA 3212668)



**Figure 2.9** CSIR Offices building under construction 1929 (Source: NAA 3151395)



**Figure 2.10** CSIR Offices and Laboratories with Black Mountain in background 1929 (Source: NAA 3174982)



**Figure 2.11** Current day view over Black Mountain Tower towards Acton (Source: Google Images)





**Figure 2.12** Black Mountain Tower under construction 1975  
(Source: CDHS 16359)



**Figure 2.13** Black Mountain Tower under construction 1976  
(Source: CDHS 14856)



**Figure 2.14** Black Mountain Tower under construction 1975  
(Source: NAA 11731438)



**Figure 2.15** Canberra Botanic Gardens 1970 , which were later renamed the 'National Botanic Gardens' (Source: NAA 11701393)



**Figure 2.16** Botanic Gardens 1971 (Source: NAA 11701247)



**Figure 2.17** Botanic Gardens 1973 (Source: NAA 11701307)

### 2.3.3 Acton Peninsula and Lake Burley Griffin

#### Royal Canberra Hospital/ National Museum of Australia

With the outbreak of World War II, the need for a permanent community hospital was realised. The foundation stone was laid for the Royal Canberra Hospital in 1941 at the site nominated by Griffin (1918 plan) on the Acton Peninsula. (Figures 2.18-20) This new hospital replaced the functions of the existing hospital facilities (on the then proposed University site) on Mills and Eggleston Roads.

The Royal Canberra Hospital later provided clinical facilities for the John Curtin School of Medical Research of the ANU. The Hospital was demolished in July 1997 for the construction of the National Museum of Australia and the Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), both completed in 2001. (Figure 2.21)

Despite the major changes in use and character due to contemporary buildings, Acton Peninsula has strong historic associations with the indigenous landscape (extant native grasslands), the early pastoral period and the development of Canberra. It includes evidence of the cultural planting undertaken by successive Superintendents of Parks and Gardens, who were involved in planting native and exotic trees on Acton Peninsula. These included Weston, Bruce, Hobday, Pryor and Shoobridge.<sup>27</sup>

#### Lake Burley Griffin

Lake Burley Griffin defines the central area of Canberra; it is an essential component of the Griffin plan and unifies the axes and vistas of the plan to the underlying landform of the place. In 1964 the lake was constructed after many decades and much debate at a political level. It has since been considered important for its association with the creation of the national capital and subsequent phases of national development.

At Canberra's inception, the idea for integrating landscape and the city was accepted as necessary to beautify the city but was also related to ideas of social reform and individual freedom, reinforced by the Garden City / City Beautiful principles that were being promoted in Australia. Public places, radial tree-lined avenues, picturesque parks and ornamental water bodies were promoted as evidence of cultural progress and civic pride.<sup>28</sup>

The era of Federation marked a growing self-confidence in Australia as a nation and created a receptive climate for the progressive town planning models to be discussed. Debate was intense (and at times parochial) about the location, physical design and appearance of the capital. The Constitution required that the new capital be a distance from Sydney and this was generally understood to mean a new city in a rural landscape (the *bush*). The image promoted was that of a beautiful new city in a picturesque landscape setting enhanced by water.<sup>29</sup>

In 1954, well before a final decision was made to implement Griffin's plan for the ornamental water bodies, the connection of the ANU to the proposed Lake was considered in detail by its then Vice Chancellor, Sir Leslie Melville (in the position from 1953–1960). Melville was in favour for the lake but had good reason to believe the proposal may be abandoned because of the bid by the racing fraternity for a permanent lease of the land adjacent to the Molonglo River on Acton Peninsula for the 'Acton Racecourse'. The area of the proposed West Lake was reserved for University use, but had been used for a temporary racecourse. (Figures 2.22 and 2.23)

Melville lobbied the Minister for the Interior, and the Prime Minister, to ensure the land set aside for West Lake in Griffin's plan for Canberra was implemented. However, it was not for development purposes

that Melville made his case to Parliament's Public Works Committee on 25 October 1954. He lobbied for the implementation of West Lake to give the University opportunity for:

*'the magnificent panorama, and the quiet that is so helpful to research ... There can be no doubt that the lake would have been of great beauty. It was one of the major features of the Canberra city plan.' The University, Government House, the botanical gardens, the Zoological Park and the Legation Area were all to be on its borders.'*<sup>30</sup>



**Figure 2.18** Royal Canberra Hospital Buildings 1947 (Source: NAA 8852147 )



**Figure 2.19** Aerial of Royal Canberra Hospital 1957 (Source: NAA 8363672 )



**Figure 2.20** Royal Canberra Hospital view across Lake Burley Griffin 1966 (Source: NAA 11224931 )



**Figure 2.21** National Museum of Australia on foreshore of Lake Burley Griffin (Source: National Museum of Australia website)



**Figure 2.22** View of Acton Racecourse and early research buildings of the ANU 1961. (Source: ANU Archives.)



**Figure 2.23** View of West Basin of Lake Burley Griffin and Acton Peninsula 1964. (Source: NLA.)



## 2.3.4 Civic and the City Boundary of ANU

### Canberra High School (now the School of Art)

The siting of the Canberra High School in 1937–38 was a controversial decision that had a profound effect on the administrative landscape of Canberra. In 1937, after a lengthy period during which Canberra did not have a permanent high school, the federal Cabinet finally decided that one should be constructed and chose an 'island' of land between the proposed University site and the edge of civic.<sup>31</sup> This proposal was controversial and caused some public outcry including the press release by Dr J Watson, member of the Federal Capital Commission, that:

*the erecting of the high school is a breach of the statutory plan, and an unauthorised invasion of the reserved area, as detailed in the official plans.*<sup>32</sup>

Despite the protest, the Department of the Interior was unconvinced that there was any breach of the approved plans and the building of the school went ahead. As a result of the controversy, including the heated debates in Parliament and the media, the Minister for the Interior decided to legislate for the creation of a government authority to oversee the implementation of the Griffin Plan:

*the Minister for the Interior created by ordinance in 1938 the National Capital Planning and Development Commission to consider and advise upon matters involved in the planning and development of the National Capital and its Environs.*<sup>33</sup>

The 1938 Canberra High School, like Ainslie Primary School, was designed in the Art Deco style. It was the first purpose built high school in Canberra constructed in 1938, which was later taken over by the Canberra School of Art in 1976 and adapted and extended in 1980–81. (Figures 2.24 and 2.26)

The original Canberra High School building in the Inter War Art Deco style is an important contributor of the era and a significant example of the style in Canberra. The High School building was designed by the architect Cuthbert Whitley, a government architect and prolific designer of early Canberra government buildings. The main building is essentially unchanged with its Inter War Art Deco form and features. There are remnant interior fittings and decorative features dating from the original construction.

The School of Art is notable for its sympathetic extensions, firstly to the High School in the 1950s and the 1960s in matching style, and also in 1980 when the building was extended and adapted for a School of Art by Daryl Jackson and Evan Walker who won architectural awards for this design achievement. As the School of Art, it is a feature of the Canberra arts precinct identified in Walter Burley Griffin's plan of Canberra.<sup>34</sup>

### Canberra School of Music

Although the Canberra School of Music is now included within the University itself, it was originally a separate institution but was deliberately sited in close proximity to the University. The decision to locate the School of Music in this location stemmed directly from the educational affinity between the School of Music and the ANU. Dexter cites the National Capital Development Commission's (NCDC) 1971 14<sup>th</sup> Annual Report:

*It was decided that as the school would have some affinity with the ANU, a site in or near the City Centre would have advantages and would help link town and gown. As proposed in the City Centre plan...*<sup>35</sup>

The Canberra School of Music building is associated with the prominent Australian architects Daryl Jackson and Evan Walker who designed it for the NCDC. It was constructed in 1976 and designed in

the Late Twentieth-Century Brutalist style with strong sculptural forms. (Figures 2.25 and 2.26) A sculpture by Norma Redpath, adjacent to the entry, complements the sculptural forms of the building.<sup>36</sup>

### **Australian Institute of Anatomy**

The Australian Institute of Anatomy, built in 1931 (and now the National Film and Sound Archive), was also deliberately sited adjacent to the proposed university. (Figure 2.27) The Federal Capital Commission (FCC) noted in its Annual Report of 1928, that the 'Institute of Anatomy was being located in contiguity to the University area.' It also noted that its function for research would be expected to become a permanent part of the future University and for that reason was sited close to the proposed University's eastern boundary.<sup>37</sup>

The formality of the building is complemented by the landscape setting, of many formally arranged mature cultural plantings, predominantly *Pin Oaks (Quercus Palustris)*, *Turkey Oaks (Quercus Cerris)*, *Atlas Cedar (Cedrus atlantica)*, *Monterey Cypress (Cupressus macrocarpa)* and several eucalypts, randomly scattered around the site. The site's original landscaping was designed and implemented by Alexander Bruce, Director of Parks and Gardens, who followed on from Weston.<sup>38</sup>

In 1984 the Federal Government announced the closure of the Institute, with its anatomical and ethnographic collections being transferred to the control of the 'new' Museum of Australia. The building then became the home of the National Film and Sound Archive.

### **Australian Academy of Science**

The Australian Academy of Science was created in 1954 and in 1956 it requested from the Department of the Interior a site for a building, to be in a dignified but unpretentious style.<sup>39</sup> In 1959 the Academy built a remarkable copper sheathed dome designed by Roy Grounds from Grounds, Romberg and Boyd, which rests on 16 points set in a surrounding moat.<sup>40</sup> (Figures 2.28 and 2.29)

An important reason for seeking a site immediately to the east of the Institute of Anatomy was the close association with the newly established University. Strengthening the link between the institutions and the University was at the core of decisions about its final site. The Academy was considered one of the important postwar developments in the Australian academic scene fostered by members of the University, and several of its fellows were identified for their association with the ANU.<sup>41</sup> Formerly known as Becker House, the building has been recently renamed the 'Shine Dome'.

### **Hotel Acton (Diamant Hotel) and Ian Potter House**

Hotel Acton (Diamant Hotel) initially built in 1927 and extended with the addition of several Blocks (A—H), which were constructed consistently through to 1949, played an important role in the early development of the capital. (Figures 2.30 and 2.32) The building complex was recently refitted c2007, for contemporary hotel use and renamed the Diamant Hotel. In June 2011, a fire caused major damage to the central portion of the Hotel. Preparations for its reconstruction are in progress at time of writing.

Originally, it was one of the major hostels constructed by the government to overcome the acute housing shortage that affected Canberra at that time. Acton Hostel was designed by John Smith Murdoch, the Chief Architect of the Commonwealth Department of Works and Railways, who became the first Commonwealth Architect for the newly Federated Australia. Murdoch was responsible for several buildings designed in early Canberra from 1911 until his retirement as Director-General of Works in 1929.

The Ian Potter House (formerly Beauchamp House), and its immediate setting, is also recognised as an important surviving building associated with the FCC's building program for the transfer of public servants to Canberra in 1927.<sup>42</sup> (Figures 2.31 and 2.32) It was later known as a public guest house. This building, like Hotel Acton, has had substantial rebuilding, but retains John Smith Murdoch's distinct architectural characteristics. Ian Potter House, neighbour to the Shine Dome, is now part of the Australian Academy of Science institution and complex.

Until recently, and prior to development adjacent to Hotel Acton, there were a number of significant trees in the area of Hotel Acton and Ian Potter House, including poplars, oaks, two Californian redwoods cypress pines, Atlantic cedar, Chinese elm, and to the west of Hotel Acton a stand of significant eucalypt trees (*Eucalyptus Blakelyi*) purported to be a remnant of pre-settlement woodlands.<sup>43</sup>

Around Ian Potter House, there are stands of mature eucalypt trees. Near Hotel Acton only a few of the mature plantings survive between the hotel wings and eucalypt trees have been planted along Edinburgh Avenue. The recent development around the southeastern side of the ANU has markedly changed the predominantly low density landscaped character to a high-rise boundary between the University and the city.

### Drill Hall Gallery

Another non-university function located in the University site was a Drill Hall designed in 1937 by Edwin Hubert Henderson, Chief Architect of the Department of the Interior (1926–1936) and built in 1940 on Kingsley Street in the lead up to the World War II. (Figure 2.33)

Its architecture is typical of World War II Drill Halls in a simple Inter-War Functionalist architectural style. It has a strong association with Canberra civic life during this era and has long been a significant building for Canberra residents, particularly as an art gallery and association with the ANU.

The orientation of the building, facing Civic gives it a formal presence on the edge of the Acton campus. At the rear of the building there is a carpark adjacent to Sullivans Creek that does not take advantage of its landscape setting at the rear.



Figure 2.24 Canberra High School 1947 (Source: NAA 6816714)



Figure 2.25 Current day Canberra School of Music (Source: ANU Website)



**Figure 2.26** Canberra School of Music (foreground) and Canberra High School 1977 (Source: NAA 11720868)



**Figure 2.27** Institute of Anatomy 1931 (Source: NAA 3197916)



**Figure 2.28** Academy of Science 1959 (Source: NAA 7801951)



**Figure 2.29** Academy of Science 1963 (Source: NAA 11680279)



**Figure 2.30** Hotel Acton 1927 (Source: NAA 3059374)



**Figure 2.31** Ian Potter House (formerly Beauchamp House) 1927 (Source: NAA 3064973)



Figure 2.32 Aerial view of Hotel Acton and Ian Potter House 1928 (Source: NAA 3149703)



Figure 2.33 The Drill Hall 1951 (Source: NAA 11713702)

### 2.3.5 Overview Description of the Site

The physical manifestation of buildings and landscaping at the Acton campus is layered and complex. The site's 'town planning' has long since been complicated and the ANU does not have the sense of order or the road pattern envisioned in Griffin's 1912 plan (Figure 2.35).

The focus of the ANU campus landscape and its planning reflects the powerful personalities of its founders which initially stemmed from the establishment of the four foundation research schools and their needs—rather than providing any structurally united layout or visual identity. This was despite planners and architects trying, and largely failing, to integrate the whole into the unified civic presentation that Griffin had conceived. Instead, today the campus has multiple layers of town planning concepts, some drawn from Griffin's original planning, overlaid on the indigenous landscape and topography.

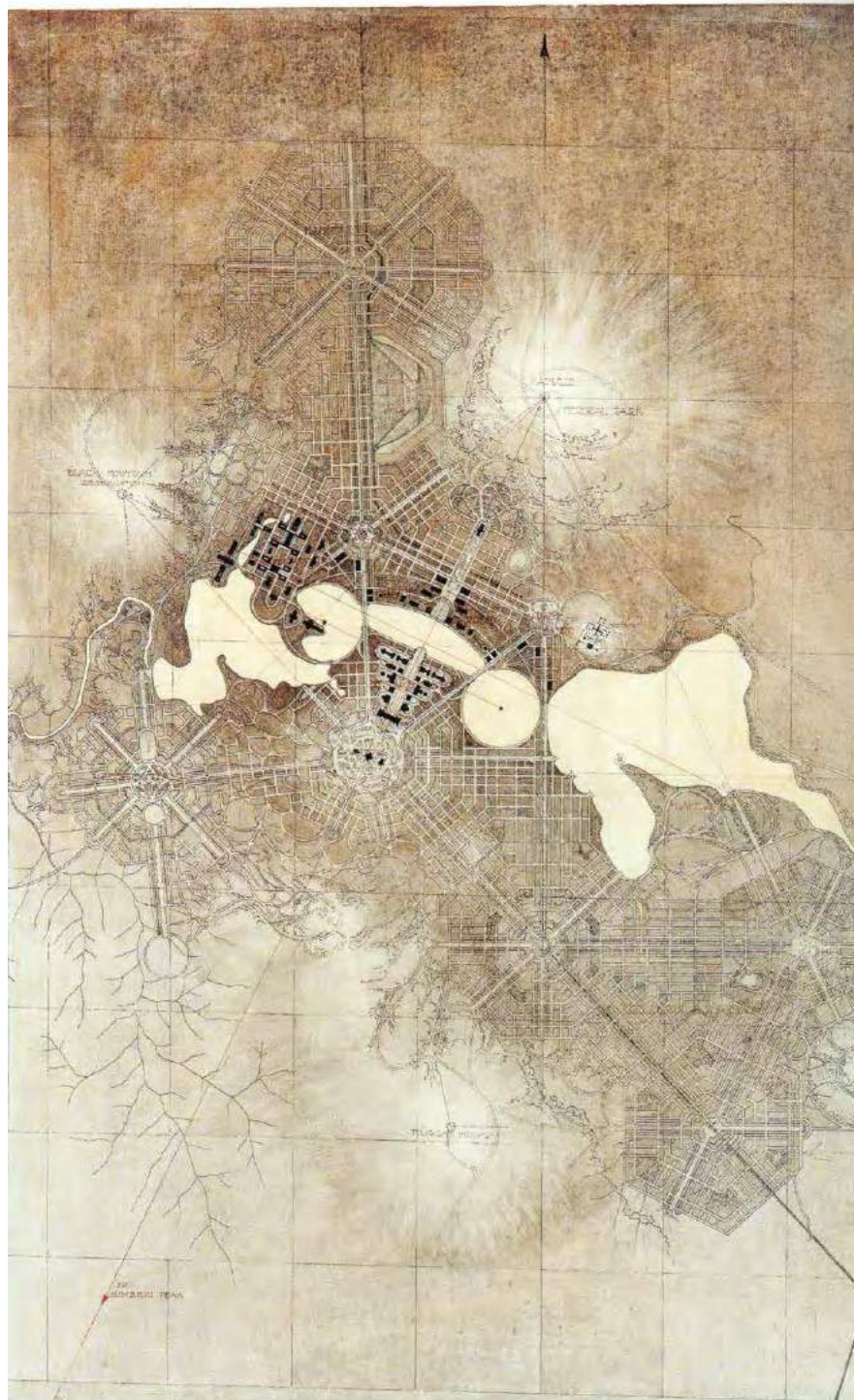
The southern part of the site encompasses the original Acton Peninsula development with a discrete precinct of cottages, houses and barracks accommodation leading into the earlier areas of the Campus' development. Across the Campus various combinations of older buildings and contemporary structures sit alongside each other in a landscape bisected by the realigned course of Sullivans Creek. The campus now contains over 100 low level buildings that partly protrude through the tree canopy. They are set out in eight precincts in a relatively low density with landscaping elements as the unifying factor. There are distinctive individual buildings, sculptures and areas of designed landscapes associated with buildings that, as a whole contribute to the cultural landscape of the campus.

The 146ha Campus site has been described as 'pavilions in a park'.<sup>44</sup> The quality and unifying character of the Campus is provided by its landscape. The areas of Sullivan's Creek and University Avenue are important landscape features of the campus that combine with the open grassed areas and ovals, planted groves and remnant woodland areas to contribute to its 'park like' nature.

The key natural elements of the cultural landscape are the remnant woodland, Black Mountain Sullivan's Creek and Acton Ridge. The essence of ANU's cultural landscape, as viewed from a distance—from Red Hill, Black Mountain and Mount Ainslie—is the dense mature canopy that sweeps down from Black Mountain to Acton Peninsula.



# COMMONWEALTH OF AUSTRALIA FEDERAL CAPITAL COMPETITION



## CITY AND ENVIRONS



Figure 2.33 Griffin's 1911 competition entry for the Federal Capital. (Source: Reid 2002, p 19)





Figure 2.34 Detail of 1914-1915 Preliminary Griffin Plan showing Land, Water and Municipal Axes. (Source: NLA, MAP NIC 22)

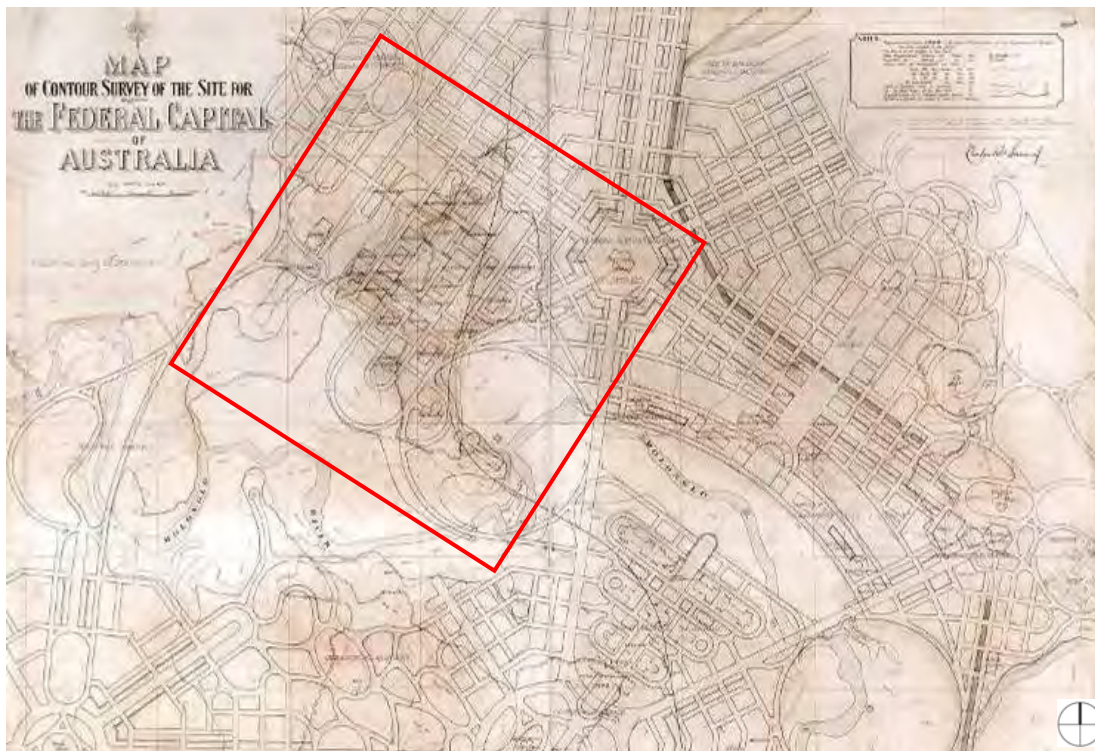


Figure 2.35 Detail of 1912 Griffin Canberra Plan. Contour Survey of the Site. Area of ANU outlined in red. (Source: NCA. The Griffin Legacy. 2004)





**Figure 2.36** Detail of 1913 Griffin Canberra plan, area proposed for the University is outlined in red. Note the grid like organisation of the buildings. (Source: National Library of Australia)

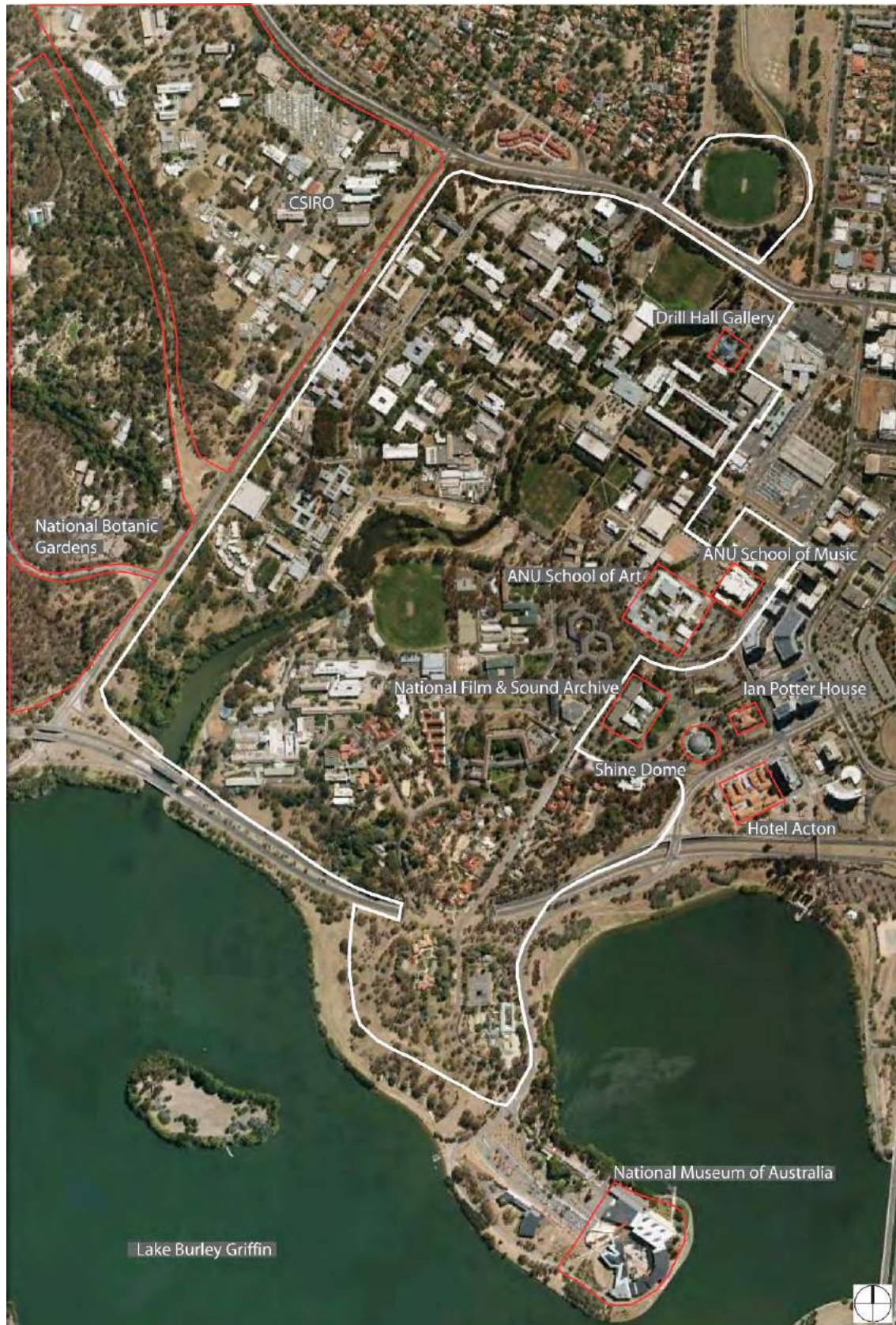


**Figure 2.37** Detail from the 1918 Griffin plan showing the area of ANU outlined in red. (Source: NCA The Griffin Legacy 2004.)



Figure 2.38 Plan view of ANU, 2010. (Source: Google Earth Image)





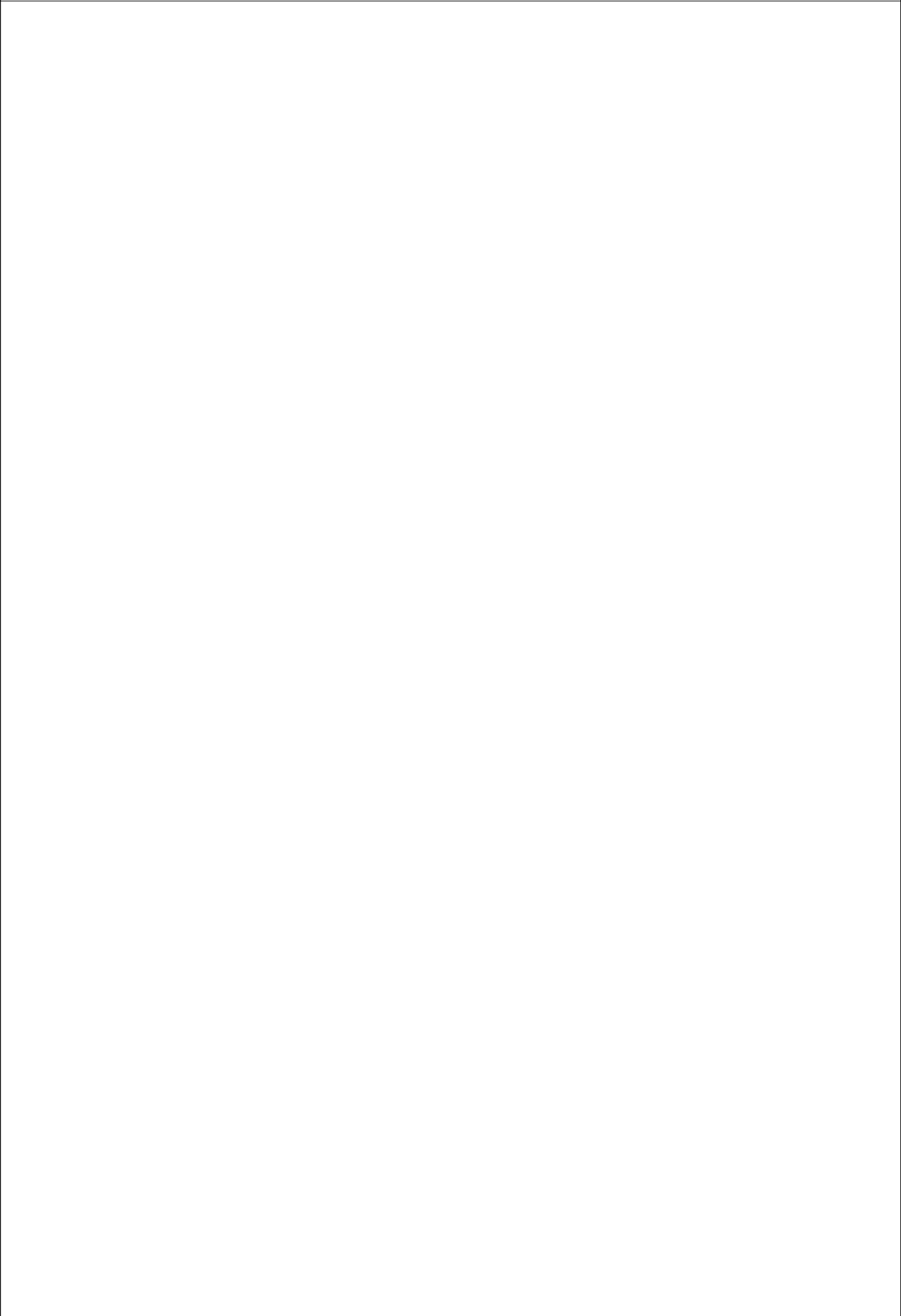
**Figure 2.39** Location of major institutions within and surrounding the campus. (Source: GML based on Google Earth Image)

## 2.4 Endnotes

- <sup>1</sup> Watson F 1927, *A Brief History of Canberra*, Federal Capital Press, Canberra, p21
- <sup>2</sup> Joshua John Moore (1790-1864), *Australian Dictionary of Biography* online < <http://adbonline.anu.edu.au/biogs/A020218b.htm>> viewed June 2010
- <sup>3</sup> ANU 2011 Acton Conservation Area Heritage Management Plan. Report produced by the ANU Heritage Office. p11
- <sup>4</sup> Canberra and District Historical Society, on-line history of Canberra <<http://www.canberrahistory.org.au/discover.asp>> viewed June 2010.
- <sup>5</sup> Watson F 1927, pps 172-173 & Reid P 2002, *Canberra following Griffin, a design history of Australia's national capital*, National Archives of Australia, p89.
- <sup>6</sup> While Walter Burley Griffin has prime attention for the design of Canberra, his wife Marion Mahony, an architect of considerable standing in her own right, was very strongly involved in the design for Canberra and accompanied Griffin to Australia to implement the design. Marion Mahony's exceptional watercolours on linen were probably a key part of the design's success. The collaborative roles of Marion and Walter are discussed in several recent publications including *The Griffins in Australia and India* edited by Jeff Turnbull and Peter Navaretti.
- <sup>7</sup> Taylor, K., 2005, 'Living with heritage: Canberra, city in the landscape. Can it remain a city 'not like any other?' *Historic Environment, Australia ICOMOS*, Vol 19 no.1, p37.
- <sup>8</sup> Fischer, KF 1984, *Canberra: Myths and Models*, Institute of Asian Affairs, Hamburg, Figures 10 and 11, pp 18-19.
- <sup>9</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, pp 21-23
- <sup>10</sup> ANU 2011 Acton Conservation Area Heritage Management Plan. Report produced by the ANU Heritage Office. p14.
- <sup>11</sup> Gibbney J 1988, p23.
- <sup>12</sup> Old Canberra House, ACT Heritage online < <http://heritage.anu.edu.au/index.php?pid=1088>> viewed June 2010.
- <sup>13</sup> This title later became the Superintendent of Parks and Gardens in the ACT.
- <sup>14</sup> ANU 2011 Acton Conservation Area Heritage Management Plan. p13.
- <sup>15</sup> Ibid.
- <sup>16</sup> Ibid.
- <sup>17</sup> Acton Conservation Area, Official CHL Citation, 2004
- <sup>18</sup> History of ANU, online < <http://heritage.anu.edu.au/?pid=7>>viewed June 2010.
- <sup>19</sup> White H L 1954, *Canberra, A Nation's Capital*, Angus and Robertson, Sydney, pps81-111.
- <sup>20</sup> ANU, web site history.
- <sup>21</sup> ANU, 1950s Prefabricated Buildings, Acton Campus, ACT Heritage Study June 2011.
- <sup>22</sup> ACT Government Territory and Municipal Services, Canberra Nature Park [http://www.tams.act.gov.au/play/pcl/parks\\_reserves\\_and\\_open\\_places/canberra\\_nature\\_park](http://www.tams.act.gov.au/play/pcl/parks_reserves_and_open_places/canberra_nature_park) accessed 24 August 2011.
- <sup>23</sup> [http://en.wikipedia.org/wiki/Black\\_Mountain\\_Tower](http://en.wikipedia.org/wiki/Black_Mountain_Tower)
- <sup>24</sup> [http://en.wikipedia.org/wiki/Black\\_Mountain\\_Tower](http://en.wikipedia.org/wiki/Black_Mountain_Tower)
- <sup>25</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p102.
- <sup>26</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p102.
- <sup>27</sup> Australian Heritage Database, Acton Peninsula Trees Group, Register of the National Estate.
- <sup>28</sup> Firth, op cit, p 53.
- <sup>29</sup> Firth, D 2000, *Behind the Landscape of Lake Burley Griffin: landscape, water, politics and the national capital 1899-1964*, University of Canberra, p 52.
- <sup>30</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p103.
- <sup>31</sup> Ibid. pps 101-107.
- <sup>32</sup> Ibid p106.
- <sup>33</sup> Ibid.
- <sup>34</sup> Australian Heritage Database, Canberra School of Art, Commonwealth Heritage List.
- <sup>35</sup> Dexter op cit. p107.
- <sup>36</sup> Australian Heritage Database, Canberra School of Music, Commonwealth Heritage List.
- <sup>37</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p103.
- <sup>38</sup> Australian Heritage Database, Institute of Anatomy, Commonwealth Heritage List.
- <sup>39</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p104.
- <sup>40</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p106.
- <sup>41</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p106.
- <sup>42</sup> Australian Heritage Database, Ian Potter House and Surrounds, Register of the National Estate.

<sup>43</sup> Australian Heritage Database, Hotel Acton, Register of the National Estate.

<sup>44</sup> ANU Website <http://heritage.anu.edu.au/index.php?pid=13>





maintenance of the physical environment of the University and provide a framework of drivers, objectives and planning principles'.<sup>1</sup>

Additionally the ANU Exchange is an area of the University which is expanding the city boundary of the Acton campus and is undergoing major development for a range of building types and functions. Its location, adjacent to the Civic Centre, provides the opportunity for connecting the city with the traditional and historic functions of the campus. The ANU Exchange currently includes student accommodation buildings (Kinloch, Davey Lodge, an office building (121 Marcus Clarke) and carparking areas on ground level and below ground. Additional student accommodation is under construction (Buildings SA3 and SA4), and other facilities in the Exchange area will include childcare, fitness, recreation and entertainment centres, restaurants and shops. Some of these facilities are already operating.

The ANU Exchange is described as:

*an exciting mix of activities in one of Australia's most significant and prestigious locations. Dynamic, inspirational and inviting – the ANU Exchange offers a true sense of community and a vibrant lifestyle. It is a new destination for a city at one with its unique mix of cultures and its diverse ways of life.*<sup>2</sup>

## 1.8 Authorship

This report has been prepared by GML's project team:

- Rachel Jackson, Senior Associate (Direction and Project Manager);
- Martin Rowney, Senior Heritage Consultant (Archaeologist);
- Anne Claoue-Long, Senior Heritage Consultant (Historian) GML;
- Sarah Webeck, Graduate Consultant (Research); and
- Sheridan Burke, Partner (Direction and Peer Review).

The following subconsultants contributed to the Heritage Study:

- Neil Urwin, Director, Griffin Associates Environment (Natural Environment and Cultural Planting Assessment and Management); and
- Dr Milton Cameron, Architect (Architectural and Planning History and Assessment).

## 1.9 Acknowledgements

Godden Mackay Logan acknowledges the assistance of the following people in the preparation of this report:

- Wayne Ford, Associate Director, Facilities Planning, Facilities and Services Division, ANU;
- James Collet, ANU Heritage Project Officer, Facilities and Services Division, ANU;
- John Sullivan, Manager, Energy & Sustainability Office, Facilities and Services Division, ANU;
- Aboriginal community representatives of the Canberra area;

- Department responsible for the EPBC Act – Kirsty Altenburg, Ilse Wurst, Theo Hooy, Lois Wishart-Lindsay and Madeleine Maple; and
- Rob Purdon, Purdon Associates.



**Figure 1.1** Site Plan showing ANU Acton campus in broader Canberra area with important landmarks. (Source: GML based on Google Earth Image)





Figure 1.2 ANU Acton campus Heritage Study Area plan. (Source: GML based on Google Earth Image)





**Figure 1.3** Location of Commonwealth Heritage Listed places within the ANU Acton Campus. Note the Acton Conservation Area boundary is dashed. (Source: GML, based on Google Earth plan)



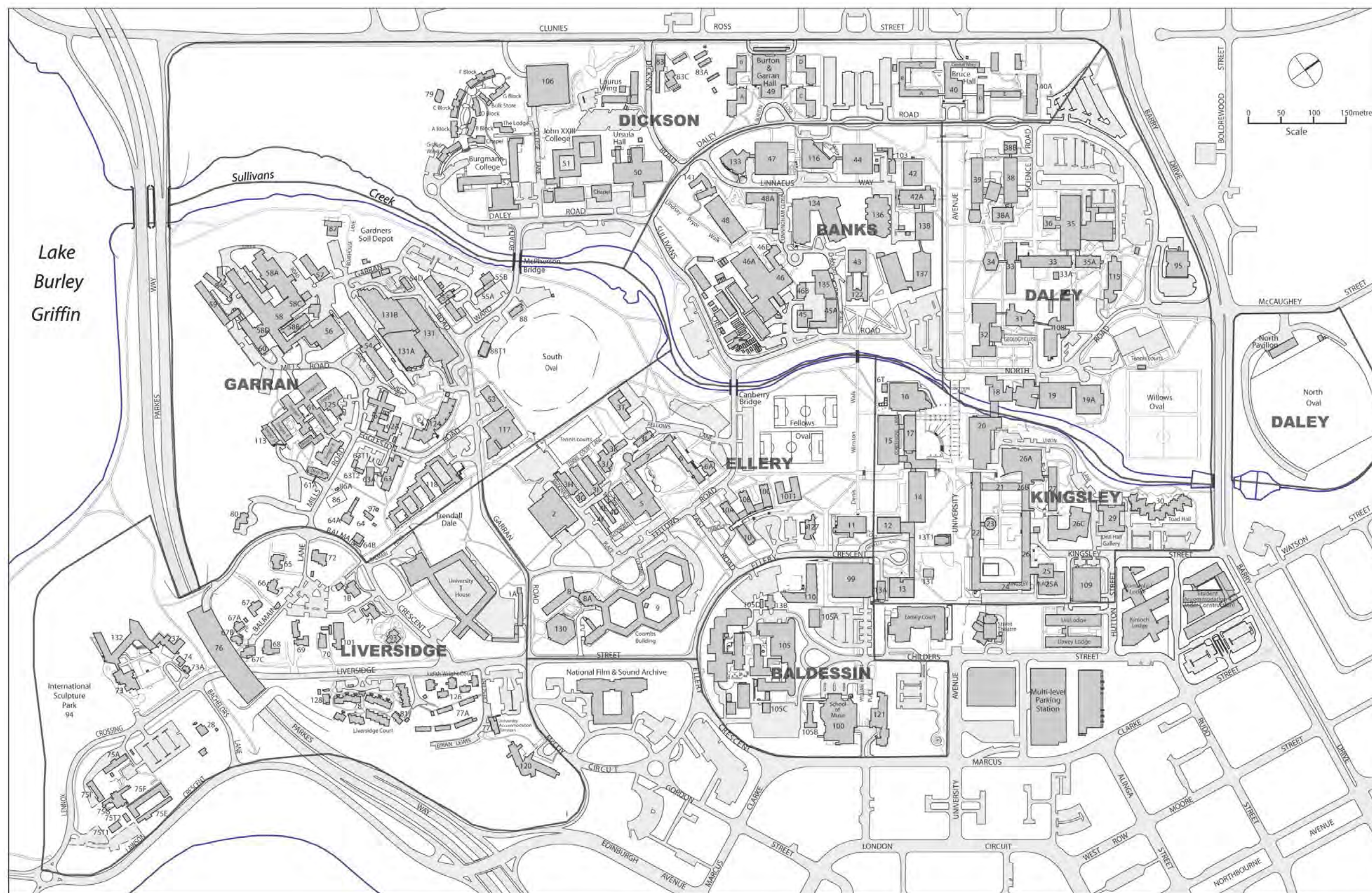


Figure 1.4 Precinct Plan of the ANU Acton campus. (Source: GML, based on plan provided by the ANU)



## 1.10 Endnotes

- <sup>1</sup> GHD March 2011, 'ANU Campus Master Plan 2030: Master Plan Volume 1: Draft'. Draft report produced for the Australian National University. p5-6.
- <sup>2</sup> ANU Exchange website: <http://www.anuexchange.net/masterplan.php>

## 3.0 Environmental Context

### 3.1 Environmental Overview—Historic Background

#### 3.1.1 The Natural Environment

Based on a summary by Estcourt<sup>1</sup> the Canberra area comprises several major physiographic units. These include low-lying undulating plains at elevations of 500 to 750m, and broad ranges and uplands at elevations of 750 to 1100m. The plains areas are characterised by residual hills and ridges with deep weathering profiles and well-developed soils, while the ranges have stripped weathering profiles and poorly-developed soils.

Black Mountain reaches 813m above sea level (ASL) with slopes comprising sandstone, quartzite and shales. The campus itself is situated on Sullivans Creek floodplain and its surrounding slopes and ridges.<sup>2</sup> The residential colleges are set on the footslopes of Black Mountain, along the western and northwestern parts of the campus.

Bedrock comprises a number of rock types, including 'siltstone and shale with some sandstone and a few lenses of limestone, all deposited at a time when the Canberra region lay under the sea'.<sup>3</sup> There are limestone outcrops around the region and it has been encountered in excavations for some of the building works on the campus, including the Ward Road (McPherson) Bridge over Sullivans Creek and some of the residential colleges.

The plain across the centre of the campus comprises sediments built up from Sullivans Creek along with some colluvial deposits fanning out from the base of Black Mountain. These 'colluvium and fan deposits' now existing on the CSIRO site at 590m ASL have been dated to 27–28,000 years ago.<sup>4</sup>

The ridge lying under the Research School of Physical Sciences, and through to University House, is part of the Pittman Formation. This includes shale, siltstone and sandstone, and it contains a bed of grey slaty shale<sup>5</sup> which resisted the erosion of Sullivans Creek. As the creek eroded its own flood plain, it created the undulating topography between this ridge to the south of the campus, the gravel terraces of the eastern side of the campus near the Schools of Art and Music, and the base of Black Mountain.

Prior to European settlement the vegetation regime across the campus area included savanna woodland and grasslands.<sup>6</sup> Main woodland vegetation included '*Eucalyptus melliodora*, *blakelyi* and *bridgesiana* mainly on the higher ground, particularly the Acton Ridge...'<sup>7</sup> Grasslands would have been 'almost entirely kangaroo grass which later, as the result of continued sheep grazing, would be reduced to a sward of *Danthonia* (wallaby grass) and *Stipa* (spear grass)'.<sup>8</sup>

### 3.2 Geology and Geomorphology

#### 3.2.1 Background

The geology of the ANU site is derived from predominantly Middle Silurian sediments, overlain on the western half by alluvium from the Sullivans Creek floodplain and colluviums descending from Black Mountain. The site is without volcanic intrusion or flows. This is depicted in Figure 3.1.

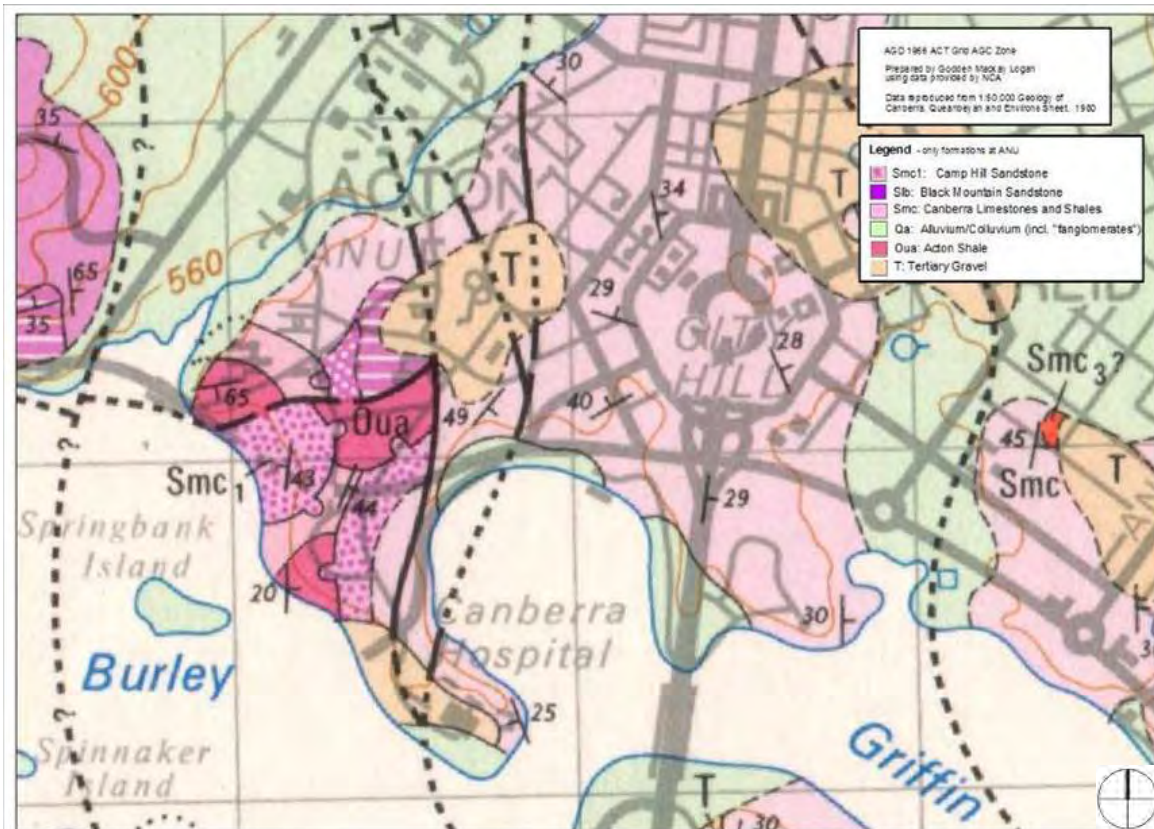


Figure 3.1: Geology of the ANU (Source: Data reproduced from 1:50,000 Geology of Canberra, Queanbeyan and Environs Sheet, 1980)

The geology and geomorphology is detectable to some degree in the present landscape of the Acton campus and has been comprehensively described by Henderson (1979). Extracts from this description, with relevance to visible features today, are quoted as follows:

*Because the site is flat to gently undulating very little of the soil and bedrock profiles are evident in natural exposures. It is known that the underlying rock formations are of early Palaeozoic age (Middle Ordovician to Middle Silurian and about 430 to 450 million years old), and that bedrock is covered in many areas by much younger Cainozoic superficial depositions, mostly not more than some hundreds of thousands of years old.*

*The bedrock consists of a number of rock types, mainly siltstone and shales, with some sandstone and a few lenses of limestone, all deposited at a time when the Canberra region lay under the sea. These rocks belong to several different formations juxtaposed in complex folded and faulted relationships.*

*Around the University campus the earliest superficial deposits are high-level gravel consisting of well-rounded cobbles together with some coarse sand. These deposits are interpreted as remnants along an ancient Molonglo River which meandered across a wider floodplain somewhat to the north of the present entrenched flood plain to the south of the campus now drowned by Lake Burley Griffin. The lowering of the bed of the Molonglo River and Sullivans Creek by erosion over many thousands of years stranded these deposits in their present elevated position.*

*As the bed of Sullivans Creek was being eroded colluvial deposits fanning out from the lower slopes of Black Mountain accumulated. These deposits are made up of angular to sub-angular gravel of Black Mountain Sandstone, up to cobble size, in a matrix of sand and silt; drilling has indicated that in places the deposits are*



*more than 50m thick. Wood from the base of thinner parts of these slope deposits in a building excavation in CSIRO has been given an age of 27,000 years by the ANU Radiocarbon Laboratory.*

*The flat plain in the middle of the campus has been built up by fine and coarse sediment brought down by Sullivans Creek to bury by at least 30m a valley which it has cut deeply below the level of the old Molonglo River gravels on the higher southeastern part of the University site. What caused this reversal from erosion to deposition is not known; the effect of a climatic change on the creek's regime is one likely cause. It has also been suggested that the fan deposits from Black Mountain, themselves probably an effect of climatic change, may have ponded back the creek.*

*The sediments of the swamp-lake of Lyneham in the northern part of Canberra are interpreted as a local deposit of Pleistocene age. The lake was caused by the scree (fanglomerates) of Black Mountain, which filled a part of the ancient bed of Sullivan's Creek. Consequently the lake had to develop a new outlet – the present Sullivan's Creek – and even today the area of the erstwhile lake is subject to deposition rather than erosion. The same fanglomerates, perhaps at a later date, temporarily blocked the bed of the Molonglo River at the south-western slope of Black Mountain, raising the river-level 35 to 40 feet.*

*Thus, in prehistoric time, the bed of the Molonglo formed a lake within the limits of Canberra. After the river had broken through the obstacles, this lake disappeared, leaving behind the sandy river- flats. Evidently, no tectonic movements of later date are needed to explain the present topography, the distribution of the alluvial deposits, or even the surface drainage system in the Canberra area.*

### **3.2.2 Geological and Geomorphological Features in the Landscape**

The superficial geology of the campus—comprising Sullivans Creek floodplain gravels and 'fanglomerate' gravels from the weathering of slopes on Black Mountain—are readily seen in cuttings and excavations, although the cut and fill associated with the many building projects at ANU over the years has resulted in much mixing and movement of substrate around the site.

Exposures of underlying, older, geology occur infrequently and temporarily during building projects, but no such exposures are permanently on display. The only exposure of underlying geology occurs just off-campus, on the eastern Acton Peninsula foreshores, where a limestone exposure has been included as a 'geological reference site' by the Geological Institute of Australia.<sup>9</sup> The same stratum is presently exposed in Canberra's Parliamentary Triangle, Civic, Manuka, Narrabundah and Fyshwick areas. It was from examples in these exposures that the name Limestone Plains derived.

Sullivans Creek formerly meandered through the campus as a largely intermittent water-body. However, to cope with flood peaks, the creek has been canalised. This has included eliminating one large meander bend, which can still be traced in the shallow depression around the Chifley Library.

#### 2011 Photograph\*



#### Description

Limestone exposure on the eastern shoreline of the Acton Peninsula. The Acton campus is in the background.

#### Natural heritage value

One of a small number of exposures of the limestone from which the Limestone Plains of Canberra was named. It is a geological reference site by the Geological Institute of Australia.



Depression in the landscape around the western and southern sides of the Chifley Library marking the previous course of Sullivans Creek.

Site shows evidence of past site morphology. Major meander of Sullivans Creek, now cut off by rerouting and straightening the creek.



\* Source: Neil Urwin, Griffin Associates Environment, 2011.

### 3.3 Biodiversity

#### 3.3.1 Flora

The vegetation of the region before European settlement was modelled by GML in 2006.<sup>10</sup> A map of the pre-European extent of these vegetation communities is provided at Figure 3.2. The grasslands distribution is derived from estimates of the original extent of grasslands in the ACT Lowland Native Grassland Conservation Strategy.<sup>11</sup> This was a refinement of the modelled distribution by Lindsay Pryor,<sup>12</sup> using survey data from all remnant sites, historical records and mapping of cold air drainage. The open forest, woodlands and riparian forest distributions have been derived from early photographs;<sup>13</sup> 1909 mapping by Scrivener,<sup>14</sup> the 1927 aerial photographic survey of Canberra by the RAAF;<sup>15</sup> species distribution notes in Pryor and Banks,<sup>16</sup> Burbridge and Gray,<sup>17</sup> and NCDC;<sup>18</sup> and field data collection from remnant vegetated areas.

Pryor's work at the University is discussed in Section 6.0.

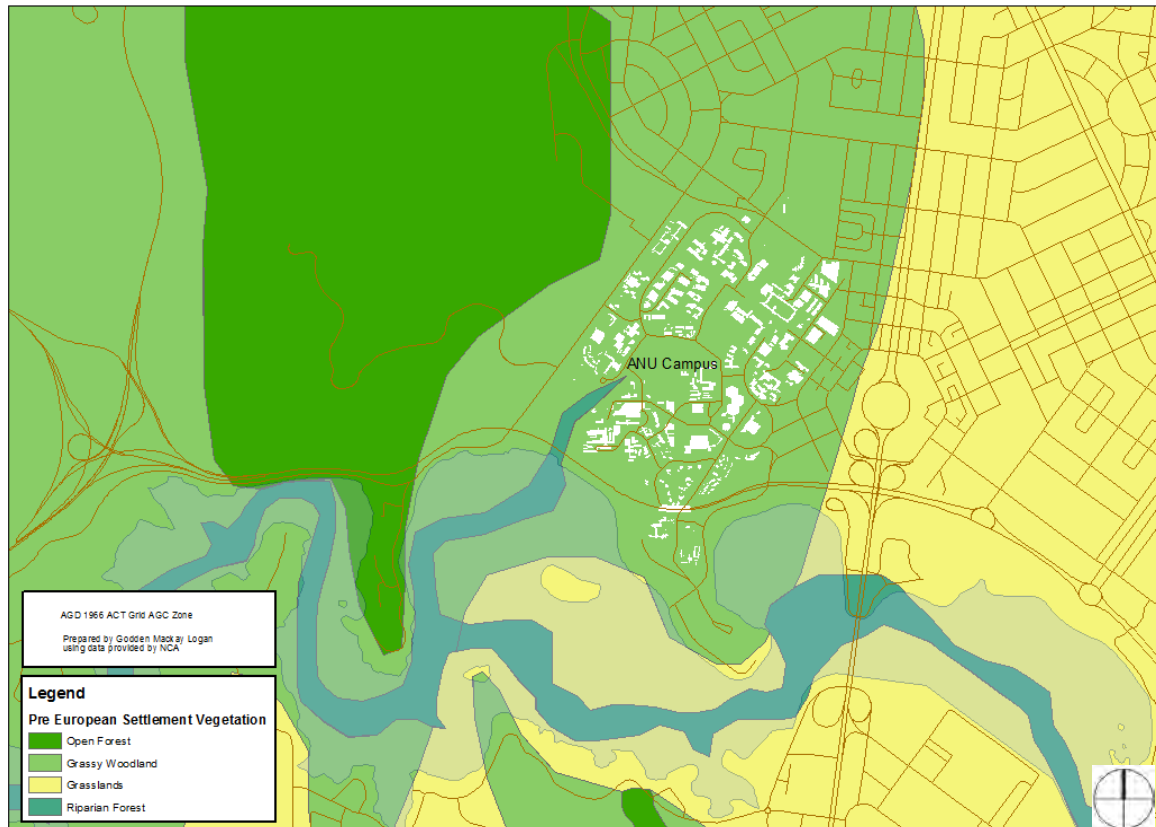


Figure 3.2: Modelled Pre-European Vegetation over the Acton Peninsula and Surrounding Areas (Source: GML 2010)

Pryor (1971) described the original vegetation of the campus as follows:

*At the time of settlement, the campus had two main vegetation types: savannah woodland, made up of *Eucalyptus melliodora*, *blakelyi*, and *bridgesiana* mainly on the higher ground, particularly the Acton Ridge, and secondly grassland.*

*At the early stage the grassland would have been almost entirely kangaroo grass which later, as the result of continued sheep grazing, would be reduced to a sward of *Danthonia* (wallaby grass) and *Stipa* (spear grass).*

Banks (1979) made the following comments on the vegetation:

*From the evidence yellow box-red gum woodland extended across most of the campus site with grassland or at least open woodland persisting along parts of the flats adjacent to Sullivans Creek. The dry sclerophyll forest on Black Mountain did not extend on to campus. The woodland had possibly persisted for thousands of years being variously used and modified over time by local Aborigines.*

*The woodland consisted primarily of yellow box (*Eucalyptus melliodora*), Blakely's red gum (*E. blakelyi*), and apple box (*E. bridgesiana*). Candlebark (*E. rubida*) was also present and possibly snow gum (*E. pauciflora*).*

Banks also repeats Pryor's contention that the grasslands were originally dominated by kangaroo grass, but changed to wallaby grass/spear grass communities under grazing pressure.

The woodland and grassy woodland were not distinct floristic or even structural formations. They were characterised by the co-dominant canopy species of yellow box (*E. melliodora*) and Blakeley's red gum (*E. blakeleyi*), with apple box (*E. bridgesiana*) along ephemeral drainage lines. The density of canopy trees varied from 10% to 30% coverage, with communities at the lower end of the

density range classed as grassy woodlands and communities at the upper end classed as woodlands. The areal balance between the two would have varied as a result of fire regimes—at some periods the woodland form being dominant, and at others the grassy woodland.

### Vegetation Change

The earliest record is the generalised mapping by Scrivener in 1909 showing the boundaries of 'Timbered Land' and 'Cultivated Land' at that time (Figure 3.3), which was on the high ground of the Acton Peninsula east of Sullivans Creek and extending north to a line approximating the current position of the School of Art and Chancelry Building.

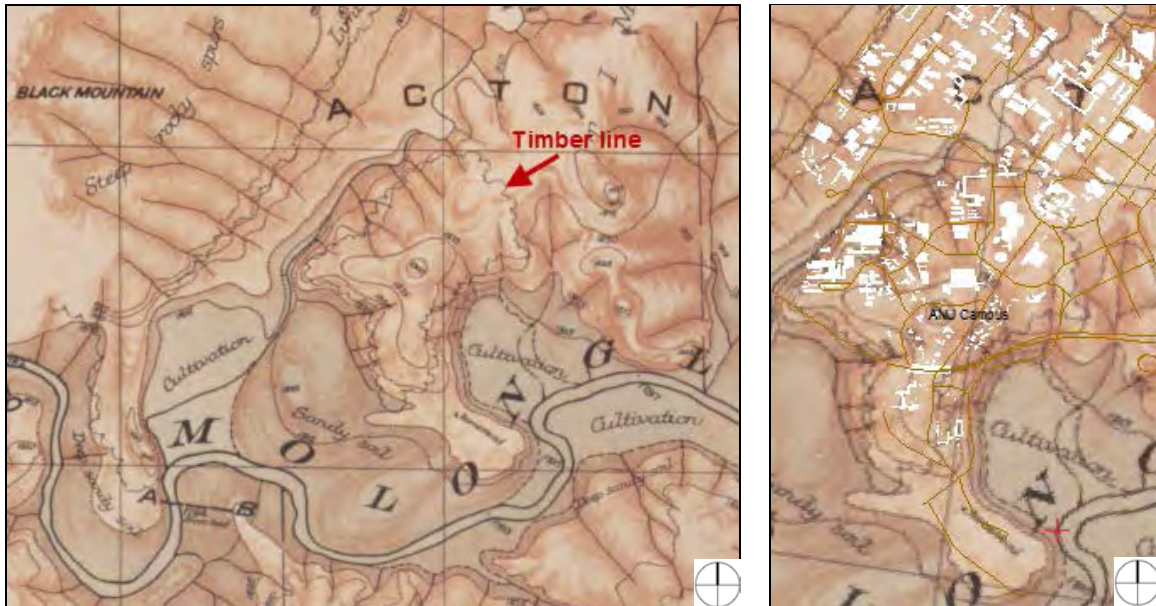


Figure 3.3: Scrivener's map of 1909 showing timber on the high ground of the central campus area, and detail with present ANU buildings and road network superimposed. (Source: GML 2010)

Although this map shows the boundaries of continuously timbered areas, it is likely that many trees were retained over the 'cultivation' lands to provide shelter and shade for stock.

The next visual record of the vegetation extent is provided by aerial photographs taken of Canberra the 1920s (Figures 3.4 and 3.5). It shows that the timbered area shown by Scrivener was in fact the total remnant woodland area on the campus site east of Sullivans Creek and that no discernable distribution of shade trees were retained in the northeast of the site. By this time, the woodland area has become an open savannah structure, but denser woodland appears to still exist around Balmain Crescent and Lennox Crossing Road near University House and the residential area. Across the creek, the photo shows scattered open woodland areas on the lower slopes of Black Mountain, only becoming sparse on the creek's floodplain. Cultural plantings are evident on the site in 1929 and these are discussed in Section 6.0.





**Figure 3.4:** 1929 Aerial showing (left) the distribution of remnant woodland on site, and (right) present ANU buildings, road network and lake superimposed (purple). (Source: National Library of Australia)



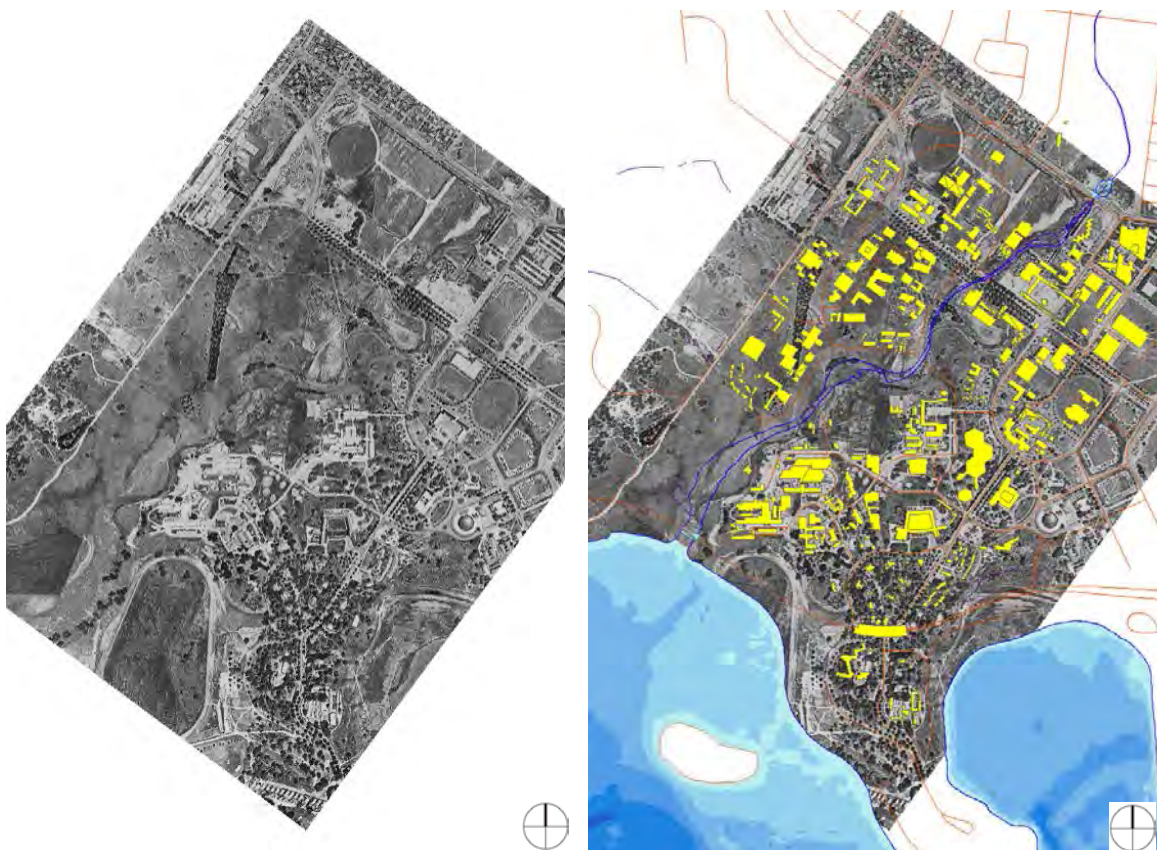
**Figure 3.5:** Oblique aerial dated 1923 looking north over Acton Ridge, with the Molonglo River in the foreground and Mt Majura and the western slopes of Mt Ainslie in the top right of the picture. (Source: National Library of Australia)



Later changes are described by Banks (1979):

*Aerial photographs taken in the early 1950s show few residual trees in the area adjacent to Sullivans Creek with most trees confined to Acton Ridge which (was) evidently not extensively cleared for grazing. Today many of these residuals are camouflaged by younger plantings. For example yellow box can be seen along Acton Ridge, off the eastern end of H.C. Coombs Building near Liversidge Street, and near Clunies Ross Street between Burton and Bruce Halls. Blakely's red gum is also fairly common although some trees may date from regrowth last century. Examples of old residual trees exist along Acton Ridge, off the western corners of University House and the Zoology building and in small stands near the Chemistry building (midway along University Avenue); these may once have been part of the one stand. Apple box is relatively common also, but is confined to particular areas; this is in keeping with its natural distribution which appears to be frequently confined to alluvial fans. For example large shapely trees exist in the broken arc from the lawns around the Menzies Library to the tennis courts. Candlebark is less common and was possibly restricted to lower, drier, colder flats near Sullivans Creek.*

*Snow gum may have existed in the woodland-grassland boundaries along Sullivans Creek although no old trees exist to confirm this. This species exists on the head waters of Sullivans Creek in Gungahlin and may have occurred intermittently downstream to the confluence with the Molonglo River. Similarly Bull oak (*Casuarina Leuhmannii*) persisting today in nearby Black Mountain Peninsula may have extended to Acton Ridge.*



**Figure 3.6:** 1960 Aerial showing (left) the areas of surviving remnant woodland on site, and (right) present ANU buildings, road network and lake superimposed (blue). This figure also shows the realignment of Sullivans Creek referred to in Section 3.2.2. (Source: National Library of Australia)

The surviving natural woodland on the southern part of the Acton Peninsula is a remnant of the original vegetation and is currently classified as the *White Box-Yellow Box-Blakely's Red Gum*

*Grassy Woodland and Derived Native Grassland* Critically Endangered Ecological Community under the EPBC Act, and the *Yellow Box – Red Gum Grassy Woodland* Endangered Ecological Community under the ACT *Nature Conservation Act*.

In some areas, the woodland canopy species have disappeared, but the native grassland remains. This is classified as the same Critically Endangered Ecological Community under the EPBC Act, and as the *Natural Temperate Grassland* Endangered Ecological Community under the ACT *Nature Conservation Act*.

Section 86 (the wallaby enclosure) and the low-lying area between Parkes Way and the Oliphant Buildings (Building 60) have no trees or vegetation of natural or cultural heritage value (although the landform of the latter area is part of the pre-lake racecourse). The eastern bank of lower Sullivans Creek has been landscaped and planted with native trees since the 1960s, but none have notable natural or cultural heritage value. Similarly the western bank of lower Sullivans Creek has been extensively planted with Casuarinas and, judging by their age, willows since the 1960s. A small drainage tributary of the creek on its northern bank has become a re-entrant waterbody since the flooding of Lake Burley Griffin and is vegetated by a dense thicket of alder (*Alnus glutinosa*) with black and crack willow (*Salix nigra* and *Salix fragilis* var *fragilis*). This area has become an important water-bird and native and exotic fauna refuge in the lower creek area, but does not satisfy the usual criteria for natural heritage value.<sup>19</sup>


### 3.3.2 Remnant Vegetation in the Landscape






An inventory of remnant native vegetation on the ANU campus has been undertaken as part of this study. The remaining natural vegetation on site may be divided into the following categories:

- i. Remnant natural vegetation communities;
- ii. Groups of relic native trees with vegetation community affinities; and,
- iii. Individual relic native trees.

#### Remnant vegetation communities

These are vegetation communities which are survivors of the original vegetation on site (before the construction of cottages, hospital and university). In some places they represent the pre-European settlement vegetation. These areas comprise remnant areas of grassy woodland and grassland. The woodland areas are not characterised by individual trees of excessive age, but rather by a cross-section of ages from young to over-mature, reflecting a natural community structure. Many of the tree individuals present today in these communities are not pre-campus relics, having grown naturally from seedlings or saplings within the community.

Map	2011 Photograph*	Description	Natural heritage value
RVG1		Large area of remnant grassy woodland dominated by <i>Eucalyptus melliodora</i> and <i>Eucalyptus bridgesiana</i> with infrequent <i>E. blakeleyi</i> in the canopy array. With a natural grass understorey comprising <i>Themeda australis</i> , <i>Stipa bigenicularis</i> and infrequent <i>Austrodanthonia</i> spp.	Relic vegetation communities consisting of critically endangered and endangered ecological communities under the EPBC Act and ACT Nature Conservation Act.  Habitat values recorded in Biodiversity Management Plan, Acton campus ACT

Map	2011 Photograph*	Description	Natural heritage value
	  	<p>Grassland includes the endangered species (under the ACT Nature Conservation Act) Hoary sunray (<i>Leucochrysum albicans</i>).</p> <p>Acton Peninsula, south, southeast and west of Old Canberra House.</p>	(2011). <sup>20</sup>
RVG2 RVC3		<p>Two areas of derived natural grassland (woody grassland with tree canopy removed) dominated by <i>Stipa bigeniculata</i> and <i>Austrodanthonia</i> spp. Current canopy species are planted eucalypts (<i>E. mannifera</i>).</p> <p>West of the Crawford School (Building 132)</p>	<p>Relic vegetation community - endangered ecological community under the EPBC Act and ACT Nature Conservation Act.</p> <p>Habitat values recorded in Biodiversity Management Plan, Acton Campus ACT (2011).</p>
RVC4		<p>Small area of derived natural grassland (woody grassland with tree canopy removed) dominated by <i>Themeda australis</i> and <i>Austrodanthonia</i> spp.</p> <p>South of Winston Churchill Trust (Building 93), on Liversidge Street.</p>	Relic vegetation community - endangered ecological community under the EPBC Act and ACT Nature Conservation Act.





Map	2011 Photograph*	Description	Natural heritage value
			

\* Source of photograph: Neil Urwin, Griffin Associates Environment, 2011













### Groups of relic trees with vegetation community affinities

These are groups of trees which were originally grassy woodland communities. However these have been modified either by selective clearing or conversion of understory to lawn or gardens or carparks—so that they no longer represent that endangered ecological community but are relics of the communities.

Map	2011 Photograph*	Description	Natural heritage value
GRT1		Over mature <i>Eucalyptus melliodora</i> and <i>E. blakeleyi</i> individuals along the northwestern boundary of the campus (Clunies Ross St.) extending into the university grounds between Burton and Bruce Halls.	Groups of relic trees with vegetation community affinities. Survivors of the natural woodland community on the lower slopes of Black Mountain.
			
GRT2		Over mature <i>Eucalyptus melliodora</i> and <i>E. blakeleyi</i> individuals around Old Canberra House.	Groups of relic trees with vegetation community affinities. Disturbed and isolated relics of the same Yellow Box– Red Gum Grassy Woodland which is intact south and west of Old Canberra House (see RVG1 above).
GRT3		Large area of over mature <i>Eucalyptus bridgesiana</i> individuals in landscaped area among carparks and buildings of University Accommodation Services building at the corner of Liversidge Street and McCoy Ct.	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box – Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Garran Road, through the Menzies Library and across



Map	2011 Photograph*	Description	Natural heritage value
			South Oval (marking a drainage swale which flowed into Sullivans Creek).
GRT4	 	Over mature <i>Eucalyptus melliodora</i> individuals among the cottages and car parks of the Liversidge precinct between Liversidge Street and Balmain Crescent.	Groups of relic trees with vegetation community affinities. Disturbed and isolated relics of the same Yellow Box – Red Gum Grassy Woodland which is intact south and west of Old Canberra House (see RVG1 above).
GRT5	 	Area of over mature <i>Eucalyptus bridgesiana</i> individuals in landscaped area on the south side of the RG Menzies Library.	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box – Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Garran Road, through the RG Menzies Library and across South Oval (marking a drainage swale which flowed into Sullivans Creek).



Map	2011 Photograph*	Description	Natural heritage value
GRT6		Area of over mature <i>Eucalyptus bridgesiana</i> individuals around the tennis courts west of the old Administration Area Buildings (3-4).	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box – Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Garran Road, through the RG Menzies Library and across South Oval (marking a drainage swale which flowed into Sullivans Creek).
			
GRT7		Area of over mature <i>Eucalyptus bridgesiana</i> individuals in landscaped area on the southern side of the Chancelry Buildings and along East Road.	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box – Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Fellows Road from Ellery Crescent.
			
GRT8		Area of over mature <i>Eucalyptus blakeleyi</i> individuals in landscaped area on west University Avenue and extending northwards toward the Research School of Chemistry (Building 35)	Groups of relic trees with vegetation community affinities. The tree group is a relic of an isolated stand of Yellow Box – Red Gum Grassy Woodland.

Map	2011 Photograph*	Description	Natural heritage value
			


\* Source of photograph: Neil Urwin, Griffin Associates Environment, 2011




### Individual relic trees

These individual trees consist of species which are part of the original Grassy Woodland Community of the area and, because of their great age, almost certainly date from before the settlement of Canberra along Acton Ridge.




Map	2011 Photograph*	Description	Natural heritage value
IRT1		Over mature <i>Eucalyptus melliodora</i> individual on Clunies Ross Street.	Individual relic tree from the natural woodland community on the lower slopes of Black mountain.
IRT2		Mature <i>Eucalyptus blakeleyi</i> individual in the grounds of the Psychology Building (39) (northwest of campus).	Individual relic tree from an isolated stand of Yellow Box – Red Gum Grassy Woodland. Probably part of the <i>Eucalyptus blakeleyi</i> group at GRT8.



Map	2011 Photograph*	Description	Natural heritage value
IRT3		Over mature <i>Eucalyptus bridgesiana</i> individual north of Dickson Precinct Parking Station and behind John XXII College.	Individual very old relic tree from Yellow Box – Red Gum Grassy Woodland.
IRT4		Mature <i>Eucalyptus melliodora</i> individuals in the carpark on corner of Lennox Crossing Road and Lawson Crescent.	Individual relic trees from the large extant natural woodland community south of University House.
IRT5		Over mature <i>Eucalyptus melliodora</i> individual on the island between Balmain Crescent and Balmain Place. (Younger <i>E. rubida</i> in front).	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.
IRT6		Over mature <i>Eucalyptus blakeleyi</i> individual in the grounds of Liversidge Court Apartments.	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.
IRT7		Over mature <i>Eucalyptus bridgesiana</i> individual on the corner of Fellows Road and East Road, outside the Law Building. It is an isolated individual from the relic group at GRT7, but is significantly older than this group.	Individual relic tree from the Yellow Box – Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Fellows Road from Ellery Court.

Map	2011 Photograph*	Description	Natural heritage value
IRT8		Over mature <i>Eucalyptus blakeleyi</i> individual on Garran Road, northwest of University House.	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.
IRT9		Over mature <i>Eucalyptus melliodora</i> individual on the eastern side of Ellery Crescent at the intersection with East Road.	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.  Listed as a significant tree in Pryor and Banks (2001) <sup>21</sup> as '200-300 years old'.
IRT10		Over mature <i>Eucalyptus melliodora</i> individual on the western side of Liversidge Street at the HC Coombs Building.	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.



Map	2011 Photograph*	Description	Natural heritage value
IRT11		Over mature <i>Eucalyptus bridgesiana</i> individual on the northeastern corner of the Old Administration Area.	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.  Listed as a significant tree in Pryor and Banks (2001) <sup>22</sup> as 'c200 years old'.
IRT12		Over mature <i>Eucalyptus blakeleyi</i> individual on the corner of Fellows Road and East Road, outside the Law School Buildings.	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.  Listed as a significant tree in Pryor and Banks (2001) <sup>23</sup> as 'Blacksmith's Tree' due to pieces of iron in the trunk.
IRT13		Over mature <i>Eucalyptus melliodora</i> individual on Fellows Road, next to Building 10B.	Individual relic tree from the original Yellow Box – Red Gum Grassy Woodland of Acton Ridge.

\* Source of photograph: Neil Urwin, Griffin Associates Environment, 2011

### 3.3.3 Fauna

Banks (1979) made the following observations about the past and present (1979) fauna of the ANU campus area:

*Wallabies and kangaroos once grazed on the area now occupied by the campus and possums were so common as to be an agricultural pest. One early report records a wallaby drive on Black Mountain during*

*which 217 wallabies were shot. On another occasion more than 1000 possums were killed in a single night. Early attempts to breed rabbits in the area proved futile because the predatory Native Quolls and Tiger Quolls were in such large numbers. Dingos were common and damage to grain crops from various species of parrots and cockatoos was a continual problem to early settlers.*

*Many other species of birds and mammals once occurred in the area, but the ones that received most attention from colonists were those regarded as agricultural pests or hunted as game. At the time of the first European settlement the campus supported open areas of grassland and some open woodland. A diverse fauna typical of southern woodland inhabited the land. The continued pressures of grazing, and eventually close settlement have resulted in the complete disappearance of many of these species, although a few still remain.*

*Brushtail Possums and several species of small, insectivorous bats are still fairly common on campus and Grey Kangaroos and Greyheaded flying foxes are occasionally seen. Water rats are common in Sullivans Creek, particularly where it opens out into the lake.*

### **3.3.4 Wildlife in the Landscape**

The Biodiversity Management Plan, Acton Campus ACT (2011)<sup>24</sup>, contains an inventory of wildlife on campus drawn from the Lower Sullivans Creek Catchment Ecological Survey (LSCCES) of 2002–03 which was undertaken to inform the ANU Environmental Management Plan.<sup>25</sup> The LSCCES is a partnership between the ANU, surrounding landholders (the Australian National Botanical Gardens (ANBG), ACT Government, CSIRO Black Mountain, National Museum of Australia, the National Capital Authority (NCA) and the local Catchment Group (Sullivans Creek Catchment Group). The findings of these surveys, relating specifically to the ANU campus area, are summarised below.

#### **Birds**

In the 2002 to 2003 seasonal bird surveys almost 100 species were recorded. They included 70 terrestrial species, 22 water/wetland species and 6 pest species. Distribution of species is spread mainly along vegetated corridors, extending from source habitat to the west of the campus and along the two main water resources (Sullivans Creek and the lake shore). The survey concluded that the ready availability of healthy water sources makes a significant contribution to bird biodiversity across the study site, in particular waterbird species.

Two species recorded within the study area are listed on the ACT and New South Wales threatened species lists:

- Varied Sitella (*Daphoenositta chrysoptera*)—ACT Threatened Species
- Gang-gang Cockatoo (*Callocephalon fimbriatum*)—NSW Threatened Species

#### **Mammals**

The Acton campus hosts a small number of native mammals:

- Brushtail Possum (*Trichosurus vulpecula*)—widespread
- Ring-Tailed Possum (*Pseudocheirus peregrinus*)—Sullivans Creek
- Sugar Glider (*Petaurus breviceps*)—Forestry

- Bat (*Microchiroptera*(?))—Sullivans Creek
- Echidna (*Tachyglossus aculeatus*)—Toad Hall grounds
- Water Rat (*Hydromys chrysogaster*)—Sullivans Creek

Sullivans Creek corridor and vegetation linking through to source habitat to the west provided the main habitation zones for species sighted on the campus. A sighting of a platypus in Sullivans Creek (on 20 April 2011 by postgraduate biology students) has added this important species as a possible campus resident.

### **Amphibians**

Seven frog species were observed across the Acton campus, representing all but two of the frog species recorded in lowland woodland complexes in the ACT and six of the 10 commonly observed lowland native grassland species. The frogs found at the ANU include the following:

- Common Eastern Froglet (*Crinia signifera*)
- Plains Froglet (*Crinia parinsignifera*)
- Eastern Banjo Frog (*Limnodynastes dumerili*)
- Striped Marsh Frog (*Limnodynastes peronei*)
- Spotted Grass Frog (*Limnodynastes tasmaniensis*)
- Peron's Tree Frog (*Litoria peronei*)
- Whistling Tree Frog (*Litoria verreauxii verreauxii*)

The most common of these frogs on campus are the Striped Marsh Frog, a lowland woodland species, and the Common Eastern Froglet and Spotted Grass Frog, which are recorded regularly along Sullivans Creek.

### **Reptiles**

Lone individuals of three different reptile species were recorded on the Acton campus. These were the Delicate Skink (*Lampropholis delicata*), Three-toed Skink (*Hemiergis decresiensis*) and the Eastern Water Dragon (*Physignathus leseurii*). A more intensive survey method would be expected to record other common species, such as the Eastern Blue-tongue Lizard and the Long-necked Turtle.

#### **3.3.5 Diversity and Values**

The Canberra Nature Park Plan of Management<sup>26</sup> lists recordings of 12 different mammal species and 28 reptile and amphibian species for the combined open forest and woodland areas associated with Black Mountain, Mt Ainslie, Mt Painter and Red Hill. The same Plan of Management notes that the diversity of bird fauna in the ACT is due not only to the range of natural habitats in the region, but also the habitats created by city gardens, parks and the artificial urban lakes. Of the 245 bird species recorded for the ACT by the National Parks Association<sup>27</sup>, only a proportion would be indicative of the diversity present in the natural habitats of the Limestone Plains and adjacent high ground.

The biodiversity values for the ANU campus study area compare very favourably to these areas—especially when the degree to which the campus is built-up and modified is taken into account. The habitats and wildlife corridors provided by (i) the remnant native vegetation, (ii) Sullivans Creek vegetation, water bodies and soft edges, and (iii) the lake foreshores, are responsible for this relatively high biodiversity.



**Figure 3.7:** Main wildlife habitats (Sullivans Creek, lakeshore and remnant woodland) and native fauna of the campus (Water Dragon, Water Rat, Echidna and Brush-tailed Possum). (Source of photographs: Neil Urwin, 2011 and Biodiversity Management Plan, Acton Campus ACT.)

### 3.4 Endnotes

- <sup>1</sup> Estcourt G., 2007 Indigenous Heritage Study – Stage 1 Overview of ANU Properties. Unpublished report to ANU Green. p3.
- <sup>2</sup> Dexter, D., 1991 The ANU Campus. Published by the Australian National University, Canberra. p3.
- <sup>3</sup> Ibid. p4.
- <sup>4</sup> Estcourt, op. cit. p3 and Dexter, op.cit p5. note that Dexter provides an ANU Radiocarbon Laboratory date of 27,000 years BP while Estcourt references Officer 1995 at 28,000 years BP.
- <sup>5</sup> Dexter, op. cit. p5.
- <sup>6</sup> Pryor, L.D. 1971 as referenced in Dexter op. cit. p7.
- <sup>7</sup> Ibid.
- <sup>8</sup> Ibid.
- <sup>9</sup> Henderson, G.A.M. and Strusz, D. L. 1982, Rocks and Fossils around Canberra, Bureau of Mineral Resources, Australian Government Publishing Service, Canberra.
- <sup>10</sup> Godden Mackay Logan, 2006, *Lake Burley Griffin Heritage Management Plan*. Report to the National Capital Authority, Canberra ACT.
- <sup>11</sup> Environment ACT, 2005, *A Vision Splendid of the Grassy Plains Extended - ACT Lowland Native Grassland Conservation Strategy*, Action Plan No. 28, Arts, Heritage and Environment, Canberra.
- <sup>12</sup> Pryor, L. 1938, The botany, forestry and zoology of the Australian Capital Territory on an ecological basis, in *Handbook for Canberra*, ed, K. Burns, ANZAAS Meeting, Canberra, January 1939. Canberra: Commonwealth Government Printer.
- <sup>13</sup> NCA Photographic Collection, and in Öpik, A. A. 1958, The Geology of the Canberra City District, Bulletin No. 32, Department of National Development, Bureau of Mineral Resources, Geology and Geophysics.
- <sup>14</sup> Reproduced in 'The *Griffin's Legacy*, Canberra the National's Capital in the 21<sup>st</sup> Century', National Capital Authority, 2004.
- <sup>15</sup> Reproduced in 'The *Griffin's Legacy*, Canberra the National's Capital in the 21<sup>st</sup> Century', National Capital Authority, 2004.
- <sup>16</sup> Pryor, L.D. and Banks, J.C.G. 2001 (2<sup>nd</sup> Edition), *Trees and Shrubs in Canberra*, Little Hills Press, Canberra.
- <sup>17</sup> Burbidge, N.T. and Gray, M. 1970, *Flora of the Australian Capital Territory*. ANU Press, Canberra.
- <sup>18</sup> NCDC, 1984, *The Ecological Resources of the ACT*, National Capital Development Commission, Canberra.
- <sup>19</sup> Australian Heritage Commission 2002, *Australian Natural Heritage Charter for the conservation of places of natural heritage significance 2<sup>nd</sup> ed*. Environment Australia, Canberra.
- <sup>20</sup> ANU Green 2011, *Biodiversity Management Plan, Acton Campus ACT*, unpublished report prepared for the Australian National University, April 2011.
- <sup>21</sup> Pryor, L.D. and Banks, J.C.G. 2001 (2<sup>nd</sup> Edition), *Trees and Shrubs in Canberra*, Little Hills Press, Canberra.
- <sup>22</sup> Pryor, L.D. and Banks, J.C.G. 2001 (2<sup>nd</sup> Edition), *Trees and Shrubs in Canberra*, Little Hills Press, Canberra.



<sup>23</sup> Pryor, L.D. and Banks, J.C.G. 2001 *ibid*.

<sup>24</sup> ANU Green 2011, *Biodiversity Management Plan, Acton Campus ACT*, unpublished report prepared for the Australian National University, April 2011.

<sup>25</sup> ANU 2009, Environmental Management Plan, Implementation Strategies 2009 to 2015, Australian National University April 2009.

<sup>26</sup> Environment ACT, 2005, *op cit*.

<sup>27</sup> Taylor, M. and Day, N. 1999, *Field Guide to the Birds of the ACT*, National Parks Association of the ACT Inc.

## 4.0 Indigenous Context

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### 4.1 Introduction

This section presents the summary of an Indigenous Heritage Values Assessment for the ANU Acton Campus, 2011, prepared by GML. This assessment provides the opportunity for Indigenous heritage values to be outlined and integrated into the heritage assessment for the whole site; the ANU Acton campus.

Indigenous heritage conservation and management aims to sustain the relationship between Indigenous people and their heritage places. Assessments of Indigenous heritage values should take into consideration the principles outlined in *Ask First: A guide to respecting Indigenous heritage places and values*, prepared by the Australian Heritage Commission, 2002<sup>1</sup>, in which consultation is a key factor in the process of identifying heritage values:

*In recognising the rights and interests of Indigenous peoples in their heritage, all parties concerned with identifying, conserving and managing this heritage should acknowledge, accept and act on the principles that Indigenous people:*

- are the primary source of information on the value of their heritage and how this is best conserved;*
- must have an active role in any Indigenous heritage planning process;*
- must have input into primary decision-making in relation to Indigenous heritage so they can continue to fulfil their obligations towards this heritage; and*
- must control intellectual property and other information relating specifically to the heritage, as this may be an integral aspect of its heritage values.<sup>2</sup>*

The methodology for the Indigenous heritage assessment for the ANU comprised four main activities:

- **Consultation:**

Consultation was undertaken with the Indigenous community as a means of establishing their views of the heritage values of the site. This practice is standard for assessments under the EPBC Act and serves to draw out the intangible heritage values that cannot be readily assessed through research and site inspections.

- **Background Research:**

Background research into the cultural values of the campus included discussions with ACT Heritage regarding registered and recorded sites in the area, and a review of consultant reports for other projects and studies in the area. The background research assisted in predicting the likely location of archaeological sites within the study area.

- **Site Assessment:**

The site assessment was informed by background research; whereby parts of the site were targeted for inspection to assess the likelihood of predicted archaeological sites surviving. The opportunity for all of the Indigenous representatives to participate was offered. However, all of the groups attended the site separately and not all individuals chose to walk around the

campus to inspect the site. This was reflective of the general understanding that the campus had been subject to a significant amount of disturbance.

- Recommendations:

Recommendations were prepared based on the consultation discussions and also the assessment of the site's archaeological potential. The recommendations reflect the views of the Indigenous representatives. These are included in the full report 2011 Indigenous Heritage Values Assessment for the ANU Acton campus.

## **4.2 Consultation**

### **4.2.1 Methodology and Process**

As part of the process of assessing the Indigenous heritage values of a place, the heritage values associated with it must be identified by the relevant local Indigenous community.

The Commonwealth Heritage Management Principle 6 states:

*Indigenous people are the primary source of information on the value of their heritage. The active participation of Indigenous people in identification, assessment and management is integral to the effective protection of Indigenous heritage values.<sup>3</sup>*

The guidelines for managing Commonwealth Heritage values recommend that the local Indigenous community be engaged in accordance with the Ask First guidelines.

These guidelines generally require that the relevant Traditional Owners and any other Indigenous People with rights and interests in the area are identified. Identifying them is a matter of contacting Land Councils, local Councils, state authorities (such as ACT Heritage) and any other known group or authority who may provide the relevant information. It is not a specifically prescriptive process. Fortunately, the process has been addressed in the ACT through the issuing of an official 'Representative Aboriginal Organisation' (RAO) list by ACT Heritage.

### **4.2.2 ACT Representative Aboriginal Organisations**

The RAO list issued by ACT Heritage identifies the following four groups for consultation:

- Buru Ngunawal Aboriginal Corporation.
- Consultative Body Aboriginal Corporation on Indigenous Land and Artefacts in the Ngunnawal Area.
- Little Gudgenby River Tribal Council.
- Ngarigu Currawong Clan.

At present there are no specific ANU protocols for liaison with the Indigenous community. In general, the ANU subscribes to the processes and practices of the Ask First guidelines. The consultation used the following procedure, whereby each group was:

1. contacted by phone to establish whether or not they had an interest in being part of the project. Each of the groups nominated an interest;
2. offered the opportunity to meet initially to discuss the project;

3. invited to discuss the project on site, and to walk around the site to identify heritage values, and also to identify places and to discuss elements of the site; and
4. forwarded a copy of the report for comment.

### 4.2.3 Indigenous Engagement with the Process

Each of the four identified RAOs nominated an interest in the area. The following representatives were contacted and participated in discussions:

- Wally Bell—Buru Ngunawal Aboriginal Corporation.
- Carl Brown—Consultative Body Aboriginal Corporation on Indigenous Land and Artefacts in the Ngunnawal Area.
- Matilda House—Little Gudgenby River Tribal Council.
- Ellen Mundy—Ngarigu Currawong Clan.

Initial meetings to outline the project were held with Wally Bell, Carl Brown and Ellen Mundy, while Matilda House elected to meet and discuss the project on site. Further on site discussions were conducted with Wally Bell, and at a separate time with Ellen Mundy and Tony Boye (both representing the Ngarigu Currawong Clan), and also with Michelle House on behalf of the Little Gudgenby River Tribal Council.

Each group has offered their perspective on the heritage values of the area. These heritage values are discussed in Section 4.6.

## 4.3 Historic and Cultural Background

Historical observations and archaeological evidence attest to the occupation of the Black Mountain and Sullivans Creek area by Indigenous people prior to the settlement of the area by Europeans.<sup>4</sup> Bluett in 1954 noted that early settlers had recorded observations of at least 'one group camped at the foot of Black's Mountain close to Canberry Creek'.<sup>5</sup>

*Both the quantity of Aboriginal artefacts found in Canberra and the ethno-historical record testify to its equal importance as a meeting place in prehistoric times.<sup>6</sup>*

Various other historical observations also note that the area was well used by Aboriginal people and was rich in food sources.

According to Gillespie<sup>7</sup>, resources in this environment would have been good, including freshwater fish like Murray Cod in the Molonglo River, a variety of reptiles, birds, insects (Bogong Moths) and larger animals like the possum, wallaby and kangaroo, as well as a variety of roots and yams.

Observations by Wright in 1923 (as recorded by Watson in 1927) include the following succinct observational summary with regard to the Aboriginal group in the Canberra area, with specific reference to Black Mountain:

*The tribe numbered about four or five hundred individuals divided into isolated groups, who camped where food was plentiful. Excepting on special occasions such as a corroboree, a camp usually was formed by one family. A camp consisted of a rude shelter, made of boughs for protection against rain and the prevailing winds, or, when the camp was more permanent, a hut was constructed of bark.*



*Usually the aborigines carried two to six spears each, some of which were barbed and some plain. The spears were hurled with throwing sticks or womerahs. They also used boomerangs, nulla nullas or clubs made of wood, and stone axes. For purpose of defence, they used two forms of shields; one was broad and light for defence against spears and the second smaller and more solid for defence against nulla nullas. They made fishing lines and snares out of the tendons drawn from the tails of kangaroos and wallabies. They constructed canoes from bark, which were cut from a suitable elbow of a tree and were structures very like the early English coracles. For protections against the cold, they made rugs or cloaks from the skins of kangaroos and wallabies.*

*Their food consisted of opossums, wallabies, bandicoots, turtles, fish, eggs, grubs and snakes. These were cooked whole, after their entrails had been removed; and, at each repast it was customary for the male aboriginal to consume the most savoury and delicate portions.*<sup>8</sup>

The Black Mountain area would also have provided protection from the prevailing northern winds and provided a close source of water. Flood<sup>9</sup> observes that the general range of material cultural artefacts would in fact have been moderately restricted in quantity and complexity—reflecting the need for greater upland mobility based on climatic restrictions. According to Moss:

*It is probable that sites on the northern side of the Molonglo would have preference in the summer while the sheltered valleys on the south side would prove more congenial in winter, but in my opinion stone age man did not remain in the city area through winter on account of the low temperatures which prevail. He would probably have spent the winter months in the warmer climates of the Murrumbidgee Valley.*<sup>10</sup>

Flood<sup>11</sup> also notes that climatic restrictions will have been a factor in reduced population sizes in the groups in the uplands areas; smaller groups were favoured due to the need to migrate between seasonal resource zones and pursue warmer climates in the colder months. Groups are typically recorded as beginning around 20–30 people, coming together in larger groups for festive/meetings occasions. Population estimates vary from around 500<sup>12</sup> people to around 700–800<sup>13</sup> people for the total tribal size in the area, although their congregation as a total group was rare. Smaller group estimates vary from ‘family or larger groups’ up to around 50 people.<sup>14</sup>

Kabaila<sup>15</sup> has interpreted the groups of Aboriginal people camped at the base of Black Mountain as evidence of seasonal, nomadic habitation. Ethnohistorical records indicate that the rudimentary shelters (mia-mias) being made were temporary, seasonal camps, rather than permanent camps, and were set up along a nomadic route, used as necessary based on the availability of resources. The ‘nomadic route’ was well defined and identified by Kabaila<sup>16</sup> as a pathway along Canberry (Sullivans) Creek and between Black Mountain and O’Connor Ridge heading west towards Belconnen.

The base of Black Mountain is identified in a number of historic sources as the site of one of the main ceremonial areas in Canberra.<sup>17</sup> The site was identified as being located at the ‘former Administrative offices at Acton’<sup>18</sup>—a location which has since been established as the current entrance to the Botanical Gardens<sup>19</sup> (this was also corroborated by one of the Aboriginal representatives while on site—see Section 4.6).

Kabaila quotes the following description from Bluett:

*The night would be lit up with the cooking fires at a hundred or more mia-mias spread along the Creek; the four or six blazing bonfires lighting up the big cleared dancing ground; the painted and decorated performers, greased bodies glistening in the firelight; children goggle-eyed with excitement; old men chanting and tapping their feet; the women clapping hands and slapping buttocks to the rhythm of the dance.*<sup>20</sup>

Estcourt observes that the arrival of European settlers had a devastating impact on the local Aboriginal populations<sup>21</sup> with the 1860s population of around 60 people reduced to 5 or 6 by 1872. This was reported in the *Goulburn Herald* on 9 November 1872. The main culprit was disease: 'diseases such as measles and smallpox had decimated the Aboriginal population of the Highlands, and only a few survivors remained' by the 1870s'.<sup>22</sup>

According to Jackson-Nakano<sup>23</sup>, Bluett in 1954 recorded that Aboriginal people were still occupying and working in their own country in 1927, despite the fact that the land had been incorporated into the Federal Capital Territory. However, the numbers of Aboriginal people appeared to have been fairly low with the observation that:

*Up to the acquisition of the territory by the Commonwealth there were some ten or twelve purebreds and lighter shades working in their shiftless, spasmodic way on Yarralumla and surrounding stations. These have either died or drifted onto other parts. Canberra knows them no more<sup>24</sup>*

The presence of contemporary Aboriginal families with connections to their country indicates that the Aboriginal people may not necessarily have 'died or drifted onto other parts', but may have been existing quietly in the area as a 'silent presence'<sup>25</sup> during the early to mid-twentieth century.

## 4.4 Archaeological Background

### 4.4.1 Contextual Data

In archaeological terms, the intensive occupation of the Canberra area is evidenced by the 'large numbers of implements and flakes which have been found in several places in the city area including Pialligo, Black Mountain Peninsula and the slopes of Mt Ainslie'.<sup>26</sup>

Local historian Lyall Gillespie collected many artefacts from the areas mentioned above throughout the 1970s. As he reported: 'On each occasion I found more implements and flakes—more than 500 in total. The implements were mainly scrapers, blades and points. I also found pieces of good quality ochre and animal bones, which had been buried for a long time'.<sup>27</sup>

Some decades earlier, from 1929 through to the late 1930s, HP Moss was collecting artefacts in the areas of Black Mountain and Black Mountain Peninsula, as well as around the Old Canberra Hospital and Sullivans Creek. The collection included a diverse range of artefacts and that supported Gillespie's later observations.<sup>28</sup>

The areas of the Federal Capital Administrative Offices (now occupied by the Botanic Gardens) and also the Old Canberra Hospital (now part of the ANU) were surveyed by Moss and '30 artefacts and 23 items of debitage'<sup>29</sup> were recovered. A survey of the Acton Peninsula recovered 'nine thumbnail scrapers, three cores, one undescribed artefact, one backed blade, one hammer stone, six hammer anvils, one burin, four fragments of/or complete ground axes, two utilised flakes, one mortar, one scraper and twenty-three items labelled as waste material'.<sup>30</sup>

In 1934 Kinsela found a hatchet on the site of the Film and Sound Archive, and further work between the Old Canberra Hospital, Institute of Anatomy (Film and Sound Archive) and Sullivans Creek revealed a large grinding stone and two pounding stones.<sup>31</sup>

When summarising the length of time Aboriginal people occupied the region, Kabaila notes: 'Upper sediments of archaeological excavations [around Canberra] have found evidence of a permanent, intense occupation of the region beginning from....4,500 years ago'.<sup>32</sup> However, Flood notes that on

a broader scale there is evidence (Birrigai rock Shelter near Tidbinbilla) that the general area was occupied at around 21,000 years ago.<sup>33</sup>

Recent research by Kabaila at Black Mountain included the recording of another archaeological site. The site comprised 15 artefacts, including microflakes and cores indicating that the site was used for stone tool working and manufacturing<sup>34</sup>. It was located close to the Botanic Gardens entrance in an area with a nearby water course and was interpreted as being evidence of a more permanent longer-term encampment.

Other observations about Black Mountain include Gillespie's note that ochre has been found there<sup>35</sup>, and Kabaila's recording of a stone arrangement comprising a ring of rocks approximately 13–16m in diameter with a small ring (3m diameter) within it. However, Kabaila casts some doubt about its authentic origin, suggesting it could be a recent (1950s) artefact of cultural parallelism.<sup>36</sup>

#### 4.4.2 Archaeological Site Predictive Model

Based on archaeological observations and historical records it is possible to make some predictions about the nature and possible locations of potential archaeological sites.

Cultural activities likely to result in archaeological site production include occupation/inhabitation of the area, the production of stone tools, trading of items, and possibly ceremonial activities—although the latter is likely to have been undertaken in known locations off site.

The most likely archaeological expressions of these activities will include:

**Artefact scatters**—these are the evidence of where people lived in the past and what they did. These are the most common type of Aboriginal heritage place. They usually consist of fragments of broken stone ('artefacts') that are part of the process of making and maintaining stone tools. They may also include remains of food items (bones, shell) and processes (charcoal). Rarely other artefacts made from wood and shell are also found in these sites. Artefact scatters as evidence of the occupation of the site are likely to have existed anywhere across the campus because of its proximity to Sullivans Creek; generally resource-rich zones and known ceremonial areas. Very dense artefacts scatters with a wide range of shapes and sizes of artefacts may be indicative of a manufacturing site.

**Isolated artefacts**—individual artefacts on the landscape usually comprising pieces of stone tool dropped as Aboriginal people travelled across and generally used the landscape. In an area of intensive occupation they may be less obvious because of a higher overall background scatter of artefacts.

**Hearths**—fireplaces defined as small rings and clusters of heat-affected stones with charcoal, possibly also stone artefacts and bone- or shell-based food remains. Hearths usually (although not exclusively) occur in conjunction with artefact scatters and indicate the inhabitation of an area.

**Scarred trees**—trees where bark has been removed in large strips to be used for various items like containers, shelter and canoes. Ethnohistorical reports of bark and grass *mia-mias* in the Sullivans Creek area suggest that scarred trees are possible.

#### 4.4.3 ACT Heritage Register Search

A search of the ACT Heritage Register for sites in and around the ANU campus revealed two recorded sites within the boundary of the campus, both of which have been destroyed, and six sites on the eastern side of Black Mountain. Figure 4.1 shows the locations of these sites.

### *Sites within the Acton Campus*

The two sites within the campus are recorded as:

**Sullivans Creek 1:** a corroboree site recorded in the CAS database from information provided by Bluett in 1954. The site is listed as destroyed, but location data indicates that it was close to the lower reaches of Sullivans Creek.

**Institute of Anatomy Site:** a hatchet found in 1934 by Kinsela. The location of this artefact was recorded as 100m west of the Institute of Anatomy, near Sullivans Creek. The details of the location are unknown but it is considered to have been destroyed.

### *Sites on the eastern side of Black Mountain*

The six sites on the eastern side of Black Mountain include:

**BM1:** Isolated artefact recorded by Barz in 1985<sup>37</sup> (no description details) located just off Black Mountain Drive.

**BM2:** Artefact scatter comprising three artefacts also recorded by Barz in 1985 (no description details). Located on a small terrace on a ridge running down the eastern side of Black Mountain towards the southern end of Sullivans Creek.

**BM3:** Isolated artefact recorded by Barz in 1985 (no description details) but located nearby on the same ridge as BM2.

**BM4:** Artefact scatter and Potential Archaeological Deposit (PAD) recorded by Barz in 1985. Comprises 19 artefacts, including quartz, quartzite and chert pieces. Artefact types include two cores and the rest flakes.

**BM5:** Scarred tree of probable Aboriginal origin recorded by Officer in 1995.<sup>38</sup> Located up the northern side of Black Mountain to the west of CSIRO.

**BMF9:** Isolated artefact recorded by Navin Officer 2003.<sup>39</sup> No description details provided. Located to the west of BM5.



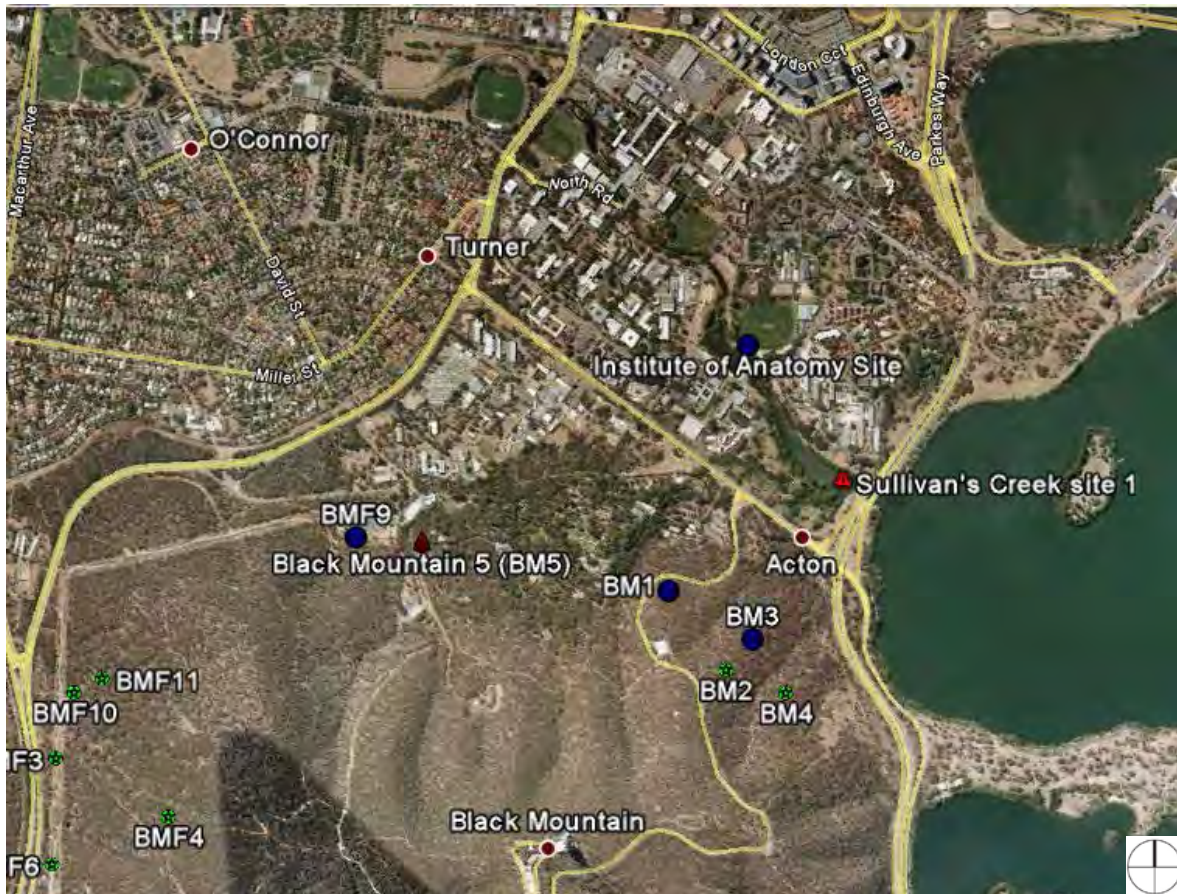


Figure 4.1 Location plan showing sites recorded in the ACT Heritage Register in and around the study area. (Source: ACT Heritage Unit)

## 4.5 Summary of the Archaeological Potential

In summary, ethnohistorical observations from the area and archaeological reports indicate that the study area, prior to European settlement, was a rich cultural zone where the resource-rich environment of the Sullivan's Creek valley provided a forum for ceremonial activities in the nearby area.

Bluett's 1954 reports of hundreds of cooking fires along the creek, Wright's 1923 reports of the cultural details of everyday life of the people camping at the base of Black Mountain, along with reports of ceremonial sites at what is now the Botanic Gardens, all suggest a complex and stable society.

Collections of artefacts in the past indicate the reasonably intense occupation of the zone with a complex technological assemblage.

These factors suggest that the ANU Acton campus is likely to have the potential for archaeological remains in the less disturbed parts of the study area.

The presence of known ceremonial sites in the area suggests that there may also be spiritual and mythological values associated with the study area and its surrounds. These intangible heritage values were explored through the consultation process and are discussed in Section 4.6 of this report.

Since the commencement of the construction of the ANU, the landscape in the area has been extensively modified. A few areas appear to have been subjected to less disturbance, including the southern reaches of Sullivans Creek, the area between Parkes Way and the Old Canberra Hospital Precinct, as well as the area to the south and west of Old Canberra House, including some parts of the International Sculpture Garden. These areas have some, albeit low, potential for the survival of Indigenous archaeological sites and artefacts.

Given the site's disturbance history, other than the areas mentioned above there would appear to be little potential for archaeological remains to survive in situ unless they were buried beneath layers of relatively recent disturbance. During consultation, one of the groups suggested that the Sullivans Creek area may retain buried evidence of the early (Pleistocene) occupation of this area. While the creekline has been extensively modified in the past, some consideration may be given to the possibility that deeper, buried remains exist on the campus.

## 4.6 Observations from the Indigenous Community

The following observations about the ANU campus and surrounding area were made by the individual representatives from the ACT's RAOs. Most observations were made independently between the groups, indicating a generally held common understanding of the place. Some observations have been paraphrased and abbreviated due to the sensitive nature of the material provided by some of the representatives. The meanings and values associated with the material have not been changed.

Parts of the ANU campus with cultural significance include:

- 1 The **biodiversity corridor** along Sullivans Creek and into Acton Ridge is important. It reflects the fact that Sullivans Creek was an important water course and resource zone that will have contributed to the attractiveness of the place as a meeting area. The conservation of this zone is considered important.
- 2 The **whole of the campus** is significant due to the high usage of the area by Aboriginal people prior to the arrival of Europeans. It was part of a well-used zone for meetings and trading, and was located in close proximity to important ceremonial areas, including the corroboree site near the entrance to the Botanic Gardens. The intensity of use of the area is attested to by the historical observations about the number of campfires along Sullivans Creek.
- 3 Despite its recent modification, **Sullivans Creek** itself is identified as a feature that embodies the significance of the campus as a meeting place as well as a resource-rich zone. The conservation of this feature is important. The rehabilitation of the northern section of this waterway for natural water filtering is also considered to be an important proposal.
- 4 **Acton Ridge** is part of a track that connected a series of important landmarks: Mount Rogers, Black Mountain and Capital Hill—the latter being a sacred site.

Surrounding features with associative cultural significance:

- 5 **Black Mountain** is an important landscape feature with connections to other landscape features.
  - In particular the connection between Mount Rogers, Black Mountain and Capital Hill is very important, as noted above.

- Black Mountain with Mount Ainslie formed a pair of landmarks also used for navigation and landscape recognition. They were seen as being representative of women's breasts.
- 6 More than one corroboree site was identified during this process: one where the entrance to the Botanic Gardens now stands (noted above), one just to the south of Black Mountain Drive and one further to the south, now submerged under the lake. None of these are directly affected by works on campus.
  - 7 Black Mountain was part of a longer and more substantial walking/tracking route up the east coast of Australia. Now parts of that walking track have been incorporated into the 'National Trail'.
  - 8 Black Mountain was also a place of significance which in the latter part of the year was a restricted access zone. It was not used or accessed during 'Law Time' which was during spring and into early summer.

## 4.7 Endnotes

- 1 Australian Heritage Commission 2002, *Ask First: A guide to respecting Indigenous heritage places and values*, Australian Heritage Commission, Canberra, p 6.
- 2 AHC 2002, *Ask First: A guide to respecting Indigenous heritage places and values*, p 6.
- 3 Department of the Environment, Water, Heritage and the Arts, *Guidelines for Management Plans on the Commonwealth Heritage List*, October 2005, p3.
- 4 Estcourt G., 2007 *Indigenous Heritage Study – Stage 1 Overview of ANU Properties*. Unpublished report to ANU Green. p 4.
- 5 Bluett W., 1954 *The Aborigines of the Canberra District at the arrival of the White man*. Unpublished paper read to the Canberra & District Historical society, 29<sup>th</sup> May 1954. p1
- 6 Flood, J. , 1980 *The Moth Hunters*. Published by Australian Institute of Aboriginal Studies, Canberra. p8.
- 7 Gillespie, L. 1979 'Aborigines of Canberra and nearby areas'. *Canberra Historical Journal* Vol 4. p19-25.
- 8 Wright 1923 in Watson, F. 1927. *A Brief History of Canberra, the capital city of Australia*. Published by Federal Capital Press of Australia Ltd., Canberra. p.14-15.
- 9 Flood, op. cit. p127.
- 10 Moss, H.P. 1939 *Evidences of Stone Age Occupation of the Australian Capital Territory*. Report of the Congress (ANZAAS) Vol 24. pp163-165.
- 11 Ibid. p128.
- 12 Watson op.cit. p14.
- 13 Gillespie 1979. p20.
- 14 Watson op cit and Gillespie op cit.
- 15 Kabaila, P. R. 1997 *Belconnen's Aboriginal Past: a glimpse into the archaeology of the Australian Capital Territory*. Published by Black Mountain Projects Pty ,Ltd. ACT. p47.
- 16 Ibid.
- 17 This observation is made by Wright 1923, Watson 1927, Moss 1939, Bluett 1954, Gillespie 1979, Flood 1980, Kabaila 1997 and Estcourt 2003.
- 18 Watson op cit p.15 and also Bluett 1954.
- 19 Estcourt, op.cit.
- 20 Bluett 1954:1 quoted in Kabaila op cit p48.
- 21 Estcourt op cit
- 22 Flood. op cit p8.
- 23 Jackson-Nakano, A. 2001, *The Kamberri: A History of Aboriginal Families in the ACT and Surrounds*. Aboriginal History Monograph 8, Weereewaa History Series Volume 1, Published in the ACT. p166.
- 24 Ibid.
- 25 Ibid p167.
- 26 Gillespie op cit. p20
- 27 Gillespie 1984:14 quoted by Kabaila op.cit. p47
- 28 Moss op cit

- <sup>29</sup> Estcourt op cit. p6.
- <sup>30</sup> Ibid. NB in this quotation Estcourt references Bindon 1973 and Freeman Collett 1993
- <sup>31</sup> Ibid.
- <sup>32</sup> Kabaila op cit. p31
- <sup>33</sup> Flood 1987 in Kabaila op cit p 31.
- <sup>34</sup> Kabaila p48.
- <sup>35</sup> Gillespie 1984 in Kabaila op cit p51.
- <sup>36</sup> Kabaila op cit p48
- <sup>37</sup> Barz, R. 1985 An Archaeological Survey of the site of the proposed extension to the Australian National Botanic Gardens, Canberra. As reported in the ACT Heritage Register. NB the Register attributes the authorship as 'Barx'.
- <sup>38</sup> Officer, K 1995 Aboriginal Archaeological Survey, Proposed Nursery and Depot Complex, ANBG, Canberra. As reported in the ACT Heritage Register.
- <sup>39</sup> Navin Officer 2003, Investigations of Aboriginal Heritage Places along fire trails in Canberra Nature Parks. Unpublished report to ACT Heritage Unit. As reported in the ACT Heritage Register.





## **5.0 Historic Heritage Values Discussion**

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### **5.1 Introduction**

This section provides the context for the historic development of the ANU—its planning and architectural history, and the potential for further research about its development and other heritage values.

The historic phases in Section 2.0 have been referred to in this section for continuity and to provide a substantiating framework for assessing the significance of the Acton campus as a whole in Section 7.0.

### **5.2 The Built Environment: Planning and Architecture of the ANU**

The role and influence of the ANU's founding academics, administrators, architects and planners are integral to the history of development, planning and architecture of the Acton campus. The campus planning reflects the range of personalities. Predominantly the most dominant of these were the academic advisers for their roles in founding the research schools. The schools each had their own academic autonomy and the University administration nurtured the schools; defending and promoting them without interfering with their structures and development decisions. The architects and planners had a difficult time of promoting and implementing the strength of their planning ideology for the University.

This section follows the chronological order of the particular separate historic planning phases.

#### **5.2.1 Phase 1: Early Canberra and Genesis—Griffins' Plan and the Location of the Australian National University (1912–1947)**

##### **Griffins' Plan for a University in Canberra (& the Canberra University College)**

In his first year as Minister for Home Affairs, King O'Malley, in a government led by Prime Minister Andrew Fisher, ensured that land would be set aside for a national university. The 1911 guidelines for the international design competition for the Federal City, prepared under his direction, contained instructions requiring the competitors to designate a suitable site for a university campus in their designs. Competition entrants placed the university in a range of prominent locations in their Federal City layouts.<sup>1</sup>

The winning design, Design Number 29, was prepared by Walter Burley Griffin, architect and landscape architect, of Chicago, USA. In more recent years, Griffin's partner, Marion Mahony Griffin—who prepared the elegant renderings of the competition entry—has also been credited with substantially contributing to the design. The Griffins proposed the university to be located in a prime position immediately to the west of the Municipal Centre. Comprising a large complex of structures at the foot of Black Mountain, it was to front ornamental lakes on its southwest and southeast perimeters. Describing their dramatic, stage-set vision for the Education Precinct, the Griffins wrote: 'Black Mountain rising almost directly out of the waters at the Western end of the Water Axis is set off from the formal pool by the University and surrounding professional schools, gardens, and forestry reserves.'<sup>2</sup> While the drawings did not include a detailed plan of the university—which was not required by the competition brief—the Griffins later provided a diagram identifying the academic disciplines to be studied, and indicating their interpretation of the relationship between theoretical and applied science in the 'university group'. A series of concentric and radial lines illustrated how

‘Fundamental sciences, descriptive by nature, lead directly to the theoretical sciences dependent upon them along lines of derivation and through these, in appropriate combination, into the lines along which they are applied to the work of civilization.’<sup>3</sup> Figure 5.1 below shows the Griffin diagram.

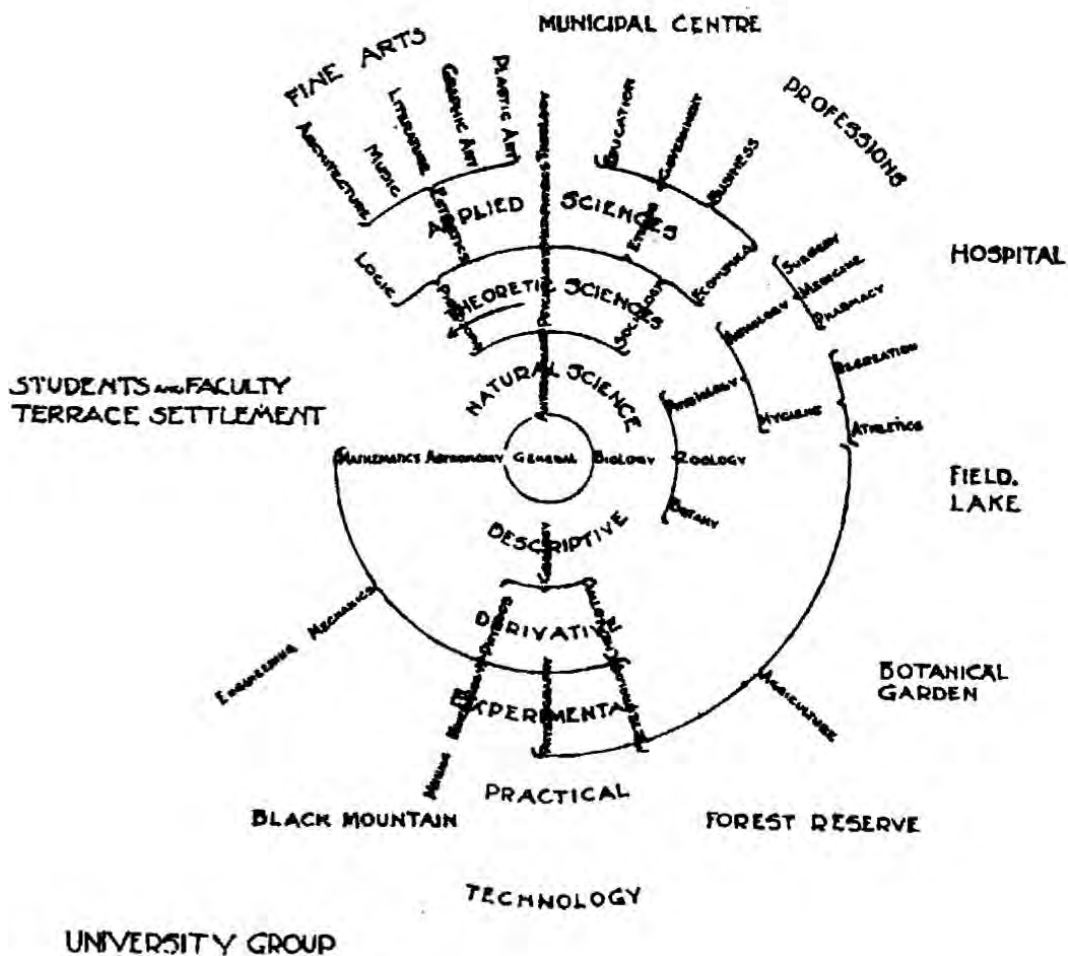


Figure 5.1 Walter Burley Griffin, "University Group". Griffin, "The Federal Capital, Report Explanatory of the Preliminary general Plan", 1913 (Source: S. G. Foster & Margaret M. Varghese, *The Making of the Australian National University* 1946-96)

The Griffins' idea that a contrived and geometric notion of a university—laid out in a rigid format of concentric circles—could somehow represent the growth of human knowledge, met with some early scepticism. In Australia, (Sir) Keith Hancock—who, much later, would become Director of the Research School of Social Sciences at ANU—wrote in 1929 how, in the Griffins' university plan, 'Everything is placed in relation to everything else', in accordance with what he described as a 'curious academic system'. Other doubts were raised about how this 'interesting exposition' could be translated into architectural reality.<sup>4</sup> Some of these concerns were warranted. Although the Griffins did allow for future expansion, it is very difficult to change, or add to, individual elements of a rigid plan without compromising the integrity of the whole. Such a tight and highly defined form of planning and building layout would perhaps prove to be too restrictive as the university's requirements changed, and as rapid expansion was required.

But, irrespective of any geometric limitations, the physical embodiment of the proposed university would prove to be a long time coming. The Federal City itself was subject to many delays, and, due to the interruption of World War I, did not become a functional national capital until 1927, when Federal Parliament relocated from its temporary home in Melbourne. Meanwhile, discussions about

the proposed university continued. Opinions about its role ranged from one in which it was to educate the sons and daughters of Canberra's comparatively well-educated population base—the newly arrived civil servants—to more ambitious proposals, where it would become 'Australia's Oxford, a prestigious national research and residential institution modelled on Britain's ivy league universities'.<sup>5</sup>

Eventually it was decided that plans for a full-scale university would be temporarily put on hold, in favour of a more low-key approach. A group of residents known as the Canberra University Association successfully lobbied the government for the establishment of a university college, believing that the presence of such an institution would reassure potential public service recruits in Melbourne or Sydney that they would 'not be coming to an educational desert'. As a result of their activities, the Canberra University College (CUC) was set up in 1930 in an informal relationship with the University of Melbourne.<sup>6</sup>

During the delay in establishing the University, the Department of the Interior established a new high school (1939) and sited it on land encompassed by Ellery Crescent. This location proved to be controversial because it was seen by some as interrupting the relationship between the city and the University. Although the Department of the Interior proceeded with the construction of Canberra High School, it also moved to create the National Capital Planning and Development Committee (NCPDC) to advise on future decisions that affected the philosophy of Canberra's town plan.<sup>7</sup>

During World War II discussions continued between the College Council and the NCPDC regarding the construction of a national university. Of paramount importance was whether the proposed site was adequate in size. In 1942 R. Keith Harris, an architect and member of the NCPDC, presented to both the College Council and the NCPDC a schematic plan of groups of buildings arranged on the site. In a further reference to the importance of relating the university to established Ivy League examples, Harris displayed plans, to the same scale, of existing university layouts at Oxford, Cambridge, Columbia, Berkeley, British Colombia and Sydney.<sup>8</sup>

### **The Grand Vision: Coombs' 'Intellectual Powerhouse'**

Herbert Cole ('Nugget') Coombs, Director-General of the Commonwealth Ministry of Post-War Reconstruction, assembled a group of 'brilliant staff'—including one architect, Grenfell ('Gren') Rudduck—in the old Acton hospital buildings<sup>9</sup>, where the Ministry was located from early 1943 until its abolition in 1946. The cornerstone of Coombs' vision for postwar Australia was the construction, in Canberra, of a new research-based national university. Later in his life, Coombs reflected that the University had been 'a kind of intellectual powerhouse for the rebuilding of society'.<sup>10</sup>

Coombs envisaged a grand design for a university—possibly the result of an architectural competition. However, the University's Interim Council and the Academic Advisory Committee favoured a more pragmatic approach, believing that it was more important to provide 'simple buildings' within a short timeframe than it was to pursue grand visions. They asked the Interim Council to appoint an architect immediately and, following the recommendation of a member—Roy ('Pansy') Wright—engaged Brian Lewis, Professor of Architecture at the University of Melbourne, as consulting architect in late 1947. Wright, who knew Lewis through his position as Professor of Physiology at the University of Melbourne, considered him a 'good fellow', and believed that his robust personality and no-nonsense approach would stand him in good stead for confronting the equally forthright Academic Advisory Committee and the Interim Council.<sup>11</sup> Others described the Tasmanian-born architect as 'a pugnacious and learned man, accustomed to having his own way', and 'short, red-haired, blunt, quick in repartee and even more aggressive by nature than Oliphant'.<sup>12</sup>



Refer to Figure 5.2 below for a photograph of three of the key academic advisers; Oliphant, Hancock and Florey inspecting the ANU site in 1948.



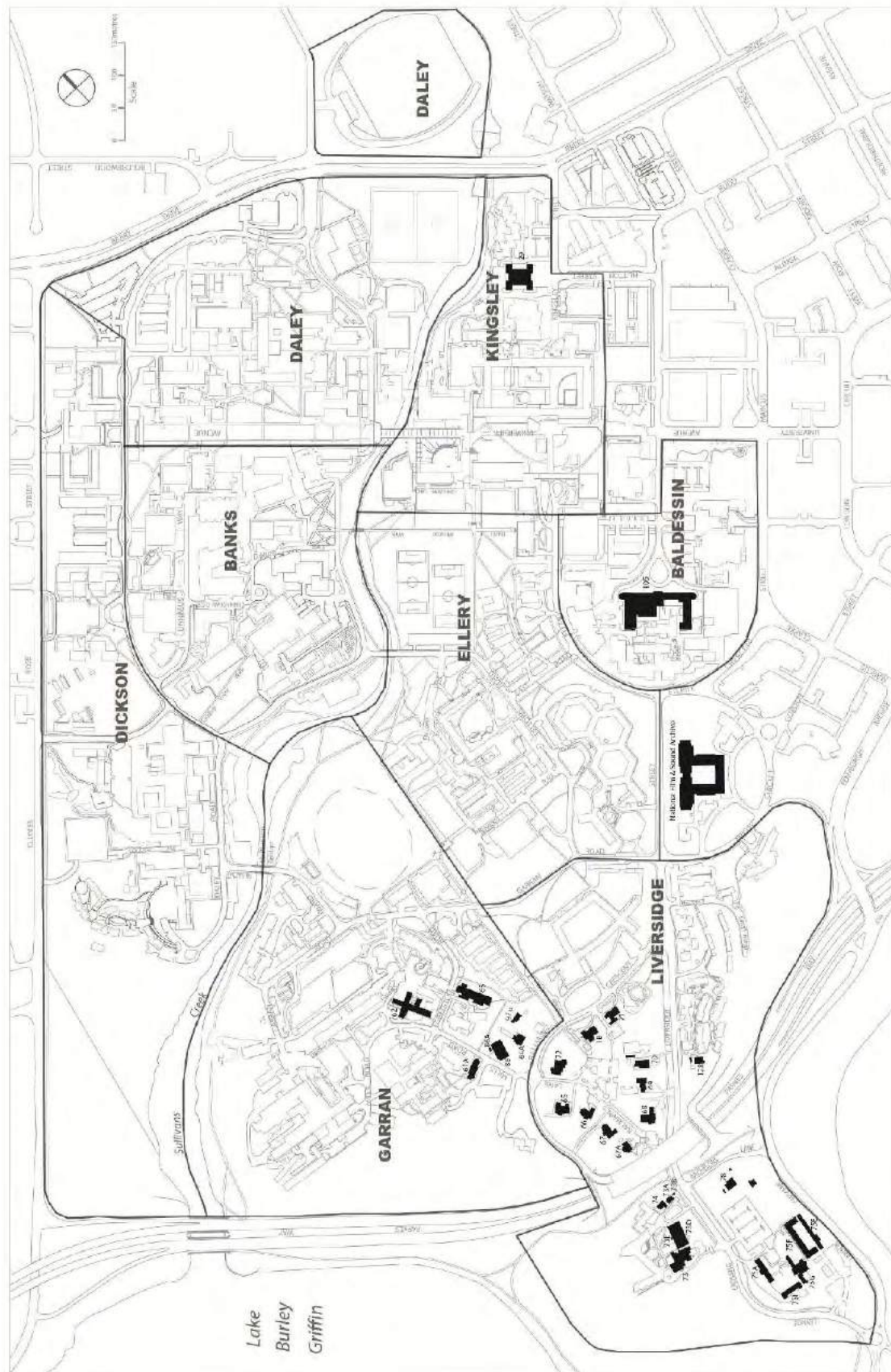
**Figure 5.2** Oliphant, Hancock and Florey inspect the ANU site, Easter 1948. (Source: Oliphant Papers, Barr Smith Library, University of Adelaide)

The key buildings constructed during this phase are listed below in Table 5.1.

**Table 5.1** Phase 1 (1912–1947): Key extant buildings developed in this phase. The buildings are listed in groups and are not necessarily chronological.

Building Name and Number	Details – Date and Architect	Precinct Location
16 Lennox Crossing 'Constable's Cottage'(28) and outbuildings	1912 one of the original seven cottages for the married men	Liversidge Precinct
3 Liversidge Street (68)	1927, designed by HM Rolland for Percy Dean, the secretary to Prime Minister Hughes	Liversidge Precinct
5 Liversidge Street (69)	1929, designed by TR Casboulte and built for Clerk of the Senate	Liversidge Precinct
7 Liversidge Street (70)	1913, by HM Rolland as his residence	Liversidge Precinct
8 Liversidge Street (128)	1916 one of original seven cottages for the married men	Liversidge Precinct
Old Canberra House (73)	1913, designed by John Murdoch, several subsequent changes from 1913	Liversidge Precinct
Tennis court and pavilion (73D and 73E) at Old Canberra House	1914 Tennis court and pavilion constructed for Administrator's Residence (Old Canberra House), graded by Weston	Liversidge Precinct
Gardener's cottage (74) at Old Canberra House	c1926 by the FCC	Liversidge Precinct

Building Name and Number	Details – Date and Architect	Precinct Location
Chauffeur's cottage (73A), at Old Canberra House	1938, possibly by the Department of the Interior, a five-room cottage built for newly married chauffeur	Liversidge Precinct
Garden Shed (73B) at Old Canberra House	c1920s garden shed, possibly by HM Rolland	Liversidge Precinct
Old Bachelors' Quarters (Lennox House Blocks) (75)	c1911–1927, blocks completed at varying stages by the Department of Home Affairs and the FCC	Liversidge Precinct
14 Balmain Lane (67A)	1924, designed under the FCAC and was the home of TR Casboulte, the head of housing construction department in the 1920s.	Liversidge Precinct
16 Balmain Lane (67)	1925–1927 designed by HM Rolland of the FCC and was for officers of the FCC.	Liversidge Precinct
18 Balmain Lane (66)	1925–1927 designed by HM Rolland and was for officers of the FCC.	Liversidge Precinct
20 Balmain Crescent (65)	1925, designed by Henderson of the FCC, was originally the home of CS Daley, the Secretary to the FCAC and FCC.	Liversidge Precinct
22 Balmain Crescent (72)	1929, designed by TR Casboulte for Brigadier General JP McGlenn, the commissioner of the public service board from 1923–1930.	Liversidge Precinct
26 Balmain Crescent (1B)	1929, designed by TR Casboulte, for senior public servants	Liversidge Precinct
28 Balmain Crescent (71)	1928, designed under the FCC, and had extensions in 1982 and 1988	Liversidge Precinct
Old Hospital Buildings (61A)	1928, designed by HM Rolland of the FCC and was the Administration Block for the Old Hospital	Garran Precinct
Tennis Court (86)	1930, formed for the hospital nursing staff	Garran Precinct
Tennis Court Shed (86A)	1938, by the Department of the Interior and was the canteen for the Hospital Women's Auxiliary.	Garran Precinct
Old Hospital Buildings (62)	1930s by the Department of the Interior as the Nurses' Quarters of the Old Hospital	Garran Precinct
Old Hospital Buildings (63)	1928, designed by HM Rolland of the FCC and was the Isolation Ward of the Old Hospital	Garran Precinct
Old Hospital Building (64A)	1928, designed by TR Casboulte for the Commonwealth Department of Health Animal Laboratories	Garran Precinct
Canberra High School (ANU School of Art) (105)	1939, designed by Cuthbert Whitely of the Department of the Interior	Baldessin Precinct
Drill Hall Gallery (29)	1940, designed by EH Henderson of the Department of the Interior	Kingsley Precinct
National Institute of Anatomy (National Film and Sound Archive)	1930, by the FCC	Outside ANU boundary



**Figure 5.3** Key extant buildings on the ANU campus developed during Phase 1 (1912–1947) are highlighted in black. (Source: GML, using a base plan courtesy of the ANU)

## 5.2.2 Phase 2: Age of Masters, Academic Advisers & Brian Lewis (1948–1954)

### Brian Lewis' Planning Role at the ANU

This section analyses the planning role and influence of Professor Brian Lewis during the implementation and physical development of the ANU.

Brian Lewis, Professor of Architecture at Melbourne University, prepared the first ANU 'masterplan' in 1948 in a Beaux Arts style (refer to Figure 5.4). Lewis' grand landscape plan of formal planted avenues held vistas overlooking the West Basin of the proposed Lake Burley Griffin and buildings aligned along Griffin's water axis. It did not eventuate.<sup>13</sup>

Like Coombs, Lewis had grand visions for the new university. In this respect he also followed on from the Griffins, whose water axis he retained as a key element of his layout. Lewis' university plan—was an interpretation of Beaux Arts style planning techniques. Consisting of sweeping axes and formal, symmetrical layouts, it depicted a university that was intended to focus on the proposed lake. In doing so, Lewis proposed removal of most of the earlier buildings on the site.<sup>14</sup>

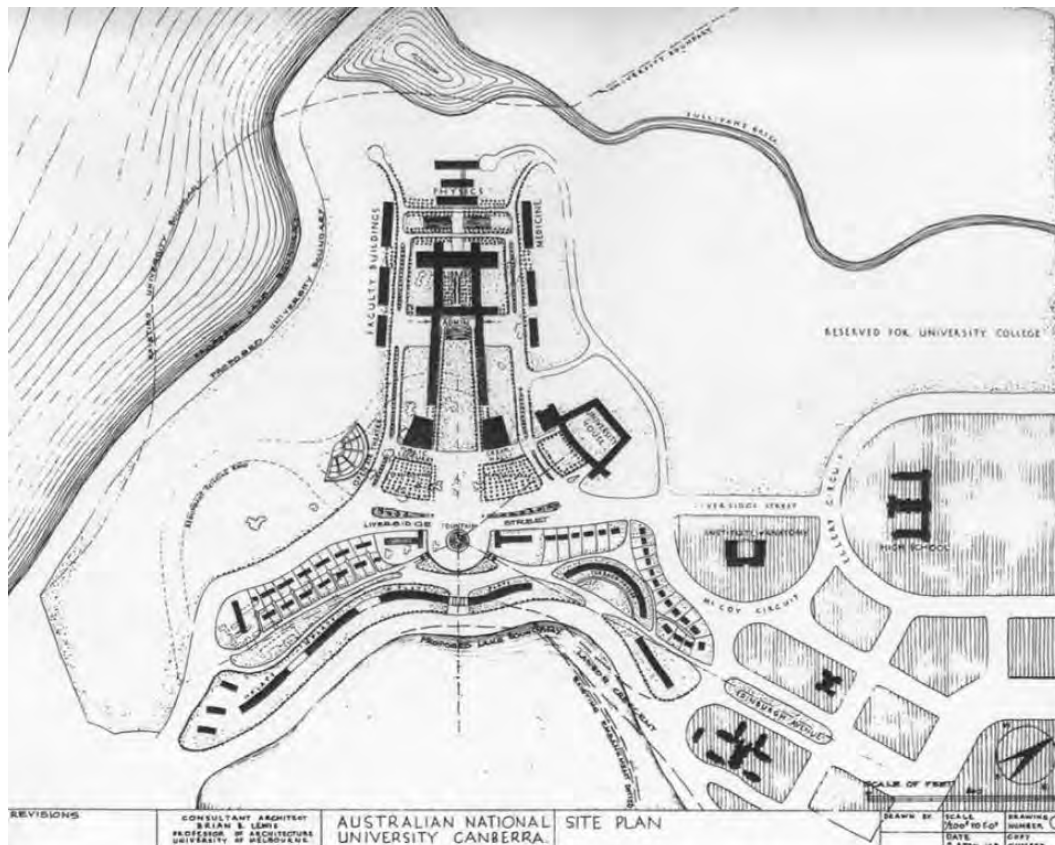


Figure 5.4 Brian Lewis' ANU masterplan in the Beaux Arts style, April 1948. (Source: ANU collection)

However, during his tenure Lewis actually achieved very little in the way of implementing his grand ideas on the campus. The absolute power that the University's Academic Advisers (Florey, Oliphant, Hancock and Firth) exerted upon all aspects of university planning and design created an increasingly difficult personal and professional relationship between these 'founding fathers' and the University architect. The drawbacks of university bureaucracy, lack of funding, and material shortages during the austerity of the early post-World War II period added to the friction.

The following remark by Sir Howard Florey about Lewis indicates the fundamental tension between the University architects' physical planning role and the Academic Advisers' perceptions of priorities in forming the University as an entity:

*The architect must be entirely subordinated to the scientific requirements of those who are to inhabit [the building] ... I will not be pushed around by an architect for architectural reasons.*<sup>15</sup>

With Lewis continuing to be sidelined, and eventually 'given a hefty push', he resigned as architect for the John Curtin School of Medical Research (JCSMR) building in 1953.<sup>16</sup> Nevertheless, he battled on designing Oliphant's Research School of Physical Sciences building (later known as 'The Cockcroft Building', and opened in 1954)—despite Oliphant's constant jibing that Lewis was over-designing his laboratories by 'building a palace' when Oliphant wanted a shed, and accusations that Lewis was amending drawings without consulting with him.<sup>17</sup> Lewis was also involved in a protracted investigation into proposed staff accommodation on the campus. Unfortunately, this led to more conflict between the architect, the University administration and the NCPDC. The University eventually decided to build a cluster of five, Lewis-designed 'Type F' cottages. These linear-shaped, single-storey houses—the only staff houses that the University provided on the campus—were arranged in two parallel rows that followed the natural contours of the site in order to provide potential views of the proposed lake.<sup>18</sup>

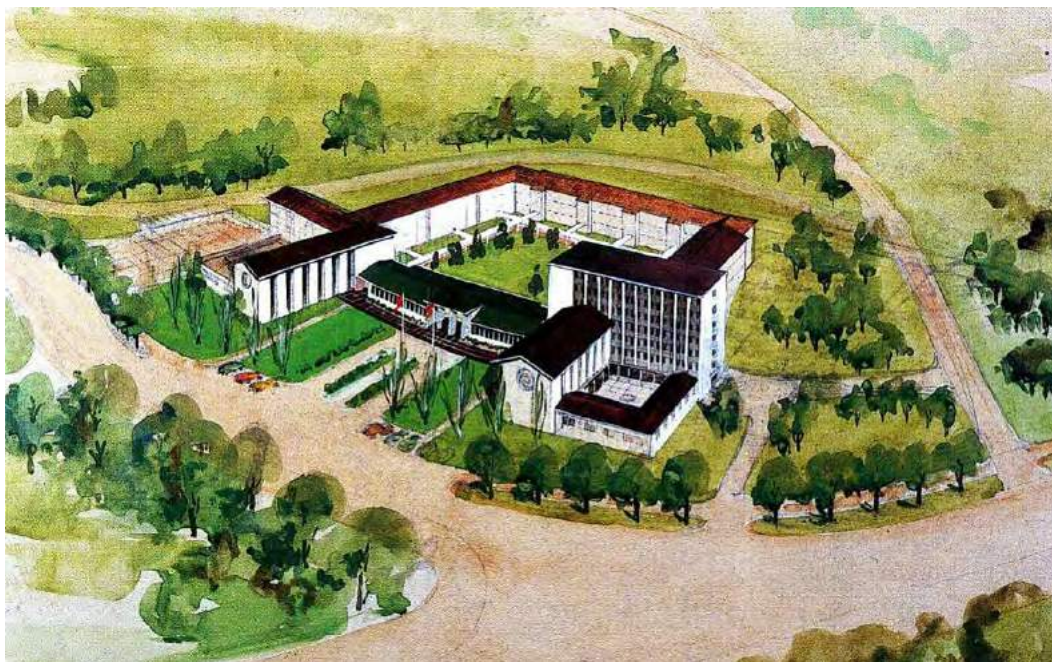
Lewis found himself lacking support from the University administration and had an uncertain relationship with the Academic Advisers. The 'masters' and postwar austerity meant that his overarching planning concepts for the campus did not proceed. Many decisions regarding planning and building seemed to be made up on the run, often with no regard for the architect's formal campus plan.

At its meeting of 12 May 1949, the Building and Grounds Committee discussed Lewis' proposals for the general layout of the University site. The Committee agreed that 'no useful purpose should be served by adopting the Architect's general proposals at this stage'. To make matters worse, it was decided that 'the siting of any additional buildings in the immediate future could be determined on an ad hoc basis.'

The outstanding exception is University House, an ambitious centrepiece of collegiate life, designed to front Lewis' planned ceremonial space. To Lewis' architectural credit and professional excellence in the face of personal criticism, he was a recipient of the prestigious Royal Australian Institute of Architects (RAIA) Sulman Award in 1953 for University House (Figure 5.5).

In the University House project Lewis engaged leading artists and designers, including notable sculptors Gerald Lewers and Frank Hinder and furniture maker Frederick Ward to design furniture and select artwork specifically for the building. This concept of artworks integrated with the architecture and landscape of the University has prevailed at the Acton campus, where numerous sculptures have been commissioned in conjunction with the construction of a building. Further examples are discussed in Section 5.5.4.





**Figure 5.5** Brian Lewis, perspective rendering of University House. (Source: ANU collection)

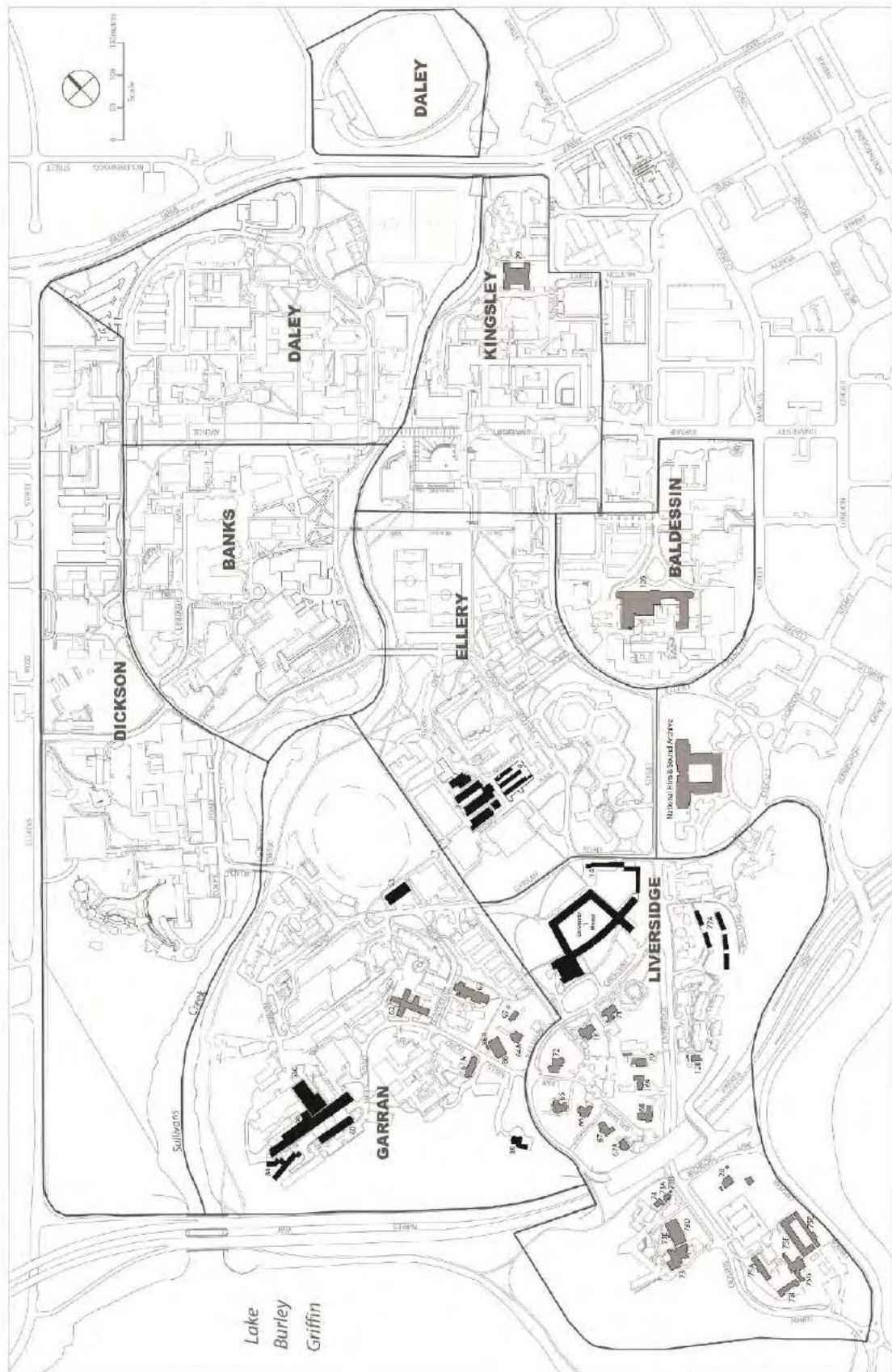
Several foundation stone ceremonies were held in 1949 and the building programme for Lewis' work on campus, including University Hall, academic housing, the Vice Chancellor's house and the central store.

The key buildings constructed during this phase are listed below in Table 5.2.

**Table 5.2** Phase 2 (1948-1954): Key extant buildings developed in this phase, listed chronologically by construction date.

Building Name and Number	Details – Date and Architect	Precinct Location
Old Administration Buildings (3-4)	1948–59, Kenneth Oliphant. Some of the buildings have since been demolished	Ellery Precinct
The Research School of Physical Sciences building (The Cockcroft Building) (58)	1950–52, Brian Lewis	Garran Precinct
The Research School of Physical Sciences building (Oliphant Building) (60)	1950–52, Brian Lewis	Garran Precinct
Vice-Chancellor's Residence (80)	1952, Brian Lewis	Garran Precinct
Central Store Building (53)	1952, Brian Lewis	Garran Precinct
The Research School of Physical Sciences building (John Carver Building) (58C)	1950–53, Kenneth Oliphant	Garran Precinct
Old Geophysics Building (Applied Mathematics Building) (84)	1952–53, Brian Lewis	Garran Precinct
University House (1)	1953, Brian Lewis	Liversidge Precinct

Building Name and Number	Details – Date and Architect	Precinct Location
Molly Huxley Building (1A)	1953, GJ Harrison, Gatehouse to University House	Liversidge Precinct
Workshop (Demolished)	1954, Brian Lewis. Demolished to make way for JCSMR Stage 1 development	—
Staff housing, Liversidge Street and Brian Lewis Crescent (77A)	1954, Brian Lewis	Liversidge Precinct



**Figure 5.6** Key extant buildings on the ANU campus developed during Phase 2 (1948–1954) are highlighted in black. Existing buildings from previous phase highlighted in grey. (Source: GML, using a base plan courtesy of the ANU)

### 5.2.3 Phase 3: From Garden City to 'Disneyland' (1954–1968)

#### Professor Denis Winston and Grenfell Ruddock's Planning Role

This section describes the planning role and influence of Professor Denis Winston and Grenfell Ruddock at the ANU during the years of 1954–1967.

Professor Denis Winston, a planner from the University of Sydney was the next consultant planner engaged by the CUC, preparing a university plan with Grenfell Ruddock in 1955 which was functional and pragmatic. Grenfell Ruddock, an architect, was an outstanding architecture student in Melbourne in the 1930s, when he was a colleague and friend of Robin Boyd, who described him as 'always a compassionate rebel.' Ruddock worked with Winston as a consultant to the ANU from 1954 until 1958, after which Winston became the sole University planner. During this period the ANU also employed a series of 'University Architects' who contributed to aspects of the campus and buildings. These included John Scollay, John Howard and Bruce Litchfield.

While the Lewis phase was largely about grand visions—visions that did not come to fruition, the Winston-Ruddock phase was different in both approach and implementation. The most pressing problem faced by the new planning team was how to convert a green-field site into a new university within a short timeframe. The University was finding it extremely difficult to persuade academics and scientists to consider the move to Canberra. It was widely known throughout Australia that Canberra in 1950 contained very little in the way of infrastructure, and that the University, which would require specialised laboratories and libraries, had virtually no facilities or resources.<sup>19</sup>

Winston and Ruddock favoured a pragmatic, inclusive approach to site planning—rather than imposing a holistic university order and plan for the site with an overall unifying theme, Winston followed the spatial demands of the Academic Advisers and employed garden city planning principles, with separate self-sufficient and dispersed precincts of particular character and architectural diversity within a loosely planned open space system which provided the landscape opportunities which are now a main characteristic of the campus.<sup>20</sup>

They introduced a functional, holistic approach to the siting of buildings on the campus, considering factors such as topography, orientation, views, vegetation, flooding, access, services and future expansion<sup>21</sup>. The Winston and Ruddock methodology involved analysis of the site in regard to these criteria, identification of areas of the site that were suitable for building upon, and development of these areas as 'self-sufficient precincts'—containing buildings of similar functions that did not conform 'rigidly to a preconceived architectural scheme for the whole university'.<sup>22</sup> They were also cognisant of the fact that the University requirements would change over time, and that the campus would always be a work in progress that could never be completed.

The year 1960 saw the amalgamation of the CUC with the ANU to form a School of General Studies offering undergraduate courses, and this required the incorporation of buildings offering undergraduate facilities. An intense period of building began. In 1960 Bruce Litchfield was appointed University Architect and John Stephens became Landscape Architect in 1964. A programme of commissioning public sculptures with the architectural works commenced, marking start of the ANU's remarkable art collection.

Within the Winston and Ruddock plan, the architectural style and concept of the individual buildings was left to others to determine—at least in the first instance. While they dictated no specific guidelines for architecture, Winston and Ruddock did make one point very clear: that the shift away from grand visions within the plan was to extend down to the level of individual buildings.<sup>23</sup> During



the 1960s, the University opened all architectural commissions very widely, with the result that many local Canberra firms designed new structures and fewer national architectural commissions were issued.

The Winston and Ruddock plan tended to promote buildings that could be described as 'well behaved'. While their approach to university planning was a carefully thought through, pragmatic solution to a complex series of problems, the end architectural result was a somewhat dispersed, heterogeneous campus whose buildings were scattered and generally unremarkable in character<sup>24</sup> (Figure 5.7).



Figure 5.7: Denis Winston and Grenfell Ruddock's ANU sketches, c1961. (Source: ANU collection)

In 1964 Robin Boyd, whose Melbourne firm, Grounds, Romberg and Boyd, was designing its first building on campus, the new Zoology building (1963–68). Robin Boyd intensified an earlier attack on the University in his book *The Australian Ugliness* first published in 1960, by comparing the campus to Disneyland. Boyd described how 'the ANU shared Disneyland's vast contrasts of style. In many sections of the ANU three or four violently different styles were set cheek by jowl.'<sup>25</sup> Figure 5.8 shows an ANU building by Grounds, Romberg and Boyd.





**Figure 5.8** Grounds, Romberg and Boyd. Botany and Zoology School of Life Sciences Building (44) 1968. (Source: Milton Cameron 2009)

However the most significant, and lasting, legacy of the Winston and Ruddock plan was that the campus took on an informal character, with the dominant effect being one of separate clusters of buildings set in landscaped open space. Winston's preference for the Garden City planning principles was responsible for the creation of this, the most significant quality of the ANU campus: that of buildings set in a park. But the same approach was also responsible for the principal areas of criticism: a very dispersed campus, with little connection—either in physical proximity or in architectural character—between separate precincts. Problems were also identified in terms of individual building access, orientation and servicing.

Of additional importance to the historic context of the ANU, yet outside the study area, is Lake Burley Griffin—inaugurated and filled in 1964 to realise the Griffins' full water axis at the southern edge of the Acton campus.

The key buildings constructed during this phase are listed in Table 5.3.

**Table 5.3** Phase 3 (1954-1968): Key extant buildings developed in this phase, listed chronologically by construction date.

Building Name and Number	Details – Date and Architect	Precinct Location
The John Curtin School of Medical Research (54)	Completed in 1957 by Mussen MacKay & Potter— Brian Lewis resigned from this project in 1953	Garran Precinct
The Research School of Earth Sciences 'Rock Mechanics Laboratory' (Jaeger Building) (61)	1958, Collard, Clarke and Jackson	Garran Precinct
14 Liversidge Street (136)	1958, Collard, Clarke and Jackson. Constructed for Sir Keith and Lady Hancock	Liversidge Precinct

Building Name and Number	Details – Date and Architect	Precinct Location
The Research School of Physical Sciences (Heavy Ion Accelerator Building) (58A)	1958–60, Bruce Litchfield	Garran Precinct
Plant Culture Facility (Fenner School Field Services) (83, 83A, 83C)	1959, 1962, 1964-67, Stan Bell Pty Ltd, Scollay Bischoff Pegrum	Dickson Precinct
The Haydon-Allen Building (22) and 'Tank' Lecture hall (23)	1960 and 1961, Bunning & Madden	Kingsley Precinct
Physics Building (38) Psychology Building and Physics Lecture Theatre (39)	c1960, Eggleston, Macdonald and Secomb	Daley Precinct
Bruce Hall (40) – College Residence	1961, 1964 & 1971, Bunning & Madden	Dickson Precinct
Hanna Neumann Building (21)	1962, Bunning & Madden extensions to Haydon-Allen Building	Kingsley Precinct
Chemistry Building (33) and Arthur Hamblly Lecture Theatre (34)	1962, Eggleston, Macdonald and Secomb	Daley Precinct
University Maintenance, No.2 Boiler House (John Yencken Building) (45, 45A)	1963, 1964, Eggleston Macdonald and Secomb	Banks Precinct
Mathematic Building (Le Couteur Building) (59)	1963, Buchan Laird & Buchan Pty Ltd	Garran Precinct
Nuclear Physics Building (57)	1963, Buchan Laird & Buchan Pty Ltd	Garran Precinct
RG Menzies Building (University Library) (2)	1963, J Scarborough & Partners in association with Collard, Clarke & Jackson	Ellery Precinct
General Studies Building (University Library) (later known as JB. Chifley Building) (15)	1963, 1968, O'Mahony, Neville and Morgan in association with Bunning & Madden	Kingsley Precinct
Research School of Social Sciences and Pacific Studies (HC Coombs Building) (9)	1964, 1968, Mockridge, Stahle and Mitchell and 1971, 1975, Anthony Cooper & Assoc.	Ellery Precinct
The Chancelry (10)	1964, 1965 & 1968, Yuncken Freeman	Ellery Precinct
Pauline Griffin Building (University Union) (11)	1965, Sydney Ancher	Ellery Precinct
Geology (Engineering) Building (32)	1964, Eggleston, Macdonald and Secomb	Daley Precinct
Botany and Zoology School of Life Sciences Building (44)	1964–69, Grounds, Romberg and Boyd	Banks Precinct
Oriental Studies Building (Law School – North Wing) (6)	1965, O'Mahony, Neville & Morgan, in association with Bunning and Madden	Ellery Precinct
South Oval Pavilion (88)	1965, John Scollay & Theo Bischoff	Garran Precinct
Burton and Garran Hall (Residences) (49)	1965, 1966, Leith & Bartlett	Dickson Precinct
The Faculty of Economics (Copland Building) (24)	1967, Richard Meldrum & Partners	Kingsley Precinct

Building Name and Number	Details – Date and Architect	Precinct Location
Research School of Chemistry (Arthur Birch Building) (35) and Research School of Chemistry Lecture Theatre (36)	1967, Eggleston, Macdonald and Secomb	Daley Precinct
North Oval Pavilion (C003)	1968, Scollay Bischoff Pegrum	Daley Precinct
Law Building (South Wing and Link) (5,7)	1968, 1975, O'Mahony, Neville & Morgan	Ellery Precinct
John Dedman Building (27)	1968, Bunning & Madden	Kingsley Precinct
Department of Botany (Geology DA Brown Building) (47)	1968, Roy Grounds	Banks Precinct
Forestry Building (48) and Fenner Geography Building (48A)	1968, Eggleston, Macdonald & Secomb	Banks Precinct
Ursula Hall (Residences) (50)	1968, Fowell, Mansfield, Jarvis & Maclurcan	Dickson Precinct
John XXIII College (Residences) (51)	1968, Kevin J Curtin & Partners	Dickson Precinct

Significant precinct planning developed during Phase 3 included the:

- Arts and Social Sciences Precinct, 1966, by Bunning and Madden;
- Science Precinct 1966, by Eggleston, Macdonald and Secomb; and
- Chancelry and Union Precinct 1967, by Yuncken Freeman.

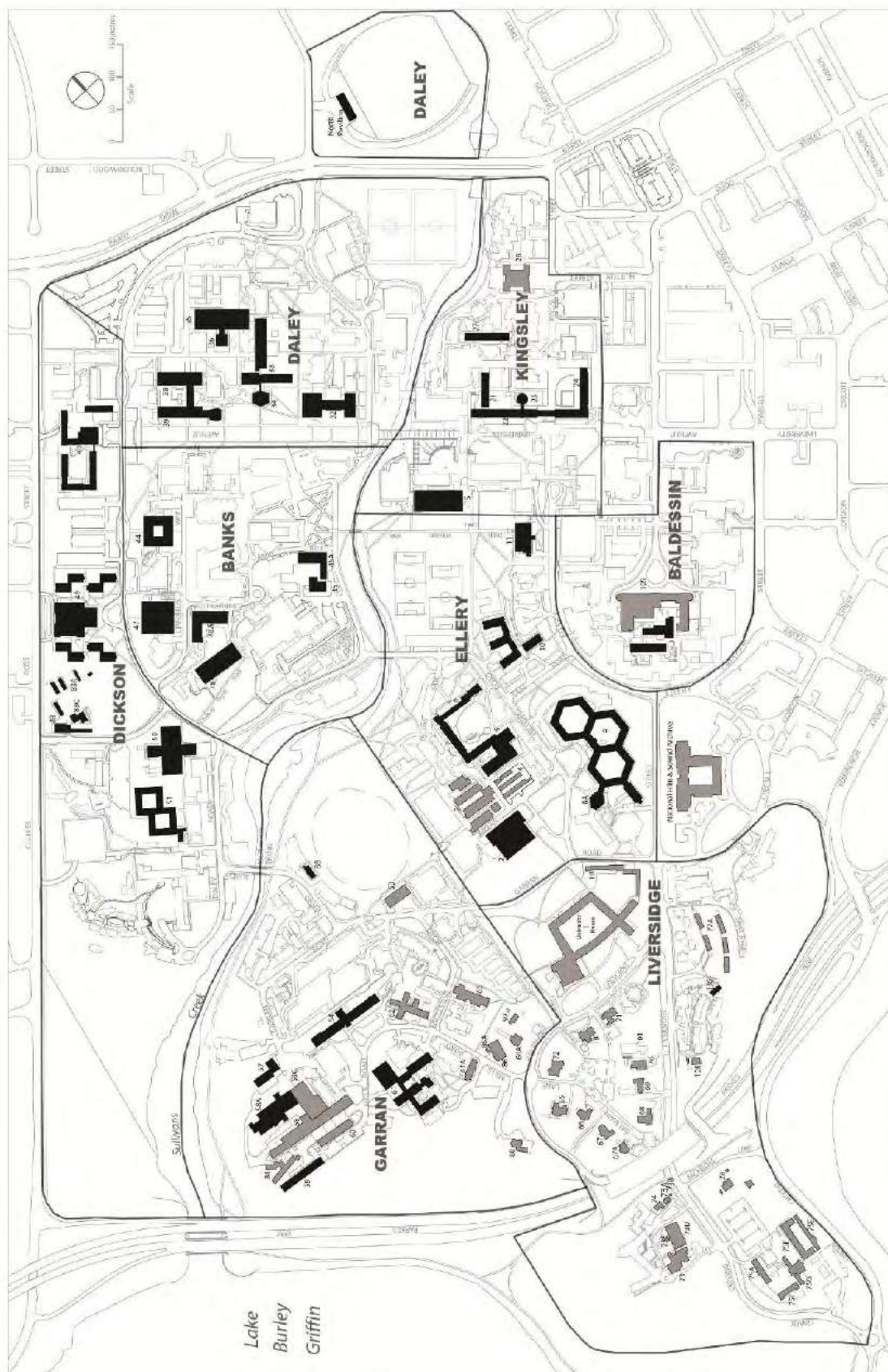


Figure 5.9 Key extant buildings on the ANU campus developed during Phase 3 (1954–1968) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU)



#### 5.2.4 Phase 4: 'Ensemble and Interaction' (1968–1971)

##### Roy Simpson's Planning Role

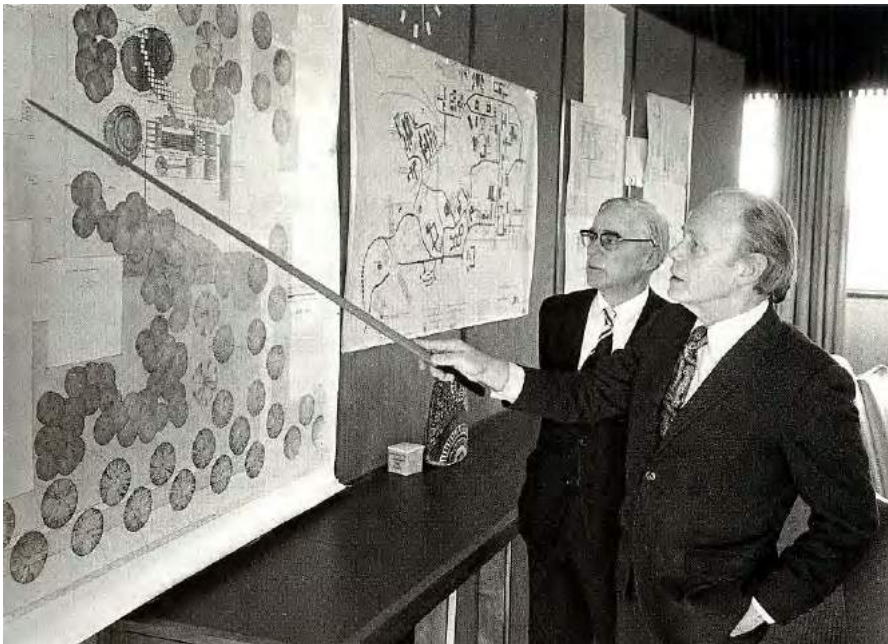
This section assesses the planning role and influence of Roy Simpson at the ANU during the years of 1968–1971.

In the late 1960s the Council's Building and Grounds Committee resolved that fresh ideas were required to achieve some form of unity and coherence to the sprawling campus plan. For this reason it engaged Roy Simpson in 1968, of Yuncken Freeman Architects, as a full-time site planner to continue the planning of the ANU. Simpson was a 'legendary' architecture student in Melbourne during the 1930s and was a friend of Boyd's.<sup>26</sup>

Simpson's aim was to harmonise the disparate architectural precincts while also pedestrianising the interior of the campus and accommodating escalating carparking requirements at the peripheries. He believed the greatest challenges and achievements were not in the design of individual buildings, but in group developments or precincts such as the ANU campus:

*...where the architect rarely has control over what happens immediately across the boundaries but he can link buildings to each other, or arrange them in a multiplicity of ways to create courtyards, formal or informal, in an infinite variety of forms. Multiple developments offer a much wider range of possibilities for ensemble and interaction, each building with the others.*

In an inversion of what many architects would view as their design priorities, for Simpson 'the total scene is more important than the individual project', 'the precinct is more important than the individual buildings' and 'the city is more important than the precinct.' Simpson believed that, in their continuing quest for self-expression and creativity on individual projects, architects had lost control of the wider context.<sup>27</sup> In spite of all of this, Simpson was also a consummate designer of individual buildings: his highly regarded circular chapel at Canberra Grammar School, completed in 1965, is one local example.



**Figure 5.10** Roy Simpson (right) explaining his ANU plan to David Dexter, 1974. (Source: Photo by Gabe Carpay. Foster & Varghese, 1996, p.195)



Like his predecessor, Simpson did not believe in being overtly dictatorial in his approach to campus planning. He believed his primary objective was to create a 'campus which had a harmony and consistency, happy relationships between the buildings and the landscape, Australian in character.' Simpson was experienced in dealing with large clients, universities, committees—and difficult architects.

Simpson, in conjunction with Yuncken Freeman, prepared a plan pushing for higher density and closer proximity in an attempt to halt the scattering of buildings and provide more efficient circulation patterns. Simpson made a number of strategic interventions into the development of the University, shifting and re-orienting the whole campus.

His plans for the ANU acknowledged the expansion of Canberra's city centre to the north of the campus and the need for an improved 'town and gown' interface. Simpson also acknowledged the University's shifting centre-of-gravity, by confirming a shift towards the north. Previously, the proposed ceremonial group commanded views over the lake in 'monumental isolation', quite detached from the University's everyday activities. Simpson advocated the abandonment of the water axis, the retention of Acton Ridge in its current form, and the relocation of the main elements of the ceremonial group—auditorium, exhibition building, and other public functions—to the eastern end of University Avenue. Simpson envisaged University Avenue as a pedestrian precinct and as the main gateway to the University. He believed that the ceremonial group would be ideally located there, near the centre of undergraduate teaching, and where 'town and gown' would merge 'with considerable drama'.<sup>28</sup>

Simpson's plans improved the nature and appearance of the open space by reducing clutter and removing temporary buildings, and he made a stronger effort to achieve more architectural unity between buildings in the same precinct. His greatest strengths (in practice and in his own words) were his abilities to interpret and realign broad planning issues, rather than to contribute to the detailed design or style of specific buildings.



Figure 5.11 View west along University Avenue (Source: GML 2011)

In 1970 the University Council endorsed the principal notions behind the Simpson plan. Its endorsement signified a significant shift, not only in planning direction, but also in the way in which the University related to the wider context. Buoyed by forward-looking modernism, Simpson's initial 1970 plan condemned the ANU's temporary buildings whose values were fortunately recognised by the University Council in its joint 1971 plan, ensuring their conservation, maintenance and ongoing use.

The key buildings constructed during this phase are listed below in Table 5.4.

Table 5.4 Phase 4 (1968–1971): Key extant buildings developed in this phase, listed chronologically by construction date.

Building Name and Number	Details – Date and Architect	Precinct Location
Frank Fenner Building (42)	1969, Eggleston, Macdonald and Secomb	Banks Precinct
Chapel of St John the Evangelist	1969, Kevin J Curtin & Partners. Opened by Archbishop Thomas Cahill	Dickson Precinct
Copland Lecture Theatre (25)	1970, Richard Meldrum & Partners	Kingsley Precinct
Melville Hall (Assembly Hall) (12)	1971, Yuncken Freeman	Kingsley Precinct
Biochemistry and Molecular Biology School of Life Sciences (41/138)	1971, Eggleston, MacDonald and Secomb	Banks Precinct
Burgmann College (Residences) (52)	1971, Dirk Bolt and Associates	Dickson Precinct

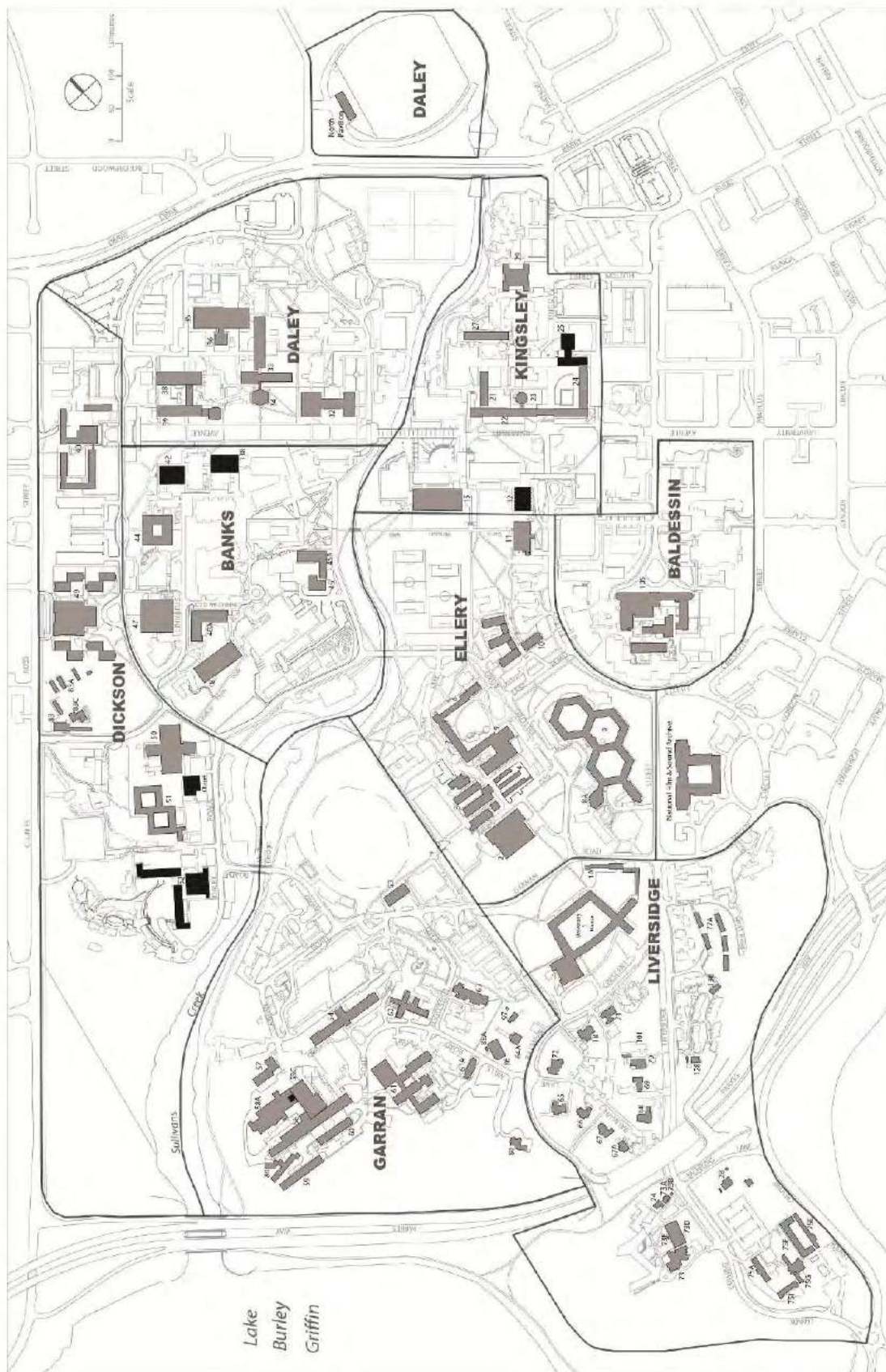
Building Name and Number	Details – Date and Architect	Precinct Location
The Research School of Physical Sciences (14UD Tower) (Attached to 58A)	1971, Civil and Civic. Originally to house the Electrostatic Tandem Generator, later the 14UD Accelerator.	Garran Precinct

Significant planning concepts instigated during Phase 4 included:

- the relocation of the main elements of the ceremonial group—auditorium, exhibition building, and other public functions—from Acton Ridge to the eastern end of University Avenue, and the reworking of University Avenue as a pedestrian precinct and the main gateway to the University.

In addition to these main areas, development in this phase saw detailed studies undertaken into other parts of the University, including:

- the Student Union and Sports Union buildings, Law-Asian Studies, the Menzies Library, the Chancelry, the Chifley Library, Melville Hall, and the Arts and Science precincts.



**Figure 5.12** Key extant buildings on the ANU campus developed during Phase 4 (1968-1971) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU)



### 5.2.5 Phase 5: Consolidation and the ‘Quiet Years’ (1972–1990)

Compared to the 1960s, which was a boom-time of extensive development at the university, less construction occurred in the following decade and a greater focus was given to student facilities. Precincts were consolidated as a range of smaller extension buildings and carparking areas grew ad hoc. While the legacy of trees planted by Pryor (and some from Weston’s era) began to mature during this period, some of the individual trees were lost and the concept of a cohesive landscape diminished.

Between 1972 and 1990, there was a significant slowing down in the amount of building work on the campus, and between 1979 and 1985 no substantial construction took place on site. This was a difficult period for the ANU in financial terms. During the 1970s the University ‘lost its “special relationship” with the government and was forced to compete with other universities.’ The demise of this unique relationship—based on patronage and benevolence—ushered in a ‘new era of financial stringency’ for the University.



Figure 5.13 Toad Hall by John Andrews International. (Source: ANU Toad Hall HMP 2010)

While work had comparatively slowed down from the previous period, the significant precinct plans and buildings constructed during this phase and are listed in Table 5.5.

Table 5.5 Phase 5: (1972–1990) Key extant buildings developed in this phase, listed chronologically by construction date.

Building Name and Number	Details – Date and Architect	Precinct Location
Arts III Building – now referred to as the LF Crisp Building (26)	1972, Bunning and Madden	Kingsley Precinct
Concessions area buildings (17) part of the University Union Plaza plan (1975)	1972, Yuncken Freeman Architects	Kingsley Precinct
Research School of Biological Sciences (46)	1972, Hely & Horne	Banks Precinct
University Union Building (20)	1973, Yuncken Freeman Architects	Kingsley Precinct
Toad Hall (Residences) (30)	1973–4, John Andrews International	Kingsley Precinct
WK. Hancock Building (43)	1973–75, O’Mahoney, Neville and Morgan	Banks Precinct



Building Name and Number	Details – Date and Architect	Precinct Location
AD Hope Building (14)	1975, Yuncken Freeman Architects	Kingsley Precinct
Arts Centre (16)	1975, O'Mahoney, Neville, Morgan with Tom Brown and Associates	Kingsley Precinct
Leonard Huxley Building (56)	1975, O'Mahoney, Neville, Morgan with Anthony Cooper and Associates	Garran Precinct
University Union Plaza precinct plan	1975, from Yuncken Freeman Architects (Partner in charge Roy Simpson).	Kingsley Precinct
Canberra School of Music (100)	1976, Daryl Jackson and Evan Walker At the time the building was on the city boundary of the Arts precinct of the ANU, rather than part of the ANU campus.	Baldessin Precinct
'Acton Underhill' (76)	1977–79 constructed by the National Capital Planning Authority as a carpark and as part of the Parkes Way development. Currently it houses the Noel Butlin Archives Centre and ANU storage.	Liversidge Precinct
Conversion of the former Canberra High School (1939) into the Canberra School of Art (105)	1981, Daryl Jackson and Evan Walker	Baldessin Precinct
Beryl Rawson Building (formerly known as JG Crawford Building) (13)	1985, Geoff Butterworth & Partners	Kingsley Precinct
Liversidge Court Apartments (78)	1987-1989, John Playoust	Liversidge Precinct
ANUTECH Court (Fulton Muir Building) (95)	1990, Geoff Butterworth, Armour & Partners The first commercial development at ANU—which represented a shift in building funding mechanisms.	Daley Precinct



**Figure 5.14** Key extant buildings on the ANU campus developed during Phase 5 (1972–1990) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU)

### **5.2.6 Phase 6: Strategic Planning on Campus (1990–Present)**

During the 1990s the growth of the University was beginning to once again outstrip its facilities, and there began an essential phase of campus masterplanning. The University's Building and Grounds Division took over responsibility for campus development, and commissioned a number of plans, reports and studies into aspects of the site to assist with forward planning and management.

In 1990 the Division established a Design and Site Planning Subcommittee to implement this process. The Subcommittee comprised Don Hardman, Head of the Building and Grounds Division; Dr Bryce Mortlock, architect; John Gilchrist, town planner; and Kath Wellman, landscape architect. In 1992 the Subcommittee prepared a Development Policy Plan for the campus, which was adopted as a control for future development.

During the following year, the Division commissioned landscape architect Richard Ratcliffe and architect John Armes to prepare a Heritage Study of the ANU Acton campus. The second volume of the Heritage Study was completed in 1995. Prior to this, in 1994, Knox and Tanner were commissioned to undertake a Strategic Landscape Plan.

Both the 1994 Strategic Landscape Master Plan and the 1995 Architectural Heritage Study began to provide guidance for the general development and appearance of the campus, strengthening University Avenue and introducing a robust landscaping regime to support precinct linkages and amenity. These documents continue to be referred to for development proposals.

Following the review of the University Site Masterplan in 2000, a range of internal development and planning reports (including the Development Policy Plan), as well as major growth, was directed to the ANU Exchange area. However, the varied range of anchor buildings in several precincts has once again given rise to a lively architectural debate between the established precinct character and architectural trends. Pressures for increasing on-campus student accommodation, co-location, traffic functionality and landscape renewal and management have led to the initiation of the 'ANU Campus Master Plan 2030' being prepared by GHD in conjunction with the ANU's Facility and Services Division.

The ANU Exchange provides a hub of new buildings, accommodating some of the pressure for new spaces as identified in the ANU Campus Master Plan 2030'. It is a very active period of campus building and offers revitalisation of the university functions on the city edge. More student accommodation and childcare, fitness, recreation and entertainment facilities are currently being constructed in the area.

The ANU produced its Heritage Strategy 2010–2012 in accordance with its responsibility under the EPBC Act, which provides the strategy for including heritage management and conservation into its framework (refer to Section 8.0). The ANU also began the essential work of documenting and conserving its environmental heritage. This programme provides for the preparation of management plans for buildings included in the CHL, or with the potential for having Commonwealth Heritage values.

This Heritage Study is a revision of the 1995 Heritage Study and represents a new phase of heritage management and planning for the ANU, fully integrated into its asset management processes.

Since 1994, several current buildings have been constructed. The construction of some of these new buildings has seen the demolition of earlier buildings. A variety of university and residential

buildings have been constructed from 2000 to the present day. Buildings considered of note in a contemporary sense (mainly for their award winning status), are included in the table below.

The key buildings constructed during this phase are listed below in Table 5.6.

**Table 5.6** Phase 6: (1990–present): Key extant buildings developed in this phase, listed chronologically by construction date.

Building Name and Number	Details – Date and Architect	Precinct Location
Manning Clarke Lecture Theatre Centre (26A)	1993, Woods Bagot	Kingsley Precinct
Multi-level car parking (109)	1994, Collard, Clarke and Jackson	Kingsley Precinct
Asian Studies Building (110)	1994, Pegrum/Coilek Architects	Baldessin Precinct
Innovations Building (124)	1998, Hoadley Budge Olphert & Edwards Madigan Torzillo Briggs Pty Ltd, 2010 by HBO+EMTB	Garran Precinct
Sir Roland Wilson Building (120)	1999, Daryl Jackson Alistair Swayn Pty Ltd	Liversidge Precinct
WEH Stanner Building (37)	2001, Woods Bagot	Liversidge Precinct
Ian Ross Building (31)	2002, Collard, Clarke and Jackson	Daley Precinct
Hugh Ennor Building (Phenomics Facility) (117)	2003, DesignInc Pty Ltd	Garran Precinct
Peter Baume Building (42A)	2004, May and Russell Architects	Banks Precinct
John Curtin School of Medical Research (131)	2005–10 Stages 1-3 extensions, Lyons Architects and Hindmarsh Construction	Garran Precinct
Hedley Bull Centre (130)	2008, Lyons Architects	Ellery Precinct
Laurus Wing (Ursula College) (50TI)	2010, Architectus	Dickson Precinct
Crawford School Building (132)	2010, Tanner Architects	Liversidge Precinct
College of Business and Economics (26C)	2010, AC&A Architects	Kingsley Precinct





**Figure 5.15** Key extant buildings on the ANU campus developed during Phase 6 (1990–present) are highlighted in black. Existing buildings from previous phases highlighted in grey. (Source: GML, using a base plan courtesy of the ANU)



### 5.2.7 Summary: Key Historic Periods of Site Development

Fundamental to the complexity of the ANU campus we see today is the influence of the various strong personalities—the academic advisers, architects and planners. The planning of the ANU campus reflects the powerful personalities of its founders in the establishment of four foundation research schools, each with academic autonomy and a university administration established to protect and nurture the schools without interfering with their structures and development decisions. Independent precincts tied with landscaping, without a guiding structural layout or visual identity, became the pattern.

Phase 1 (1912–1947): the intellectual and administrative conception of the University is supported by federal legislation in 1946 for the first and only National University of Australia. During this phase, there were no specific landscaping, site planning or university buildings constructed—the site was simply reserved for its future development. As Canberra itself continued to develop, several important institutions surrounding the ANU campus were constructed. Some of the buildings that already existed in Acton, or were constructed for the Federal Capital in the area, were absorbed and appropriated for the University's use.

During Phase 2 (1948–1954) the formal planning of the University commenced and specific purpose built facilities for the University were constructed.

Within the built fabric, location and orientation of these buildings lies physical evidence of the influences of the University planning. However, Lewis' 1948 Beaux Arts attempts to relate to the Griffin Axis and future lake were not supported and it is generally accepted that the University has regrettably little to show for Lewis' architectural skill and grand planning intent, apart from the plan form of University House and the gestural embrace of the lake and the grand axis that would lead to it. These could still be read as a microcosm of his overall planning intent.

During Phase 3 (1954–1968) the Beaux Arts ordered concept proposed by Lewis for the ANU gave way, in 1955 to the request of the research schools and to planner Professor Denis Winston's pragmatic garden-planning precinct functionalism and architectural diversity. It is the most enduring phase of campus development in terms of the amount of building work that took place.

The CUC was amalgamated with the ANU in 1960, uniting undergraduate teaching facilities to an older national research institution. The need for accommodation and student facilities, coupled with an open architectural brief, created the appearance of a less ordered and diverse campus of buildings.

This is the most prominent phase in terms of the visual appearance and quality of the campus—that of groups of buildings set in landscaped open space—which owes much to Winston's garden city model and to the landscape work of Lindsay Pryor. This phase was relaxed and completely 'hands-off' in terms of architectural intent—leading to the perception by many that the University campus was too dispersed, and lacked coordination and cohesion—as exemplified by Boyd's infamous 'Disneyland' comparison.

While Phase 4 (1968–1971) is relatively short in chronological terms, Roy Simpson had a particularly decisive and strategic involvement, with many strong ideas which harmonised disparate architectural precincts which skilfully met Canberra's maturing city expansion. His influence included the re-focusing of the campus toward the north, the pedestrianisation of University Avenue and focus on that area as the ceremonial area and transitional threshold between the city centre and the University (between 'town and gown').

Throughout Phases 5 (1972–1990) and 6 (1990–present day) the campus has continued to be generously bound by maturing landscapes of the early and prescient landscape architects of the University, with allowance for the major works of architecture to accommodate the University's requirements.

The overall University plan, and the diversity of buildings that it contains, together reflect the myriad of factors that lie behind their design and conception over six decades of growth and change: different eras and different planning ideologies, unique functional requirements, changing economic landscapes, and the strong directive from University administration and advisers.

The most significant quality of the campus does not lie in these structures themselves. It is not the architectural style, formal massing, or any material aspect of the buildings that unifies the campus and defines the University's predominant physical character. Instead, it is the spaces between the structures as much as the multifaceted historic layers that, together, form the cultural landscape of the Acton campus.

## **5.3 Research Potential in the Cultural Environment**

### **5.3.1 Historic Archaeological Potential**

The history of the development of ANU includes the demolition and/or removal of approximately 63 structures from as early as the late 1960s. Main zones of demolition and reconstruction include the Old Administration Area (OAA), the Old Canberra Hospital Precinct and some of the cottages between Balmain Crescent and Liversidge Street, and along Lennox crossing.

Current buildings and landscape elements around the OAA include the construction of the Law School and the creation of carparking. Of the 14 original buildings only six remain standing, although remains of the demolished eight structures are unlikely to have survived the construction of the main Law School buildings—which have been built into the landscape, and directly over the footprint of the earlier structures.

Similarly, in the Old Canberra Hospital area, four original buildings remain standing, including:

- the Administration and Outpatients building (Building 61A) also known as Jaeger OHB A,
- the Nurses' Quarters (62) now the National Centre for Epidemiology and Population Health,
- the Isolation Block (63) now the Centre for Mental Health Research,
- the Laboratory (64A) now the Gardener's depot.

The tennis court also remains. Of these, their surrounding landscaping is modest and includes gardens and carparking. Where buildings have been replaced, the new structures are substantial and will have invariably destroyed the remains of the earlier structures. The current state of roads, carparking and landscaping also suggests that remnants of earlier landscaping and road alignments are unlikely to have survived.

In the Acton Conservation Area, some remains are visible on the ground of the footings from 9 Liversidge Street. Other structures demolished here are sheds from the rear of these cottages. Substantial archaeological remains from these structures are unlikely, although some evidence may remain of their building plans. The location of garbage and/or toilets pits is unknown for this area

and may or may not have created an archaeological signature. Remnants may survive of some of the southern end structures from within the Lennox House precinct, between buildings A and I.

The Childers Street Hall was located almost opposite the Drill Hall and its site is now occupied by the newly built Kinloch Lodge. The substantial nature of this new structure will have totally destroyed any archaeological remains in this area.

In summary, the potential for archaeological remains to exist on the campus is relatively low. Areas where historical archaeological deposits may have formed include the OAA, the Old Canberra Hospital Precinct, the location of the former Childers Street Hall, and some of the cottages between Balmain Crescent and Liversidge Street, and along Lennox Crossing Road. Of these areas, only the latter, around the cottages in Acton, retain any real possibility of having archaeological remains still present. It is the yards and open spaces around the existing buildings that have some, albeit limited, potential for the remains of cottages, toilets and rubbish pits and ephemera.

### **5.3.2 Sustainability and Energy Efficiency**

The ANU has an established strategic approach to environmental sustainability. The Acton campus is a microcosm of buildings types; there are some 200 buildings on site, a large number with historic importance and heritage value.

The ANU strives to achieve best practice in reaching sustainability and energy efficiency targets, above and beyond the minimum standards for best practice.<sup>29</sup> For the ANU to maintain its reputation as a centre of internationally recognised academic research it must accommodate increasing student numbers and provide state of the art research facilities.

As such, the ANU has an important task to meet ‘sustainability targets’ as set out in its Environmental Management Plan (EMP) within the framework of upgrading the campus and implementing development programs. An important component of the ANU’s sustainability initiative is to ‘retrofit’ (or ‘retro-green’) its existing building stock where this is possible. This initiative can be tied to opportunities for adaptive reuse and conservation of the cultural and architectural heritage of the campus.<sup>30</sup>

Currently, the ANU EMP is not specific about its framework or targets for low carbon adaptive reuse projects and the refurbishment or ‘retro-greening’ existing buildings. Additionally complex is the need for ANUgreen the ANU Environment, Sustainability and Heritage Office of the ANU’s Facilities and Services Division, to assess the viability of the existing building stock against a number of criteria. These include its ability to be adapted for improved energy efficiency, its ‘retro-greening’ to continue to be useful as a University facility, and the ability to conserve the identified heritage value of the building. It is critical to ensure heritage values are conserved and managed, and that they are carefully balanced with meeting the ANU’s sustainability targets.

At the University, environmental research surrounding the complex issues of climate change and environmental degradation is being undertaken by economists, engineers, hydrologists, historians, ecologists, foresters, geographers and climatologists. The ANUgreen program currently commissions research on a case by case basis for individual buildings on campus, to actively research and balance best practice outcomes for heritage conservation with sustainability. This should continue. Given its research knowledge, the University can employ best practice initiatives and become a leader in this area.

## 5.4 Other Values of the Cultural Environment

### 5.4.1 Introduction

Beyond the built environment, the ANU has a complex history of intellectual pursuits and research achievements that form the *raison d'être* of the University and are an integral part of the institution's heritage values.

These intangible values, and the research potential for students of the ANU to investigate, contribute to the heritage values of the place as whole.

The heritage significance of the place continues to evolve through the faculty and students' ongoing research achievements. It is deeply rooted in many substantial research achievements of the past, including Nobel prize winners and world-first discoveries. However, many more achievements await identification and significance assessment—a project that will require consultation and engagement with the University community as a whole.

There is also relatively little data about the movable heritage collections of ANU. The remarkable purpose- and location-designed furniture, the artworks and the collections are a significant part of the heritage value of the ANU; future detailed research will need to be undertaken to ensure it is appropriately managed and conserved. This is a priority as movable heritage is a particularly vulnerable asset.

Identifying heritage places associated with research achievements and collections of the ANU, and assessing their relative values, will provide the knowledge base needed for an important step in the heritage conservation process: interpretation. Interpretation will enable the University communities, visitors and public to know and celebrate the many stories of the ANU, its history, its heritage places and its remarkable legacies.

### 5.4.2 Research Achievements

The research achievements of the institutes and faculties of ANU are often intangible, although associated strongly with a particular place, event or discovery which happened in a specific location.

Obvious examples include:

- the development of the Sensitive High Resolution Ion Microprobe (SHRIMP) which was a world-first;
- the research of the Geophysics Magnetic Hut, including demonstrating the reversal of polar magnetic fields and the recording of significant data in establishing an understanding of continental drift;
- the development of the home to the world's largest homopolar generator (a remnant of which is now located outside the RSPE building as an ANU artwork).

The ANU also has associations with four Nobel Prize winners, including the awarding of two of Australia's Nobel Prizes to research through the JCSMR, making it the most recognised Australian institution by the Nobel Institution.

- Professor Peter Doherty of the JCSMR shared the Nobel Prize in Physiology or Medicine with Rolf Zinkernagel in 1996 'for their discoveries concerning the specificity of the cell mediated

immune defence'. Their discovery revolutionised understanding of the immune system and has major implications for clinical medicine, regarding both the efforts to strengthen the immune response against invading micro-organisms and certain forms of cancer, and the efforts to diminish the effects of autoimmune reactions in inflammatory diseases, such as rheumatic conditions, multiple sclerosis and diabetes.

- 1963 Professor John Eccles, Medicine, also received the Nobel Prize in Physiology or Medicine for his pioneering work on aspects of the mammalian central nervous system. Professor Eccles was founding Professor of Physiology at the JCSMR.
- 1994 Professor John C Harsanyi, Economics, was a co-recipient of the Nobel Memorial Prize in Economic Sciences for pioneering work on game theory, providing a new tool for economic analysis. Professor Harsanyi taught economics at ANU.
- In October 2011, Professor Brian Schmidt from the Research School of Anatomy and Astrophysics received the Nobel Prize for Physics for his shared discovery with two American scientists that the universe is expanding at an accelerating rate.

Other research milestones include:

- Professor Frank Fenner's leading role in the eradication of smallpox; and
- the ANU team that pioneered the use of myxomatosis in the control of rabbits.

The ANU is an internationally recognised research institution. The heritage values of this research still await comprehensive identification and significance assessment, a project that will require consultation and engagement with the University community as a whole. This will ensure that the ANU research legacy is appropriately identified, conserved and celebrated.

### **5.4.3 Collections and Movable Heritage**

The University prides itself on its artworks, sculptures and individual collections of the research schools. However, to date there has been no comprehensive collation of data about the public art or movable heritage collections of ANU.

Movable heritage items at the ANU include a range of commissioned furniture and fittings, collections of materials, and artefacts relevant to the research basis of specific schools within the University, along with the cabinets that house them.

Among the earliest of these collections are the 4,000 pieces of purpose-designed furniture by Frederick Ward, commissioned in conjunction with the design and construction of University House in the early 1950s. This collection remains in existence in part within University House and also in various other parts of the University. In its own right, this collection is both rare and of high creative and technical achievement.

Many of the research collections are less well known to the wider ANU community. Often these collections are associated with specific research schools and are displayed in foyers or collection rooms of individual buildings. Many of these collections are associated with ongoing research and undergraduate teaching, and some are presented in cabinets that have been purpose-designed with the building that houses them.



The importance or rarity of the collections would be associated with the founding of the individual research schools and of the value of the items themselves.

Among those collections are:

- The ANU Rare Book Collection based at Menzies library (Rare Books Room)—The Rare Book Collection holds over 34,000 items. These items are listed in the catalogue and include a wide spectrum of disciplines and formats.
- The ANU Classics Museum, which was established in 1962 and is currently housed in the AD Hope Building. Spanning the Mediterranean and beyond, the collection features examples of ancient art and objects of daily life from Greece, the Roman world, Egypt and the Near East.
- The Keyboard Institute Collection—The Institute's keyboard collection contains a range of rare and unusual keyboards spanning the history of the evolution of keyboard instruments; representing 'monuments in the history of music'.<sup>31</sup>
- A number of important archaeological and anthropological collections, which are retained by institutions within the ANU, including the Research School of Pacific and Asian Studies (RSPAS) and the School of Archaeology and Anthropology. The Grove Collection includes skulls, skeletal materials and preserved skins, the Thorne collection contains a number of Human skeletal remains from the Willandra Lakes area, while the Golson/Ambrose Collection includes a wide range of excavated artefacts, in stone, bone, shell, pottery and wood from New Guinea and the Pacific, and is retained at RSPAS.
- The School of Botany and Zoology, which contains the two Foley (Animal and Plant) Collections. These collections include the Zoology teaching collection of invertebrate and vertebrate animals and the collection of mounted plant herbarium specimens. Both are active teaching collections.
- The Research School of Earth Sciences (RSES), which retains a number of collections of rock and mineral samples including those held at RSES and the teaching collection of rock samples in the DA Brown building
- The ANU Paleontological collection, which is a collection of fossil vertebrates from Palaeozoic rocks [Devonian Period] housed at the School of Botany and Zoology. This collection is renowned in paleontological circles as housing the world's largest collection of fossil vertebrates from the 400 million year old Devonian limestone deposits around Lake Burrinjuck, to the northwest of Canberra. This collection is considered so rare that there is no comparable collection in the world.
- The ANU Art Collection—for more than 60 years the ANU has been building a collection that reflects major developments in Australian art. It is curated by the ANU Visual Art Foundation, the Drill Hall Gallery and the ANU School of Art Gallery. The Collection was established in 1949 and now comprises more than 1,500 paintings, sculptures, drawings, limited edition prints, and ceramic and glass objects by significant artists. These are displayed throughout the campus.

Items of movable heritage also include two timber wagons located near Forestry, between Lindsay Pryor Walk and Linnaeus Way, which are situated outside buildings in a manner suggestive of a museum display but not part of a specific collection of art or teaching specimens.

This list above is by no means a complete reflection of the wide range of collections housed in various research schools across the ANU. To the best of our knowledge, a comprehensive survey has not been undertaken, but would provide essential data for collections management and assessment in the future.

Among the custom and commissioned cabinetry and fittings at the ANU are the vitrines at Menzies Library and the Geology collection cabinets in the DA Brown building. A comprehensive survey of these items is also currently not available and warrants undertaking in the future.

### **ANU Collection Policy**

ANU's core mission is to advance knowledge through research, education and community engagement. Collections of materials play an essential role in this activity. Some of those collections have a value beyond their immediate services to teaching and research, and the University recognises that those collections require appropriate care and attention.

The collections covered under this policy are groups of objects acquired and maintained by the University for the purposes of teaching, research or community engagement with the following characteristics:

- They provide a long-term educational or research resource to the University.
- They have cultural or heritage value.
- They are otherwise valuable for preservation.
- They enrich the scholarly environment of the University.

#### **5.4.4 Public Art and Sculpture in the Landscape**

A highly visible part of the ANU's Art Collection is the suite of artworks and sculptures publicly displayed across the landscape.

Integral with the founding of the University in 1946 was the concept of integrating works of art with the individual architectural projects to create a unique campus environment. Works of art in a place of learning were considered to enhance the academic environment because their presence demonstrated a culture that valued creative thinking.<sup>32</sup> Consequently, a significant number of sculptures were commissioned in conjunction with the planning and construction of major building projects.

These sculptures now demonstrate the University's continuing commitment to the study, patronage and advancement of the visual arts. This collection is a manifestation of the Art Collection's main objectives, including acquiring works of art suitable for the purpose of enhancing the public areas and works of significance within the perceived developments of contemporary Australian art.<sup>33</sup>

The appreciation of sculptures continues to be major part of the contemporary environment of the ANU. Some of the sculptures are nearly 50 years old and the collection continues to grow, with new works being commissioned. Additionally, the ANU Facilities and Services Division and the School

of Art designed a brochure in 2005, recently updated in mid-2011, which lists sculptures on the campus and a location map for self-guided tours of the artworks.

The earliest major work commissioned on campus is Gerald Lewer's sculpture 'Relaxation' which was commissioned in 1953 in conjunction with the design and construction of University House.

University House, designed by Brian Lewis, provides an outstanding example where artworks, sculpture and the design of the fixed hardware and loose furniture is integrated with the architecture. The building is a repository of modern art, including 4,000 pieces of purpose-designed furniture by Frederick Ward and major sculptural works by Gerald Lewers, Frank Hinder, Leonard French and Mark Grey-Smith.

Early works at University House include the untitled floor of the entrance hall by Frank Hinder, featuring seven panels cast in 1954, and Lewers' 1961 'Swans in Flight', the Theaden Hancock Fountain, situated in the Ladies Lounge Garden.

In 1972 Leonard French painted the mural 'Regeneration' on the end wall of the Hall and in 1996 University House purchased the Leonard French series 'The Journey', consisting of ten panels that are installed on the walls of the hall. Forty-five years after the initial commission of Lewers' 'Relaxation' came the installation of 'Withholding' by Mark Grey-Smith in 1998 on the front lawns.

Other early sculptural works commissioned for the construction of buildings include the Lyndon Dadswell screens on the windows of Menzies Library (1961), the screens on the HC Coombs buildings by Matcham Skipper (1962), the cast concrete panels on the ends of the 1962 Chemistry building by Lenton Parr, and Vincas Jomantas's sculpture 'in the Pursuit of Knowledge' (1962) in the courtyard of the Physics building. Importantly, the earliest administrators of the ANU demonstrated a commitment fostering the artistic values of practicing Australian artists.

The broader ANU sculpture collection includes a range of Australian artists practicing through the mid- to late twentieth century into the early twenty-first century, including a number with now high public profiles (Bert Flugelman, Inge King, Norma Redpath, Ron Robertson-Swann, Ken Unsworth, among others). It also includes a smaller number of international artists, mainly those with works on the International Sculpture Park on Acton Peninsula. Many of the artists also have a connection to the ANU either as alumni, past lecturers or visiting artists.

The collection intends to represent major developments in Australian art and includes a range of styles from traditional figurative bronze busts to abstract steel formalism and post-modernist installations.

## 5.5 Endnotes

<sup>1</sup> For a description of the competition and entries, see John W. Reps, *Canberra 1912: Plans and Planners of the Australian Capital Competition*, (Carlton South: Melbourne University Press, 1997).

<sup>2</sup> Reps, 1997, 144.

<sup>3</sup> S. G. Foster & Margaret M. Varghese, *The Making of the Australian National University 1946-96* (St. Leonards: Allen & Unwin, 1996), 6.

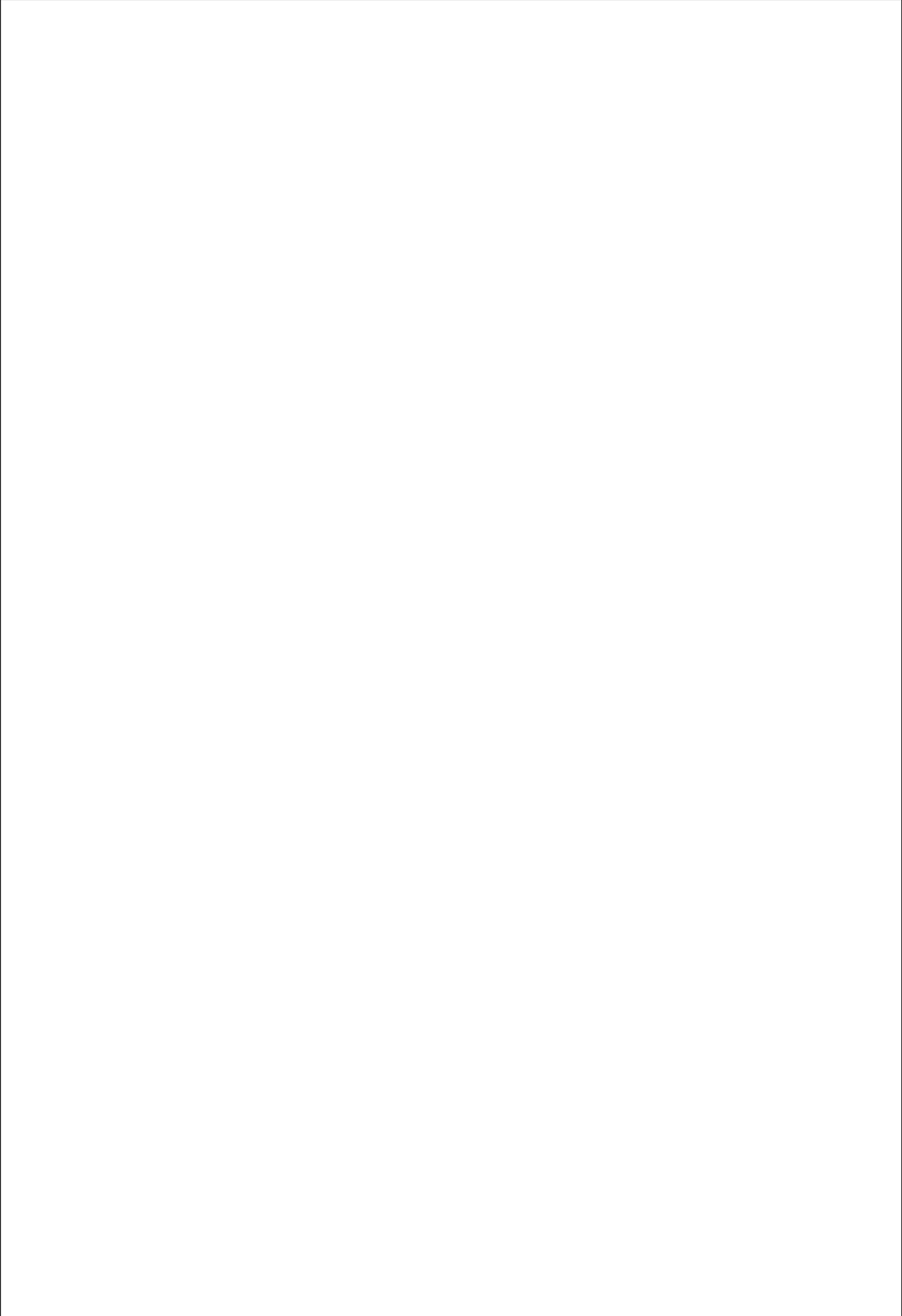
<sup>4</sup> Cited by David Dexter, 'The Australian National University Campus', 1991, 29.

<sup>5</sup> S. G. Foster & Margaret M. Varghese, *The Making of the Australian National University 1946-96* (St. Leonards: Allen & Unwin, 1996), p. 6-7.

<sup>6</sup> Jim Gibbney, 1996, *Canberra 1913-1953* (Canberra: Australian Government Publishing Service, 1988), 166, Foster & Varghese, p.8.

<sup>7</sup> Dexter D 1991, *The ANU Campus*, ANU, Canberra, p.106.

- <sup>8</sup> Dexter D *ibid.*, p.64, p.259.
- <sup>9</sup> Refer to Section 2.2 for further information
- <sup>10</sup> S. G. Foster & Margaret M. Varghese, *The Making of the Australian National University 1946-96* (St. Leonards: Allen & Unwin, 1996), p.19.
- <sup>11</sup> S. G. Foster & Margaret M. Varghese, *The Making of the Australian National University 1946-96* (St. Leonards: Allen & Unwin, 1996), p.67-69.
- <sup>12</sup> Geoffrey Serle, Robin Boyd, *a Life* (Carlton North: Melbourne University Press, 1995), 105; Stewart Cockburn and David Ellyard, Oliphant, *The Life and Times of Sir Mark Oliphant* (Axiom 1981), p.154.
- <sup>13</sup> *The ANU, the history of the site plan 1912-1917, 1973*, unpublished report ANU.
- <sup>14</sup> Richard Ratcliffe and John Armes, 'ANU Heritage Study', Stage 1, Volume 1, 1993, 20; Robin Boyd, *The Australian Ugliness* (F. W. Cheshire, 1960), this edition Penguin Books, 1968, 33.
- <sup>15</sup> Howard Florey to Douglas Copland, Vice-Chancellor, ANU. Trevor Williams, Howard Florey, Penicillin and After (Oxford: Oxford University Press, 1984), 251-52; Foster and Varghese, 1996, p.74.
- <sup>16</sup> Foster and Varghese, 1996, 74.
- <sup>17</sup> Cockburn and Ellyard, 1981, 162.
- <sup>18</sup> Grounds claimed that the main reason no more staff houses were built was because 'the university authorities decided that if they provided housing for professors, they would have to provide it for all staff'. Roy Grounds, interview by Conrad Hamann, January 1978. Hamann, 'Modern Architecture in Melbourne, the Architecture of Grounds, Romberg and Boyd, 1927-1971', 51, ANUA 53, Correspondence files, Box 469, 12.1.2.9 (1).
- <sup>19</sup> S. G. Foster & Margaret M. Varghese, *The Making of the Australian National University 1946-96* (St. Leonards: Allen & Unwin, 1996), p.67.
- <sup>20</sup> ANU Heritage on line <http://heritage.anu.edu.au/index.php?pid=13>, viewed June 2011.
- <sup>21</sup> Winston and Ruddock, 'The ANU Site Development Proposals', September 1955, p.1.
- <sup>22</sup> ANU Buildings and Grounds Division, 'Development Policy Plan', 1992, p.14.
- <sup>23</sup> Winston and Ruddock, 'The ANU Site Development Proposals', September 1955, p.31.
- <sup>24</sup> Ratcliffe and Armes, 'ANU Heritage Study', Stage 2, Volume 1, 1995, p.19.
- <sup>25</sup> Richard Ratcliffe and John Armes, 'ANU Heritage Study', Stage 1, Volume 1, 1993, 20; Robin Boyd, *The Australian Ugliness* (F. W. Cheshire, 1960), this edition Penguin Books, 1968, p. 33.
- <sup>26</sup> Geoffrey Serle, Robin Boyd, *a Life* (Carlton North: Melbourne University Press, 1995), 105; Stewart Cockburn and David Ellyard, Oliphant, *The Life and Times of Sir Mark Oliphant* (Axiom 1981), p.65.
- <sup>27</sup> Roy Simpson, 'A. S. Hook Address', 1997.
- <sup>28</sup> G. Foster & Margaret M. Varghese, *The Making of the Australian National University 1946-96* (St. Leonards: Allen & Unwin, 1996), pps 193-194.
- <sup>29</sup> Pers Comm John Sullivan, Manager Energy & Sustainability office of Facilities & Services Division, August 2011.
- <sup>30</sup> ANU Environmental Management Plan Implementation Strategies 2010-2015, April 2010.
- <sup>31</sup> ANU Website <http://music.anu.edu.au/node/322>
- <sup>32</sup> ANU, 2005, Sculptures at the ANU Acton Campus - [http://facilities.anu.edu.au/files/1227\\_sculpture\\_brochure.pdf](http://facilities.anu.edu.au/files/1227_sculpture_brochure.pdf)
- <sup>33</sup> ANU website [http://www.anu.edu.au/mac/content/art\\_collection](http://www.anu.edu.au/mac/content/art_collection) viewed on 8 September 2011.





## 6.0 Acton Campus as a Cultural Landscape

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### 6.1 Introduction

This section provides a discussion of the cultural heritage value of the Acton campus landscape and its plantings, as well as the key characteristics that contribute to this cultural landscape. Together with the discussion of natural values in Section 3.0, and the other sections which discuss the historic, cultural and built context for the site (Sections 2.0, 4.0 and 5.0), it will inform the assessment of heritage values in Section 7.0.

A cultural landscape is defined as the combined works of nature and humankind.<sup>1</sup> The concept emphasises the 'landscape-scale' of history and the connectivity between people, places and heritage items—recognising that the present landscape is the product of these long-term and complex relationships.<sup>2</sup>

There are historic layers of the ANU's history which combine with the natural environment and landscape setting of Canberra; from its Indigenous occupation by the Ngunnawal people (Section 4.0), to the development of Canberra (Section 2.0) through to the formation and growth of the University (Section 5.0).

### 6.2 Landscaping the Campus

#### 6.2.1 Trees Pre-Dating European Settlement

Previously discussed in Section 3.0, the trees which pre-date European Settlement are the remnants of the savannah woodland and grasslands which featured along Acton Ridge and the site of the ANU campus.

The remnant original trees are described as the 'bones' supporting the landscape structure of the campus.<sup>3</sup> In summary, the original trees include five species: Yellow Box (*Eucalyptus melliodora*), Blakely's Red Gum (*Eucalyptus blakelyi*), Apple Box (*Eucalyptus bridgesiana*), Brittle Gum (*Eucalyptus maniifera*) and Candle Bark (*Eucalyptus rubida*).

#### 6.2.2 Pre- and Early University Planting

Native and exotic trees were planted following European settlement in the area of the (future) University. Refer to Table 6.1 for the trees which are characteristic of the nineteenth-century use of the land as a pastoral landscape and the earlier Indigenous landscape in the area of the International Sculpture Park around the Acton Peninsula, on the edge of Lake Burley Griffin.

The landscape planting from the Federal Capital period area is a prominent aspect of the present day campus. Noted previously in Section 2.0, the early plans for landscaping the capital city to implement Griffin's plans were undertaken by Weston. He established a temporary nursery at Acton near the administrative offices surrounding (former) Acton House, Old Canberra House and the old hospital buildings, experimenting with species and hybrids to trial and assess the best trees for the Limestone Plains.<sup>4</sup>

Weston's selection included Australian native species from various origins, exotic deciduous trees and exotic coniferous trees. Many of the trees subsequently grown in Canberra's streets and parks were chosen because of their success in Weston's experimental plantings. The mature effect on the local

landscape was a transformation from bare plains to modern city, with the urban forest and surrounding treed hills a distinctive feature of Canberra today.

Weston's success in Acton, the site of the future ANU, includes the Cedars, Douglas Fir and a Canary Island Pine<sup>5</sup> near old Canberra House, Cedars and prunus along Liversidge Street, Monterey Pines, Elms and Eucalyptus on Acton Ridge and White Poplar, Silver Poplar, Elms, Cedars and giant Sequoia on University Avenue. Weston's plantings are valuable assets to the ANU treescape and described by Professor Ken Taylor accordingly: '[a] number of fine trees, mainly evergreens, with beautifully developed crowns have been able to develop because of the open setting.'<sup>6</sup>

In summary, the evidence of the pre and early University cultural plantings including Weston's plantings from the pre-university period can be found around Old Canberra House (1913–1920) and there are remnants from the original grand parade plantings of University Avenue, cypresses around the Acton cottages and plantings dating from a shepherd's hut (c1850). Some of his plantings also survive on Liversidge Street, University Avenue, Kingsley Street and Linnaeus Way.

There are also commemorative plantings of Earl and Lady Grey at Old Canberra House and the cricket bat willow planted by test cricketers in the late 1920s which is located near the Physics Building (38);

### **6.2.3 Continuing the Planting Tradition**

Extensive landscape planting programs have continued since the establishment of the ANU in association with the development of the campus. The tradition of planting has essentially evolved from Weston's initial planting in Acton and the conservation of remnant original trees are protected as part of the current tree management program.

A major contributing influence on the landscape development of the ANU campus, and wider Canberra, was Lindsay Pryor, Emeritus Professor of Botany (he was appointed in 1959 as the Foundation Chair of Botany at the ANU), who had been involved in the early development of the Australian National Botanic Gardens and who had a particular interest in Australian native plants. Pryor took the inheritance of exotics started by Weston and further developed it with native species. The splendid stands of urban treescapes of ANU and wider Canberra are his generous legacy.

Professor John Banks (Forestry ANU) worked closely with Pryor in developing the strong landscape character of the campus that is evident today. In 1991 he assisted Pryor to produce the 3<sup>rd</sup> edition of 'Trees and Shrubs in Canberra' which provides comprehensive descriptions of woody species planted in Canberra's streetscapes. It is a prolific text with each species being illustrated by colour plates and accompanied by comment of general interest.

John Banks, with Warwick Williams, the then Director of Facilities and Services, established Lindsay Pryor Walk in recognition of Pryor's significant role at the ANU. The walk commences at the pedestrian crossing opposite Ursula Hall on Daley Road, running past the Forestry Building and Research School of Biological Sciences to the western side of the Hancock Building. The walk includes plaques to describe various trees and shrubs and the botanical paving stones set into the pathway.<sup>7</sup>

Banks worked at the ANU for 35 years and is remembered by a Wollemi Pine planted in his honour on World Forestry Day on 21 March 2006.

Over time, various tree themes have evolved within the campus with areas of predominantly Australian native species, others with mainly exotic deciduous trees or conifers and some with mixed planting. The most enduring philosophy for the planting theme for the campus is based on an image of the native

landscape of Black Mountain sweeping over the campus being interspersed with pockets and avenues of exotic species.

The ANU's 1994 Strategic Landscape Plan, prepared by Knox & Tanner Pty Ltd, proposes a landscape treatment to 'work with buildings and courts, the main axial paths and Sullivans Creek Open Space System to assist in orientation within the University, strengthen the connections between precincts and provide a strong impact of a diverse but unified campus.' This Landscape Plan continues to be used by the ANU's arborist and grounds staff of the Facility and Services Division and is the basis for the cultural plantings included in the ANUs 'Tree Database'.

## **6.3 Cultural Plantings in the Landscape**

### **6.3.1 ANU Tree Database**

An inventory of trees of heritage significance on the ANU campus has been undertaken as part of this study, through site survey and research. This has been augmented by a tree database maintained by the ANU. The dataset is maintained by the ANU's Gardens and Grounds section of the Facilities and Services Division and includes genus and species, physical dimensions and health, and is used as a management information system for maintenance and planning. The trees in it are given a 'significance' rating of exceptional, high, medium or poor. These ratings relate primarily to the landscape and visual importance of the trees. However, the criteria for the exceptional rating also include historic value, commemorative value or natural history value.

### **6.3.2 Cultural Heritage Value of Trees in the Landscape**

This section provides a discussion about the cultural heritage value of the plantings at the campus. It is important to note that of the 10,000 + trees on the ANU campus; only a select few have cultural heritage value. This is not to say that the other trees, the vast majority, are without 'heritage value'. Their contribution to the scenic and aesthetic qualities of the campus is extremely high; both singly and in combination, and these values have been recognised in the literature<sup>8</sup> and in successive phases of developmental planning for the University—most recently in the ANU Campus Master Plan 2030.<sup>9</sup>

Some landscape plantings at the ANU are rare exotic species (for Canberra and the Australian landscape) and some are rare natives, including the Wollemi pine near the Botany School. However, this does not automatically afford them heritage value unless their selection and establishment can be associated with a prominent individual or historical phase of the university's development. This is an uncertain area, because since the 1950s there are periods during which individuals in the Botany and Forestry Schools, who also served as landscape advisors for the campus (primarily Pryor and Banks), have sought to establish small isolated arboreturns based on themes. Among these are mixed oak plantings around the old administration area in the 1950s and the 'pinetum' Forestry quadrangle and Willow oaks (*Quercus phellos*) along Linnaeus Way in the 1960s and early 70s. In general, the grouping of surviving trees which have both a theme and association with a prominent individual have been included in the heritage inventories below, while the individual rare or unusual exotics have not.

The trees on site with significant cultural heritage value may be divided into the following categories:

- i. Early cultural plantings associated with agricultural use and site settlement (before 1920s);
- ii. Experimental plantings mainly associated with the work of the Parks and Gardens Section (Department of Interior) and the University's own landscaping organisation (1920–1960);
- iii. Historic formal and informal exotic landscape plantings on campus (1930–1960); and

iv. Historic formal and informal native landscape plantings on campus (1930–1960).




### (i) Early Cultural Plantings

These are individual exotic trees or groups of trees which were planted when Acton Ridge and the Sullivans Creek floodplain were pastoral areas, before (and in the case of ECP3, during the early stages of) the establishment of the city of Canberra.



**Figure 6.1** Detail contemporary aerial photograph showing locations of early cultural plantings associated with agricultural use and site settlement (before 1920s). (Source: Base image Google Earth)

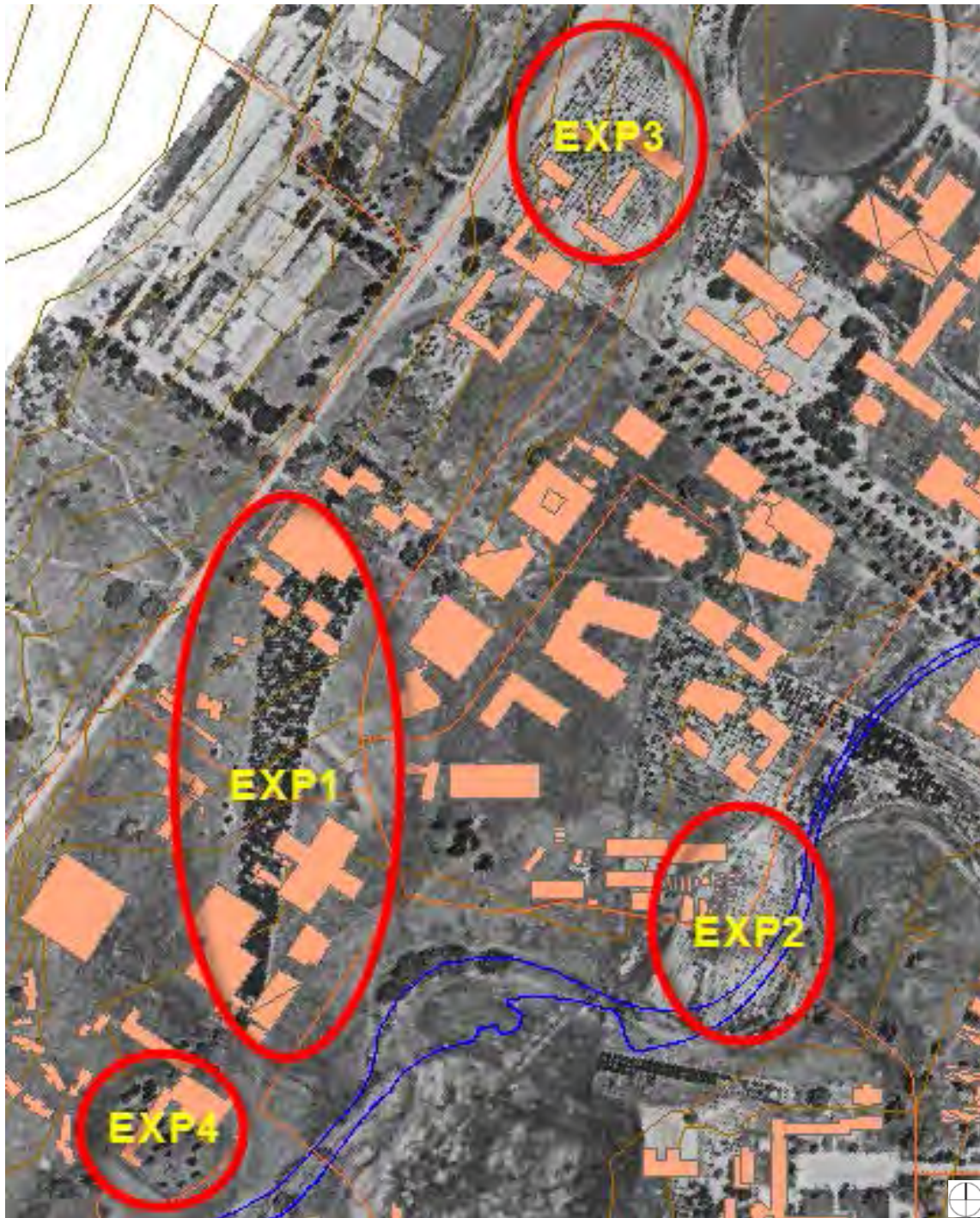
**Table 6.1** Early cultural plantings associated with agricultural use and site settlement (before 1920s).

Map	Photo	Description	Reference for Cultural Heritage Value
ECP1		Group of very old <i>Populus nigra</i> var. <i>Italica</i> (Lombardy poplar) behind the Forestry School	Banks (1979) <sup>10</sup> records: 'the copse of Lombardy poplars near Forestry apparently dates from this period (pre-Canberra) and it is thought marks the site of an early shepherd's hut'.  Listed as a significant tree group in Pryor and Banks (2001) <sup>11</sup> as 'shepherd's hut group (circa 1850)'.
ECP2		Some <i>Salix babylonica</i> (Weeping willow) trees along parts of Sullivans Creek, (where the course is unchanged) have generated from original plantings dating from the pre-Canberra agricultural period.	Banks (1979) records: 'Graziers also left their mark.... Weeping willows along Sullivans Creek originate from early plantings'.
ECP3		One of three old <i>Robinia</i> trees which bordered a small limestone quarry area operating in this area.	ANU Heritage Officer, Pers. Com, April 2011.

## (ii) Experimental plantings



These are survivors from extensive groups of trees which were planted as part of Pryor's experimental plantings during the late 1950s and 1960s. These were designed to explore suitable species for Canberra landscaping and to investigate the growth forms of selected Eucalypts at different densities. At that time the campus was relatively undeveloped and large areas of unused land remained—especially in the northwest of the site. Remnants from four of these large plots survive today among the buildings of the university.







**Figure 6.2** Detail of the 1960 aerial photograph (northern corner of campus) showing four areas of experimental plantings, with present ANU buildings and road network superimposed. (Source: base image Google Earth)

**Table 6.2** Experimental plantings mainly associated with the work of the Parks and Gardens Section (Department of Interior) and the University's own landscaping organisation (1920–1960).

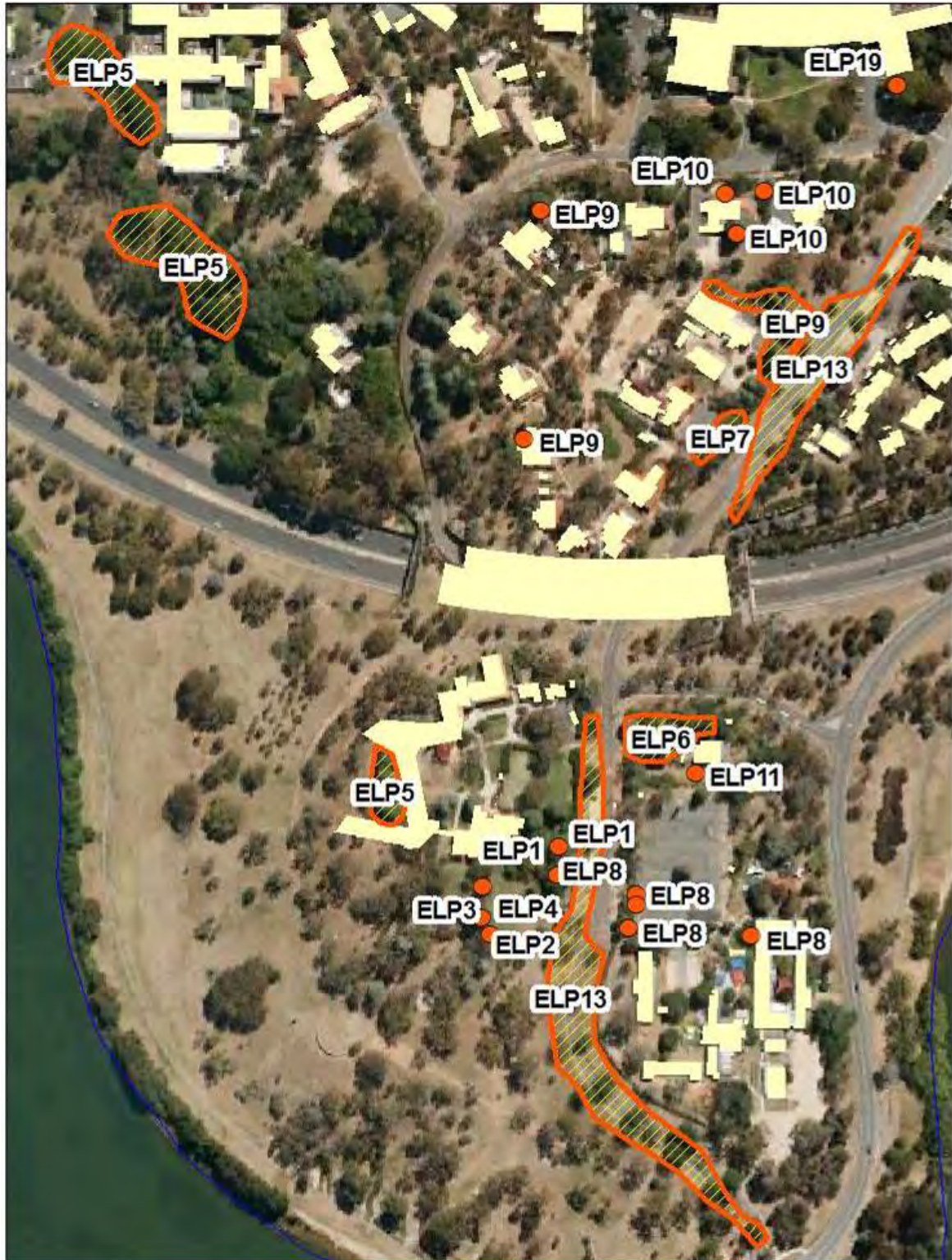
Map	Photo	Description	Reference for Cultural Heritage Value
EXP1		<p>High density planting of <i>Eucalyptus bicostata</i> by Pryor in the area now occupied by Garran Hall and Ursula College.</p> <p>Because of their closed forest density, these trees have grown very tall.</p>	<p>Banks (1979)<sup>12</sup> records: 'They are part of experimental plantings made available by Pryor. The major eurabbie stand stretching from Garran Hall south into Ursula College carpark was established in 1952'.</p>
EXP2		<p>A ragged line of <i>Eucalyptus aggregate</i> individuals have survived from extensive experimental plantings along both sides of Sullivans Creek.</p>	<p>Banks (1979) records: 'Other (experimental) plantings (in the early 1950s) included a belt of black gum on either side of Sullivans Creek below Fellows Road'.</p>



Map	Photo	Description	Reference for Cultural Heritage Value
EXP3		Mixed conifers and deciduous trees in a regular grid were planted in the northern corner of the campus. A small part survives next to Bruce Hall carpark.	These plantings probably date from the early 1950s and are those referred to in Banks (1979) as: '...the mixed exotic and native species in the north-west of campus around the present day Corin Hut complex'. Banks notes the poor growth of these trees.
EXP4		Mixed poplar plantings in the area now occupied by Burgmann College. Included in the group is a white poplar from North Africa ( <i>P. alba</i> var. <i>Matikar</i> ).	Banks (1979) dates this group to the mid-1950s. In Banks and Pryor (2002) the <i>P. alba</i> var. <i>Matikar</i> is listed as a significant tree and dated at 1960.

### (iii) Formal and informal exotic landscape plantings

These individual exotic trees have cultural heritage value in the landscape for a variety of reasons. The first group are trees which, because of their age, date from the earliest period of the establishment of the city of Canberra. These are the plantings around Old Canberra House and the Acton Ridge cottages. Also included in this group are shelterbelt plantings—probably to protect Old Canberra House and the Acton Ridge cottages from westerly winds off the Molonglo River valley on the Limestone Plains. The second group are trees dating from the earliest formal landscaping associated with the development of the ANU campus. These include the University Avenue plantings, 'Winston Line' plantings and elms along Liversidge Street. The third group in this heritage category are the special interest and themed groups of exotics established in the 1960s. The locations for these trees are shown in Figures 6.3a and 6.3b and listed in Table 6.3.



**Figure 6.3a** Detail contemporary aerial photograph showing locations of early cultural plantings associated formal and informal exotic landscape plantings. (Source: base image Google Earth)




















**Figure 6.3b** Detail contemporary aerial photograph showing locations of early cultural plantings associated formal and informal exotic landscape plantings. (Source: base image Google Earth)







**Table 6.3** Historic formal and informal exotic landscape plantings on campus (1930–1960).






Map	Photo	Description	Reference for cultural heritage value
ELP1		Old trees either side of the entrance gate to Old Canberra House. These are commemorative trees from 1914 planted by Earl Grey ( <i>Cedrus libani</i> ) and Lady Grey ( <i>Cedrus deodora</i> ).   	These date from the establishment of Old Canberra House gardens. The <i>Cedrus deodora</i> is listed as a significant tree in Pryor and Banks (2001) <sup>13</sup> as 'one of the largest in Canberra'.
ELP2		<i>Pinus canariensis</i> in the lawns of Old Canberra House.	Listed as a significant tree in Pryor and Banks (2001) <sup>14</sup> as 'circa 1920'.
ELP3		<i>Pinus sabiniana</i> in the lawns of Old Canberra House.	Listed as a significant tree in Pryor and Banks (2001) <sup>15</sup> as 'circa 1920'.

Map	Photo	Description	Reference for cultural heritage value
ELP4		<i>Calocedrus decurrens</i> in the lawns of Old Canberra House.	Probably dating from 1926, the time that this same species was planted in University Avenue.
ELP5	  	Shelterbelt plantings of Monterey Pine ( <i>Pinus radiata</i> )/ Canary Island pine ( <i>Pinus canariensis</i> )—probably to protect the Acton Ridge cottages and Old Canberra House from westerly winds off the Molonglo River valley on the Limestone Plains	Banks (1979) <sup>16</sup> records: 'In the 1920s an extensive Monterey pine shelterbelt was established to the south-east of the present day Oliphant buildings'.
ELP6		<i>Cupressus macrocarpa</i> (left) and <i>Cupressus torulosa</i> (right) along the driveway of Constable's Cottage (8 Liversidge Street / Building 28).	Listed as 'Weston 1914 planting - Heritage value' in ANU Tree Database.

Map	Photo	Description	Reference for cultural heritage value
ELP7		A line of <i>Cupressus macrocarpa</i> on Liverside Street – originally a hedge which has grown out into trees.	Date unknown. It may date from similar <i>Cupressus</i> tree plantings in the same area.
ELP8		A line of <i>Schinus molle</i> (Peppercorn) trees along Liverside Street, plus another adjacent to Lennox House.	Listed as 'Early Weston planting - Heritage value' in ANU Tree Database.
ELP9	 	Large group of mixed cypress trees among the cottages on Acton Ridge along Liverside Street (between Parks Way underpass and Balmain Crescent). Species present are <i>Cupressus macrocarpa</i> , <i>C. torulosa</i> , <i>C. arazonica</i> , <i>C. sempervirens</i> and <i>C. glabra</i> .	Listed as 'Weston 1913 planting - Heritage value' in ANU Tree Database.
ELP10		Two <i>Cupressus sempervirens</i> trees and a <i>C. arazonica</i> (left to right) among cottages along Balmain Crescent, opposite University House.	Listed as 'Weston 1913 planting - Heritage value' in ANU trees database.



Map	Photo	Description	Reference for cultural heritage value
ELP11		<i>Ficus carica</i> (Common fig) shooting from very large, old root mass. Growing on the south side of Constable's Cottage.	Associated with Constable's Cottage garden plants. Pre-ANU.
ELP12		Surviving original plantings along University Avenue are <i>Populus alba</i> . The original mix of <i>P. alba</i> and <i>P. nigra</i> has been maintained through replacements for senescent trees.	The <i>P. alba</i> trees listed as a significant tree group in Pryor and Banks (2001) <sup>17</sup> as 'five mature trees circa 1920'.
ELP13		Elm trees along each side of Lennox Crossing Road between Bachelors Land and the intersection with Lawson Crescent.	The only recorded elm plantings on Acton Ridge date from before 1920 (Banks (1979) <sup>18</sup> ) and these trees probably date from this period.
ELP14		The surviving section of a line of poplars which originally stretched from Sullivans Creek up to the Chancelry area.	Banks (1979) <sup>19</sup> records: 'The only other significant planting at this time (early 1930s) was the major screen plantings of poplars between the tennis courts and Sullivans Creek and extending up to the Chancelry Annex along the so-called 'Winston Line''. This may be a retrospective reference to Professor Dennis Winston who was University architect during the years of 1954–1967.

Map	Photo	Description	Reference for cultural heritage value
ELP15		Probably the single surviving <i>Salix alba</i> var. <i>coerulea</i> (Cricket bat willow) from a group planted near the oval on the northwest of the campus (now carparks and landscaping)—or a shoot from an original tree. This tree is on the eastern corner of the Physics Building.	Part of a group planting by test cricketers in the late 1920s–early 1930s.
ELP16	 	Mixed conifer species 'pinetum' established between the Forestry School and the School of Biological Sciences. Part of the 'Lindsay Pryor Walk'.	During the 1950s and 60s individuals in the Botany and Forestry Schools, who also served as landscape advisors for the campus (primarily Pryor and Banks), established small isolated arboretums based on themes. The 'pinetum' is one.
ELP17		Wollemi pine ( <i>Wollemia nobilis</i> ) cultivated in the Forestry Quadrangle.	The isolated and restricted natural range of this species is part of the values protected by the listing of the Blue Mountains World Heritage site. A limited number have been propagated from the original type location's seed source for research. The Forestry Quadrangle pine is one. (The seeds became commercially available in 2006). Commemorative tree for John CG Banks.
ELP18		Mature mixed conifers and broadleaf species in the small enclosed garden area between the Forestry and Geography buildings.	During the 1950s and 60s individuals in the Botany and Forestry Schools, who also served as landscape advisors for the campus (primarily Pryor and Banks), established small isolated arboretums based on themes. The Forestry Quadrangle is one.







#### (iv) Formal and informal native landscape plantings

A major focus of campus landscaping has been the establishment of native species in both formal and informal arrangements throughout the University. Most of these plantings have occurred since the 1960s and extend to the present day. As a result, the majority of trees currently on campus date from this period. The most used species in this context have been *Eucalyptus bicostata*, *Eucalyptus mannifera*, *Eucalyptus elata* and *Eucalyptus viminalis*. These species are widespread throughout the campus, and individuals and groups of widely varying ages can be seen. The oldest surviving native tree plantings (as distinct from survivors and remnants from the original natural vegetation—refer to Section 3.0) which substantially predate the 1960s plantings are listed below in Table 6.4, refer to NLP1 and NLP2.




**Figure 6.4** Detail of a contemporary aerial photo showing locations of historic formal and informal native landscape plantings on campus (1930–1960). (Source: base image Google Earth)

**Table 6.4** Historic formal and informal native landscape plantings on campus (1930–1960).

Map	Photo	Description	Cultural heritage value
NLP1		Grove of <i>Angophora floribunda</i> trees at the corner of Liversidge Street and Balmain Crescent, location of the Churchill Trust.	<p>Listed as a significant tree group in Pryor and Banks (2001)<sup>20</sup> were planted 'circa 1930'.</p> <p>"part of the Weston's original 1920s introductions into Canberra", Banks and Gaardboe (1996)<sup>21</sup>.</p>
NLP2		Grove of <i>Eucalyptus bicostata</i> trees at the corner of Balmain Crescent and Mills Road and extending among the Jaeger Buildings complex.	<p>Listed as 'Weston 1919 plantings - Heritage value' in ANU trees database.</p> <p>Listed as 1915-1920 plantings and "one of the first <i>E. bicostata</i> planted on campus", Banks and Gaardboe (1996)<sup>22</sup>.</p>
NLP3		Single <i>Eucalyptus smithii</i> at the northwestern corner of the Forestry School.	Listed as a significant tree in Pryor and Banks (2001) <sup>23</sup> as 'planted in 1968'.
NLP4		<p>Row of <i>Eucalyptus mannifera</i> trees tracing the old alignment of Balmain Crescent towards Lennox Crossing.</p> <p>This group identified in Banks (1979) as; 'The candlebark trees along Balmain were planted in 1916'. It is unlikely that Banks would misidentify <i>E. rubida</i>—so these trees may be replacements of the original plantings.</p>	Date unclear. Associated with historical alignment of Balmain Crescent in the south of the campus.



Map	Photo	Description	Cultural heritage value
NLP5		Survivors of a group of <i>Eucalyptus viminalis</i> trees established near the cricket practice area.	Recorded as planted in 1965 by Banks (1979). Recorded in ANU trees database as planted in 1950. Noted as tallest tree on campus (at 32m) in Banks and Gaardboe (1996) <sup>24</sup> .

### 6.3.3 Commemorative and Memorial Trees at ANU

There are a number of commemorative trees scattered throughout the campus area. Some have undoubted historic value due to their age and/or association with prominent people or events, and these are included in the inventory in Section 6.3.4. Another large group of trees and shrubs have been dedicated as commemorative and memorial plantings in recent years—and although these currently have no historic cultural value they are part of ANU's cultural heritage and should be recognised as such. Drawn from the ANU's trees database, these comprise the following items:

Species	Age	GPS Coordinates	Commemoration
<i>Cedrus libani</i>	Mature	-35.2881920338 149.116711721	Commemorative cedar 1914
<i>Cedrus deodara</i>	Mature	-35.2880798115 149.116749402	Commemorative cedar 1914
<i>Fraxinus angustifolia</i>	Semi mature	-35.2880033936 149.116771778	Commemorative tree. Tree label
<i>Prunus serrulata</i>	Young	-35.2885760962 149.116598021	Replacement commemorative tree cultivar 'fugenzo'
<i>Platanus x acerifolia</i>	Young	-35.2867131293 149.117057095	European centre-commemorative tree.
<i>Quercus robur</i>	Semi mature	-35.2841161886 149.118433773	Commemorative tree - Hancock Oak from Cambridge University.
<i>Eucalyptus pauciflora</i>	Semi mature	-35.2785659517 149.121265207	Commemorative tree - sorry day.
<i>Lagerstroemia indica</i>	Young	-35.2760251824 149.119286293	Commemorative tree - Autumn festival
<i>Acer saccharinum</i>	Semi mature	-35.2851699452 149.114943078	Commemorative tree - Walter Sawicki.
<i>Wollemia nobilis</i>	Young	-35.2777442083 149.116060909	Commemorative tree for John Banks
<i>Eucalyptus camaldulensis</i>	Semi mature	-35.2786422013 149.115483382	Commemorative tree - World forestry day.
<i>Magnolia grandiflora</i>	Young	-35.2786338392 149.115001494	Ursula Hall old scholars 40th anniversary commemorative tree.
<i>Eucalyptus kybeanensis</i>	Young	-35.2784997563 149.115385873	Forestry 50th reunion commemorative tree.
<i>Ulmus glabra</i> 'Lutescens'	Young	-35.2833270906 149.114065036	Commemorative tree

Species	Age	GPS Coordinates	Commemoration
<i>Lagerstroemia indica</i>	Young	-35.2760505756 149.11930086	Replacement commemorative tree
<i>Pyrus ussuriensis</i>	Mature	-35.2743946092 149.117046134	Memorial tree - Cindy Sheu.
<i>Pyrus calleryana</i>	Semi mature	-35.2789343665 149.114260153	Memorial tree - Jacqueline Hyde
<i>Melia azedarach</i>	Mature	-35.2779449554 149.116998216	Memorial tree - Sir Rupert Myers
<i>Eucalyptus pryoriana</i>	Semi mature	-35.2786029442 149.116079307	Memorial tree - Lindsay Pryor.
<i>Eucalyptus bridgesiana</i>	Semi mature	-35.276773787 149.115430976	Memorial tree - Peter "Wally" Bamford.
<i>Pistacia chinensis</i>	Semi mature	-35.2761229028 149.117659468	Memorial tree - Noel Call.
<i>Corymbia maculata</i>	Young	-35.2821981699 149.120150758	Memorial tree - Hokari Minoru.
<i>Angophora costata</i>	Semi mature	-35.2822326798 149.120098417	Memorial tree - Elizabeth Kingdon.
<i>Prunus serrula</i>	Semi mature	-35.2802895862 149.121302228	Memorial tree - Past ANU Indian students.
<i>Prunus serrula</i>	Semi mature	-35.2802387284 149.121283857	Memorial tree - Past ANU Indian students.
<i>Prunus serrula</i>	Semi mature	-35.2801811 149.121222314	Memorial tree - Past ANU Indian students.
<i>Prunus serrula</i>	Semi mature	-35.2802291463 149.121236387	Memorial tree - Past ANU Indian students.
<i>Prunus serrula</i>	Semi mature	-35.2802930215 149.121259818	Memorial tree - Past ANU Indian students.
<i>Eucalyptus mannifera</i>	Young	-35.2802988509 149.122870661	Anzac memorial tree replacement
<i>Eucalyptus melliodora</i>	Young	-35.2826626195 149.119105833	Memorial planting for John Braithwaite
<i>Acer pentaphyllum</i>	Young	-35.280174503 149.121420326	Memorial planting for Professor Alfonso
<i>Melia azedarach</i>	Young	-35.2823683897 149.119450318	Memorial tree - Valerie Braithwaite.

## 6.4 Key Character Areas of the Landscape

The campus landscape and cultural plantings discussed above are described as an important part of the University's identity—the 'binding' characteristics of the ANU campus. The following character areas further define these building blocks of the ANU's cultural landscape.

### 6.4.1 The Acton Campus

#### The Location of the Campus

Historically the location of the ANU at the Acton campus was vehemently protected and maintained as the site for the future university. The planning of the campus was often contentious and Griffin's chosen location remained the 'fixed' feature from which to develop the site. Development ideology changed with the several personalities involved and their development objectives, rather than there being any structurally united layout or visual identity, despite planners and architects trying (and in large part failing) to integrate the whole site into the unified civic presentation that Griffin had conceived.<sup>25</sup> The location is one of the historic layers which contributes to our understanding of the cultural landscape.

The main characteristics of this historic layer, which are visible in the contemporary landscape, are:

- The proximity of the ANU to Black Mountain both as a dramatic visual backdrop, and as a site of activities which are complementary to the University, such as the CSIRO and the National Botanic Gardens (Figures 6.5 and 6.6).
- Its proximity to the city and the important 'town and gown' interface.
- The presence of the site with the Municipal and Water Axes of the Griffin plans for Canberra.
- The proximity of the campus to Lake Burley Griffin and the views into and out from the campus across the lake (to Black Mountain, Red Hill, the Brindabella Mountain Range to the southwest and the ranges to the east.)
- The major public road frontages to the northwest and northeast which give a sense of address to the University.<sup>26</sup>

#### **6.4.2 Evidence of Griffin's Plans**

Today there is scarce surviving physical evidence of the implementation of Griffin's plans of 1912, 1913, 1915, 1918 and 1925. However, what was realised, and remains at the ANU as evidence of Griffin's plans, includes:

- the 'ornamental lakes'; the West Basin and West Lake of Lake Burley Griffin, to the southwest and southeast perimeters of the campus;
- the location of the ANU in Griffin's 'Education Precinct', with its dramatic, stage-set vision of 'Black Mountain rising almost directly out of the waters at the western end of the Water Axis' and between the Municipal Axis;
- the 'University Group', a diagram in which Griffin proposed a university layout whereby he 'sought an organic union between function and site. Theoretical disciplines formed the core, surrounding a central quadrangle and library, while applied disciplines were located at the periphery to reflect their relationship to the surrounding city functions.'<sup>27</sup> Generally, this is what exists at the university today and the 'professional schools, gardens, and forestry reserves' surround the campus; and
- small sections of the road layout for the city and its connection to the university (1915, 1918 and 1925 plans)—Ellery Crescent (which later enclosed the Canberra High School), Liversidge Street, Edinburgh Avenue (which was referred to by Griffin as 'University Avenue') and Terrace Avenue (which is the current University Avenue).

#### **6.4.3 Acton Ridge**

Acton Ridge is an important part of the ANU's cultural landscape for its Indigenous cultural values, pastoral history prior to Canberra's development, early settlement of Canberra and for its biodiversity.

For the Indigenous cultural history Acton Ridge is part of a track that connected a series of important landmarks: Mount Rogers, Black Mountain and Capital Hill (site of Parliament House)—the latter being a sacred site.



The area of Acton Ridge is the high ground of the campus and covers the area of the 'Acton Conservation Area'. The landscape environment and cultural plantings, together with the historic built evidence of the pre-university development, are the most characteristic features of the cultural landscape of Acton Ridge. It includes the former Acton Village, Old Canberra House, the old hospital buildings, the Balmain Crescent and Liversidge Street Cottages, and the other important buildings along Liversidge Street and Lennox Crossing (see Figures 6.7–6.12).

The 'Acton Ridge Walkway' is a pedestrian zone which extends beyond the ridge itself, and will become part of the cotemporary cultural landscape of the campus. It is proposed to connect the southern and northern ends of the campus for pedestrians.



**Figure 6.5** Black Mountain and the tower providing a backdrop to the University (from the junction of Fellows Road and Sullivans Creek Road). (Source: GML 2011)



**Figure 6.6** Black Mountain and CSIRO buildings located adjacent to the Campus, view across Clunies Ross Road. (Source: GML 2011)



**Figure 6.7** The northern side of Old Canberra House in the Acton Conservation Area. (Source: GML 2011)



**Figure 6.8** Old Hospital Building (61A) in the Acton Conservation Area. (Source: GML 2011)



**Figure 6.9** 16 Balmain Lane Cottage (67), in the Acton Conservation Area, view. (Source: GML 2011)



**Figure 6.10** 3 Liversidge Street Cottage (68), in the Acton Conservation Area. (Source: ANU 2009)



**Figure 6.11** Rear of the Brian Lewis Cottages in Brian Lewis Crescent. (Source: GML 2011)



**Figure 6.12** Constable's Cottage (Building 28), in the Acton Conservation Area. This is the rear of the building where it overlooks Lawson Crescent and Lake Burley Griffin. (Source: GML 2011)

#### 6.4.4 Sullivans Creek

Sullivans Creek is the north-south link through the campus, from North Oval through to Lake Burley Griffin. It is important to the University as a biodiversity corridor, as a water course and for cultural reasons. It is a dominant natural feature of the campus for its aesthetic values, natural resources and biodiversity values.

Prior to European settlement it was a highly cultural zone where the resource-rich environment of the Sullivans Creek valley provided a forum for ceremonial activities in the nearby area. There continues to be spiritual and mythological values associated with the creek. Later, it provided a prime location for pastoral settlement in the area prior to the development of Canberra.

The university campus takes advantage of the creek frontage for easy pedestrian access and appreciation in only a few locations—these include the open area around South Oval, including the opposite side of the creek accessible by large stepping stones, the bridge crossings of Ward Road (McPherson Bridge), Fellows Road (Canberry Bridge), Denis Winston Walk, University Avenue, Union Refectory, and the area behind the Drill Hall Gallery and Toad Hall (see Figures 6.13–6.16).

Fellows Oval is a flat area that rises to a bank which separates Sullivans Creek from the oval and does not take advantage of the creek frontage.



'Chifley Meadow' in front of the JB Chifley Library, adjacent to Fellows Oval, has a distinct depression in the landscape. It is the location of the former meandering bend of Sullivans Creek which was deviated for the construction of Chifley Library. To avoid flooding, the Library is elevated, surrounded by the Meadow and Oval to the east and south.

Fellows Oval and Chifley Meadow provide an important open space and landscape setting for the Pauline Griffin Building, Melville Hall and the Chancelry group of buildings (see Figures 6.17 and 6.18).

#### 6.4.5 University Avenue

University Avenue is a well-defined precinct. It is located on Griffin's north-west line (axis)—from 'City Hill (or City Place) to Black Mountain' and referred to as 'Terrace Avenue'. The wide pedestrian avenue is a very strong landscaped corridor lined with mature cultural plantings.

In the 1920s the Avenue was landscaped with street plantings which included four species, one for each season. The evergreen Atlas cedar was for winter, flowering plums for spring, picture elms for summer and poplars for autumn. The Avenue has served as the major access and visual link between Civic and CSIRO's Black Mountain facilities since Phase 3 of the University. However, this physical connection was punctuated by the development of Bruce Hall in 1961, essentially terminating the University Avenue vista with the forecourt fountains and dominant facade of Bruce Hall (see Figures 6.19 and 6.20).



**Figure 6.13** Sullivans Creek to the south of McPhersons Bridge  
(Source: GML 2011)



**Figure 6.14** Stepping stone crossing of Sullivans Creek near South Oval, between McPhersons Bridge and Canberry Bridge.  
(Source: GML 2011)



**Figure 6.15** University Union Building crossing over Sullivans Creek. (Source: GML 2011)



**Figure 6.16** Sullivans Creek behind the Drill Hall Gallery. (Source: GML 2011)



**Figure 6.17** Chifley Library elevated above the 'Chifley Meadow', where Sullivans Creek used to meander and was diverted for the construction of the Library. (Source: GML 2011)



**Figure 6.18** View of Pauline Griffin Building (1964, Anchor, Mortlock, Murray and Woolley) on the left from Chifley Meadow. (Source: GML 2011)



**Figure 6.19** Looking west down University Avenue with Bruce Hall punctuating the vista. (Source: GML 2011)



**Figure 6.20** University Avenue with context of Black Mountain. (Source: GML 2011)



#### 6.4.6 Other Landscape Areas

There are several smaller areas on campus with distinct landscape characteristics important to the ANU's cultural landscape (also discussed in Section 6.3). Some of these include:

- the landscape area distinguished by lawn and mature sparsely planted Eucalypt species, along East Road near Chancelry, Research School of Social Sciences and Pacific Studies (HC Coombs Building) extending through to the Law School courtyard;
- South Oval and its pavilions, the landscape setting on Sullivans Creek to the north, the elevated area to the east around the tennis courts and Fellows Lane Cottage;
- 'Menzies Meadow'—the landscape setting of Menzies Library;
- Individual landscapes associated with buildings and designed specifically to complement the building. These landscape areas include courtyards, spaces, ponds of several buildings and sculptures. Some of these areas are associated with the following buildings — Chancelry Building, Haydon-Allen Building, Research School of Social Sciences and Pacific Studies (HC Coombs Building), School of Botany and Zoology (Banks Wing), Department of Earth and Marine Sciences (DA Brown Building), Physics Building and Psychology Building, Physics Lecture Theatre and Bruce Hall;
- Lindsay Pryor stands of Eucalyptus near the Forestry building and on the University boundary of Barry Drive; and
- International Sculpture Park.



**Figure 6.21** South Oval, view toward Sullivans Creek (Source: GML 2011)



**Figure 6.22** Menzies Meadow, the area south of Menzies Library. (Source: GML 2011)





**Figure 6.23** Courtyard of Haydon-Allen Building (1960 and 1961, Bunning & Madden), view of the landscaped area by Kath Wellman. (Source: GML 2011)



**Figure 6.24** The courtyard of the HC Coombs Building (1964, 1968, Mockridge, Stahle and Mitchell and 1971, 1975, Anthony Cooper & Assoc). (Source: GML 2011)



**Figure 6.25** Landscaped internal courtyard and pond of the School of Botany and Zoology (1964–69, Grounds, Romberg and Boyd) (Source: GML 2011)



**Figure 6.26** Landscaped courtyard and pond of the Psychology Building (c1960, Eggleston, Macdonald and Secomb). (Source: GML 2011)



**Figure 6.27** Lindsay Pryor planted stand of Eucalypts near the Forestry building on the corner of Dickson and Daley Roads (Source: GML 2011)



**Figure 6.28** Track through the International Sculpture Park, view toward Lennox Crossing. (Source: GML 2011)

## 6.4.7 Views and Site Boundaries

### *Overall Site Character and Views*

The important overall character of the landscape is its strong treed canopy, with buildings being contained and below the canopy. The views into the campus from vantage points around central Canberra, such as Commonwealth Avenue Bridge, or from Red Hill, are of the strong dark green canopy of trees which cover the campus.

They are distinct long distance views of the surrounding Canberra hills and mountain ranges which are punctuated by Lake Burley Griffin in the foreground. There are a few vantage points within the campus which provide views to Black Mountain, Red Hill, the Brindabella Mountain Range to the southwest and the ranges to the east. These provide cues for the viewer about the location of the campus on the lake edge and within broader cultural landscape setting of Canberra.

The density of the built environment of the campus and its low-lying topography means there are limited characteristic long distance views within the campus. That noted, University Avenue provides excellent views of the avenue planting from both ends of the avenue and beyond to Black Mountain. Other internal views of the landscape which are distinctive include open views to the stands of cultural plantings and open lawn areas.

Some of these characteristic views to, from and within the campus are indicated in Figure 6.41 and the photographs (Figures 6.29-6.40). Distant view sheds to the campus from vantage points on the lake are shown in Figure 6.42 and from Black Mountain, Red Hill and Mount Ainslie are shown in Figure 6.43.

The landscape character of the boundary edges and entry points to the campus varies considerably, as described below.

### *Barry Drive—Northern Campus*

The University has a strong presence along Barry Drive, a major arterial road from the city to Belconnen. The boundary is heavily planted with Eucalyptus trees north of Willows Oval, at the North Road entrance and on the corner of Clunies Ross Street (Figure 6.29). The Fulton Muir building (formerly ANUTECH) with its commercial appearance and glass curtain wall facade is a dominant feature that breaks the tree-lined boundary. The building is at odds with the majority of the university building stock.

Barry Drive provides a physical separation, severing the University's 'North Oval' from the remainder of the campus.

### *North East City Edge—Childers Street and Marcus Clarke Street*

The city on the northeast boundary of the campus is the main campus/city interface. Childers Street, Marcus Clarke Street and University Avenue are the defining roads for this edge of the campus, yet it lacks a defining University character. Instead, it is dominated by commercial buildings, new residential/university buildings and open carpark areas.

The pedestrian entry at University Avenue has a 'gateway' character, strengthened by the community theatre and the Family Law Court building (Figure 6.30). The termination of Childers Street at the School of Art Building and the strong formal presence of both the School of Art and the School of Music provides a strong public face for the University on the city boundary.

### *South East City Edge—Liversidge Street, Ellery Crescent and McCoy Circuit*

The public face and boundary to the University on the southeast city edge of the campus is not clear and is hidden by the Academy of Science Shine Dome and the National Film and Sound Archive Buildings. A defined entry point to the campus is further complicated by the circular road system of Ellery Crescent and McCoy Circuit around the two public institutions, which are dominant architectural monuments located within a landscape setting (Figure 6.31).

### *Parkes Way—Lake Burley Griffin*

Parkes Way, a major arterial road, and the Acton Tunnel, physically and visually sever the natural topographic connection between the campus and Lake Burley Griffin.

The best place to view Lake Burley Griffin from the campus, and to gain access to its edge, is from Lawson Crescent, near Lennox House and Bachelors Lane (Figures 6.32 and 6.33). Expansive open views over West Basin and the Commonwealth Avenue Bridge to the National Library are gained from Liversidge Street, and partial views are gained from Lennox Crossing (Figures 6.34).

There are open views over Parkes Way to West Lake of Lake Burley Griffin from the Research School of Earth Sciences (Jaeger Buildings), Research School of Physical Sciences (primarily from the Le Couteur Building and Oliphant Building) and the Vice Chancellors residence (Figure 6.35). At this location Parkes Way is a source of traffic noise which is notably evident.

Views over Lake Burley Griffin are also observed from the International Sculpture Park and the landscaped areas surrounding the Crawford School and Old Canberra House on the Acton Peninsula. The elevated Acton Ridge provides outlooks south towards Government House and the Brindabella Mountain Ranges, and west toward Black Mountain Tower (Figures 6.36–6.38).

Clear views of the Acton campus from the south of Canberra over Lake Burley Griffin can be gained from Commonwealth Avenue Bridge and Red Hill. From this view the campus is covered by vegetation with a few tall buildings above the canopy. The '14UD Tower' constructed in 1971 and part of the Research School of Physical Sciences is the tallest on campus and can be seen from a distance.

### *Clunies Ross Street—Black Mountain*

Clunies Ross Street is the longest unbroken stretch of boundary to the campus and is predominantly vegetated. The road is not pedestrian friendly and there is only one set of traffic lights and entrance point to the campus at Dickson Road.

The boundary is slightly elevated above the University and there are glimpses through to the University colleges and residences. Opposite the National Botanic Gardens, near the Parkes Way exit, there is a large area of dense vegetation known as Section 86 (Figure 6.39).

The views over the Acton campus and Lake Burley Griffin from Black Mountain Tower are at their best and the unity of the campus in its vegetated mass is apparent (Figure 6.40).





**Figure 6.29** View northwest taken from Daley Road of the ANU boundary on Barry Drive, west of the Fulton Muir building (Source: GML 2011)



**Figure 6.30** View west of University Avenue taken from the Childers Street junction. The Family Law Court is on the left (and street theatre out of the frame is on the right) (Source: GML 2011)



**Figure 6.31** View west along curved McCoy Circuit. The National Film and Sound Archive is located at the right. (Source: GML 2011)



**Figure 6.32** Views from Lawson Crescent to West Basin of Lake Burley Griffin, where access to the lake edge from the ANU is possible. (Source: GML 2011)



**Figure 6.33** View out over West Basin to Commonwealth Bridge from Lawson Crescent. (Source: GML 2011)



**Figure 6.34** View out to Commonwealth Bridge and the National Library from Liverside Street. (Source: GML 2011)





**Figure 6.35** View to West Lake of Lake Burley Griffin from the Research School of Physical Sciences. (Source: GML 2011)



**Figure 6.36** Elevated views across Lake Burley Griffin toward Government House and the Brindabella ranges from the International Sculpture Park. (Source: GML 2011)



**Figure 6.37** View of Black Mountain Tower from the International Sculpture Park. (Source: GML 2011)



**Figure 6.38** View to West Lake of Lake Burley Griffin, from the International Sculpture Park. (Source: GML 2011)



**Figure 6.39** View southwest from Sullivans Creek toward the Wallaby enclosure and the ANU land referred to as 'Section 86'. (Source: GML 2011)



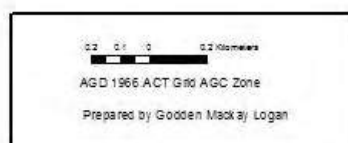
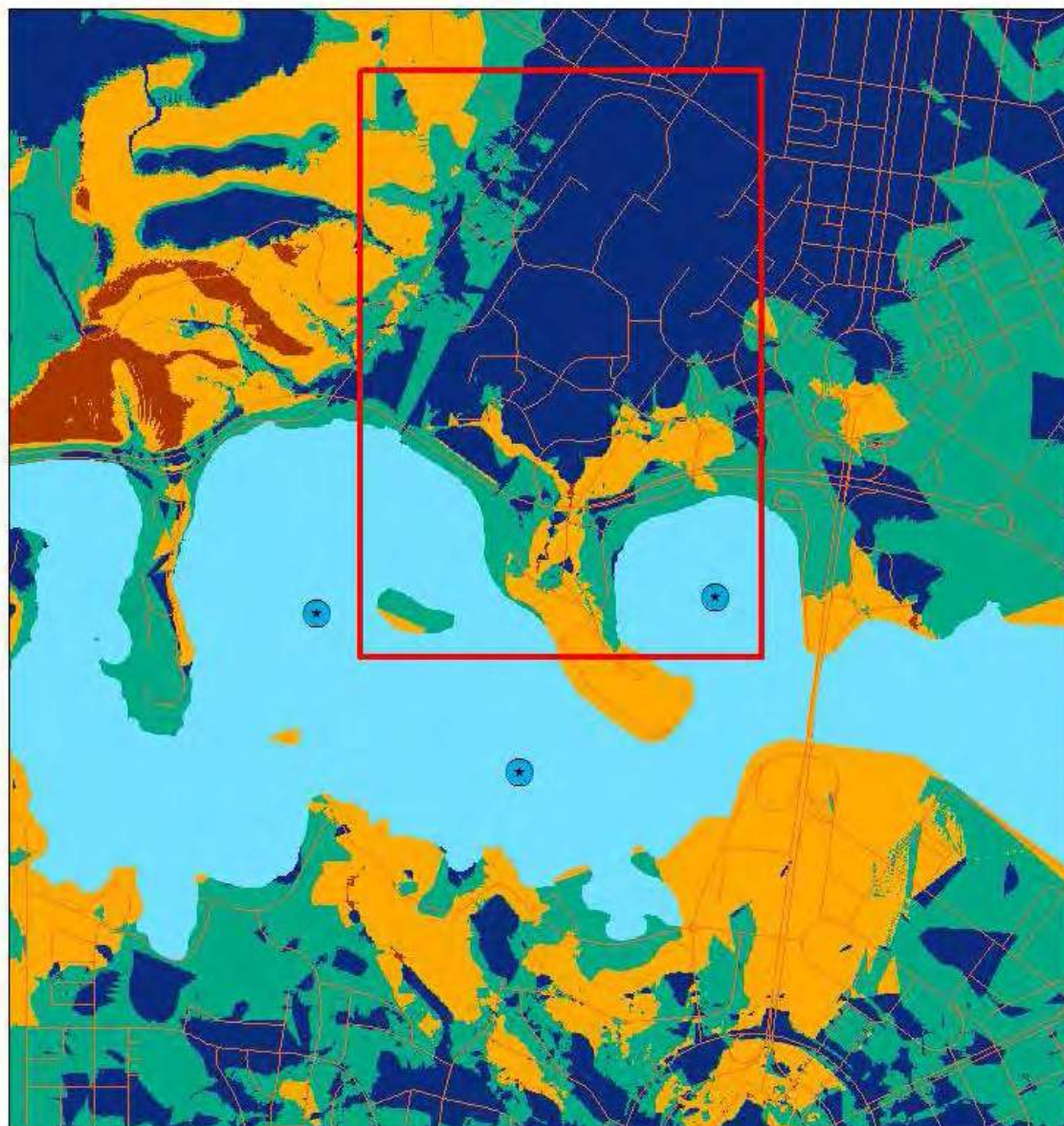
**Figure 6.40** View of ANU Acton campus (left with the '14UD tower' evident in the foreground), Acton Peninsula and Lake Burley Griffin (West Lake is in the foreground) from Black Mountain, 1981. (Source: NLA)



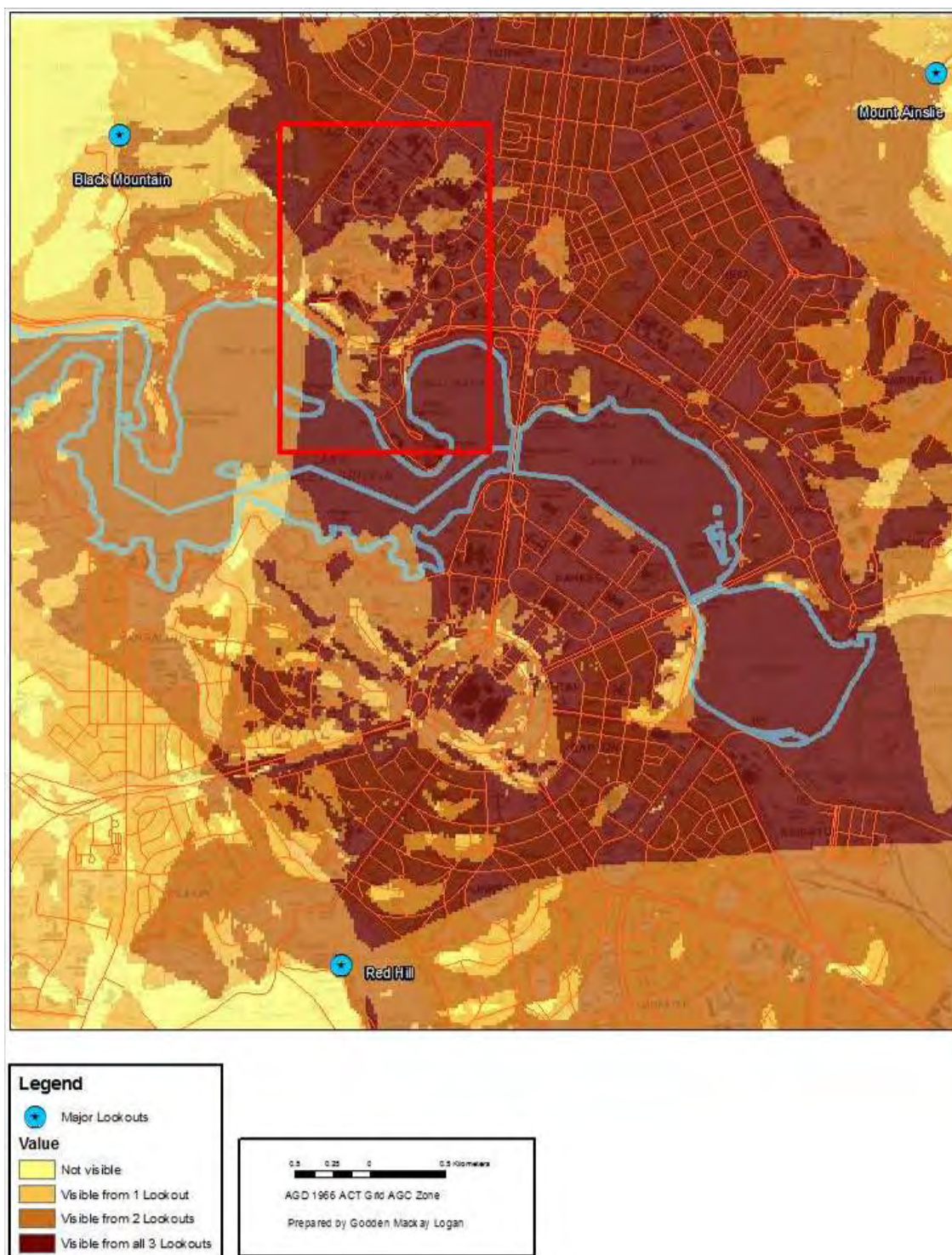


**Figure 6.41** Indicative views to, from and within the University. Characteristic views are shown indicatively by the hatched 'view' corridors. The direction of the view is from the narrow end to the wider area and beyond, or where they are parallel the direction of the view goes both ways. (Source: GML 2011, overlaid on a Google Earth map).





**Figure 6.42** Viewsheds to the Acton campus (shown in the rectangle) from three locations on Lake Burley Griffin (Source: Neil Urwin, 2011).



**Figure 6.43** Viewsheds to the Acton campus (shown in the rectangle) from three Canberra lookouts; Black Mountain, Red Hill and Mount Ainslie (Source: Neil Urwin, 2011).



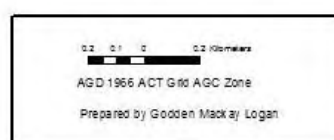
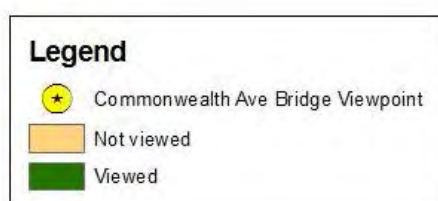
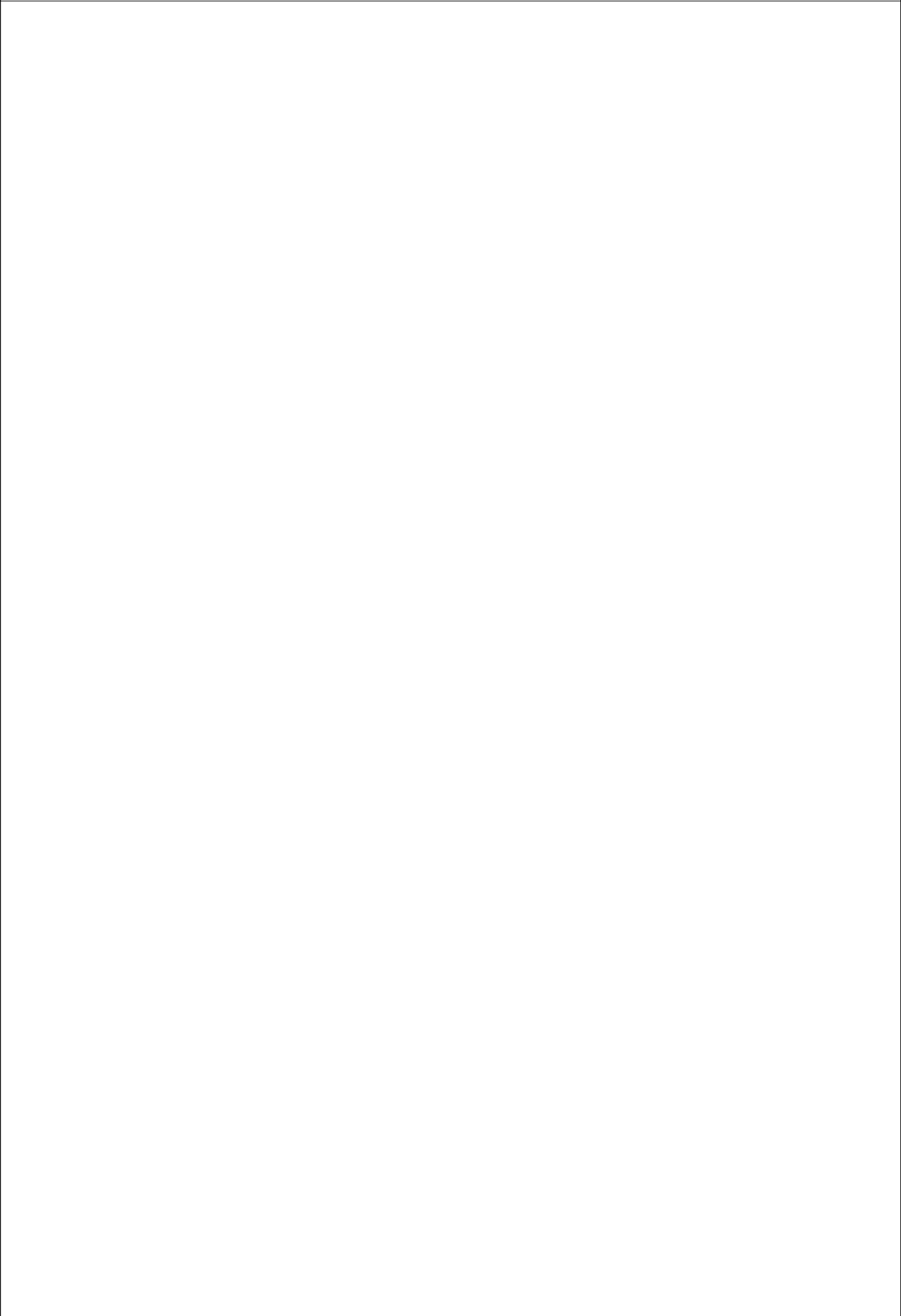


Figure 6.44 Viewsheds to the Acton campus (shown in the rectangle) from Commonwealth Avenue Bridge (Source: Neil Urwin, 2011).

## 6.5 Endnotes

- <sup>1</sup> Definition of Cultural Landscapes designated in Article 1 of the UNESCO Operational Guidelines for the Implementation of the World Heritage Convention. Furthermore the definition states that cultural landscapes are illustrative of the evolution of human society and settlement over time, under the influence of the physical constraints and/or opportunities presented by their natural environment and of successive social, economic and cultural forces, both external and internal.
- <sup>2</sup> Department of Environment, Climate Change & Water, 2011, Cultural Landscapes (NSW), A Practical Guide For Park Management, p.4.
- <sup>3</sup> ANU Facilities and Services Division: tree management statement included in the website: <http://facilities.anu.edu.au/index.php?pid=349>
- <sup>4</sup> Gibbney J 1988, Canberra 1913-1953, AGPS, Canberra, p7.
- <sup>5</sup> Taylor, K, 2006, Canberra: City in the Landscape, Halstead Press., Ultimo, p81.
- <sup>6</sup> Taylor, K, 2006, Canberra: City in the Landscape, Halstead Press., Ultimo, p81.
- <sup>7</sup> The Inaugural Lindsay Pryor Memorial Lecture address by Dr Allan Hawke Chancellor ANU, Coombs Lecture Theatre, 26 September 2006.
- <sup>8</sup> Pryor L. 1971 in Dexter D 1991 *The ANU Campus*. Australian National University, Canberra. Pryor, L.D. and Banks, J.C.G. 2001 (2<sup>nd</sup> Edition), *Trees and Shrubs in Canberra*, Little Hills Press, Canberra. Knox and Tanner 1994, *The Australian National University Strategic Landscape Plan*, amended June 1994. Taylor K 2006, *Canberra: City in a Landscape*. Halstead Press, Broadway, NSW, Australia.
- <sup>9</sup> GHD 2011, ANU Campus *Master Plan 2023*
- <sup>10</sup> Banks J.C.B. 1979, in Dexter D. 1991 *The ANU Campus*. Australian National University, Canberra.
- <sup>11</sup> Pryor, L.D. and Banks, J.C.G. 2001 op cit.
- <sup>12</sup> Banks J.C.B. 1979, in Dexter D. 1991 *The ANU Campus*. Australian National University, Canberra.
- <sup>13</sup> Pryor, L.D. and Banks, J.C.G. 2001 op cit.
- <sup>14</sup> Pryor, L.D. and Banks, J.C.G. 2001 *ibid*.
- <sup>15</sup> Pryor, L.D. and Banks, J.C.G. 2001 op cit.
- <sup>16</sup> Banks J.C.B. 1979, in Dexter D. 1991 *op cit*
- <sup>17</sup> Pryor, L.D. and Banks, J.C.G. 2001 op cit
- <sup>18</sup> Banks J.C.B. 1979, in Dexter D. 1991 *op cit*
- <sup>19</sup> Banks J.C.B. 1979, in Dexter D. 1991 *ibid*
- <sup>20</sup> Pryor, L.D. and Banks, J.C.G. 2001 op cit.
- <sup>21</sup> Banks J.C.G. and Mads Gaardboe 1996, *Buildings and landscape, The Australian National University, Canberra: Acton Campus and Mt Stromlo*. ANU
- <sup>22</sup> Banks and Gaardboe 1996, *ibid*.
- <sup>23</sup> Pryor, L.D. and Banks, J.C.G. 2001 op cit.
- <sup>24</sup> Banks and gaardboe 1996, op cit.
- <sup>25</sup> Milton Cameron, 'Experiments in Modern Living: Scientists and the National Capital Private House 1925-1970'. Ph.D. Thesis, UNSW, 2009.
- <sup>26</sup> Knox and Tanner 1994, *The Australian National University Strategic Landscape Plan*, amended June 1994.
- <sup>27</sup> John W. Reps, Canberra 1912: Plans and Planners of the Australian Capital, p144.



## 7.0 Assessment of Heritage Values

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### 7.1 Assessment Methodology

#### 7.1.1 Understanding Heritage Values

This section presents an integrated assessment of the cultural and natural heritage values of the ANU Acton campus. To date, the assessment of heritage significance of the site as a whole has not been undertaken; instead individual assessments and recognition of buildings and places within the campus has prevailed.

Assessments of heritage value identify whether a place has heritage significance, establish what the heritage values are, and why the place, or element of a place, is considered important and valuable to the community. Heritage value is embodied in the location, function, form and fabric of a place and/or an element of a place (including its setting and relationship to other items), the records associated with the place and the response that the place evokes in the community.

*The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance 1999*<sup>1</sup> and its Guidelines for Assessment of Cultural Significance recommend that significance be assessed in categories such as aesthetic, historic, technical, scientific and social significance.

Identifying the many layers of value of the ANU's heritage—its sites, places, elements and collections—and assessing their relative values through this report provides the knowledge base needed for the framing and implementation of heritage management and conservation processes discussed in Sections 8.0 and 9.0.

#### 7.1.2 Indigenous Heritage Values

Indigenous heritage conservation and management aims to sustain the relationship between Indigenous people and their heritage places. The Indigenous heritage values assessment comprises the views of Indigenous community representatives and an assessment of the potential survival of archaeological remains around the campus.

As noted in Section 4.0, the Indigenous heritage values of the ANU Acton campus have been previously assessed for the ANU against the Commonwealth Heritage criteria and are integrated here with the assessment of the whole site.

The criteria of specific relevance to the Indigenous heritage values of the ANU Acton campus are criteria (a), (c) and (g) for historic and significant associations by local Aboriginal groups, explained further in Section 7.4.

Indigenous heritage values specific to the ANU Acton campus do not meet the threshold for criterion (i) 'the Place's importance as part of Indigenous tradition'. The view of the Department responsible for the EPBC Act and also the Federal Court of Australia is that the Indigenous heritage values at the ANU Acton campus do not meet criterion (i) because of the interpretation of the meaning of 'importance as part of Indigenous tradition'.<sup>2</sup> The interpretation applied to the concept of Indigenous tradition is one of knowledge handed down from generation to generation and that the tradition must apply to a specific place, usually one that is sacred.



### 7.1.3 Natural Heritage Values

As outlined in the Australian Natural Heritage Charter: for the conservation of places of natural heritage significance,<sup>3</sup> natural heritage is defined as:

*Natural heritage comprises the natural living and non-living components, that is, the biodiversity and geodiversity, of the world that humans inherit. It incorporates a range of values, from existence value to socially-based values.*

In making decisions that will affect the future of a place, it is important to consider all heritage values—both natural and cultural—as issues relating to the conservation of cultural values may affect the selection of appropriate conservation processes, actions and strategies for the place’s natural values and vice versa.<sup>4</sup>

As previously analysed in Sections 3.0 and 6.0, the natural heritage values for the Acton campus essentially relate to the vegetation and are closely integrated with the cultural plantings of the site—together these have been assessed against the Commonwealth Heritage criteria below. In this case, the natural values of the Acton campus meet the threshold under only one criterion (criterion (b) for rarity) and matters of national environmental significance protected by the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) and *ACT Nature Conservation Act (1980)*.

## 7.2 Commonwealth and National Heritage Criteria

### 7.2.1 Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)

The 2004 amendments to the EPBC Act established the Commonwealth and National Heritage Lists. The Commonwealth Heritage List (CHL) is for those places owned or controlled by the Commonwealth that have been assessed as having heritage values against the criteria established under the Act.

The threshold for inclusion on the CHL is that the place meets one or more of the criteria for significant heritage values. This value can be at a local level. The threshold for inclusion on the National Heritage List (NHL) is that the place meets one or more of the criteria at an outstanding level for the nation.

Section 528 of the EPBC Act defines the ‘heritage value’ of a place as including the place’s natural and cultural environment having aesthetic, historic, scientific or social significance, or other significance, for current and future generations of Australians. The EPBC Act therefore covers all forms of cultural significance (Indigenous and non-Indigenous) and natural heritage significance.

Section 10.01A and Section 10.03A of the EPBC Act Regulations define the nine National and Commonwealth Heritage criteria for evaluating, identifying and assessing the Commonwealth or National Heritage values of a place and these criteria are set out below. Note the only difference between them is the threshold for National Heritage value which is ‘outstanding’ significance.

Each statement against the criteria below in Section 7.4 also sets out the ‘attributes’ of the ANU Acton campus that are relevant to the particular criterion. In this sense, ‘attributes’ means those aspects of the place that most strongly embody that heritage value.

Table 7.1 Commonwealth and National Heritage criteria

Criterion	Commonwealth Criteria The place has significant heritage value because of ...	National Criteria The place has outstanding heritage value to the nation because of ...
Criterion A— Historic	<i>The place's importance in the course, or pattern, of Australia's natural or cultural history.</i>	<i>The place's importance in the course, or pattern, of Australia's natural or cultural history.</i>
Criterion B— Rarity	<i>The place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.</i>	<i>The place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.</i>
Criterion C— Scientific	<i>The place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history.</i>	<i>The place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history.</i>
Criterion D— Representative	<i>The place's importance in demonstrating the principal characteristics of: i) a class of Australia's natural or cultural places; or ii) a class of Australia's natural or cultural environments.</i>	<i>The place's importance in demonstrating the principal characteristics of: i) a class of Australia's natural or cultural places; or ii) a class of Australia's natural or cultural environments.</i>
Criterion E— Aesthetic	<i>The place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.</i>	<i>The place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.</i>
Criterion F— Creative/ Technical	<i>The place's importance in demonstrating a high degree of creative or technical achievement at a particular period.</i>	<i>The place's importance in demonstrating a high degree of creative or technical achievement at a particular period.</i>
Criterion G— Social	<i>The place's strong or special associations with a particular community or cultural group for social, cultural or spiritual reasons.</i>	<i>The place's strong or special associations with a particular community or cultural group for social, cultural or spiritual reasons.</i>
Criterion H— Associative	<i>The place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.</i>	<i>The place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.</i>
Criterion I— Indigenous	<i>The place's importance as part of Indigenous tradition.</i>	<i>The place's importance as part of Indigenous tradition.</i>

### 7.3 Historic Themes

The Commonwealth has developed a framework of 'Australian Historic Themes' to assist with identifying, assessing, interpreting and managing heritage places and their values. The Australian Historic Themes were developed and identified by the former Australian Heritage Commission and provide a context for assessing heritage values. The themes are linked to human activities in their environmental context. Themes link places to the stories and processes which formed them, rather than to the physical 'type' of place represented.

The Australian Historic Themes are grouped together by an overriding historic theme, which is further divided into more specific themes and sub-themes. The Australian Historic Themes which underpin the assessment of the ANU Acton campus are set out in the Table 7.2.

**Table 7.2** Australian Historic Themes and their relevance to the ANU.

Australian Historic Theme	Assessment Rationale Relevant to the ANU
<p><u>Peopling Australia</u></p> <p>Living as Australia's earliest inhabitants</p> <p>Promoting settlement</p>	<ul style="list-style-type: none"> <li>Indigenous Cultural Associations and Pastoral Use</li> </ul> <p>The Acton campus provides evidence of the occupation of the landscape by Indigenous groups prior to white settlement, and also of the continuing attachment of Indigenous groups to the place, especially to Sullivan's Creek, which fed into the former Molonglo River and Acton Ridge.</p> <p>Acton, prior to development of Canberra and later the University, was used for pastoral activities and settlement.</p> <p>The Acton Conservation Area of the campus was used for experimental cultural planting, the location of administrative offices and housing for Canberra's development and for Canberra's first 'temporary' hospital.</p>
<p><u>Building Settlements Towns and Cities</u></p> <p>Planning urban settlements</p>	<ul style="list-style-type: none"> <li>Achievements of Design: Central Canberra – the Griffin expression: Land, Water and Municipal Axes</li> </ul> <p>The concept or promise of the University on the proposed lake edge (the Molonglo River was developed later as Lake Burley Griffin) was part of the original selection of this site for Canberra and the University developed in the location of Griffin's original Canberra plans.</p> <p>The selection of the site for the capital, of which a university was an integral component, the design competition, Griffin's plans for Canberra and the subsequent history of the development of the central national area of Canberra all reflect the pursuit of excellence in creating a symbolic urban precinct with a distinct national character.</p> <p>The achievement of the designed landscape setting of Canberra has put the national capital on the world stage and ANU is a major contributing component.</p>
<p><u>Governing</u></p> <p>Federating Australia</p>	<ul style="list-style-type: none"> <li>Association with the Federal Government of Australia</li> </ul> <p>The ANU is integrally linked to the creation of a new national capital following the federation of the Australian states in 1901.</p> <p>The ANU is the only Australian university created under a Federal Act of Parliament, recognising the need for a national research institution.</p>
<p><u>Developing Australia's Cultural Life</u></p> <p>Organising recreation</p> <p>Pursuing excellence in the arts and sciences</p>	<ul style="list-style-type: none"> <li>Developing Australia's Cultural Life</li> </ul> <p>The University itself is a major contributor to the pursuit of excellence in the arts and sciences.</p> <p>The central national area of Canberra, including the University, reflects the pursuit of excellence in creating a symbolic urban precinct with a distinct national character.</p> <p>It includes several national cultural institutions (e.g. the ANU, both parliament houses, the research centres and laboratories of the CSIRO, National Botanic Gardens, National Gallery of Art, National Museum, National Academy of Science, National Film and Sound Archives, National Archives, National Library, National Science Centre, National Portrait Gallery and other museums, theatres and civic centre).</p>
<p><u>Education and Research</u></p> <p>Forming associations, libraries and institutes for self-education</p> <p>Building a system of higher education</p>	<ul style="list-style-type: none"> <li>Development of the ANU for Education</li> </ul> <p>The outstanding reputation of the ANU for its research development and education in the international and national realm represents an important element in the higher education system of Australia.</p>

## 7.4 Application of Heritage Values Criteria

The Commonwealth and National Heritage criteria of the EPBC Act regulations have been used to identify and assess the heritage values of the ANU Acton campus as a whole. The individual elements and buildings already included in the CHL (refer to Section 1.0) have been integrated into this assessment of the whole site.

### 7.4.1 Assessment of Heritage Value

#### Criterion A (Historic)

*The place's importance in the course, or pattern, of Australia's natural or cultural history.*

The Acton campus has significant historic values and meets the threshold at an exceptional level for Commonwealth Heritage value under this criterion. The ANU has outstanding heritage value to the nation under this criterion as a component of the Griffin plan for Canberra and Canberra's subsequent realisation and historical development as the national capital.

The ANU Acton campus is historically important and meets this criterion for:

- its associations with the landmark event of the creation of the national capital. It has particular associations with the push for national identity and independent development in the years immediately after Federation and before World War I, and again after World War II in the Menzies era;
- being part of the original competition brief for the design of Canberra, and being planned in its original conception, not just in the realisation of Griffin's design. The original concept, location and use of the site has continued and been developed over time as the design focus for the University;
- providing evidence of the historic pattern of tensions of the University's academic advisers, architects, planners and politicians in relation to the creative processes associated with the planning and development of the University;
- reflecting the evolution of the ANU campus as part of the development of Canberra, the nation's capital, and its visionary post war establishment as four scientific research institutes and an international centre of teaching and research. It has become an internationally renowned research university and is the highest ranked university in Australia (in 2011, for research);
- its historic layer associated with the early development of the national capital, particularly in Acton as one of the earliest 'suburbs' of Canberra and the initial centre of administration during the developing years of the ACT;
- the built cultural elements which predate the University are very important to the story of Canberra and the ANU;
- the cultural plantings which demonstrate the pattern of history in the region because of their age and links with the historic development of the area both pre- and post-University development;



- the natural heritage of the ANU Acton campus; the remnant grassy woodland communities and relic trees from this original community and ANU's flora, fauna and geomorphology partly demonstrate the process of natural history in the region;
- Acton Ridge and Sullivans Creek and its floodplain, which were traditionally part of a well utilised landscape, being used as a meeting place and trading zone by the Indigenous people of the Canberra area. The area was an occupation zone which provided support for the use of nearby ceremonial areas: one near the current entrance to the National Botanic Gardens and another near the junction between Sullivans Creek and the (former) Molonglo River;
- Acton Ridge, which is an important landscape feature of the campus, for its use and part of the local Indigenous cultural history, forming part of an Indigenous route across the landscape connecting significant cultural sites; and
- the associative relationship with Black Mountain and its ceremonial areas, which is significant as part of local Indigenous cultural history.

#### *Attributes*

The key attributes which embody the historic heritage values of the campus are:

- the Acton campus as a whole, including its cultural landscape—the setting, location and use;
- the physical remnants which represent the original design and geometry of Griffin's plan for Canberra;
- Acton Ridge, Sullivans Creek and its biodiversity corridor for Indigenous heritage connections;
- the area of Acton Ridge and the Acton Conservation Area (including buildings, elements and cultural plantings);
- the built cultural environment, including the form, fabric, function and location of built elements;
- the cultural plantings, including Weston's plantings around Old Canberra House (1913–1920), remnants from the original grand parade plantings of University Avenue and plantings dating from a shepherd's hut (c1850) (refer to ECP1 in Section 6.0); and
- the remnant grassy woodland communities and relic trees from these original communities;
- the wider setting of the campus on the lake below Black Mountain.

Note the natural heritage of the ANU Acton campus—flora, fauna and geomorphology—partly demonstrates the process of natural history in the region. However, the non-pristine condition of the natural heritage and the low relative importance of the remnant vegetation compared with other areas in the ACT region means that it does not reach the threshold for inclusion in the CHL under this criterion.

## Criterion B—Rarity

***The place's possession of uncommon, rare or endangered aspects of Australia's natural or cultural history.***

The Acton campus possesses highly significant heritage values under this criteria relating mostly to the University as a component of the Griffin plan for Canberra—a unique urban design in the context of Australia. The Acton campus meets the threshold for Commonwealth Heritage value under this criterion because:

- the University's location is on the intended municipal and water axes and in the symbolic part of Griffin's plan for Canberra, which is one of 'the most ambitious and most successful examples of twentieth century urban planning in Australia';<sup>5</sup>
- Lake Burley Griffin and the surrounding national institutions in the immediate area of the University (CSIRO, National Botanic Gardens, National Film and Sound Archives, the Australian Academy of Science) were implemented as part of Griffin's plan for central Canberra by the Federal Capital Commission to ensure Canberra was fittingly developed as the national capital of Australia;
- it has numerous individual historic and cultural elements, particularly in Acton, associated with the early development of the national capital. A great deal of the evidence of the early settlement period of Canberra has been lost, giving added importance to the buildings and planted trees in Acton and other buildings on the campus including the Canberra School of Art and the Drill Hall;
- it is the only university created under a Federal Act of Parliament and as such is Australia's National University;
- Weston's earliest plantings around Old Canberra House (1913–1920), remnants from the original grand parade plantings of University Avenue and cypresses around the Acton Conservation Area cottages;
- Pryor's experimental plantings of native species are uncommon in the region and include the extremely dense *Eucalyptus bicostata* plantings and remnants of dense *Eucalyptus aggregata* plantings; and
- the ANU's native flora includes relic vegetation communities consisting of critically endangered and endangered ecological communities under the EPBC Act and *ACT Nature Conservation Act*.

### *Attributes*

The key attributes which embody 'rarity value' include:

- the use and location of the site for a University and its setting which correlate with Griffin's plans for Canberra;
- the location, layout and buildings predating the University (buildings of Phase 1 including Old Canberra House, all the Acton Conservation Area hospital buildings, Lennox House and structures, residential cottages and structures in Balmain Crescent, Balmain Lane, Liversidge Street, Lennox Crossing Road, the Canberra School of Art and the Drill Hall);

- Weston's plantings and the remains of Pryor's experimental plantings; and
- the remnant grassy woodland communities and relic trees from this original community.

### **Criterion C—Scientific**

***The place's potential to yield information that will contribute to an understanding of Australia's natural or cultural history.***

The Acton campus meets the threshold for Commonwealth Heritage value under this criterion. The study area meets the threshold in relation to the potential for research into urban planning, architecture, landscape architecture, the acclimatisation of exotic plantings and the history of those subjects and for Indigenous cultural values. The Acton campus meets this criterion because of:

- the association with the original Griffin plan for the location of the University between the water and municipal axes;
- the association with Griffin's philosophy for the university layout and its 'organic union between function and site' with theoretical disciplines at the core and applied disciplines at the periphery to reflect their relationship to the city;
- later design overlays are all the subject of significant and ongoing research in the areas of urban planning, architecture, landscape architecture and the history of those subjects, as well as research into the work of key personalities in the founding of the University, including the architectural language and design of the purpose built faculty buildings and residences dating from 1948–1971;
- historic evidence (built features or plantings) of the pastoral use of the site predating the formation and building of the University;
- unique contribution and international standing in fields of scientific research and endeavour and the potential for further research in the areas of sustainability and embodied energy, moveable heritage and art collections; and
- areas of the ANU Acton campus may have some potential for the survival of Indigenous archaeological sites and artefacts and may yield information relating to the Indigenous use of the area. Potential for Indigenous archaeological sites and artefacts may be in areas that appear to have been subjected to less disturbance, including the southern reaches of Sullivans Creek, the area between Parkes Way and Acton (the old Canberra Hospital area), and the area to the south and west of Old Canberra House, including some parts of the International Sculpture Garden.

### ***Attributes***

The key attributes which embody 'scientific value' include:

- The urban and landscape context—the location of the campus on Sullivans Creek with Black Mountain as the backdrop, close to Lake Burley Griffin (the former Molonglo River and Limestone Plains) and adjacent to Canberra's civic centre are most strongly associated with the Griffin plan concept and original location for the University;

- the ANU's international standing in fields of scientific research and endeavour and the potential for further research in the areas of sustainability and embodied energy, moveable heritage and art collections; and
- Sullivans Creek and its biodiversity corridor and Acton Ridge.

### **Criterion D—Representative**

***The place's importance in demonstrating the principal characteristics of:***

***i) a class of Australia's natural or cultural places; or***

***ii) a class of Australia's natural or cultural environments.***

The ANU Acton campus has highly significant representative values and meets the threshold for Commonwealth Heritage value under this criterion.

- The ANU is the highest ranked university in Australia (as at 2011) for research. It has held this position for many years.
- The design and construction of individual buildings and elements of the Acton campus represent the historic phases of the University's development.

#### ***Attributes***

The key attributes which embody the representative characteristics of the ANU include:

- Acton campus as a whole; and
- individual buildings, elements and cultural plantings of the Acton campus which represent the University's development from each of the historic phases including Phase 1: 1912–1947, Phase 2: 1948–1954, Phase 3: 1954–1968, Phase 4: 1968–71, Phase 5: 1972–1990 and Phase 6: 1990–present. Note the ranking of significance for individual buildings, elements and sites will be included in Volume 2, the Heritage Inventory.

### **Criterion E—Aesthetic**

***The place's importance in exhibiting particular aesthetic characteristics valued by a community or cultural group.***

The Acton campus has not been formally tested for the aesthetic characteristics and value held by communities or cultural groups against this criterion. However, it is very likely that, if tested, there may be strongly held aesthetic characteristics valued by a community or cultural group.

The aesthetic characteristics of the Acton campus which meet the threshold for Commonwealth Heritage value under this criterion are as follows:

- Acton campus, a component of Griffin's plan for Canberra can be appreciated today by the Canberra community for its aesthetic characteristics which include:

the links between the University and Griffin's water axis and the municipal axis;



strong visual links with the close and distant Canberra topography: Black Mountain as the immediate backdrop, Lake Burley Griffin and the Brindabella Mountain Range to the southwest; and

the strong landscape character of the cultural plantings throughout the campus to the dark green backdrop of Black Mountain and can be gained from several public vantage points around Canberra (e.g. these include the views from Black Mountain Tower, Red Hill, Commonwealth Avenue Bridge);

- the ANU's natural and cultural heritage plantings combine to produce a landscape which is a key aesthetic component of the central Canberra area;
- the distinct built and cultural landscape features of the University which have strong aesthetic characteristics include:

a densely planted university campus with a distinct canopy level that encloses the buildings. The trees of the ANU campus have high aesthetic and ecological value which are held in high regard by the ANU and general community of the University;<sup>6</sup>

Sullivans Creek, a major natural feature which runs through the length of the campus and the strong contrasts of the structured spaces of University Avenue with planted avenues of trees and buildings set behind the avenue;

planted boundary edges of the campus along Barry Drive and Clunies Ross Street;

some individual buildings with architecturally distinctive aesthetic values such as designed courtyards, planned landscape settings, purposefully placed public art and connection with the landscape setting and functions of the University (from various historic phases); and

road network from Phase 1: 1912–1947 — Liversidge Street, Balmain Crescent, Ellery Crescent, Lennox Crossing Road.

### *Attributes*

The key attributes with aesthetic characteristics include:

- the natural and cultural landscape plantings, features and characteristics of the campus; and
- some individual buildings with distinct aesthetics and relationship to landscape setting of the campus; and
- the mix of natural remnant vegetation communities and exotic and native plantings in both formal and informal configuration throughout the campus.

### **Criterion F—Creative/Technical**

***The place's importance in demonstrating a high degree of creative or technical achievement at a particular period.***

The initial planning phases of the ANU, demonstrated by key attributes of Acton campus, meet the threshold for Commonwealth Heritage value under this criterion for the technical achievement for cultural landscape elements and individual buildings.

- The historic development phases of the Acton campus have individually significant periods of creative and technical accomplishment;
- Acton campus, a component of Griffin's creative design for Canberra, can be appreciated today, including:
  - the evidence in the landscape of the links between the University and Griffin's water axis and the municipal axis; and
  - strong visual links with the close and distant Canberra topography: Black Mountain as the immediate backdrop, Lake Burley Griffin and the Brindabella Mountain Range to the southwest.
- the Acton Campus demonstrates an array of different layers of urban planning, individual architectural statements and creative responses implemented over time. An urban environment developed in response to trends in university funds and other pragmatic constraints;
- historic natural and cultural plantings of deciduous trees, now mature, were deliberately planted as part of early Canberra planting. The historic plantings in Acton and on the Acton Peninsula date from the earliest pastoral settlement at Canberra/Acton and are associated with Weston, Banks and Pryor, amongst others, in the ambitious horticultural project to landscape the city; and
- some individual buildings and elements within the campus (for example, modernist structures and spaces such as University House, Pauline Griffin Building, the Chancelry and Toad Hall) have their own degree of creative or technical achievement.

#### *Attributes*

The Acton campus as a whole demonstrates a high degree of technical achievement, creative and technical excellence.

### **Criterion G—Social**

***The place's strong or special associations with a particular community or cultural group for social, cultural or spiritual reasons.***

The Acton campus has strong associations with a range of community or cultural groups for social, cultural or spiritual reasons. It meets the threshold for Commonwealth Heritage value under this criterion for the following reasons:

- the University's alumni and the many individual research schools' alumni and groups such as the Acton Walkways and ANU walking groups demonstrate special associations with the social and cultural life of the ANU;
- the Canberra community for its association with the ANU; for example, public functions, exhibitions, lectures, rallies and performances are held regularly in locations throughout the campus. In particular, the University libraries, theatres and the arts and music precincts, including the School of Music, the Llewellyn Hall, the ANU Arts Centre, the Coombs Lecture Theatre and the Drill Hall Gallery, are well known to the community;

- the ANU Acton campus occupies an area of the local landscape which has some special associations for the local Indigenous community for their understanding, remembrance and recognition of their cultural history. In particular, the cultural association relates to:

Sullivans Creek and its surrounds in the pre-contact period provided important food and water resources for the Indigenous people who lived in the area and used nearby ceremonial areas. The natural resources supported meetings and trade which were significant traditional cultural activities; and

Acton Ridge, an important landscape feature which has associations with a wider landscape and forms part of an Indigenous route across the landscape. It connects significant cultural sites and associational significance for the local Indigenous community with the traditional use of other parts of the landscape.

- the local Indigenous community have a special attachment to the site's documented archaeological record which connects people today to their ancestors and helps in developing and refining their understanding of traditional land use practices in the Canberra area.

#### *Attributes*

The attributes associated with the social values of the Acton Campus include:

- the University as a whole and the areas open to the public;
- Sullivans Creek and its biodiversity corridor, Acton Ridge, and the areas of potential archaeological potential through to Acton Peninsula; and
- Acton Conservation Area and the International Sculpture Garden.

#### **Criterion H—Associative**

***The place's special association with the life or works of a person, or group of persons, of importance in Australia's natural or cultural history.***

The Acton campus possesses highly significant associations with people of importance in Australia's history. The site meets the threshold for Commonwealth Heritage value under this criterion as follows.

- the ANU has close associations with many individuals and groups whose activities have been significant for the development of the University and to the history of the nation and of the region. These people include Prime Minister Andrew Fisher, King O'Malley, Walter Burley and Marion Mahony Griffin, Herbert Cole ('Nugget') Coombs, Director-General of the Commonwealth Ministry of Post-War Reconstruction, Sir Robert Garran, first Chair of the Canberra University College (CUC), the academic advisers HW Florey (medical research), ML Oliphant (physical science), RW Firth (Pacific studies) and Sir WK Hancock (social studies), several architects and planners of the ANU (including Brian Lewis, Sir Denis Winston, Grenfell Ruddock, and Roy Simpson, among several others) and a range of artists (including Fred Ward, Gerald Lewers, Frank Hinder, Matcham Skipper, Lenton Parr, Vincas Jomantas Bert Flugelman, Inge King, Norma Redpath, Ron Robertson-Swann, Ken Unsworth and many others);

- the cultural heritage plantings of the ANU have close associations with the work of three individuals who shaped the landscape of Canberra from the earliest period to the present: TCG Weston, Emeritus Professor Lindsay Pryor and Professor John Banks;
- the commemorative plantings of trees and shrubs on campus have direct associative value but only a small number would be associated with individuals of sufficient prominence to meet the threshold of listing against this criterion; and
- many professions have been involved in planning design and construction of the ANU Acton campus including town planners, architects and landscape architects, artists, engineers and surveyors. The bodies that represent these professionals have also had an active part in the history of the ANU and other parts of Canberra's development.

### *Attributes*

The key attributes which demonstrate this criterion include:

- the Acton Campus as a whole;
- individual buildings, sculptures, artworks and areas associated with eminent people or associated with specific building commissions;
- moveable heritage (furniture designed for ANU, including Fred Ward's furniture);
- Weston's plantings around Old Canberra House (1913–1920), remnants from the original grand parade plantings of University Avenue and cypresses around the Acton cottages; Prior's dense *E. bicostata* plantings and remnants of dense *E. aggregata* plantings and poplar group at Burgmann College; and Banks' mixed plantings and small arboretums around the Forestry and Botany schools; and
- commemorative plantings of Earl and Lady Game at Old Canberra House and the cricket bat willow planted by test cricketers in the late 1920s near the Physics Building (38).

## **Criterion I—Indigenous**

***The place has significant heritage value because of the place's importance as part of Indigenous tradition.***

The Acton campus is not a sacred site and does not meet this criterion for Commonwealth or National Heritage value. Further explanation about the Federal Court finding is provided in Section 7.1.2.

## **7.4.2 Summary Statement of Heritage Values**

### **Statement of Significance**

In summary, this study has found that the ANU Acton campus possesses a broad array of cultural heritage values that meet the threshold for Commonwealth Heritage value under eight of the nine criteria. The campus also meets the threshold for outstanding National Heritage value under criterion (a) because it makes an irreplaceable contribution to the historic heritage values of the place as a whole and to Canberra, the national capital of Australia.

The ANU is a place of cultural importance for Australia in terms of its heritage places and its associations with Australian scientific research and endeavour. The Acton campus has significant cultural heritage



values and meets the threshold at an exceptional level for Commonwealth Heritage value under this criterion. The ANU has outstanding heritage value to the nation under this criterion if considered as a component of the Griffin plan for Canberra and Canberra's subsequent realisation and historical development as the national capital.

### Statement of the Existing Condition

The individual condition of buildings and elements at the ANU is broad ranging and too vast to detail in this report. However, the condition of the heritage values of the whole site is good to excellent. The heritage values continue to be managed by the Facilities and Services Division of the ANU in accordance with the EPBC Act and the Commonwealth Heritage management principles (Section 8.0).

## 7.5 Ranking Significance at the Acton Campus

### 7.5.1 Cultural Heritage Values

As set out above, the ANU Acton campus as a whole is ranked as having exceptional heritage value. This heritage study is an assessment of the place as a whole, rather than individual buildings and elements. The individual elements possess an array of identified heritage values and the site is made up of many elements that contribute to these values to a greater or lesser degree. The purpose of understanding the significance of the various elements is to enable a flexible yet consistent approach to the management of the place.

It is important to note the elements will be assessed individually in the future site inventory, Volume 2 of this study which is currently being developed by the ANU. The individual elements in Volume 2 will be assessed using the methodology outlined here.

The methodology follows the national benchmark approach set out by JS Kerr in *The Conservation Plan*, whereby the significance of the various elements has been assessed by considering the independent value of the element 'tempered by consideration of the degree to which the element tends to reinforce or reduce the significance of the whole'.<sup>7</sup> It is also based on current methodology established by the ANU and referred to as the 'ANU heritage classification'.

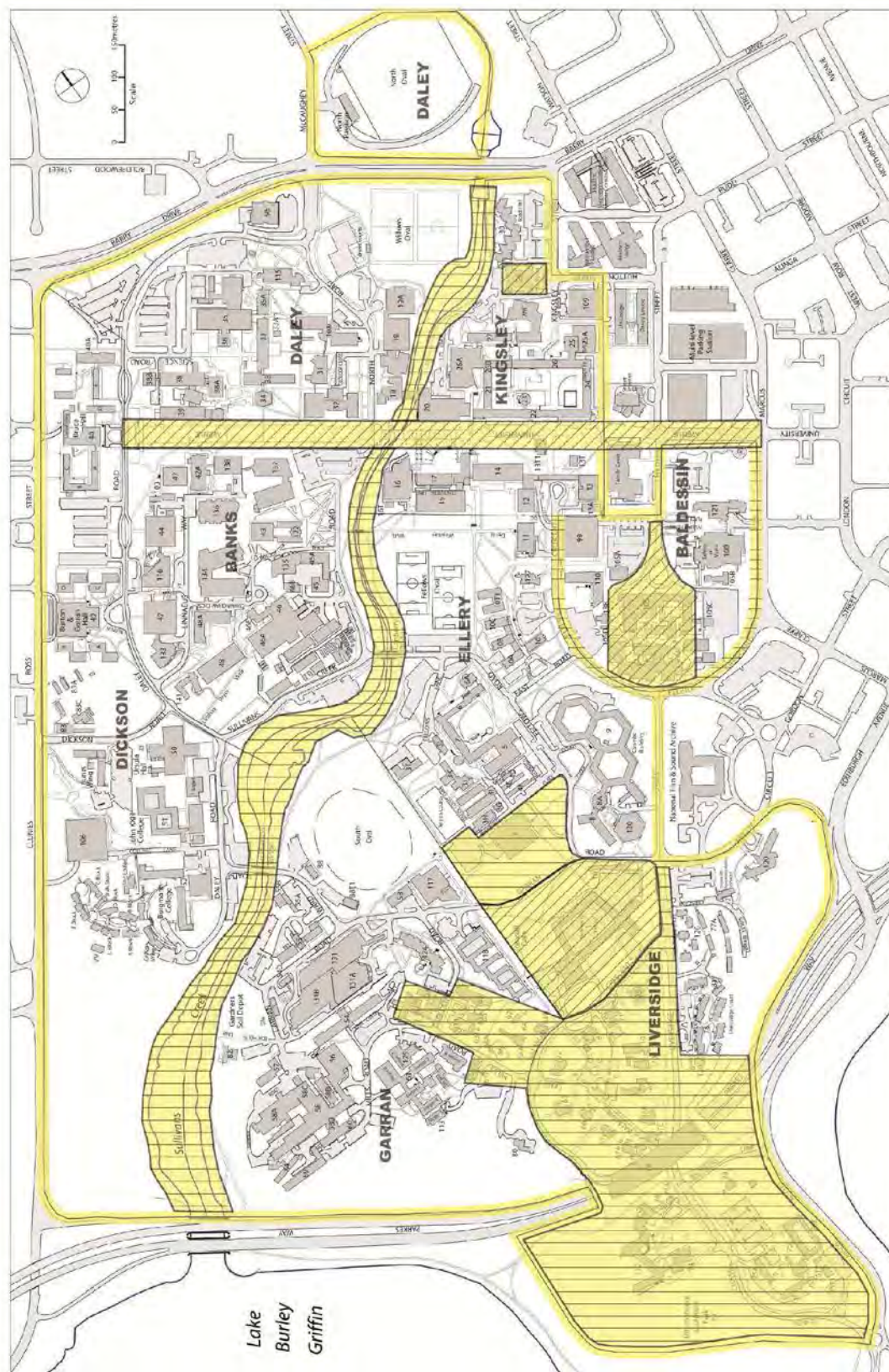
The following rankings and additional explanation provides for adoption in the ANU heritage classification to assist with the ranking of the elements with historic and cultural values at the Acton campus. The individual natural and cultural plantings have a different classification and have been ranked separately (refer to Section 7.7).

**Table 7.3** Definition of the ranking, or grades, of heritage significance for cultural heritage values at the ANU Acton campus. It also includes reference to management and tolerance for change (refer also to Section 7.6).

Level	Explanation of the Heritage Significance Ranking/Grade
Exceptional	<p><u>Ranking and threshold: likely to fulfil National Heritage and Commonwealth Heritage criteria</u></p> <p>The Acton campus is considered to have 'exceptional' level of significance and meets the threshold for Commonwealth Heritage value and outstanding heritage value at a national level.</p> <p>Individual elements of exceptional heritage value embody Commonwealth Heritage values in their own right and make an irreplaceable contribution to the heritage values of the ANU as a whole and to Canberra, the national capital of Australia.</p> <p><u>What it generally applies to the Acton campus</u></p> <p>At the ANU Acton campus, elements of exceptional heritage value are generally associated with the ANU's development. Essentially this includes all the elements of Phase 1: Early Canberra and Genesis:</p>

Level	Explanation of the Heritage Significance Ranking/Grade
	<p>Pastoral Use, Griffin's Plan and the Location of the ANU (1912–1947). This is because of the contribution and association with the development of Canberra as the national capital of Australia. Refer to Figure 7.1.</p> <p><u>Management</u></p> <p>The whole site requires the highest level of consideration for management. It is particularly sensitive to change, especially in the Acton Conservation Area and can be compromised by inappropriate development or impacts, including in its vicinity.</p> <p>Individual elements of exceptional heritage value must be retained and conserved. The tolerance for change level is generally low. Loss or alteration of individual elements that may have exceptional significance would significantly diminish the Commonwealth Heritage (or other) values of the ANU Acton campus.</p>
High	<p><u>Ranking and threshold: likely to fulfil Commonwealth and State/ Territory (ACT) Heritage criteria</u></p> <p>Elements of 'high' heritage value embody Commonwealth Heritage values in their own right and make a significant contribution to the values of the ANU Acton campus as a whole.</p> <p><u>What it generally applies to at the ANU</u></p> <p>At the ANU Acton campus, elements of high heritage value are generally associated with Phases 1, 2, 3, and 4. There may be some elements from all the historic phases which could be ranked higher or lower than the 'high' ranking level and these will be identified and assessed in Volume 2, the Heritage Inventory.</p> <p><u>Heritage management</u></p> <p>Elements of high heritage value should be retained and conserved. They require a high level of care in their management and the tolerance for change is generally low or able to tolerate some change and adaptive reuse.</p> <p>Loss or unsympathetic alteration would diminish the Commonwealth Heritage values of an individual element and the ANU Acton campus as a whole.</p>
Moderate	<p><u>Ranking: likely to fulfil Commonwealth Heritage criteria or equivalent local heritage criteria</u></p> <p>Elements embodying moderate heritage value make a contribution to the overall heritage significance of ANU Acton campus.</p> <p><u>What it generally applies to at the ANU</u></p> <p>At the ANU Acton campus, elements of moderate heritage value are generally, but not always, associated with later historic phases: Phases 5 and 6. There are some elements from earlier phases which could be ranked higher or lower than the moderate ranking level. These will be identified and assessed in Volume 2, the Heritage Inventory.</p> <p><u>Heritage management</u></p> <p>Elements of moderate heritage value should be retained and conserved. They require care in their management and can generally tolerate a low degree of change or some change and adaptive reuse.</p> <p>Loss or unsympathetic alteration could diminish the Commonwealth Heritage or local heritage values of the ANU Acton campus.</p>
Low	<p><u>Ranking and threshold: unlikely to contribute to other elements of Commonwealth Heritage value</u></p> <p>A precinct, building, element or landscape component of the site that reflects a low level of Commonwealth Heritage value and may contribute to the overall significance/values of the ANU Acton campus. Does not fulfil criteria for heritage listing on its own merit.</p> <p><u>What it generally applies to at the ANU</u></p> <p>These elements are of relatively low heritage value to the ANU Acton campus as a whole and generally do not make a contribution to the overall heritage values of the place. These will be identified and assessed in Volume 2, the Heritage Inventory.</p> <p><u>Heritage management</u></p> <p>The loss of these elements would not diminish the Commonwealth or National Heritage values of the ANU Acton campus. They are robust and can tolerate a moderate, reasonable or substantial degree of change, adaptive reuse, removal or replacement.</p>

Level	Explanation of the Heritage Significance Ranking/Grade
Neutral	<p><u>Ranking and threshold: does not fulfil criteria for Commonwealth or other level listing</u></p> <p>This ranking applies to elements that are 'neutral' in that they do not embody, reflect or demonstrate Commonwealth or National Heritage values.</p> <p>The elements make no contribution to the site nor do they detract from the overall heritage values of the ANU Acton campus.</p> <p><u>What it generally applies to at the ANU</u></p> <p>All the elements which do not contribute to the heritage values of the place. In general, this includes elements which are unlikely to have heritage value or have been individually assessed and do not possess historic, cultural or natural values at the Acton campus.</p> <p><u>Heritage management</u></p> <p>The tolerance for change is substantial. Removal of neutral elements is not necessary unless it allows for heritage values of the campus to be regained, reinforced or conserved.</p>
Intrusive	<p><u>Ranking and threshold: does not fulfil criteria for Commonwealth or other level listing</u></p> <p>Does not fulfil criteria for heritage listing because it is potentially damaging to the heritage values of the ANU.</p> <p><u>What it generally applies to at the ANU</u></p> <p>All the elements which make a negative impact on the heritage values of the Acton campus.</p> <p><u>Heritage management</u></p> <p>The removal of intrusive elements can be undertaken in the interest of allowing for the heritage values of the campus to be regained or reinforced.</p>



**Figure 7.1.** ANU Acton campus. The boundary of the campus is marked in yellow and is a place identified in this Heritage Study as having exceptional heritage value. Individual elements within the site contribute to the cultural landscape of the site's exceptional value and/ or have exceptional value in their own right. These elements are indicated in yellow and hatched, including the Acton Conservation Area, University House and setting, Menzies Library and setting, Sullivans Creek, ANU School of Art, Ellery Crescent, University Avenue and Toad Hall. Other individual elements of the site have heritage value and this will vary. The levels of



significance applied to the individual elements will be identified and assessed in Volume 2, the Heritage Inventory. (Source: GML, base plan provided by the ANU).

## 7.6 Tolerance for Change Applied to the Site

### 7.6.1 Explanation of Tolerance for Change

In the case of a large site such as the ANU Acton campus, the concept of sensitivity or ‘tolerance for change’ is a useful management tool which assists with managing any proposed change to the site’s heritage values, in particular the built and landscape character.

Tolerance for change can be applied to individual elements, buildings or sites at the Acton campus which will be identified in Volume 2, the site heritage inventory. It can be used in relation to the extent to which the Commonwealth Heritage values and key attributes are able to tolerate change without adversely impacting the nature or degree of its heritage values to the site overall.

Table 7.4 below sets out the rankings for tolerance for change used in this report and explains their potential application to the individual elements of the Acton campus. It will help the Facilities and Services Division to identify the extent to which they retain and/or provide important evidence of the site’s significance in their existing form, fabric, function and/or location.

**Table 7.4** Tolerance for change—levels of significance ranking for the ANU Acton campus

Tolerance for Change	Definition of the Application to the ANU Acton Campus
<b>Low</b> tolerance for change	The key attributes (form, fabric, function and/or location) embody the heritage values of the element and its contribution to the ANU Acton campus. It retains a high degree of intactness with only very minor alterations that do not detract from significance. The key attributes should be retained and conserved.
<b>Some</b> tolerance for change	The key attributes (form, fabric, function and/or location) embody the heritage values of the element and its contribution to the ANU Acton campus. It has undergone some alteration which does not detract from its significance. The key attributes should generally be retained and conserved. However, they may be altered to some degree without adverse impact on heritage significance.
Able to tolerate <b>moderate</b> change	The key attributes (form, fabric, function and/or location) only partly embody the heritage values of the element and the site or have been considerably modified. The key attributes should be retained and conserved. There is greater opportunity for change with less adverse impact.
Able to tolerate <b>reasonable</b> change	The key attributes (form, fabric, function and/or location) have relatively little heritage value but contribute to the overall significance of the element and/or the site. Alterations detract from significance or the original attribute is difficult to interpret.
Able to tolerate <b>substantial</b> change	The key attributes (form, fabric, function and/or location) have little or negligible heritage significance to the element or the overall ANU Acton campus.

### 7.6.2 Application to the Site

While the whole site offers opportunities for interpretation, new development, adaptive reuse or conservation of some buildings, the application of the tolerance for change tool will help with a quick reference management and development guide. Integrated site management and the development of a future interpretation plan or landscape plans, rather than precinct-based management, will in turn assist in the appropriate management of the heritage values of Acton campus as a single site.

The sum of all parts adds to a ranking of 'exceptional' for the whole site. While the whole site is of exceptional significance, the heritage value of the elements (individual buildings, sites, precincts, etc.) varies. The variable significance of the elements can tolerate a different degree or level of change. Generally, the higher the heritage value, the lower the tolerance for change. For example, the management of the University House precinct should be commensurate with its exceptional level of significance which is, that it has a low tolerance to change.

## 7.7 Heritage Trees, Plantings and Landscape Features

### 7.7.1 Ranking/Classification Criteria of Natural and Cultural Plantings

The ANU's natural and cultural heritage plantings combine to produce a landscape which is a key aesthetic component of the central Canberra area. The natural values of the campus, which include the relict vegetation community—endangered ecological community (see Section 7.6.2) meet the threshold for Commonwealth Heritage value under criterion (b) for rarity and under the EPBC Act and *ACT Nature Conservation Act* as endangered communities.

The vegetation and landscape features, which have been identified in Sections 3.0 and 6.0 as having heritage value, have been assessed for their heritage significance. This is different to the significance ranking for the classification of individual trees in the ANU trees database used by the Facilities and Services Division. While the ANU trees database assessment criteria include some historical criteria, it is mainly weighted on the tree's age and role in the aesthetic landscape of the campus.

The heritage significance ranking used in this study for natural and cultural plantings is based upon a ranking of exceptional, high and moderate levels against the criteria in Table 7.5, which are comparable to the rankings for the built cultural heritage values defined in Table 7.3.

**Table 7.5** Classification and ranking of significant plantings (natural and cultural) on the ANU campus

Rank	Criteria	Tolerance for Change
Exceptional	Original vegetation (remnant individual, group or community) Native species in excess of 200 years old Exotic species planted before 1930 Plantings associated with Weston (pre-ANU site implementation) Experimental plantings associated with Pryor Plantings closely associated with specific historical period	Low
High	Tree groups with community affinities, but disturbed Exotic species planted 1930–1960 Thematic exotic plantings 1930–1960 Geological features Plantings loosely associated with an historic period	Some
Moderate	Thematic native plantings pre-1965 All recent commemorative plantings Geomorphological features	Some

## 7.7.2 Ranking of Natural Landscape Values

Table 7.6 Natural Heritage values of the Acton campus

Map	Description	Natural Heritage Value	Ranking of Significance
GFL1	Limestone exposure on the eastern shoreline of the Acton Peninsula. ANU campus in background.	One of a small number of exposures of the limestone from which the Limestone Plains of Canberra was named. Reference site by Geological Institute of Australia.	High (not in the ANU study area)
GFL2	Depression in the landscape around the western and southern sides of the Chifley Library Building marking the previous course of Sullivans Creek.	Site shows evidence of past site geomorphology. Major meander of Sullivans Creek, now cut off by canalisation.	Moderate
RVC1	Large area of remnant grassy woodland dominated by <i>Eucalyptus melliodora</i> and <i>Eucalyptus bridgesiana</i> with infrequent <i>E. blakeleyi</i> in the canopy array. With a natural grass understorey comprising <i>Themeda australis</i> , <i>Stipa bigenicularis</i> and infrequent <i>Austrodanthonia</i> spp.  Grassland includes the endangered species (under the ACT <i>Nature Conservation Act (1980)</i> ) Hoary sunray ( <i>Leucochrysum albicans</i> ).  Acton Peninsula, south, southeast and west of Old Canberra House.	Relic vegetation communities consisting of critically endangered and endangered ecological communities under the EPBC Act and ACT <i>Nature Conservation Act (1980)</i> .  Habitat values recorded in Biodiversity Management Plan, Acton Campus ACT (2011).	Exceptional
RVC2 RVC3	Two areas of derived natural grassland (woody grassland with tree canopy removed) dominated by <i>Stipa bigeniculata</i> and <i>Austrodanthonia</i> spp. Current canopy species are mainly planted eucalypts ( <i>E. mannifera</i> ).  West of Building 132.	Relic vegetation community—endangered ecological community under the EPBC Act and ACT <i>Nature Conservation Act 1980</i> .  Habitat values recorded in Biodiversity Management Plan, Acton Campus ACT (2011).	High
RVC4	Small area of derived natural grassland (woody grassland with tree canopy removed) dominated by <i>Themeda australis</i> and <i>Austrodanthonia</i> spp.  South of Winston Churchill Trust, on Liversidge Road.	Relic vegetation community—endangered ecological community under the EPBC Act and ACT <i>Nature Conservation Act 1980</i> .	Moderate

Map	Description	Natural Heritage Value	Ranking of Significance
GRT1	Mature <i>Eucalyptus melliodora</i> individuals along the northwestern boundary of the campus (Clunies Ross Street) extending into the University grounds between Burton and Bruce Halls.	Groups of relic trees with vegetation community affinities. Survivors of the natural woodland community on the lower slopes of Black Mountain.	High
GRT2	Over mature <i>Eucalyptus melliodora</i> and <i>E. blakeleyi</i> individuals around Old Canberra House.	Groups of relic trees with vegetation community affinities. Disturbed and isolated relics of the same Yellow Box–Red Gum Grassy Woodland which is intact south and west of Old Canberra House (see RVG1 above).	Exceptional
GRT3	Large area of over mature <i>Eucalyptus bridgesiana</i> individuals in landscaped area among carparks and buildings of University Accommodation Services building at the corner of Liversidge Street and McCoy Circuit.	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box–Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Garran Road, through the Menzies Library and across South Oval (marking a drainage swale which flowed into Sullivans Creek). Recorded as 200+ years in ANU trees database.	Exceptional
GRT4	Over mature <i>Eucalyptus melliodora</i> individuals among the cottages and carparks of the Liversidge precinct between Liversidge Street and Balmain Crescent.	Groups of relic trees with vegetation community affinities. Disturbed and isolated relics of the same Yellow Box–Red Gum Grassy Woodland which is intact south and west of Old Canberra House (see RVG1 above).	High
GRT5	Area of over mature <i>Eucalyptus bridgesiana</i> individuals in landscaped area on the south side of the Menzies Library.	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box–Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Garran Road, through the Menzies Library and across South Oval (marking a drainage swale which flowed into Sullivans Creek). Recorded as 200+ years in ANU trees database.	Exceptional
GRT6	Area of over mature <i>Eucalyptus bridgesiana</i> individuals around the tennis courts west of the old administration area.	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box–Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Garran Road, through the Menzies Library and across South Oval (marking a drainage swale which flowed into Sullivans Creek).	High



Map	Description	Natural Heritage Value	Ranking of Significance
GRT7	Area of over mature <i>Eucalyptus bridgesiana</i> individuals in landscaped area on the southern side of the Chancery Buildings and along East Road.	Groups of relic trees with vegetation community affinities. The tree group is a relic of the Yellow Box–Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Fellows Road from Ellery Crescent.	High
GRT8	Area of over mature <i>Eucalyptus blakeleyi</i> individuals in landscaped area on west University Avenue and extending northwards toward the Research School of Chemistry.	Groups of relic trees with vegetation community affinities. The tree group is a relic of an isolated stand of Yellow Box–Red Gum Grassy Woodland. Tree in centre of avenue is listed 200+ years in the ANU trees database.	High
IRT1	Mature <i>Eucalyptus melliodora</i> individual on Clunies Ross Street.	Individual relic tree from the natural woodland community on the lower slopes of Black Mountain.	Moderate
IRT2	Mature <i>Eucalyptus blakeleyi</i> individual in the grounds of the psychology building (northwest of campus).	Individual relic tree from an isolated stand of Yellow Box–Red Gum Grassy Woodland. Probably part of the <i>Eucalyptus blakeleyi</i> group at GRT8. Recorded as 200+ years in ANU trees database.	High
IRT3	Over mature <i>Eucalyptus bridgesiana</i> individual north of Dickson Precinct Parking Station and behind John XXII College.	Individual very old relic tree from Yellow Box–Red Gum Grassy Woodland. Recorded as 200+ years in ANU trees database.	Exceptional
IRT4	Mature <i>Eucalyptus melliodora</i> individuals in the carpark on corner of Lennox Crossing Road and Lawson Crescent.	Individual relic trees from the large extant natural woodland community south of University House.	Moderate
IRT5	Over mature <i>Eucalyptus bridgesiana</i> individual on Balmain Crescent in front of University house. (Younger <i>E. melliodora</i> in front.)	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge. Recorded as 200+ years in ANU trees database.	High
IRT6	Over mature <i>Eucalyptus blakeleyi</i> individual in the grounds of Liversidge Court.	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge.	High
IRT7	Over mature <i>Eucalyptus bridgesiana</i> individual on the corner of Fellows Road and East Road, outside the Law Building. It is an isolated individual from the relic group at GRT7, but is significantly older than this group.	Individual relic tree from the Yellow Box–Red Gum Grassy Woodland growing on a small alluvial fan (where <i>E. bridgesiana</i> naturally predominates) which ran down Fellows Road from Ellery Crescent. Recorded as 200+ years in ANU trees database.	Exceptional
IRT8	Over mature <i>Eucalyptus blakeleyi</i> individual on Garra Road, northwest of University House.	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge.	High

Map	Description	Natural Heritage Value	Ranking of Significance
IRT9	Over mature <i>Eucalyptus melliodora</i> individual on the eastern side of Ellery Crescent at the intersection with East Road.	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge.  Listed as a significant tree in Pryor and Banks (2001) as ‘200-300 years old’.  Recorded as 200+ years in ANU trees database.	Exceptional
IRT10	Over mature <i>Eucalyptus melliodora</i> individual on the western side of Liversidge Street at the H.C. Coombs Building.	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge.  Recorded as 200+ years in ANU trees database.	High
IRT11	Over mature <i>Eucalyptus bridgesiana</i> individual on the northeastern corner of the old geology huts group.	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge.  Listed as a significant tree in Pryor and Banks (2001) as ‘c200 years old’.  Recorded as 200+ years in ANU trees database.	Exceptional
IRT12	Over mature <i>Eucalyptus blakeleyi</i> individual on the corner of Fellows Road and East Road, outside the Law Building.	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge.  Listed as a significant tree in Pryor and Banks (2001) as ‘Blacksmith’s Tree’ due to pieces of iron in the trunk.  Recorded as 200+ years in ANU trees database.	Exceptional
IRT13	Over mature <i>Eucalyptus melliodora</i> individual on Fellows Road next to Building 10B.	Individual relic tree from the original Yellow Box–Red Gum Grassy Woodland of Acton Ridge.  Recorded as 200+ years in ANU trees database.	Exceptional

### 7.7.3 Ranking of Cultural Plantings

Table 7.7 Cultural plantings of the Acton campus

Map	Description	Cultural Heritage Value	Ranking of Significance
ECP1	Group of very old <i>Populus nigra</i> var. <i>Italica</i> (Lombardy poplar) behind Forestry School.	Banks (1979) records: ‘..the copse of Lombardy poplars near Forestry apparently dates from this period (pre-Canberra) and it is though marks the site of an early shepherd’s hut’.  Listed as a significant tree group in Pryor and Banks (2001) as ‘shepherd’s hut group (circa 1850)’.	Exceptional

Map	Description	Cultural Heritage Value	Ranking of Significance
ECP2	Some <i>Salix babylonica</i> (weeping willow) trees along parts of Sullivans Creek (where the course is unchanged) have generated from original plantings dating from the pre-Canberra agricultural period.	Banks (1979) records: 'Graziers also left their mark....weeping willows along Sullivans Creek originate from early plantings'.	High
ECP3	One of three old <i>Robinia</i> trees which bordered a small limestone quarry operating in this area.	Part of early development area (quarry).	High
EXP1	High density planting of <i>Eucalyptus bicostata</i> by Pryor in the area now occupied by Garran Hall and Ursula College. Because of their closed forest density, these trees have grown very tall.	Banks (1979) records: 'They are part of experimental plantings made available by Professor Pryor. The major eucalypt stand stretching from Garran Hall south into Ursula College carpark was established in 1952'.	High
EXP2	A ragged line of <i>Eucalyptus aggregate</i> individuals have survived from extensive experimental plantings along both sides of Sullivans Creek.	Banks (1979) records: 'Other (experimental) plantings (in the early 1950s) included a belt of black gum on either side of Sullivans Creek below Fellows Road'.	High
EXP3	Mixed conifers and deciduous trees in a regular grid were planted in the northern corner of the campus. A small part survives next to Bruce Hall carpark.	These plantings probably date from the early 1950s and are those referred to in Banks (1979) as: '...the mixed exotic and native species in the north-west of campus around the present day Corin Hut complex'. Banks notes the poor growth of these trees.	Moderate
EXP4	Mixed poplar plantings in the area now occupied by Burgmann College. Included in the group is a white poplar from North Africa ( <i>P. alba</i> var. <i>Matikar</i> ).	Banks (1979) dates this group to the mid-1950s. In Banks and Pryor (2002) the <i>P. alba</i> var. <i>Matikar</i> is listed as a significant tree and dated at 1960.	High
ELP1	Old trees either side of the entrance gate to Old Canberra House. These are commemorative trees from 1914 planted by Earl Grey ( <i>Cedrus libani</i> ) and Lady Grey ( <i>Cedrus deodora</i> ).	These date from the establishment of Old Canberra House gardens. The <i>Cedrus deodora</i> is listed as a significant tree in Pryor and Banks (2001) as 'one of the largest in Canberra'.	Exceptional
ELP2	<i>Pinus torreyana</i> in the lawns of Old Canberra House.	Listed as a significant tree in Pryor and Banks (2001) as 'circa 1920'.	High
ELP3	<i>Pinus canariensis</i> in the lawns of Old Canberra House.	Listed as a significant tree in Pryor and Banks (2001) as 'circa 1920'.	High
ELP4	<i>Sequoiadendron giganteum</i> in the lawns of Old Canberra House.	Probably dating from 1926, the time that this same species was planted in University Avenue.	High

Map	Description	Cultural Heritage Value	Ranking of Significance
ELP5	Shelterbelt plantings of Monterey Pine ( <i>Pinus radiata</i> )/Canary Island pine ( <i>Pinus canariensis</i> ) probably to protect the Acton Ridge cottages and Old Canberra House from westerly winds off the Molonglo River valley on the Limestone Plains.	Banks (1979) records: 'In the 1920s an extensive Monterey pine shelterbelt was established to the south-east of the present day Oliphant buildings'.	High
ELP6	<i>Cupressus macrocarpa</i> (left) and <i>Cupressus torulosa</i> (right) along the driveway of Constable Cottage.	Listed as 'Weston 1914 planting – Heritage value' in ANU trees database.	Exceptional
ELP7	A line of <i>Cupressus macrocarpa</i> on Liversidge Street – originally a hedge which has grown out into trees.	Date unknown. May date from similar <i>Cupressus</i> tree plantings in the same area.	High
ELP8	A line of <i>Schinus molle</i> (Peppercorn) trees along Liversidge Street, plus another adjacent to Lennox House.	Listed as 'Early Weston planting – Heritage value' in ANU trees database.	High
ELP9	Large group of mixed cypress trees among the cottages on Acton Ridge along Liversidge Street (between Parkes Way underpass and Balmain Crescent). Species present are <i>Cupressus macrocarpa</i> , <i>C. torulosa</i> , <i>C. arazonica</i> , <i>C. sempervirens</i> and <i>C. glabra</i> .	Listed as 'Weston 1913 planting – Heritage value' in ANU trees database.	Exceptional
ELP10	Two <i>Cupressus sempervirens</i> trees and a <i>C. arazonica</i> (left to right) among cottages along Balmain Crescent, opposite University House.	Listed as 'Weston 1913 planting – Heritage value' in ANU trees database.	Exceptional
ELP11	<i>Ficus carica</i> (Common fig) shooting from very large, old root mass. Growing on the south side of Constable Cottage.	Associated with Constable Cottage garden plants. Pre-ANU.	High
ELP12	Surviving original plantings along University Avenue are <i>Populus alba</i> . The original mix of <i>P. alba</i> and <i>P. nigra</i> has been maintained through replacements for senescent trees.	The <i>P. alba</i> trees listed as a significant tree group in Pryor and Banks (2001) as 'five mature trees circa 1920'.	Exceptional
ELP13	Elm trees along each side of Lennox Crossing Road between Bachelors Land and the intersection with Lawson Crescent.	The only recorded elm plantings on Acton Ridge date from before 1920 (Banks (1979) and these trees probably date from this period.	High

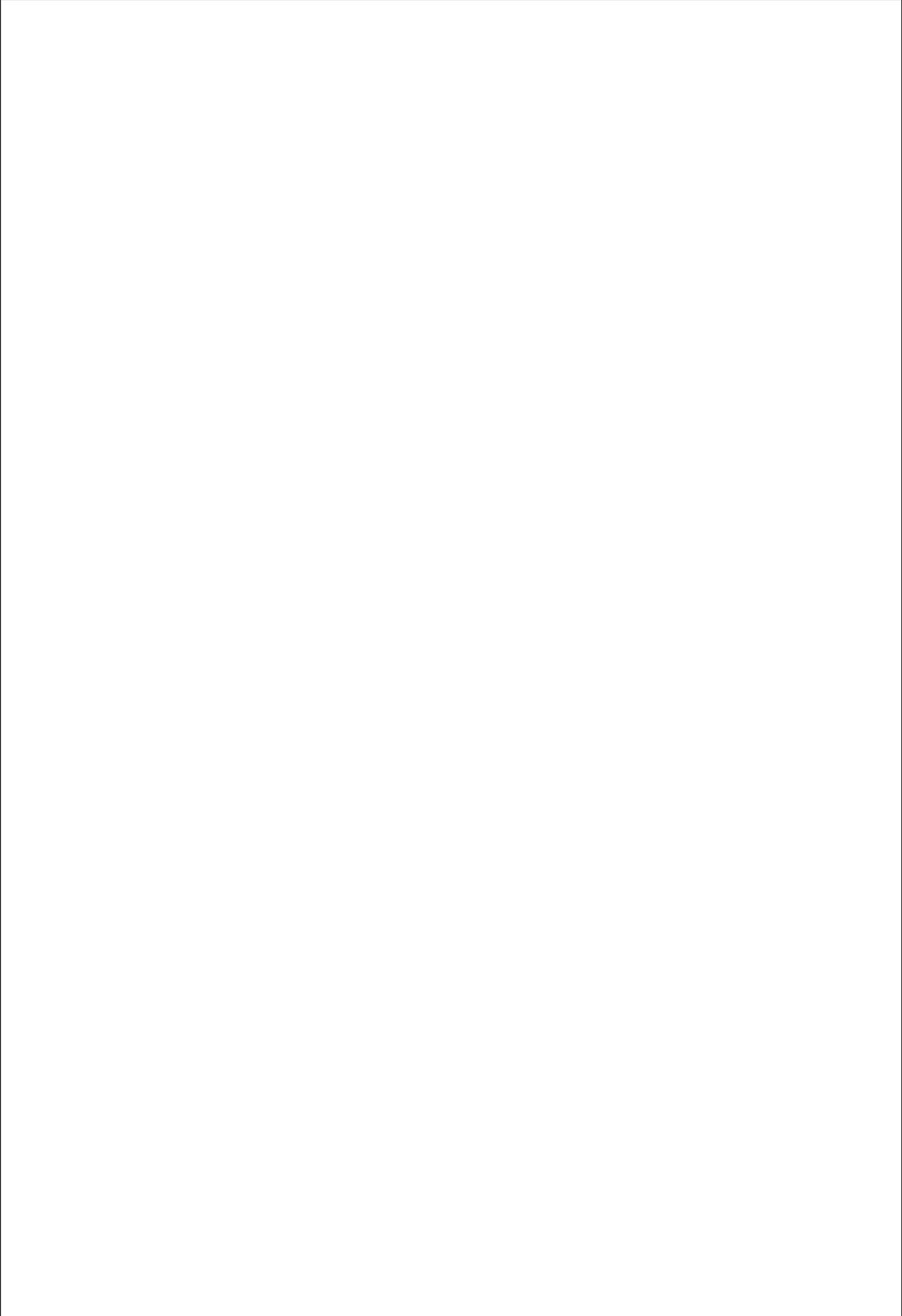


Map	Description	Cultural Heritage Value	Ranking of Significance
ELP14	The surviving section of a line of poplars which originally stretched from Sullivans Creek up to the Chancelry area.	Banks (1979) records: 'The only other significant planting at this time (early 1930s) was the major screen plantings of poplars between the tennis courts and Sullivans Creek and extending up to the Chancelry Annex along the so-called 'Winston Line'. This may be a retrospective reference to Professor Denis Winston who was University architect during the years 1954–1967.	High
ELP15	Probably the single surviving <i>Salix alba</i> var. <i>coerulea</i> (cricket bat willow) from a group planted near the oval on the northwest of the campus (now carparks and landscaping) or a shoot from an original tree. This tree is on the eastern corner of the Physics Building (38).	Part of a group planting by test cricketers in the late 1920s–early 1930s.	Exceptional
ELP16	Mixed conifer species 'pinetum' established between the Forestry School and the School of Biological Sciences. Part of the 'Lindsay Pryor Walk'.	During the 1950s and 1960s individuals in the Botany and Forestry Schools who also served as landscape advisors for the campus (primarily Pryor and Banks) established small isolated arboretums based on themes. The 'pinetum' is one.	High
ELP17	Wollemi pine ( <i>Wollemia nobilis</i> ) cultivated in the Forestry Quadrangle.	The isolated and restricted natural range of this species is part of the values protected by the listing of the Blue Mountains World Heritage site. A limited number have been propagated from the original type location's seed source for research. The Forestry Quadrangle pine is one. (The seeds became commercially available in 2006).	High
ELP18	Mature mixed conifers and broadleaf species in the small enclosed garden area between the Forestry and Geography buildings.	During the 1950s and 1960s individuals in the Botany and Forestry Schools who also served as landscape advisors for the campus (primarily Pryor and Banks) established small isolated arboretums based on themes. The Forestry Quadrangle is one.	High
NLP1	Grove of <i>Angophora floribunda</i> trees at the corner of Liversidge Street and Balmain Crescent. Churchill Trust.	Listed as a significant tree group in Pryor and Banks (2001) as 'circa 1930'.	High
NLP2	Grove of <i>Eucalyptus bicostata</i> trees at the corner of Balmain Crescent and Mills Road and extending among the Jaeger Buildings complex.	Listed as 'Weston 1919 plantings – Heritage value' in ANU trees database.	High

Map	Description	Cultural Heritage Value	Ranking of Significance
NLP3	Single <i>Eucalyptus smithii</i> at the northwestern corner of the Forestry School.	Listed as a significant tree in Pryor and Banks (2001) as 'planted in 1968'.	Moderate
NLP4	Row of <i>Eucalyptus mannifera</i> trees tracing the old alignment of Balmain Crescent towards Lennox Crossing.  This group identified in Bank (1979) as: 'The candlebark trees along Balmain Crescent were planted in 1916'. It is unlikely that Banks would misidentify <i>E. rubida</i> so these trees may be replacements of the original plantings.	Date unclear. Associated with historical alignment of Balmain Crescent in the south of the campus.	High
NLP5	Survivors of a group of <i>Eucalyptus viminalis</i> trees established near the cricket practice area.	Recorded as planted in 1965 by Banks (1979).	Moderate

## 7.8 Endnotes

- <sup>1</sup> Australia ICOMOS 2000, *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*, Australia ICOMOS Incorporated, Burwood (Vic), 2000.
- <sup>2</sup> Email to ANU Heritage Officer from Department responsible for the EPBC Act, 6 May 2011.
- <sup>3</sup> Australian Heritage Commission 2002, *Australian Natural Heritage Charter: for the conservation of places of natural heritage significance*, 2nd Ed, Australian Heritage Commission, Canberra, 2002.
- <sup>4</sup> Australian Heritage Commission 2002, *op cit*, p 2.
- <sup>5</sup> NHL citation for the Parliament House Vista.
- <sup>6</sup> ANU Facilities and Services Division: tree management statement included in the website: <http://facilities.anu.edu.au/index.php?pid=349>
- <sup>7</sup> For a recent example of Kerr's approach, see 2003, *Sydney Opera House: A Plan for the Conservation of the Sydney Opera House and its Site*, Third Edition, Sydney Opera House Trust, p 33.



## 8.0 Opportunities and Constraints for Management

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### 8.1 Introduction

This section discusses opportunities and constraints for the conservation and management of the ANU Acton campus. The key opportunities and constraints derive from the:

- identified Commonwealth and National Heritage values which are embodied in the attributes of the campus (Section 8.2);
- statutory obligations and legislation which govern the management of the place, principally the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), National Capital Plan and the *ACT Nature Conservation Act 1980* (Section 8.3);
- ANU's Facilities and Services Division internal heritage management tools and processes (Section 8.4);
- National Capital Authority's (NCA) role and works approvals (Section 8.5); and
- ANU Campus Master Plan 2030, its requirements and future aspirations (Section 8.6).

### 8.2 Identified Heritage Values of the ANU Acton Campus

#### 8.2.1 Summary of the Heritage Values and Attributes

The ANU Acton campus has identified Commonwealth Heritage values and meets the threshold for historic values under criterion for National Heritage listing. The individual Commonwealth Heritage listed elements play a major role in contributing to the significance of the whole site, as do the key attributes identified in Section 7.0.

The identified heritage values of the Acton campus give rise to opportunities and responsibilities to retain, conserve, augment, adapt and interpret these heritage values and these need to be integrated into the ongoing asset management of the campus.

A summary of the values and attributes of the site that need to be considered are:

- the Acton campus as a whole, including its cultural landscape—the setting, location and use;
- elements which represent the original design and geometry of Griffin's plan for Canberra;
- Acton Ridge, Sullivans Creek and its biodiversity corridor for Indigenous and natural heritage connections;
- the location, layout, buildings and cultural plantings which predate the University (the Acton Conservation Area and elements of Phase 1—largely these include Old Canberra House, the hospital buildings, Lennox House, Balmain Crescent and Balmain Lane cottages and structures, Liversidge Street, Lennox Crossing Road and the Canberra School of Art and the Drill Hall);
- the cultural landscape environment of the ANU including several individual buildings, elements and cultural plantings of the Acton campus which represent the University's development from the historic phases 1, 2, 3, 4 and 5;



- the mix of natural remnant vegetation communities and cultural exotic and native plantings in both formal and informal configuration throughout the campus, including:
  - the cultural plantings including Weston's plantings around Old Canberra House (1913–1920), remnants from the original grand parade plantings of University Avenue, cypresses around the Acton cottages and plantings dating from a shepherd's hut (c1850);
  - commemorative plantings of Earl and Lady Grey at Old Canberra House and the cricket bat willow planted by test cricketers in the late 1920s near the Physics Building (38);
  - the native flora including the relic vegetation communities consisting of critically endangered and endangered ecological communities under the EPBC Act and ACT Nature Conservation Act;
  - remains of Pryor's experimental plantings—the dense *E. bicostata* plantings and remnants of dense *E. aggregata* plantings and poplar group at Burgmann College; and
  - Banks' mixed plantings and small arboretums around the Forestry and Botany schools;
- the urban and landscape context—the location of the campus on Sullivans Creek, with Black Mountain as the backdrop, close to Lake Burley Griffin (the former Molonglo River and Limestone Plains) and adjacent to Canberra's civic centre are most strongly associated with the Griffin plan concept and original location for the University;
- the ANU's international standing in fields of scientific research and endeavour and the potential for further research in the areas of sustainability and embodied energy, moveable heritage and art collections; and
- the International Sculpture Park, sculptures, art works, moveable heritage (including furniture) and areas associated with eminent people.

### 8.2.2 Heritage Opportunities Arising from the Significance

The ANU is a leading university in research and education and must maintain its facilities and ability to function as such. The whole ANU Acton campus is of Commonwealth Heritage value as the main research and teaching campus of the University.

#### *Conservation and Management*

The campus as a whole needs to be managed in accordance with its Commonwealth Heritage values identified in this study. In place of an existing site heritage management plan, the ANU's various heritage tools, individual management plans and the Commonwealth Heritage management principles should be referred to for guidance.

Additionally, nominating the ANU Acton campus to the Commonwealth Heritage List (CHL) and highlighting the National Heritage values which form part of the nomination of Canberra to the National Heritage List will provide the next step in the legislative process for the whole site.

Individual elements and sites of the Acton campus contribute to the cultural landscape of the ANU's heritage value. The conservation of these elements presents both opportunities and constraints for the University. The future Volume 2 of this study, the Heritage Inventory, will identify the heritage values for the numerous individual elements of the campus.

### *Adaptive Reuse and Embodied Energy*

There are in excess of 150 buildings on the campus and while a large number of the buildings on the campus contribute to the heritage values of the site, not all the existing building stock has heritage value in its own right. There is a great deal of opportunity to sympathetically adapt the buildings with heritage value and those that are considered of low heritage value or neutral. The ANU also needs to meet the high quality building code standards for energy efficiency and functional requirements at the University.

Some key buildings, such as University House, RG Menzies Library, the Chancelry and the student residence Toad Hall, are significant for their contribution to the historic and architectural development of the Acton campus. There are some buildings that are important for their designed landscapes and others for their contribution to scientific research, such as the John Curtin School of Medical Research or the Research School of Biological Sciences.

Further research, tests and trials to establish an understanding for embodied energy of the existing building stock are needed before decisions are made to replace existing buildings. A case by case analysis and resolution prior to major decisions about future management, adaptive reuse and/or retrofitting buildings with heritage value will help the University to overcome the challenges in energy efficiency and to provide state-of the art facilities.

### *Interpretation*

The many layers of heritage value found in the campus's cultural landscape provide the knowledge base needed for an important step in the heritage conservation and management process—interpretation. Interpretation will enable the University's communities, visitors and public to know and celebrate the many stories of the ANU, its history, its heritage places and its remarkable legacies.

For example, the ANU's Heritage Strategy explains the historic importance of Acton—that as one of the earliest settlement areas of Canberra it should be conserved and interpreted for future generations. There is also an opportunity for it to be properly showcased in Canberra's centenary celebrations in 2013. Also, there is the opportunity to interpret the Old Administration Area as a key historic component; given it is the physical representation of ANU's first purpose-built administration buildings and research facilities.

An interpretation plan for the Acton campus, currently being prepared to be in line with this study, will provide the framework and direction for pro-active interpretation of the ANU's heritage values.

## **8.3 Statutory Obligations and Legislation**

### **8.3.1 Introduction**

The legislation which governs the heritage management of the ANU is principally the EPBC Act, the *Australian Capital Territory (Planning and Land Management) Act 1988*, the National Capital Plan and the *ACT Nature Conservation Act 1980*. The obligations arising from the heritage legislation are briefly described in this section.

It should be noted that the *ACT Heritage Act 2004* legally recognises and protects significant heritage places within the Australian Capital Territory. However, places owned or managed by the ANU and listed or nominated to the ACT Heritage Register are not legally protected under the *Heritage Act 2004*. This is because the ANU is located on national land, under the control of the Commonwealth and, as such, is protected by Commonwealth environmental and heritage legislation—the EPBC Act.

### 8.3.2 Obligations under the EPBC Act

#### *The ANU Responsibilities*

The ANU is responsible for carrying out works to conserve, maintain and improve the amenity and quality of the University and its various sites and buildings, and has obligations to minimise any adverse impact on heritage values. Under the EPBC Act, the ANU, a Commonwealth Agency, must act in accordance with the EPBC Act to protect, conserve and transmit the heritage values of the places it owns and manages. The agency must ensure that it does not take any action that has, will have or is likely to have an adverse impact upon the identified Commonwealth (or National) Heritage values of any place in its ownership or control, unless there is no feasible or prudent alternative to taking that action and that all measures that can be reasonably taken to mitigate the impact of the action on those values are taken.

A number of documents and management plans have been prepared by the ANU to meet the EPBC Act obligations and guide the conservation and management of its heritage values. These include:

- ANU Heritage Strategy 2010–2012;
- ANU Heritage Register/Database; and
- management plans (also referred to as conservation or heritage management plans) for Commonwealth listed places owned or managed by the ANU.

These documents need to be updated on a regular basis and revised to take into consideration this heritage study which identifies that the ANU Acton campus has Commonwealth Heritage value.

#### *Role of the Department Responsible for the EPBC Act*

ANU's Heritage Strategy 2010–2012 and the ANU Heritage Management Manual 2010 set out the responsibilities, consultation and approvals role undertaken by both the ANU and the Department responsible for the EPBC Act (currently called the Department of Sustainability, Environment, Water, Population and Communities—SEWPaC). In brief, the Heritage Strategy states that heritage studies prepared for the ANU to identify and assess the heritage value of any sites, areas or buildings would be forwarded to SEWPaC or other heritage experts for comment, who may in turn forward the heritage studies to the Minister for the Minister for SEWPaC for formal assessment and subsequent inclusion on the Commonwealth or National Heritage Lists.<sup>1</sup>

### 8.3.3 National Capital Plan

The National Capital Plan forms the strategic planning framework for Canberra and the Australian Capital Territory. In accordance with Section 10 of the *Australian Capital Territory (Planning and Land Management) Act 1988*, the National Capital Plan sets out detailed conditions for planning, design and development for 'designated areas'. The National Capital Authority (NCA) administers the plan. Work approval must be obtained from the NCA for all works proposed within a designated area.

A designated area is an area of land specified in the National Capital Plan as having 'the special characteristics of the National Capital Plan'. The ANU is within a designated area—the central national area—and is referred to as a 'community facility'.<sup>2</sup>

The NCA liaise directly with the ANU on the preparation of a masterplan for the ANU as a major site in the central national area. The approval of a masterplan is intended to expedite works approval requirements, especially in relation to routine and minor activities.<sup>3</sup>

The NCA's aim, through the National Capital Plan, is to achieve high qualities of planning and development within a design context appropriate to its location. In addition, development in the central national area is to be guided by the NCA's 'The Griffin Legacy' (discussed below) to allow for development which is maintained for the geometry and intent of Griffin's plan for Canberra to be respected and the landscape character of Canberra to be maintained and enhanced.<sup>4</sup>

The National Capital Plan includes policies for planning and development in all designated areas. The ANU should be aware of the policies for the areas near to the ANU Acton campus, including Lake Burley Griffin and its foreshores, West Basin, Edinburgh Road, Parkes Way, City Hill Precinct, CSIRO and the Australian National Botanic Gardens.

Further explanation about the role of the NCA in relation to the ANU's heritage values is outlined below.

### **8.3.4 ACT Nature Conservation Act 1980**

#### **Biodiversity and ACT Declared Threatened Species/Ecological Communities**

In the ACT plant and animal species, as well as ecological communities, may be declared threatened under the ACT *Nature Conservation Act 1980* and/or the Commonwealth EPBC Act. Both pieces of legislation are referred to for nature conservation in the ACT.

About 30 plant and animal species and two ecological communities have been declared as vulnerable or endangered under the *Nature Conservation Act 1980*. With the intention of integrating the conservation of threatened species with the ecological communities of which they are a part, three nature conservation strategies have been prepared for the ACT. Two of the strategies are based around the ecological communities that are declared endangered: yellow box–red gum grassy woodland and natural temperate grassland. The third strategy, which is for ACT aquatic species and the riparian zone, includes two terrestrial species declared threatened under ACT legislation.<sup>5</sup>

The ANU's Facilities and Services Division should manage the plant and animal species following the action plans (ACT) and recovery plans (Commonwealth) for declared species and ecological communities. These plans are statutory documents within their jurisdictional context. They provide a formal basis for actions directed to the conservation of species and ecological communities, including dealing with threatening processes.<sup>6</sup>

Additionally, a current ANUgreen program of the Facilities and Services Division is focussing on developing an understanding of the role of biodiversity in urban landscapes, or 'urban biodiversity'. Biodiversity conservation and management on campus is a new area of environmental management undertaken by the ANU. The Acton campus is sited within an urban catchment and the maintenance of a sufficient landscape area to maintain ecosystem services is required.<sup>7</sup>

## **8.4 ANU Facilities and Services—Management Tools and Processes**

### **8.4.1 ANU Heritage Strategy 2010–2012**

The ANU's Heritage Strategy (2010–2012) is a document that outlines the strategy for managing heritage places and the steps that should be taken to protect and conserve the ANU's Commonwealth Heritage values. It states that the constantly evolving nature of University research places additional pressures on the heritage values and fully cements the need for an effective heritage strategy.<sup>8</sup>



The document has been prepared as a requirement of the EPBC Act. All Commonwealth agencies, in this case the University, are required to prepare a heritage strategy that outlines the processes for managing places that have, or may have, Commonwealth Heritage values.

The heritage study fulfils one of the requirements identified in the heritage strategy and that is to identify the heritage values of places the ANU owns and manages. Noted previously, the whole site of the Acton campus had not been previously assessed for its Commonwealth Heritage values prior to this study.

#### **8.4.2 ANU Heritage Register/Database**

The University currently registers places that are in the CHL and these are available in the ANU's online heritage database. The list is intended to grow as more places are assessed for their inclusion in the CHL. Each place has a hyperlink to individual fact sheets about places and buildings and their heritage values.

The register and fact sheets can eventually be replaced with more detailed heritage assessments in the ANU Heritage Inventory for the Acton campus. As noted previously, the Heritage Inventory is being developed as Volume 2 to this study.

The Heritage Inventory will identify and assess individual places for Commonwealth Heritage values in readiness for their nomination to the CHL. Volume 2 could be uploaded to the ANU's Heritage Database as it develops.

#### **8.4.3 Individual Management Plans for the Campus**

The Heritage Strategy (2010–2012) anticipates that the ANU will prepare management plans for all individual places that are included in the CHL within the life of the heritage strategy. There are currently three completed plans for individual places at the ANU Acton campus (Toad Hall, Lennox House and the Drill Hall Gallery) and two others are currently in draft form (the Acton Conservation Area and Menzies Library).

The Heritage Strategy outlines the process for which heritage management plans are prepared at the ANU. Essentially they follow the Commonwealth guidelines for managing heritage places (*Working Together: Managing Commonwealth Heritage Places — Developing Management Plans*). The plans aim to protect and manage the identified Commonwealth Heritage values of a specific place, site, area or building. They also provide a management framework that includes reference to any statutory requirements and agency mechanisms for the protection of identified Commonwealth Heritage values.

Management plans are forwarded by the ANU to the Department responsible for the EPBC Act and the Australian Heritage Council for comment and are reviewed every five years. This process will continue for all individual places at the campus identified as having Commonwealth Heritage value.

#### **8.4.4 The ANU Heritage Management Manual**

The Heritage Management Manual was prepared by the ANU in 2010 and replaces the 2006 version. It outlines the internal heritage procedures for the ANU to act in accordance with the EPBC Act and its requirements to manage Commonwealth Heritage values.

It provides guidance for ANU managers proposing works to undertake a self-assessment to decide whether or not any proposals may have, or are likely to have, a significant adverse impact on the Commonwealth or National Heritage values of the place. This is explained further below.

The manual needs to be updated on a regular basis to account for changes in legislation and to include the findings in this heritage study. An annual internal review, with a 5 year peer review is recommended.

#### **8.4.5 A Single Site Management Plan**

The Commonwealth Heritage values have been identified in this study. A nomination for the site's Commonwealth Heritage values would need to be made to the Minister for the Environment and Heritage.

The preparation of a single management plan for the campus would need to be undertaken once the Commonwealth Heritage values have been formally recognised by the Minister for the Environment or on the advice of the Minister's Department.

Development of a site-wide heritage management plan would include stakeholder consultation to identify constraints and opportunities arising from the nature of the heritage values and from their social, environmental and management context.

Management policies would be developed which articulate a clear vision and direction for future heritage management of the whole site and to provide clear and practical management strategies and implementation actions.

In the meantime, the ANU should continue to manage the identified heritage values in accordance with the Commonwealth Heritage management principles (contained in the EPBC Act regulations). Generally, the layers of the historic phases of the cultural landscape should be respected and maintained in new development, site works and/or interpretation opportunities.

#### **8.4.6 The Environmental Management Plan (EMP)**

The Environmental Management Plan (EMP) administered by ANUgreen (of the Facilities and Services Division) is for maintaining and managing the ANU's environment and sustainability initiatives. The ANU also includes the need to conserve the ANU's heritage values based on the Heritage Strategy and other heritage documents developed under the requirements of the EPBC Act.

To meet the environmental and sustainability standards of the University and its EMP, evaluating the gains from reusing embodied energy, adapting and retrofitting buildings on campus could be applied to all the existing building stock, including those with heritage values.

In the early stages of planning for works it is important to evaluate each building or site area on a case by case basis, with a detailed individual heritage management plan prepared for those with heritage value.

#### **8.4.7 Managing the ANU Treescape**

The ANU, through the Facilities and Services Division, allocates funding for annual grounds maintenance and the position of a full time arborist and Grounds Section with qualified staff. The Grounds Section manage and monitor the health and condition of all the trees, program all tree surgery work and implement the tree management plan.

The aim is to maintain and protect the trees of the Acton campus to maximise their aesthetic and amenity values and minimise their risk to public safety and damage to the infrastructure of the campus.

While detailed information relating to the protection of trees during the development of the campus is contained in the ANU's landscape protection guidelines, it is important the heritage values of the natural

and cultural plantings identified in this study are considered by the Grounds Section and part of the daily decision making and forward planning for future tree replacement of senescent trees.

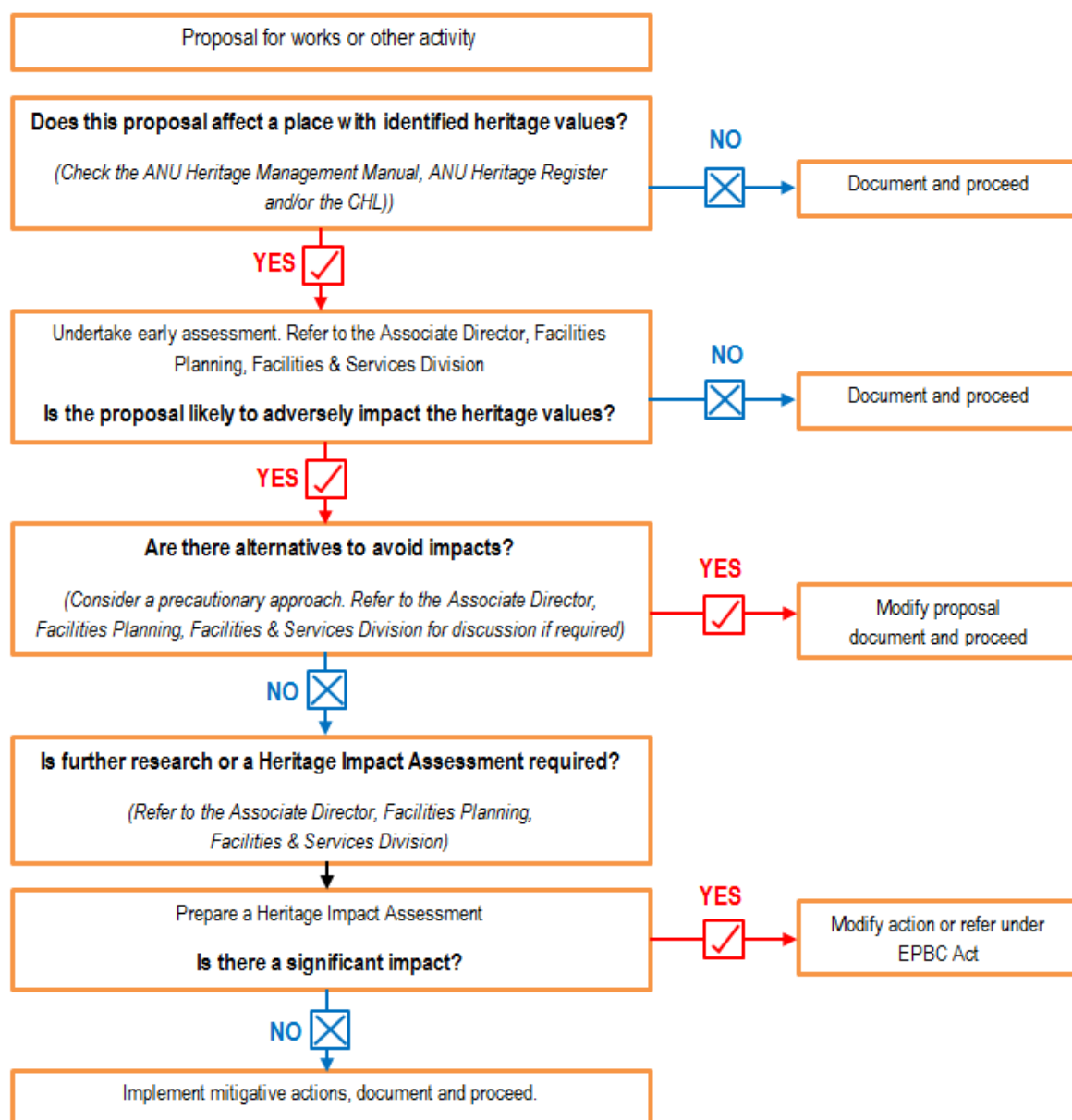
#### **8.4.8 ANU Heritage Management Procedure—Self-Assessment Process**

Identification and management of heritage values should be considered early in any planning process. All prudent alternatives to demolition or major alterations should be investigated before works are approved.

It is important to avoid negative impacts to heritage sites and their values whenever possible. However, it must be remembered that heritage conservation is about protecting the heritage values of a place, not necessarily the fabrics of a building or physical elements of a site.

Heritage (or environmental) impact assessments—often also referred to as heritage impact statements—provide the examination of the different options for redevelopment or alterations.

A standard decision-making process for implementing the requirements and responsibilities of the EPBC Act is suggested in Figure 8.1.



**Figure 8.1** Decision-making process to ensure Commonwealth and National Heritage values are considered when planning developments, activities and other proposals at the ANU.

The self-assessment should be objective and based on sufficient information. Accordingly assessment process included in the 'Significant impact guidelines for the EPBC Act' suggests that Commonwealth agencies taking actions should:

- Consult the official heritage values to ensure the proposal is consistent with the values;
- Consult a management plan, if there is one, to ensure the proposal is consistent with the management recommendations and/or conservation policies;
- Consult the Commonwealth and National Heritage management principles to be consistent with them;
- Consider the action in the broadest context, including its related activities and infrastructure;

- Look at all possible alternatives to the action or proposal;
- Look at any possible subsequent effects the action may have on other matters of National Environmental Significance or in the future;
- Select an action that does not, or is not likely to, adversely (significantly) impact on heritage values;
- Undertake measures which mitigate the impact on Commonwealth and or National Heritage values;
- Document the decision about taking the action and demonstrate how the action is not likely to have an adverse impact on heritage values; and
- Refer actions that may have a significant impact.<sup>9</sup>

#### **8.4.9 Determining Significant Impacts under the EPBC Act**

##### *What is a Significant Impact?*

Under the EPBC Act a significant impact is defined as ‘an impact which is important, notable, or of consequence, having regard to its context or intensity’. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. The definition of ‘likely’ in the Commonwealth Significant Impact Assessment Guidelines states that to be likely it is necessary for a significant impact to have a real or not remote chance or possibility. If there is uncertainty about the impacts of your action and potential impacts are serious or irreversible, it is recommended to take a precautionary approach.

If there is scientific uncertainty about the impacts of your action and potential impacts are serious or irreversible, the precautionary approach or principle is applicable. Accordingly, a lack of scientific certainty about the potential impacts of an action will not itself justify a decision that the action is not likely to have a significant impact on the environment.

##### *Decisions on Significant Impacts*

Where an action is likely to significantly impact the environment—which under the EPBC Act includes heritage places—the action must be referred to the Minister for the Environment for consideration. Three outcomes of such a referral are possible:

1. The action is determined not to have a significant impact and can go ahead.
2. The action can go ahead subject to specific conditions (included in the referral).
3. The action is controlled, which means that further assessment is required before a decision can be made on whether it can go ahead.

The Minister for the Environment considers the information provided and determines if the action can go ahead and under what circumstances. The Minister can refuse an action at the end of this process if the impacts cannot be appropriately managed.



### *EPBC Act Consultation*

Consultation should be sought with the Heritage Division of the Department responsible for the EPBC Act for proposed activities where they may have a significant impact. It is important to advise the Heritage Division that the redevelopment proposal and the heritage process are being undertaken in accordance with the ANU's Heritage Management Manual, individual management plans, the Commonwealth Heritage management principles and any other relevant requirements of the EPBC Act for Commonwealth agencies.

Further guidance on undertaking internal assessments, determining significant impacts and making referrals under the EPBC Act can be found in the publication *Working Together: Managing Commonwealth Heritage Places*, prepared by the (then) Department of the Environment, Water, Heritage and the Arts in 2008.

## **8.5 National Capital Authority Role and Works Approvals**

### **8.5.1 Development and Work Approval within Designated Areas**

Under the National Capital Plan the ANU is required to obtain work approval for:

- all external works to the building or grounds; and
- any works that change the landscape (e.g. earthworks, tree removal and replanting).<sup>10</sup>

The NCA works approval process does not cover:

- internal alterations; or
- works that may have an impact on threatened species and communities. These must be addressed under both the EPBC Act and the *ACT Nature Conservation Act (1980)* and subsequent amendments.

The NCA's role is to assist applicants, including the ANU, through a process of negotiation and design development to achieve outcomes appropriate to those areas which embody the special characteristics of the national capital.

The Facilities and Services Division has a Works Approvals Checklist for Alterations in or about Buildings to be undertaken by ANU project managers prior to making a decision about seeking works approval by the NCA.<sup>11</sup>

### **8.5.2 Consultation with the NCA**

Work approval requirements include the submission of a development application and, in some cases, evidence of environmental clearance or approval from the Department responsible for the EPBC Act. This may include a heritage impact assessment/statement or referral documentation. Therefore, it is recommended that consultation with the Department responsible for the EPBC Act and/or an EPBC Act referral should be undertaken prior to lodging a work approval application.

As a courtesy, consultation with the NCA and the Department responsible for the EPBC Act is advisable in the early stages of the design process before lodging a formal works approval/development application to outline the full scope of a proposal and the heritage process which is being followed. This will assist in identifying any major issues that require resolution prior to submission of a works approval consent form.

It is also possible to submit more detailed design drawings, when developed, to the NCA for assessment and an indication of whether the proposal is or is not consistent with the National Capital Plan before construction documentation is prepared.

### 8.5.3 The Griffin Legacy

The NCA's 'The Griffin Legacy' proposes strategic initiatives for Canberra based on the historic legacy of Griffin's plans for the national capital. The document is intended as 'far-sighted strategy to ensure the nation's capital realises its potential and can accommodate the best of contemporary urban development.'<sup>12</sup>

The intent of the NCA's 'The Griffin Legacy' is to provide a framework to underpin development in Canberra that 'fixes the big picture elements for securing the city's future. It is robust and adaptable to changes in technology and lifestyle and more compelling with each phase of its implementation.'<sup>13</sup>

The following proposed elements are excerpts from 'The Griffin Legacy' which relate specifically to the ANU as part of the NCA's proposed development framework for Canberra. These are as follows:

#### *'Build on the Griffin Legacy'*

- Incorporate Constitution Avenue into the key strategic development corridor of the city, linking Northbourne Avenue, the ANU, Civic, Russell, the Canberra Institute of Technology, RMC Duntroon, ADFA and The Canberra International Airport—supported by an integrated system and mixed land uses. This realises Griffin's vision for the municipal axis as a commercial high street contributing to the life of the national triangle.

#### *'Link the City to the Central National Area'*

- Provide a physical pattern that enables greater interaction and exchange between the ANU, the central national area and the city.
- Enhance the land and water axes—the land and water axes and the main avenues of the Griffin plan connect the government, recreation, military and education groups with the life of the city. The Griffin plan sought a seamless connection between the functions and setting of the federal city and the everyday life of the municipal city.
- Create public gathering spaces on the axes at the ANU, Rond Terraces and Jerrabomberra Wetlands to anchor the vistas to and from the central national area.

#### *'Link the ANU with the City and the Central National Area'*

- University Avenue gateway—create a significant public space that gives expression to University Avenue as the University gateway from Civic to ANU.
- Edinburgh Avenue enhancement—upgrade and formalise the avenue and its vista between City Hill and the ANU. Investigate extension of Edinburgh Avenue to the ANU.
- Ellery Crescent—create a new public space at the junction of Ellery Crescent and Marcus Clarke Street, improving campus interface with the city. Provide new pedestrian connections to Baldessin Square from City West.
- Sullivans Creek cycleway—examine the possibility of providing a continuous cycleway along Sullivans Creek, linking north Canberra through the University to the lake.

- The water axis/West Basin—give expression to the University on alignment of the water axis as one of Griffin's key federal groups (intended to have a major presence on West Basin) by providing significant building and landscape space(s) on the water axis.
- Clunies Ross 'Avenue'—upgrade Clunies Ross Street as a major city bypass and as a high-quality western address of the University precinct.

*'Extend the City to the Lake'*

- West Basin, a waterfront promenade for Civic—to develop the promenade as a strategic pedestrian/cycle/ferry link between Civic and the National Museum, the ANU and National Film and Sound Archives.
- Botanic Gardens water annex/ANU water gate—to examine the feasibility of developing a ferry jetty and tourist destination at the head of Sullivans Creek, as a gateway to the Botanic Gardens, ANU and North Canberra (Sullivans Creek).
- Link the ANU with the city and the central national area to provide greater contact between the University and the central national area by extending University development to West Basin and giving expression to the water axis at the shoreline with a significant architectural and landscape project.

*'Link National Attractions'*

- Provide greater contact between the University and the central national area by extending University development to West Basin and giving expression to the water axis at the shoreline with a significant architectural and landscape project.
- Extend the Botanic Gardens to the water (lake of West Basin); develop a wetlands garden as part of the Gardens' horticultural exhibits; remove the existing infestation of weeds. (Botanic Gardens water annex/ANU water gate).<sup>14</sup>

In summary, how the NCA's development framework augments or impacts the Commonwealth and National Heritage values of the ANU needs further examination.

## **8.6 ANU Campus Master Plan 2030**

### **8.6.1 Role of the Master Plan**

The heritage values of the campus as a whole, its individual buildings, elements and achievements will be recognised, celebrated and conserved as the University plans its future development up to 2030.

Broad heritage principles for the ANU have been prepared for the ANU Campus Master Plan 2030 and they summarise the current Australian benchmark standards for managing heritage places. . They are included in Section 9.2.2. The ANU is currently consulting with the NCA about the masterplan and subsequent volumes for detailed planning and development control guidelines for the campus.

### **8.6.2 Development Control Guidelines**

The management of heritage values needs consideration in the planning context for the future. Unlike a road or parking area, heritage cannot be recreated or adjusted in the future so conservation opportunities and constraints need to be identified, confirmed and planned for in the same way as endangered species conservation, landscape and traffic/movement.

Underlying the ANU Campus Master Plan 2030 will be development control guidelines for the campus in additional volumes which will provide an opportunity for detailed heritage principles and guidelines to conserve and manage the heritage values of the ANU.

## 8.7 Conclusions

The range of identified heritage values of the Acton campus gives rise to significant opportunities as well as obligations for conservation, management and interpretation and compliance with the relevant legislation as discussed above.

The nomination of the campus to the Commonwealth Heritage List and potentially the National Heritage List will provide the formal recognition of the outstanding heritage values of the place in its broader setting of Canberra.

Effective stakeholder involvement and consultation through the Facilities and Services Division in decision making regarding the future management of the campus needs to be integrated into the procurement and design processes for the development of future works. This will be an ongoing, dynamic process, responding to changing needs and aspirations of the ANU and the Canberra community.

The new and revised heritage management documents, the masterplan and the implementation of future developments must reflect the ANU's heritage values, its historic importance and association with the development of Canberra, the national capital.

## 8.8 Endnotes

- 1
- 2 National Capital Authority 2002, Consolidated National Capital Plan, p.23.
- 3 National Capital Authority 2009, Consolidated National Capital Plan, incorporating amendments, p.44.
- 4 National Capital Authority 2002, Consolidated National Capital Plan, p.74.
- 5 ACT Kangaroo Management Plan, 2010, pp.21–22.
- 6 ACT Kangaroo Management Plan, 2010, pp.21.
- 7 ANUgreen, outline on Biodiversity management at ANU, <http://www.anu.edu.au/anugreen/?pid=48>
- 8 ANU Heritage Study 2010.
- 9 Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies Significant impact guidelines 1.2 EPBC Act.
- 10 NCAs Application for Works/Development Approval, <http://www.nationalcapital.gov.au/>
- 11 ANU's Heritage Management Manual, July 2010.
- 12 *The Griffin Legacy*, Canberra, the Nation's Capital in the 21<sup>st</sup> Century, National Capital Authority, 2004, p.viii
- 13 *The Griffin Legacy*, Canberra, the Nation's Capital in the 21<sup>st</sup> Century, National Capital Authority, 2004, p.154
- 14 *The Griffin Legacy*, Canberra, the Nation's Capital in the 21<sup>st</sup> Century, National Capital Authority, 2004.

## 9.0 Preliminary Management Recommendations

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### 9.1 Managing the ANU's Heritage Values

The ANU is a place of outstanding cultural importance for Australia. It has identified Commonwealth and National Heritage values.

The key objective for the future management of the ANU Acton Campus is to maintain, conserve and celebrate these heritage values in the ongoing use and location of the University in Acton and its cultural landscape and research capability.

The ANU contributes to the story of Canberra's establishment and implementation of Griffin's plans for the national capital. The cultural landscape of the University reflect all the phases of the history of Canberra, from its Indigenous occupation to the formation and growth of the University and its unique contribution and international standing in fields of scientific research and endeavour.

These values and achievements are to be recognised, celebrated, managed and conserved for future generations. Preliminary management recommendations to achieve this include:

- nominating the ANU Acton campus to the Commonwealth Heritage List (CHL) and highlighting the National Heritage values which form part of the nomination of Canberra to the National Heritage List;
- nominating individual places with identified Commonwealth Heritage values to the CHL and managing them accordingly;
- revising key ANU heritage documents to fully integrate the findings of this study, including the Heritage Strategy 2010–2012 and the Heritage Management Manual, 2010;
- preparing a site-wide heritage management plan once the Commonwealth Heritage values are formally recognised by the Minister for the Environment;
- preparing the ANU Interpretation Plan to ensure that the places and people who have contributed to ANU's intellectual achievements are celebrated and recognised;
- undertaking further research projects to gain a greater understanding of the scientific research achievements of the ANU which are well recognised in fields of scientific endeavour and in the area of sustainability and embodied energy in heritage buildings at the campus;
- assessing the heritage values of moveable heritage (including furniture), sculpture and art collections following 'A Guide to Assessing the Significance of Cultural Heritage Objects and Collections', 2001. The long-term duration of these collections should also be managed in accordance with Australian standards set by the Australian Heritage Collections Council;
- managing the Indigenous cultural heritage at ANU, which is based on an understanding of the heritage values included in this report;
- following the ANU heritage management principles and the Commonwealth Heritage management principles outlined below; and
- implementing the ANU heritage management principles as development is foreshadowed or assessed.



## 9.2 ANU's Heritage Management Principles

### 9.2.1 Background

The conservation of ANU heritage values should be undertaken in accordance with the Commonwealth Heritage management principles of the EPBC Act (refer to Section 9.3) and the ANU's management principles. These principles reflect Australian best practice standards in cultural heritage conservation.

Godden Mackay Logan (GML) prepared a document in 2010 called 'Heritage Principles for the ANU Campus Master Plan 2030' for incorporation in the masterplan to guide ongoing development of the campus environment. The principles have been developed further to include the findings of this study (refer to Section 9.3). They will also be useful for integration with a future site management plan and the revision of the ANU Heritage Management Manual.

Other useful documents for reference by the ANU include:

- *The Australian Natural Heritage Charter: for the Conservation of Places of Natural Heritage Significance*, Second Edition, Australian Heritage Commission, 2002;
- *Ask First: A Guide to Respecting Indigenous Heritage Places and Values*, Australian Heritage Commission, 2002;
- *Design in Context*, 2002, RAlA and NSW Heritage Office—a key reference for the design of development in historic environments such as the ANU campus;
- *Identifying Commonwealth Heritage Values and Establishing a Heritage Register, A Guideline for Commonwealth Agencies*, prepared by the Australian Heritage Council, 2010;
- *Actions on, or impacting upon, Commonwealth land, and actions by Commonwealth agencies, Significant impact guidelines 1.2 EPBC Act*, prepared by the Department responsible for the EPBC Act, 2010; and
- *Matters of National Environmental Significance*, prepared by the Department responsible for the EPBC Act, 2009.

### 9.2.2 ANU Heritage Management Principles

The ANU heritage principles provide the framework for heritage management and conservation of the heritage values of the campus until such time as a site management plan is prepared and implemented.

The following ANU heritage principles are based on the Australia ICOMOS Charter for Places of Cultural Significance (1999).

- Recognition and conservation of ANU heritage values in day to day site management will include integration with the ANU's Environmental Management Plan, the Biodiversity Management Plan, the ANU Tree Database, the ANU Campus Master Plan 2030 and its subsequent masterplanning processes for ongoing campus development.
- Conservation and development will respect the existing fabric, use, associations and meanings of individual elements, buildings and places with heritage value at the ANU.
- Decisions which will have impact on ANU heritage places and values will draw upon all the knowledge, skills and disciplines which can contribute to its conservation and heritage management.

- All aspects of ANU cultural and natural heritage values will be considered without unwarranted emphasis on any one value at the expense of others.
- The Burra Charter principles and processes will be used in framing development decisions that impact heritage places and values.
- An appropriate visual and landscape setting will be retained for heritage places.
- New construction, demolition, intrusions or other changes which would adversely affect the setting or heritage relationships are not appropriate. (Refer to *Design in Context*, 2002, RAIA and NSW Heritage Office).
- The physical location of an element, building or place is part of its cultural heritage values. Relocation is generally unacceptable unless this is the sole practical means of ensuring its survival.
- Moveable heritage items or art collections such as furniture, fixtures, public art, sculpture and objects contribute to the cultural significance of the ANU and should be retained at ANU. Their removal is unacceptable unless it is the sole means of ensuring their security and preservation; on a temporary basis for treatment or exhibition; for cultural reasons; for health and safety; or to protect the place and its values.
- The contribution which related places and related objects make to the cultural heritage value of the ANU should be retained and celebrated.
- Conservation, interpretation and management of the ANU's heritage values should provide for the participation of people for whom the place has special associations and meanings or who have social, spiritual or other cultural responsibilities for the place.
- Co-existence of Indigenous cultural values should be recognised, respected and encouraged, especially in cases where they conflict.
- Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these. Refer to the Burra Charter for definition of terms.
- Change should be guided by an understanding of the Commonwealth Heritage values of the ANU (both listed and identified in this study) and the individual place in question and its appropriate interpretation.
- Maintenance is fundamental to asset management and to good conservation outcomes and should be undertaken regularly where physical fabric is of cultural heritage significance.
- Adequate technical and financial resources should be provided for heritage maintenance, conservation and the celebration and interpretation of the heritage values of the ANU.
- Significant associations between people and places should be respected, retained and not obscured. Opportunities for the interpretation, commemoration and celebration of research achievements and personal associations should be investigated and implemented at ANU.

- The heritage values of the ANU and its contributory elements should be explained by an active program of interpretation to enhance understanding and enjoyment of the campus landscapes and buildings, and be culturally appropriate.
- Consultation with the ANU heritage officer should be sought when new works are proposed for places on the campus included in the CHL or a place with identified heritage values in this Heritage Study or Volume 2 of this study.
- Standard ANU procedures for seeking works approval (included in the ANU Heritage Management Manual 2010) may be sought from the Department responsible for the EPBC Act and the National Capital Authority for places included in the CHL or with identified heritage values in this Heritage Study or Volume 2 of this study.
- New work such as additions should not distort or obscure the heritage values of the ANU Acton campus or individual places on the campus with identified heritage value, or detract from its interpretation and appreciation.
- New work should respond to its heritage context in its siting, bulk, form, scale, character, colour, texture and material. Imitation should be avoided and new work should be readily identifiable as such.
- The potential heritage impact of proposed changes on the cultural heritage values of the ANU should be analysed with reference to its Statement of Significance and the policies and plans established for managing the ANU, using standard heritage impact assessment processes.
- Within the University, the organisations and individuals responsible for management decisions impacting heritage places and values should be identified and specific responsibility taken for assessing and minimising the heritage impacts of each decision.
- Competent heritage direction and supervision should be maintained at all stages of development, and any changes should be implemented by people with appropriate heritage knowledge and skills.
- Records about the history and heritage of ANU should be protected and made publicly available subject to requirements of security and privacy and where this is culturally appropriate.

### 9.3 Commonwealth Heritage Management Principles

The ANU is obliged to manage Commonwealth Heritage values and places in accordance with the following Commonwealth Heritage management principles set out in the EPBC Regulation 10.03D, Schedule 7B of the EPBC Act.

- *The objective in managing Commonwealth Heritage places is to identify, protect, conserve, present and transmit, to all generations, their Commonwealth Heritage values.*
- *The management of Commonwealth Heritage places should use the best available knowledge, skills and standards for those places, and include ongoing technical and community input to decisions and actions that may have a significant impact on Commonwealth Heritage values.*

- *The management of Commonwealth Heritage places should respect all heritage values of the place and seek to integrate, where appropriate, any Commonwealth, state and territory and local government responsibilities for those places.*
- *The management of Commonwealth Heritage places should ensure that their use and presentation is consistent with the conservation of their Commonwealth Heritage values.*
- *The management of Commonwealth Heritage places should make timely and appropriate provision for community involvement, especially by people who:*  
*have a particular interest in, or associations with, the place; and*  
*may be affected by the management of the place.*
- *Indigenous people are the primary source of information on the value of their heritage and the active participation of Indigenous people in identification, assessment and management is integral to the effective protection of Indigenous heritage values.*
- *The management of cultural heritage places should provide for regular monitoring, reviewing and reporting on the conservation of Commonwealth Heritage values.*

## 9.4 Management Plans and Key Policy Areas

Management plans must be prepared for Commonwealth Heritage places in accordance with the EPBC Act s341S and Regulation 10.03B, Schedule 7A. *Working Together: Managing Commonwealth Heritage Places*, prepared by the (then) Department of the Environment, Water, Heritage and the Arts, 2008, provides a guideline for preparing management plans.

The document is intended to assist Commonwealth agencies and site managers in the management of Commonwealth Heritage places under their control or ownership. It is a user-friendly guide which outlines Commonwealth agency responsibilities and compliance matters under the EPBC Act.

The key policy areas which should be addressed in a site management plan or a management plan for an individual element on the campus include:

1. Conservation of heritage values;
2. Management process (decision-making procedures);
3. Interpretation;
4. Use and access;
5. Planning and approvals;
6. Documentation, monitoring and review;
7. Stakeholder consultation and involvement; and
8. Research and training.

## **9.5 Managing the Landscape**

### **9.5.1 Managing Natural and Cultural Heritage Values**

The stated aim of managing the ANU landscape and vegetation is to conserve and maintain the trees on the campus to maximise their aesthetic and amenity values and minimise their risk to public safety and damage to the infrastructure of the campus. The following is a summary of the current programs in support of this, and is drawn from the Facilities and Services Division webpage and requires further operational discussion. The conservation of ANU's treescape involves two parallel programs: a routine maintenance program and a development control program.

### **9.5.2 Program for Routine Maintenance**

The Grounds and Gardens Section of the Facilities and Services Division of the ANU is responsible for day-to-day management of the ANU trees and landscape. The current maintenance activities include:

- inspections;
- horticultural and arboricultural work;
- reporting;
- hazard reduction;
- tree establishment; and
- tree replacement.

The more than 10,000 trees and extensive gardens combined with the daily influx in term of up to 20,000 students and staff moving through this landscape mean that routine maintenance just to ensure the health and safety of existing plantings makes significant demands on the resources of the Grounds and Gardens Section.

### **9.5.3 Program for Development Control Impacting the Landscape**

The Facilities and Services Division has developed a set of procedures as a response to the significant amount of new buildings and other work on the campus over the last decades which have sometimes impacted negatively on the quality of the landscape. Lack of recognition of landscape values by development and services planners and designers; lack of coordination among stakeholders; and lack of data or accessibility to relevant information have all been recognised as contributing factors in this problem in the past. The procedures have been developed with the aim of addressing these issues.

Damage to trees is of most concern and towards which the procedures are largely directed. This is because of the trees' visual significance, their age, and the time it may take for damage to them to become apparent. The main principles of the procedures are:

- Surveying and classifying all trees on campus to provide a database for informed advice and action.
- Making reference to the ANU tree database a precondition for all work on the campus that has the potential to damage trees.
- Requiring the responsible project officer, consultant or contractor to seek the appropriate approvals before carrying out any such work on the campus.



The earlier the issue of landscape protection is raised in any project—whether the project is a new building, extension or an underground service—the more easily will the requirements for such landscape protection be integrated into the project program and budget. Therefore the emphasis is always to be early rather than late in the investigation of this issue. For a new building project in feasibility and planning phase, the consultants, under the direction of the Facilities and Services Division, are to consider the impact on the existing environment of the proposal.

The procedures also require the preparation of a Landscape Protection Plan (LPP) for individual projects, through consultation with the ANU Gardens and Grounds staff. The scope of the plan will vary according to the nature of the project. Indicative formats for LPPs of different sizes have been prepared. Generally the LPP will take the form of a site plan marked up with notes relating to the various landscape protection issues.

#### **9.5.4 Heritage and Landscape Values Management**

Of the 57 trees, groups of trees, vegetation communities and geomorphological features described in the inventories in Sections 3.0 and 6.0, only three are ranked moderate for their natural and cultural heritage value. This is because the process of identification only selected those landscape elements with significant heritage values (exceptional and high).

When this ranking is added to the scenic and landscape values of the trees, groups of trees, vegetation communities and features, their protection and maintenance becomes a priority for the ANU. The identification of vegetation and features with heritage significance in this report, in conjunction with the ANU Biodiversity Management Plan, will contribute to the ANU Trees Database. Together the information can be used in development control with clear values and priorities.

### **9.6 Conclusion**

#### **9.6.1 Next steps for Managing the Heritage Values**

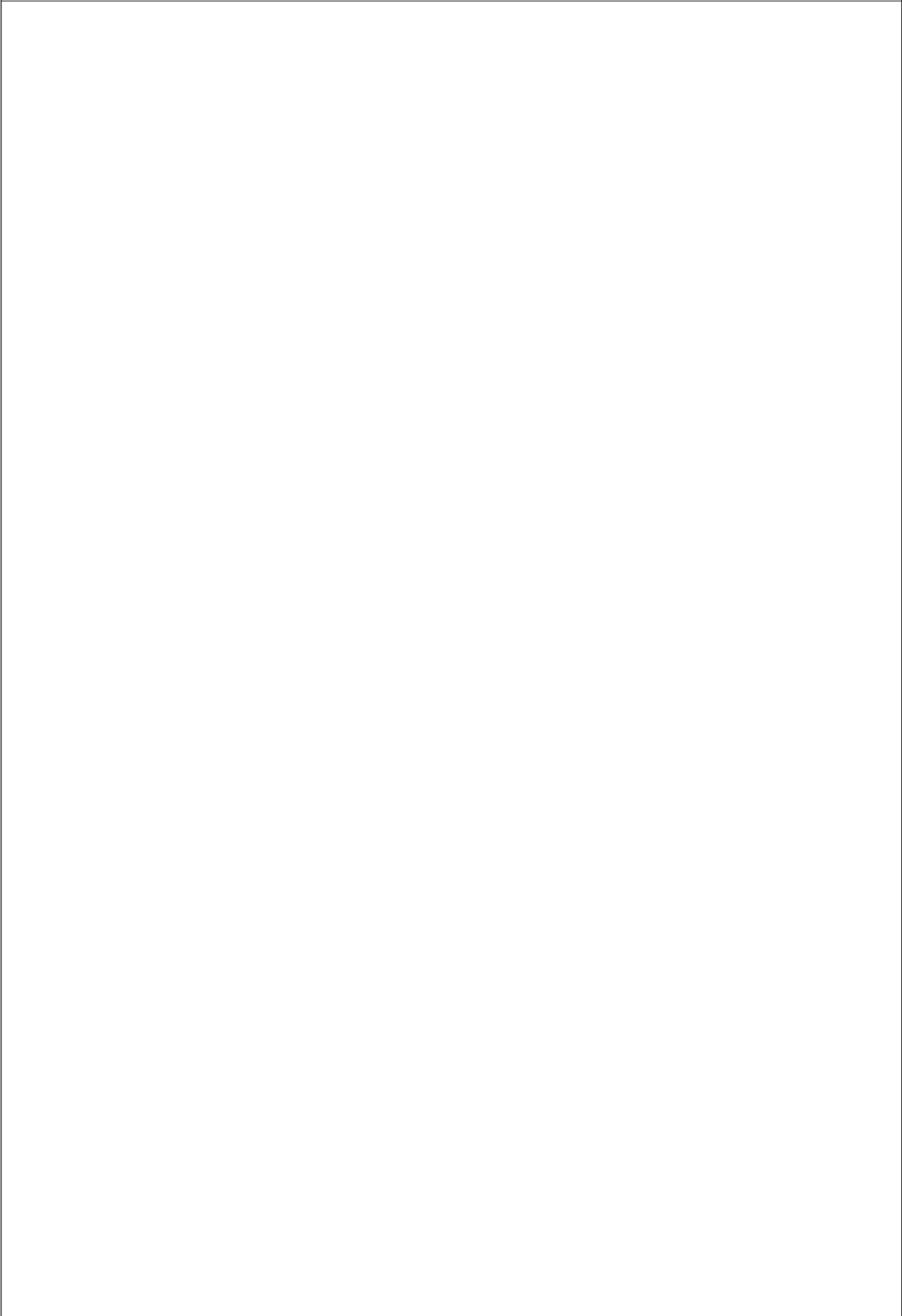
This Heritage Study recommends that the ANU Acton campus be nominated to CHL using the assessment of criteria set out in Section 7.0. The nomination form should highlight the National Heritage values of the campus under criterion (a) which contribute to the outstanding heritage values of central national areas of Canberra—a place already nominated to the National Heritage List.

The draft Heritage Study can be submitted to the Heritage Division of the Department responsible for the EPBC Act for their review and confirmation of the identified heritage values in the report.

The key objective for the future management of the ANU Acton campus, as a whole, is to maintain, conserve and celebrate these heritage values, its cultural landscape and in the ongoing use, research capability and location of the University in Acton. A future site-wide heritage management plan can incorporate the heritage values identified in this study. Additionally the celebration and interpretation of the heritage values are very important for the ANU to implement. A future interpretation plan can be developed following the findings of this Heritage Study.

Volume 2, the Heritage Inventory, will provide the assessment of heritage values and the detail required to manage individual sites, buildings and elements of the campus.

The ANU has a range of good management tools and data to support the conservation of the heritage values and guide development processes. This study, together with the ANU heritage management principles, can be integrated with the ANU's existing heritage management tools.



## **10.0 Appendices**

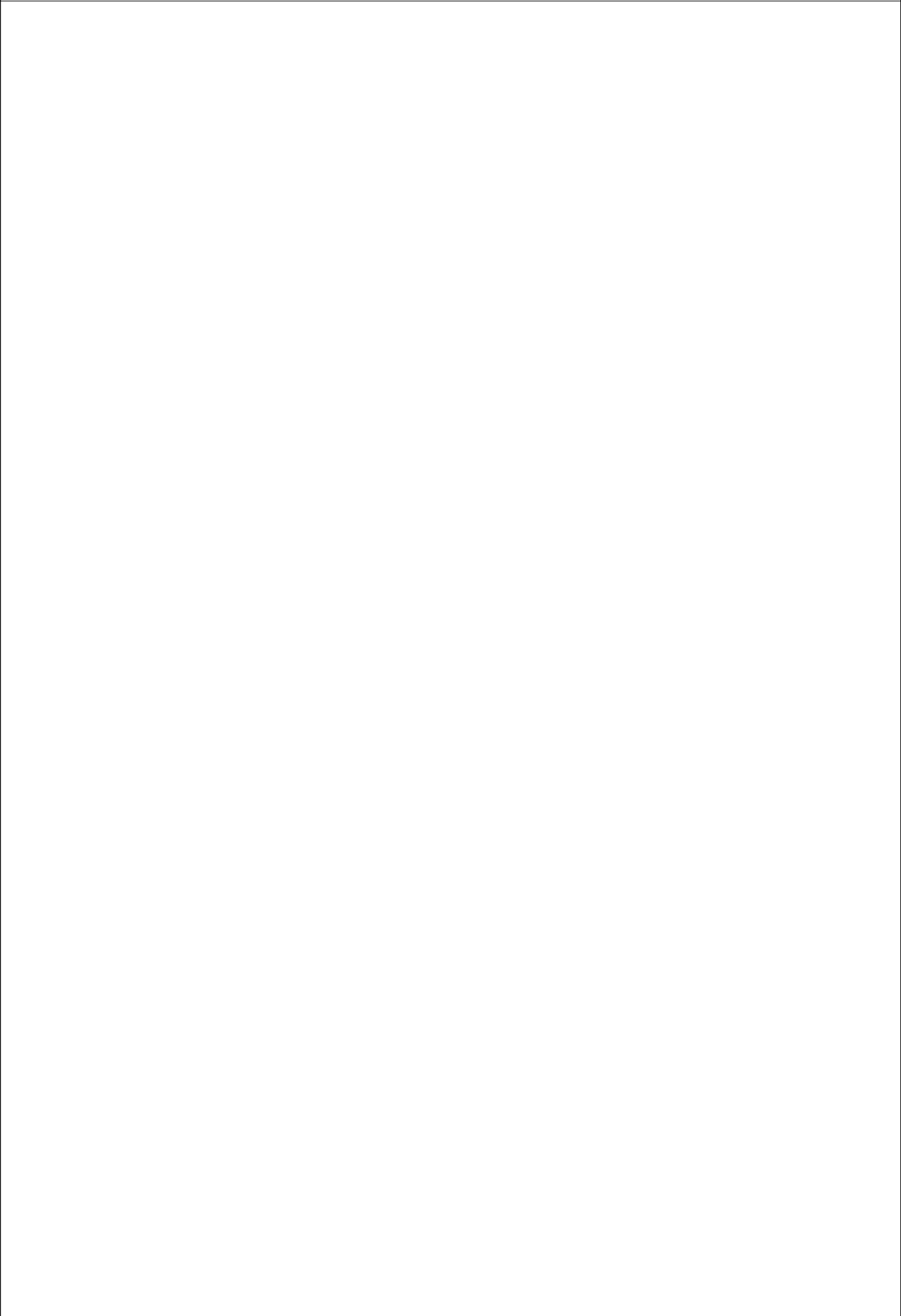
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### **Appendix A**

Essay on Architectural Influences of the Acton Campus, 2011, Dr Milton Cameron

### **Appendix B**

Glossary of Heritage Terms



## **Appendix A**

Essay on Architectural Influences of the Acton Campus, 2011, Dr Milton Cameron





## **Appendix A — Architectural Influences on the Acton Campus**

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### **A.1 Introduction: Planning and Architectural Influences**

This essay has been prepared by Dr Milton Cameron for the ANU Heritage Study. Godden Mackay Logan has referred to the essay in Section 5.0 of the study.

This essay examines the broader issues underlying the planning and architectural design of the ANU campus. It does not attempt to document or to describe all key buildings—or even the most significant examples—but rather attempts to identify and explain the key issues and ideologies that informed and generated the design of the ANU Acton campus. Where some buildings are discussed in detail, or stories of particular buildings are recounted, this is done in order to give form and substance to certain aspects of the overall discourse that influenced the planning or architectural development of the University campus.

The campus contains buildings that originate from before the arrival of the ANU on the site: Old Canberra House, Lennox House, the Acton Cottages, the Old Hospital Buildings at Acton (where the Department of Post-war Reconstruction was located from 1943 to 1946) and the Drill Hall Gallery. Other buildings associated with Canberra University College, Canberra High School and the Canberra School of Music were all incorporated into the University during different phases of its development and expansion.

In addition to these are the many buildings designed specifically for University functions that were built on the campus. Chronologically, these range from the Brian Lewis-designed University House of 1950—the first permanent building designed specifically for the University—to the numerous projects under way at present.

Within the built fabric, location and orientation of these buildings lies physical evidence of the influences of the four principal phases of University planning in which each was conceived: during the Brian Lewis phase (1948-54), the Winston and Ruddock phase (1954-66), the Roy Simpson Phase (1968-71), or during the ANU Building and Grounds Division's own Development Policy Plan phase (from 1992 onward).

It is because of the strength of these connections—between planning ideology and individual architectural form—that this section of the report largely follows the chronological order of the separate planning phases. The respective length of each of these sections relates to the timeframe of the particular planning phase, and to the quantity of architecture and building realised during that phase. Other material, more related to the overall discourse than to specific chronological phases, is introduced thematically at the end of the section.

### **A.2 Genesis: From the Griffins' Plan to Canberra University College**

In his first year as Minister for Home Affairs, in a government led by Prime Minister Andrew Fisher, King O'Malley ensured that land would be set aside for a national university. The 1911 guidelines

for the international design competition for the Federal City, prepared under his direction, contained instructions requiring the competitors to designate a suitable site for a university campus in their designs. Competition entrants placed the university in a range of prominent locations in their Federal City layouts.<sup>1</sup>

The winning design, Design Number 29, was prepared by Walter Burley Griffin, architect and landscape artist, of Chicago, USA. In more recent years Griffin's partner, Marion Mahony Griffin—who prepared the excellent renderings of the competition entry—has also been credited with contributing to the design. The Griffins proposed the university to be located in a prime position immediately to the west of the Municipal Centre. Comprising a large complex of structures at the foot of Black Mountain, it was to front ornamental lakes on its southwest and southeast perimeters. Describing their dramatic, stage-set vision for the Education Precinct, the Griffins wrote: “Black Mountain rising almost directly out of the waters at the Western end of the Water Axis is set off from the formal pool by the University and surrounding professional schools, gardens, and forestry reserves.”<sup>2</sup> While the drawings did not include a detailed plan of the university—this was not required by the competition brief—the Griffins did provide a diagram identifying the academic disciplines to be studied, and indicating their interpretation of the relationship between theoretical and applied science. A series of concentric and radial lines illustrated how “Fundamental sciences, descriptive by nature lead directly to the theoretical sciences dependent upon them along lines of derivation and through these, in appropriate combination, into the lines along which they are applied to the work of civilization.”<sup>3</sup>

The Griffins' idea that a contrived and geometric notion of a university—laid out in a rigid format of concentric circles—could somehow represent the growth of human knowledge, met with some early scepticism. In Australia, written in 1929, (Sir) Keith Hancock—who, much later, would become Director of the Research School of Social Sciences at ANU—wrote how, in the Griffins' university plan, “Everything is placed in relation to everything else”, in accordance with what he described as a “curious academic system”. Other doubts were raised about how this “interesting exposition” could be translated into architectural reality.<sup>4</sup> Some of these concerns were warranted. Although the Griffins did allow for future expansion, it is very difficult to change, or add to, individual elements of a rigid plan without compromising the integrity of the whole. Such a tight and highly defined form of planning and building layout would prove to be very restrictive as the university's requirements changed, and as rapid expansion was required.

But, irrespective of any geometric limitations, the proposed university would prove to be a long time coming. The Federal City itself was subject to many delays, and, due to the interruption of World War I, did not become a functional capital until 1927, when Federal Parliament relocated from its temporary home in Melbourne. Meanwhile, discussions about the proposed university continued. Opinions about its role ranged from one in which it was to educate the sons and daughter of Canberra's comparatively well-educated population base—the newly arrived civil servants—to more

ambitious proposals, where it would become “Australia’s Oxford, a prestigious national research and residential institution modelled on Britain’s ivy league universities”.<sup>5</sup>

Eventually it was decided that plans for a full-scale university would be temporarily put on hold, in favour of a more low-key approach. A group of residents known as The Canberra University Association successfully lobbied the government for the establishment of a university college, believing that the presence of such an institution would reassure potential public service recruits in Melbourne or Sydney that they were “not be coming to an educational desert”. As a result of their activities, the Canberra University College was set up in 1930 in an informal relationship with the University of Melbourne.<sup>6</sup>

During World War II discussions continued between the College Council and the National Capital Planning and Development Committee regarding the construction of a national university. Of paramount importance was whether the proposed site was adequate in size. In 1942 R. Keith Harris, an architect and member of the Committee, presented a schematic plan of groups of buildings arranged on the site. In a further reference to the importance of relating the university to established ivy league examples, Harris displayed plans, to the same scale, of existing university layouts at Oxford, Cambridge, Columbia, Berkeley, British Colombia and Sydney.<sup>7</sup>

### **A.3 The Grand Vision: Coombs’s “Intellectual Powerhouse”**

Herbert Cole (“Nugget”) Coombs, Director-General of the Commonwealth Ministry of Post-War Reconstruction, assembled a group of “brilliant staff”—including one architect, Grenfell (“Gren”) Rudduck—in the old hospital buildings at Acton, Canberra, where the Ministry was located from early 1943 until its abolition in 1946. These buildings are now part of the ANU campus.<sup>8</sup> The cornerstones of Coombs’s vision for post-war Australia were the construction, in Canberra, of a new, research-based, national university. Later in his life, Coombs looked back and considered that the University had been “a kind of intellectual powerhouse for the rebuilding of society.”<sup>9</sup>

Coombs envisaged a grand design—possibly the result of an architectural competition. But the University’s Academic Advisers, particularly (Sir) Mark Oliphant, favoured a more pragmatic approach. They believed that it was more important to provide “simple buildings” within a short timeframe than it was to pursue grand visions. They asked the Interim Council to appoint an architect immediately and, following the recommendation of a member—Roy (“Pansy”) Wright—engaged Brian Lewis, Professor of Architecture at the University of Melbourne, as consulting architect in late 1947. Wright, who knew Lewis through his position as Professor of Physiology at the University of Melbourne, considered him a “good fellow”, and believed that his robust personality and no-nonsense approach would stand him in good stead for confronting the equally forthright Academic Advisers and Interim Council.<sup>10</sup> Others described the Tasmanian-born architect as “a pugnacious and learned man, accustomed to having his own way”, and “short, red-haired, blunt, quick in repartee and even more aggressive by nature than (Sir Mark) Oliphant”, one of the University’s Academic Advisers, and later Director of the Research School of Physical Sciences.<sup>11</sup>

#### A.4 Age of the Masters: the Brian Lewis Phase (1947-54)

*The architect must be entirely subordinated to the scientific requirements of those who are to inhabit [the building] ... I will not be pushed around by an architect for architectural reasons.*

*Sir Howard Florey*<sup>12</sup>

Like Coombs, Lewis had grand visions for the new University. In this respect he also followed on from the Griffins, whose water axis he retained as a key element of his layout. Lewis's University plan—compared by some to Versailles—was an interpretation of Beaux Arts style planning techniques. Consisting of sweeping axes and formal, symmetrical layouts, it depicted a University that was intended to focus on the proposed lake. In doing so, Lewis proposed removal of most of the earlier buildings on the site.<sup>13</sup>

However, during his tenure Lewis achieved very little in the way of grand ideas on the campus. This was for a number of reasons, including the absolute power that the University's Academic Advisers, (Sir Howard Florey, Sir Mark Oliphant, Sir Keith Hancock and Raymond Firth) exerted upon all aspects of University planning and design, the increasingly difficult relationship that evolved between these “founding fathers” and the University architect, the drawbacks of university bureaucracy, lack of funding, and material shortages during the austerity of the early post-World War II period.

During the above-named “Age of the Masters”, it was the Academic Advisers, not the University's architectural consultant, who called the shots. As is evident from the quote above, Florey was extremely confident about his abilities to plan a university campus and to design “his own” laboratory buildings, and had little time for Lewis's advice or opinions. And he had significant “clout” because of his professional standing, having earned a shared Nobel Prize (with Alexander Fleming and Ernst Chain) for converting Fleming's penicillin into an antibiotic, and contributing to “the most significant medical discovery of the twentieth century”.<sup>14</sup> Mark Oliphant was also a fiercely determined and strong-willed character, and, unfortunately for Lewis, had a falling out with the architect quite early in their relationship.<sup>15</sup>

Lewis also found himself lacking support from the University administration. Many decisions regarding planning and building seemed to be made up on the run, often with no regard for the architect's input. At its meeting of 12 May, 1949, the Building and Grounds Committee discussed Lewis's proposals for the general layout of the university site. The Committee agreed that: “no useful purpose should be served by adopting the Architect's general proposals at this stage”. To make matters worse, it was decided that: “the siting of any additional buildings in the immediate future could be determined on an ad hoc basis.”<sup>16</sup>

With Lewis having lost the confidence of Oliphant and Florey—as well as key figures in the University administration—his role in the design of the Research School of Physical Sciences and the John Curtin School of Medical Research was diminished. Florey was adamant from the outset



that the John Curtin School was to be designed by himself and his scientist colleagues, with some assistance from an English architect with whom he was acquainted.<sup>17</sup> Lewis, the University's appointed architect, found himself relegated to documenting the external shell and having no real involvement with the design of the exterior or interior. When this situation became known in Canberra, everyone involved—from Lewis to members of the Building and Grounds Committee—was outraged.<sup>18</sup> Florey's steely response, from Oxford, left no doubt as to how he viewed the increasingly isolated architect's position:

The architect must be entirely subordinated to the scientific requirements of those who are to inhabit [the building]. As Professor Lewis has had no previous experience of constructing laboratories he may not be aware of this point of view. When this initial plan is received I will arrange to have it seen by those in this country with recent experience of building laboratories (scientists not architects!).<sup>19</sup>

With Lewis continuing to be sidelined, his position became untenable, and, “given a hefty push”, he resigned as architect for the John Curtin School of Medical Research building in 1953.<sup>20</sup> Nevertheless, he battled on designing Oliphant's Research School of Physical Sciences building, (later known as “The Cockcroft Building”, and opened in 1954)—despite Oliphant's constant jibing that he was over-designing his laboratories by “building a palace” when he wanted a shed, and accusations that he was amending drawings without consulting him.<sup>21</sup> Lewis was also involved in a protracted investigation into proposed staff accommodation on the campus. Unfortunately, this led to more conflict between the architect, the University administration and the National Capital Planning and Development Committee. The University eventually decided to build a cluster of five, Lewis-designed “Type F” cottages. These linear-shaped, single storey houses—the only staff houses that the University provided on the campus—were arranged in two parallel rows that followed the natural contours of the site in order to provide potential views of the proposed lake.<sup>22</sup>

Practical problems began to be identified in relation to aspects of Lewis's plan. Norman Mussen, of Mussen Mackay and Potter—engaged as civil engineers for the design of roads and major earthworks on the campus—identified a number of issues related to the conflict between Lewis's symmetrical planning intent, and the existing topography of the site.<sup>23</sup>

Lewis did, however, remain design architect for one University building that he largely retained control of: University House. An attempt to introduce “gracious living” to the campus, University House was largely Hancock's idea, but was supported by his fellow Advisers because they believed it would make Canberra a more tolerable destination for themselves and their wives. Initially referred to as a “faculty club”, it was based on traditional Oxford or Cambridge colleges.

As the intended centre of academic social life, and the most frequented building on campus, this was to be a showcase of contemporary Australian art and design, demonstrating that while the University maintained Oxbridge traditions, it also supported contemporary Australian culture.<sup>24</sup> Melbourne-based designer Fred Ward—whose furniture design Boyd had praised in

Victorian Modern in 1947<sup>25</sup>—was commissioned to design furniture and fittings in local timbers, and Australian paintings were hung on the walls. Lewis had recruited Ward to teach interior design in the Architecture Department at the University of Melbourne, and his design work—a restrained, modernist interpretation of the English Arts and Crafts style, underscored by a sound knowledge of Australian timbers and construction methods—was the perfect match for his own architecture. University House was Lewis's most successful building in Canberra, earning him a Sulman Medal in 1953.<sup>26</sup>

While University House was obviously Lewis's finest building on the University campus, and was a significant milestone in his career, it is considered by many to be a somewhat traditional and conservative version of modernism. In his comprehensive history of the Sulman Award, Andrew Metcalf wrote that the 1953 awarding of the Sulman Medal to University House "maintained the conservative reaction to Harry Seidler's 1951 win" (for the Rose Seidler House in Turramurra)<sup>27</sup>

Another critic was Robin Boyd. In 1950, Boyd described Canberra as a failure, a lost opportunity. He also believed that the University was a failure within a failure: a "design that started with high ideals and lost its way". However, Boyd was not overtly critical of Lewis for this. He believed that the main problem was that Lewis, like the Griffins in relation to their Federal City design, had not been allowed to develop the University far enough to allow "the expected quality to take substance". Boyd's view of University House was that it was "calm and cultivated", but possibly a little boring—summed up by his infamous description of the plan: "The residential section is in a U of three-storey wings yawning to the south, and the rest of the accommodation is in a low wing curved like a hand over the yawn."<sup>28</sup>

All of the problems between Lewis, the Advisers and the University administration resulted in increasing frustration for the architect, and in his early departure as University consultant. In many ways his tenure—when he was constantly hampered by events outside of his control—is summarised by events that occurred on what should have been a great day for the architect: the ceremony for the laying of the foundation stone of University House. However, it was not to be, as the following account explains: "24 October 1949 was cloudy, with the threat of rain. An onlooker noted: 'Lewis says he had a neat little speech ready and had, in fact, already embarked on it when—because it was raining—the Prime Minister cut him short:' 'Hand us the bloody trowel,' he said, 'and lets get on with it.'"<sup>29</sup>

## **A.5 From Garden City to “Disneyland”: the Winston-Ruddock Phase (1954-66, with Winston alone after 1958)**

Denis Winston was an architect and Professor of Town and Country Planning at Sydney University. He studied at Liverpool and Harvard, worked in England at the height of the Garden City Movement, and was influenced by the writings of earlier proponents of the Movement such as Ebenezer Howard.<sup>30</sup> Grenfell Ruddock, an architect, was an outstanding architecture student in Melbourne in the 1930s, when he was a colleague and friend of Robin Boyd, who described him as “always a compassionate rebel.” In the first years of World War II Ruddock formed the Architectural Research Group, then worked with Coombs in the Commonwealth Ministry of Post-War Reconstruction in the old Acton Hospital buildings, and later became a member of the Commonwealth Department of National Development. His association with the ANU began as early as 1947, when he became a Social Science research fellow.<sup>31</sup> Ruddock worked with Winston as a consultant to the ANU from 1954 until 1958, from when Winston became the sole University planner. During this period the ANU also employed a series of University Architects who contributed to aspects of the campus and buildings. These included John Scollay, John Howard and Bruce Litchfield.

While the Lewis phase was largely about grand visions—visions that did not come to fruition, the Winston-Ruddock phase was different in both approach and implementation. The most pressing problem faced by the new planning team was how to convert a green-field site into a new university within a short timeframe. The University was finding it extremely difficult to persuade academics and scientists to consider the move to Canberra. It was widely known throughout Australia that Canberra in 1950 contained very little in the way of infrastructure, and that the University, which would require specialised laboratories and libraries, had virtually no facilities or resources. In those days, new academic arrivals to the city were often met at the railway station in Kingston, or at Fairbairn Airport, by Ross Hohnen, Registrar of the ANU. Hohnen would then take them on a tour of the new university site, and point out the location of proposed future buildings. As Foster and Varghese described in their history of the ANU: “Some were bemused: it took a fair stretch of the imagination to accept Hohnen’s vision of a university in a paddock.”<sup>32</sup>

Beginning with considered, comprehensive, but achievable goals, the Winston and Ruddock planning phase facilitated a number of major building works across the campus. Making a “fresh start”, they proceeded to abandon the Lewis Plan. One view that they did share with their predecessor, however, was the importance allocated to the site in the Griffins’ plan: “There is little doubt that Griffin chose this site because of its particular relationship to the Canberra Plan and the topography of the city area ... on the western end of water axis ... bounded by water frontages ... abuts Black Mountain which forms a natural backdrop to the area.”<sup>33</sup> Winston’s perspective drawings from the early 1960s show the retention of Lewis’s emphasis on a ceremonial connection to the lake.

Winston and Ruddock favoured a pragmatic, inclusive approach to site planning. They introduced a functional, holistic approach to the siting of buildings on the campus, considering factors such as topography, orientation, views, vegetation, flooding, access, services and future expansion. It was a very detailed, strategic and considered approach, intended to make the University the “combined Harvard-M.I.T. of Australia.”<sup>34</sup> The Winston and Ruddock methodology involved analysis of the site in regard to the above criteria, identification of areas of the site that were suitable for building upon, and development of these areas as “self-sufficient precincts”, containing buildings of similar functions, that did not conform “rigidly to a preconceived architectural scheme for the whole university”.<sup>35</sup>

It was the abolition of a total, preconceived concept for the whole University site that signified Winston and Ruddock’s most fundamental departure from Lewis’s grand, Beaux Arts vision. There were both advantages and disadvantages within such a pluralistic approach. Winston and Ruddock recognised the scale, complexity and urgency of the challenge. They were also cognisant of the facts that University requirements would change over time, and that the campus would always be a work in progress that could never be completed. In their 1955 report on Site requirements they stated:

*“... the University is bound to consist of a series of overlapping operations some of which may have to be started before the remaining sections of the programme have been fully worked out. To meet these circumstances, the development plan should be a framework within which continual adaption can take place, working towards the gradual improvement of the facilities and amenities provided in the University, rather than a rigid or formal design which can never be fully appreciated until the day, which may never be reached, when the University is completed.”<sup>36</sup>*

In this way the Winston and Ruddock plan proposed an overall framework that dictated circulation patterns and identified locations for groups of buildings. This framework generally avoided strong, formal, symmetrical or geometric figures, and instead relied on a relaxed informality:

*“...our concept of the Uni as a series of related but independent groups is in keeping with its real organisation and functions. It is also in harmony with present day trends in that it avoids the formal alignment of buildings in street-like facades, and instead places them in landscape, with freedom of movement for motorists and pedestrians and ample facilities for parking and assembly.”<sup>37</sup>*

As part of their overall approach, Winston and Ruddock engaged separate architectural and planning firms to prepare smaller-scaled, local Precinct Plans: Bunning and Madden for the Arts and Social Sciences Precinct in 1966, Eggleston, Macdonald and Secomb for the Science Precinct in 1966, and Yuncken Freeman for the Chancelry and Union Precinct in 1967.

Within the Winston and Ruddock plan, the architectural style and concept of the individual buildings was left to others to determine—at least in the first instance. The wording of their report seemed to indicate, however, that they intended some form of involvement in aesthetic matters further down the track: “It is not possible at this stage to make any specific suggestions about the architectural

treatment of individual buildings. The problem can only be studied effectively when actual plans for particular buildings are being worked out.”

While they dictated no specific guidelines for architecture, Winston and Ruddock did make one point very clear: that the shift away from grand visions within the plan was to extend down to the level of individual buildings. This was exemplified by the following statement: “It cannot be stressed too strongly that, in all these matters, elaborate buildings, expensive materials ... are not necessarily the best way of securing the best results: Good design is the essential—not unnecessary expense.”<sup>38</sup>

The Winston and Ruddock plan tended to promote buildings that could be described as “well behaved”. While their approach to university planning was a carefully thought through, pragmatic solution to a complex series of problems, the end result was a somewhat dispersed, heterogeneous campus whose buildings were scattered and generally unremarkable in character. However the most significant, and lasting, legacy of the Winston and Ruddock plan was that the campus took on an informal character, with the dominant effect being one of separate clusters of buildings set in open space. Winston’s adherence to the Garden City planning principles were responsible for the creation of this, the most significant quality of the ANU campus: that of buildings set in a park. But the same approach was also responsible for the principle areas of criticism: a very dispersed campus, with little connection—either in physical proximity or in architectural character—between separate precincts. Problems were also identified in terms of individual building access, orientation and servicing.<sup>39</sup>

By 1961 Winston defended his earlier decision to not restrict architects in the design and planning of their buildings, but admitted that he had perhaps given too much individual freedom, writing “I think it will be generally agreed that insufficient control has been exerted over the last ten years to secure a reasonable degree of harmony between the different buildings on the University site.”<sup>40</sup>

It is highly likely that, when he wrote this admission, Winston still had Boyd’s stinging criticisms of the University campus ringing in his ears. In *The Australian Ugliness*, first published in 1960, Boyd wrote:

*“... the university began to drift away from the idea of one architect and homogeneity... After the Curtin School [John Curtin School of Medical Research] the later buildings of the National University forsook all thought of creating a symbol of the national intellectual centre, forsook all idea of unity, and even of harmony... each new project had its own architect, its own brickwork, its own colour-scheme, its own theory, concept, style. Like any ordinary Australian building each new one of the National University knew no higher discipline above the one which someone had arbitrarily selected for it in an isolated moment of conception.”<sup>41</sup>*

While it is true that Winston’s “hands-off” approach to the architecture of individual buildings was a significant factor in the overall appearance of the campus as a series of individual buildings, there were other factors. One was the decision to engage many separate architectural firms. While some firms were engaged to design more than one building in a particular cluster, there remained a high number of different architectural firms, each with their own design approach, working



simultaneously on campus buildings. A Canberra Times article of 1964 claimed that, for the thirty or so buildings that existed on the campus at that time, up to 17 architectural firms had been involved. This was in fact official ANU policy. During the late 1950s the chair of the Building and Grounds Committee was Warren McDonald, a prominent figure in the building industry. McDonald believed that, as the University was a public body, it had an obligation to employ as many architectural firms as possible.<sup>42</sup>

Another factor was simply the high number of buildings that were commissioned by the University during this period. The decade between the late 1950s and late 1960s was a period of extraordinary growth for the ANU, which saw buildings springing up all over the campus. It was also during this period that the University amalgamated with Canberra University College, providing an expanded campus for the site consultant to deal with.<sup>43</sup>

In 1964 Boyd—whose Melbourne firm, Grounds, Romberg and Boyd, was by then designing its first building on campus, the new Zoology block (1963-68)—intensified his attack on the University by comparing the campus to Disneyland. Boyd described how “the ANU shared Disneyland’s vast contrasts of style. In many sections of the ANU three or four violently different styles were set jeeek by jowl.” Malcolm Moir, the President of the ACT Chapter of the Royal Australian Institute of Architects—and an architect whose firm was not involved in University work—supported Boyd’s views, stating that “the ANU had presented an opportunity to develop a distinct Australian or Canberra style of architecture,” which “had been ruined by employing too many architects, all working to outdo other architects.”

Ross Hohnen, the University Registrar, disagreed. Hohnen claimed that thousands of visitors had been shown around the University, and he had “heard no adverse criticism of styles of architecture.”<sup>44</sup> Other Senior University academics were enthusiastic about their particular buildings. As was the case with Florey and Oliphant, many also had a significant input into their design. One of these was Professor Arthur Birch, Dean of the Research School of Chemistry, who proudly described the new building for the Research School of Chemistry, designed by Victorian architects Eggleston, Macdonald and Secomb, as a “beautiful, simple, scientific building”, one that was “technically and aesthetically the best in the University”.<sup>45</sup>

Senior academics often played a major role in planning new buildings. Involvement of senior University staff, however, was usually on a parochial basis, and did not always lead to a superior architectural solution. One example of this was Hancock’s involvement in a new building for the Research Schools of Social Sciences and Pacific Studies, required to replace overcrowded premises in the old hospital building at Acton. Jim Davidson, Professor of Pacific History and a “known aesthete” who possessed a “romantic attachment to the South Seas”, had his friend Roy Grounds design a series of buildings grouped around a lagoon with an Asian-Pacific theme—which could be interpreted as a microcosm of Griffin’s concept of a city and university located beside lagoons and a lake. Hancock, however, had other ideas, favouring a geometric design prepared by Mockridge, Stahle and Mitchell that consisted of a series of introverted hexagons connected by

covered ways. Just when it appeared that Grounds's design had won the day, Hancock undermined it at a Council meeting and the hexagonal plan prevailed.<sup>46</sup> The design was compressed in plan to save costs, with the result that the hexagons were rammed together rather than connected by the covered links. For decades since, academics have found themselves lost in the corridors of the "honeycomb", the confusing and disorientating H. C. Coombs Building.

## **A.6 "Ensemble and Interaction": the Roy Simpson Phase (1968-71)**

In 1967 the Council's Building and Grounds Committee resolved that fresh ideas were required to achieve some form of unity and coherence to the sprawling campus plan. For this reason they engaged Roy Simpson, of Yuncken Freeman Architects, as a full-time site planner.

Simpson, a "legendary" architecture student in Melbourne during the 1930s, was a friend of Boyd, who he had preceded as holder of the Haddon Travelling Scholarship.<sup>47</sup> During World War II, Simpson, along with Rob Yuncken, provided planning and design advice to the U.S. Army Engineers Corps. After the War, Simpson became the youngest partner in Yuncken's Melbourne office, Yuncken, Freeman, Freeman and Griffiths Architects. After his involvement with the ANU, Simpson went on to become the co-ordinating master-planner for La Trobe University in Bundoora, Melbourne. In 1997 he was the Royal Australian Institute of Architects Gold Medallist.

Simpson believed that the greatest challenges and achievements were not in the design of individual buildings, but in group developments or precincts such as the ANU campus, "where the architect rarely has control over what happens immediately across the boundaries but he can link buildings to each other, or arrange them in a multiplicity of ways to create courtyards, formal or informal, in an infinite variety of forms. Multiple developments offer a much wider range of possibilities for ensemble and interaction, each building with the others." In an inversion of what many architects would view as their design priorities, for Simpson "the total scene is more important than the individual project", "the precinct is more important than the individual buildings", and "the city is more important than the precinct." Simpson believed that, in their continuing quest for self-expression and creativity on individual projects, architects had lost control of the wider context.<sup>48</sup> In spite of all of this, Simpson was also a consummate designer of individual buildings: his highly regarded circular chapel at Canberra Grammar School, completed in 1965, is one local example.

Like his predecessor, Simpson did not believe in being overtly dictatorial in his approach to campus planning. He believed his primary objective was to create a "campus which had a harmony and consistency, happy relationships between the buildings and the landscape, Australian in character." Simpson was experienced in dealing with large clients, universities, committees—and difficult architects. When his friend Boyd stretched their friendship by altering his design for Menzies College at La Trobe to produce a very brutal design, Simpson let Boyd have his own way:

*"You can only go so far, you can seek co-operation. You can't impose on people. Anyway in a university there is no such thing as laying down the law, these things get kicked around by endless committees. Most extraordinary, democracy gone mad very often."<sup>49</sup>*

Given the criticisms of the University buildings covered in the above section, and the admission by the previous planner that he had possibly given too much architectural freedom to different designers, it is not surprising to find that amongst the first goals that Simpson set out to achieve was more harmony between buildings, and a more cohesive architectural treatment. Simpson—whose plan was prepared in conjunction with Yuncken Freeman—also pushed for higher density and closer proximity in an attempt to halt the “scattering” of buildings, and more efficient circulation patterns.

To halt the scatter, Simpson proposed concentrating new buildings into four groups, each defined by function: the School of General Studies, undergraduate residences, the Institute of Advanced Studies and the ceremonial group. More aesthetic cohesion was to be sought within each group, while significant connections were to be forged between them. The open space between the groups was to be optimised through removal of temporary buildings and roads that obscured their definition, while the overall circulation pattern was to be better resolved, separating pedestrians from vehicles, and integrating campus entry points with the nearby civic traffic plan.

Simpson also acknowledged the University’s shifting centre-of-gravity, by confirming a shift towards the north. In the previous plan, the proposed ceremonial group commanded views over the lake in “monumental isolation”, quite detached from the University’s everyday activities. Simpson advocated the abandonment of the water axis, the retention of Acton Ridge in its current form, and the relocation of the main elements of the ceremonial group—auditorium, exhibition building, and other public functions—to the eastern end of University Avenue. Simpson envisaged University Avenue as a pedestrian precinct, and as the main gateway to the University. He believed that the ceremonial group would be ideally located there, near the centre of undergraduate teaching, and where “town and Gown” would merge “with considerable drama”.<sup>50</sup>

In 1970 the University Council endorsed the principle notions behind the Simpson plan. Their endorsement of the plan signified a significant shift, not only in planning direction, but also in the way in which the University related to the wider context. In the 1940s, Lewis had planned a campus to accommodate four research schools, and an academic population of approximately 400 working in research and postgraduate training. The existing models that he looked at were prestigious, ivy-league institutions such as Oxford and Cambridge. By the time that Simpson was engaged, there were 800 research and teaching staff at the ANU, and over 4,000 students—most of whom were undergraduates. Instead of planning a monumental, isolated complex on Acton Ridge, which would have followed the Griffins’ grand design, Simpson oriented the University towards the city centre.

While the Simpson plan was generally supported and endorsed, there were some downsides, and some detractors. As the centre of the campus shifted, the Physical Sciences and Medical Research Schools became more isolated. Another casualty was University House. Intended to be the focus of academic life on the campus, it was now quite detached from the day-to-day activities of the University. But worse still, as it was now approached from the side or the rear, rather than between its lake-embracing, welcoming arms, it now found itself facing the wrong way.

## **A.7 Consolidation (1972 – 1989)**

Between 1972 and 1989, there was a significant slowing down in the amount of building work on the university campus. This was a difficult period for the ANU in financial terms. During the 1970s the University “lost its ‘special relationship’ with government and was forced to compete with other universities.” The demise of this unique relationship—based on patronage and benevolence—ushered in a “new era of financial stringency” for the University.<sup>51</sup>

Significant precinct plans and buildings that were completed during this phase, however, included the 1975 University Union Plaza plan by Simpson and Yuncken Freeman Architects, the 1976 Canberra School of Music by Daryl Jackson, the 1977 Toad Hall student residences by John Andrews, and the 1981 conversion of the former Canberra High School (1939) into the Canberra School of Art.

## **A.8 Current Phase (1990 onward)**

During the 1990s the University’s Building and Grounds Division took over responsibility for the campus, and commissioned a number of plans, reports and studies into aspects of the campus to assist with forward planning and management.

In 1990 the Division established a Design and Site Planning Subcommittee to implement this process. The Subcommittee comprised Don Hardman, Head of the Building and Grounds Division, Dr. Bryce Mortlock, architect, John Gilchrist, town planner, and Kath Wellman, landscape architect. In 1992 the Subcommittee prepared a Development Policy Plan for the campus, which was adopted as a control for future development on the campus. During the following year the Division commissioned landscape architect Richard Ratcliffe, and architect John Armes, to prepare a Heritage Study of the ANU Acton campus. The second volume of the Heritage Study was completed in 1995. In 1994 Knox and Tanner were commissioned to undertake a Strategic Landscape Plan.

## **A.9 In What Style Should we Build? The Question of Appropriate Architectural Style**

Discussions regarding architectural style for the proposed university took place from an early date. The importance that was given to this question is evident from the records of a Parliamentary exchange that took place between John Dedman, Minister for Post-war Reconstruction and Minister in charge of the CSIR, and Robert Menzies, Leader of the Opposition, in 1946. Opening the debate, Dedman stated his belief that the proposed university “buildings must be worthy of the objects for which they are built and in keeping with the best types of architecture in the Capital Territory.”<sup>52</sup>

Menzies was clearly horrified by this, and a few weeks later laid out his response:

*I was very pleased to hear the Minister say ... that the buildings of a university of this kind must be of distinction ... But I was a little dashed when I heard him say that the buildings should be in harmony with the general architectural feature of Canberra, because I confess that I regard Canberra for the most part as an*

*architectural abomination. The building that we are in now [Old Parliament House] although pleasant enough inside, looks externally like nothing other than a chocolate factory. We have adopted in Canberra, for some reason that I can never understand, architecture of a flat, squashed type that is completely out of harmony with what ought to be ... I hope that the Canberra university buildings will not consist of the squashed, pork-pie like buildings of the type that at present disfigure Canberra.*<sup>53</sup>

In spite of the ambition of Lewis's planning concepts, the architectural style and construction techniques that he envisaged for the University campus were relatively modest and traditional. Boyd described Lewis's architectural treatment as "relaxed", "generally domestic in quality", and avoiding "contemporary clichés with as much aversion as he did contemporary engineering". As Boyd added, Lewis used "load-bearing brick walls, tiles, and other humble materials to coax vernacular building techniques into a harmonious and easy-going environment."<sup>54</sup> But little was built of Lewis's proposals, and the majority of the new University buildings were conceived within the Winston and Ruddock years.

In the following years, however, the "style debate" was, to a large extent, placed on hold as all of those involved in the planning and designing of the University struggled with the immediate problems of providing laboratories and other facilities within a very short timeframe on a green-field site—a site that was still largely a sheep paddock. As established earlier, Winston and Ruddock provided a planning framework that effectively abdicated any responsibility for architectural style or language. Their reasons for this are below:

*"In another period we might well have devised a more compact and formal arrangement of buildings, but it should be emphasized that the present time is one of continuing changes in methods of architectural construction, forms of architectural expression, and in the material available for building at any given moment ... It was with these circumstances in mind that we decided that the most practical type of plan was one which created a series of relatively isolated groups, each of which could answer its own particular needs, take on its own architectural character, ... We do not therefore think that it is practical or desirable at this time to lay down a uniform type of design to which future University buildings should conform."*<sup>55</sup>

Simpson made a number of strategic interventions into the plan, shifting and re-orienting the whole campus. He also improved the nature and appearance of the open space by reducing clutter, and made a stronger effort to achieve more architectural unity between buildings in the same precinct. Yet Simpson's greatest strengths (in practice and in his own words), were his abilities to interpret and realignment broad planning issues, rather than to contribute to the detailed design or style of specific buildings.

By contrast, the authors of the 1992 Development Policy Plan saw no problem in attempting to prescribe details for individual buildings. While no comment was made in regard to the question of which architectural styles were to be encouraged, the 1992 Plan was very prescriptive in its attempts to ensure that future campus buildings conformed to a consistent overall character. This, the authors argued, could be achieved on a precinctual, or local, basis. To implement this concept they prescribed how buildings within certain precincts were to be constructed, on their external faces, of materials and colours that were similar to an existing building, or buildings, within that



precinct. For instance, external walls within Precinct A were to be clad in “Neutral dry pressed face brick”.<sup>56</sup>

One factor that was critical in regard to the absence of any unifying architectural theme or ideology throughout the ANU campus is the sheer length of time over which the campus has evolved, and the associated fact that approaches to architectural design changed significantly throughout that duration. This, as much as any intended University policy, is responsible for the fact that the campus was not built in any particular style. In this respect it is interesting to note the observation by Foster and Varghese that the ANU campus largely avoided the style that was known as the “New Brutalism”. Popular in the 1960s, Brutalism was more prevalent in newer universities such as Macquarie, Flinders and La Trobe.<sup>57</sup>

## A.10 Conclusion

The ANU campus contains physical evidence, in the form of site planning and individual building layout, orientation and architectural treatment, of each of the four major eras of planning: the Brian Lewis phase, the Winston and Ruddock phase, the Roy Simpson phase, and the 1992 Design and Site Planning Subcommittee.

The nature and extent of this evidence varies in strength, scale, and potential cultural significance between examples associated with one phase or another. In other words, there are subtleties in the ways in which the physical evidence can be read and interpreted. The Winston and Ruddock phase was clearly the most significant in terms of duration, and the amount of building work that took place. And it has been established that the most apparent visual quality of the campus—that of groups of buildings set in landscaped open space—owes much to Winston’s Garden City model. Yet the Winston phase was relaxed and completely “hands-off” in terms of architectural intent—leading to the perception by many that the University campus was too dispersed, and lacked coordination and cohesion—as exemplified by Boyd’s infamous “Disneyland” comparison.

While it is generally accepted that the University has little to show for Lewis’s grand planning intent, the plan form of University House, with its gestural embrace of the lake that was to come, and the grand axis that would lead to it, could be read as a microcosm of his overall planning intent. Within that building layout is the physical DNA of the entire Lewis plan. Similarly, while the Roy Simpson phase was relatively short in chronological terms, his was a particularly decisive and strategic involvement, with many strong ideas resulting from it: the re-centering of the campus toward the north, the pedestrianisation of University Avenue and focus on that area as the ceremonial area and transitional threshold between the city centre and the University (or between “town and gown”).

The overall University plan, and the great variety of buildings that it contains, together reflect the myriad factors that lie behind their design and conception over what is now six decades of growth and change: different eras and different planning ideologies, unique functional requirements, changing economic landscapes, and even parochial support and patronage from zealous University staff. But the most significant quality of the campus does not lie in these structures themselves. It is

not the architectural style, formal massing, or any material aspect of the buildings that unifies the campus and defines the University's predominant physical character. Instead, it is the spaces between the structures that are most important.

## A.11 Endnotes

- <sup>1</sup> For a description of the competition and entries, see John W. Reys, *Canberra 1912: Plans and Planners of the Australian Capital Competition*, (Carlton South: Melbourne University Press, 1997).
- <sup>2</sup> Reys, 1997, 144
- <sup>3</sup> S. G. Foster & Margaret M. Varghese, *The Making of the Australian National University 1946-96* (St. Leonards: Allen & Unwin, 1996), 6.
- <sup>4</sup> Cited by David Dexter, "The Australian National University Campus", 1991, 29.
- <sup>5</sup> Foster & Varghese, 1996, 6-7.
- <sup>6</sup> Jim Gibbney, *Canberra 1913-1953* (Canberra: Australian Government Publishing Service, 1988), 166, Foster & Varghese, 1996, 8.
- <sup>7</sup> Dexter, 1991, 64, 259.
- <sup>8</sup> Gibbney, 1988, 209-210.
- <sup>9</sup> Foster & Varghese, 1996, 19.
- <sup>10</sup> Foster and Varghese, 1996, 67-69.
- <sup>11</sup> Geoffrey Serle, *Robin Boyd, a Life* (Carlton North: Melbourne University Press, 1995), 105; Stewart Cockburn and David Ellyard, *Oliphant, The Life and Times of Sir Mark Oliphant* (Axiom 1981), 154.
- <sup>12</sup> Howard Florey to Douglas Copland, Vice-Chancellor, ANU. Trevor Williams, *Howard Florey, Penicillin and After* (Oxford: Oxford University Press, 1984), 251-52; Foster and Varghese, 1996, 74.
- <sup>13</sup> Richard Ratcliffe and John Armes, "ANU Heritage Study", Stage 1, Volume 1, 1993, 20; Robin Boyd, *The Australian Ugliness* (F. W. Cheshire, 1960), this edition Penguin Books, 1968, 33.
- <sup>14</sup> Walter Isaacson, cover notes, Eric Lax, *The Mould in Dr. Florey's Coat, the Story of the Penicillin Miracle* (New York: Henry Holt, 2004).
- <sup>15</sup> See Cockburn and Ellyard, 1981.
- <sup>16</sup> "University Site Planning, Historical Documents", February 1968, 19.
- <sup>17</sup> By early 1948 Florey decided that he was not happy with the architectural advice he was receiving from Australia, and asked Stephen Welsh, an English architect and Professor of Architecture at Sheffield, to design the medical school in collaboration with the Academic Advisers. This effectively relegated Lewis to the status of documentation architect. Williams, 1984, 251-52.
- <sup>18</sup> Lewis was furious, especially when he realised that Welsh's fees were to be deducted from his own. He fired back a hostile response, claiming that Welsh had been "unethical" and "impertinent". He threatened to take the matter to the RIBA and the RAIA, and to resign if the University did not retract. Williams, 1984, 251.
- <sup>19</sup> Florey to Copland, Williams, 1984, 251-52.
- <sup>20</sup> Ibid., 16; Foster and Varghese, 1996, 74.
- <sup>21</sup> Cockburn and Ellyard, 1981, 162.
- <sup>22</sup> Grounds claimed that the main reason no more staff houses were built was because "the university authorities decided that if they provided housing for professors, they would have to provide it for all staff". Roy Grounds, interview by Conrad Hamann, January 1978. Hamann, "Modern Architecture in Melbourne, the Architecture of Grounds, Romberg and Boyd, 1927-1971", 51, ANUA 53, Correspondence files, Box 469, 12.1.2.9 (1).
- <sup>23</sup> Ratcliffe and Armes, "ANU Heritage Study", Stage 2, Volume 1, 1995, 16.
- <sup>24</sup> Foster and Varghese, 1996, 71-73.
- <sup>25</sup> Robin Boyd, "Frederick Ward and the raspberry jam", *Victorian Modern, One hundred years of modern architecture in Victoria, Australia* (Melbourne: Architectural Students' Society of the Royal Victorian Institute of Architects, July 1947), 20, 45. The handles of a cabinet designed by Ward were made from raspberry jam wood, which smells like raspberry jam when being worked.
- <sup>26</sup> See Jill Waterhouse, *University House as They Experienced It, a History 1954-2004*, (Canberra: Australian National University, 2004)
- <sup>27</sup> Andrew Metcalf, *Architecture in Transition, The Sulman Award 1932-1996* (Glebe: Historic Houses Trust of Australia, 1997), 85.
- <sup>28</sup> Boyd, 1960, 32-33.
- <sup>29</sup> Waterhouse, 2004, 18.
- <sup>30</sup> See Ebenezer Howard, *Garden Cities of Tomorrow*, 1898.
- <sup>31</sup> Serle, 1995, 66-67, 299; Foster and Varghese, 1996, 191.
- <sup>32</sup> Foster & Varghese, 1996, 67

- <sup>33</sup> Winston and Ruddock, "The ANU Site Development Proposals", September 1955, 1.
- <sup>34</sup> Denis Winston, "Site Consultant Report", 30 November 1966
- <sup>35</sup> ANU Buildings and Grounds Division, "Development Policy Plan", 1992, 14.
- <sup>36</sup> *Winston and Ruddock, "ANU Report on Site Requirements", April 1955, 1.*
- <sup>37</sup> Winston and Ruddock, September 1955, 31.
- <sup>38</sup> *Winston and Ruddock, September 1955, 31.*
- <sup>39</sup> Ratcliffe and Armes, "ANU Heritage Study", Stage 2, Volume 1, 1995, 19.
- <sup>40</sup> *Denis Winston, "Site Consultant's Final Report", November 1961. (This was not actually the final report.)*
- <sup>41</sup> Boyd, 1960, 33-34.
- <sup>42</sup> Foster and Varghese, 1996, 192-93.
- <sup>43</sup> *Canberra Times* (29 May 1964).
- <sup>44</sup> *Ibid.*
- <sup>45</sup> "A Medal for the Birch Reduction", *Canberra Times* (21 December 1972).
- <sup>46</sup> Foster and Varghese, 1996, 106-07, 134, 192.
- <sup>47</sup> Serle, 1995, 65.
- <sup>48</sup> Roy Simpson, "A. S. Hook Address", 1997.
- <sup>49</sup> Serle, 1995, 293.
- <sup>50</sup> Foster and Varghese, 1996, 193-94.
- <sup>51</sup> Foster and Varghese, 1996, 408.
- <sup>52</sup> ANU Bill, 1946, Second Reading 19.6.46, Hansard, 19.6.46, quoted in Dexter, 1991, 282.
- <sup>53</sup> ANU Bill, 1946, Second Reading 5.7.46, Hansard, 5.7.46, quoted in Dexter, 1991, 288.
- <sup>54</sup> Boyd, 1960, 32-33.
- <sup>55</sup> *Winston and Ruddock, September 1955, 32.*
- <sup>56</sup> ANU Building and Grounds Division, "Development Policy Plan", 1992, 56.
- <sup>57</sup> Foster and Varghese, 1996, 192.



## **Appendix B**

Glossary of Heritage Terms



## Appendix B: ANU Glossary for Heritage Terms

Name (Acronym)	Description and ANU example document
Archival Recording (AR)	<p>An archival record of heritage items is undertaken when the asset has been damaged or is at risk of demolition or relocation. The recording process is carried out by qualified ANU staff, or a suitably qualified consultant.</p> <p>The ANU follows the NSW Information Series Guidelines for Photographic Recording of Heritage Sites, Building &amp; Structures. One copy of the record is retained by the ANU Heritage Office; they are used as a handy reference manual and a means to guide appropriate future works at the place or adjacent lands. One copy is also often given to the University Archives at the Noel Butlin Archives Centre on the Acton campus. Copies are available upon request.</p>
Conservation Management Plan (CMP)	<p>A CMP consists of a historical overview of the place, a detailed description and condition audit, identification of the heritage values, examination of risks or foreseeable changes to the values, and provision of management policies and protocols for the conservation and protection of these values.</p> <p>Any works that are proposed to a place with identified heritage values must be in accordance with the policies and protocols laid out in the CMP.</p> <p>CMP are reviewed every 5 years to address changes in legislation and any alterations to the values that may have occurred during that time.</p>
Commonwealth Heritage List (CHL)	<p>The CHL was established under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (the EPBC Act) and comprises identified places that have natural, Indigenous or historic heritage values that are found on Commonwealth land. They include places that reflect Australia's development as a nation. The ANU has more than 50 places registered on the CHL.</p> <p><a href="http://www.environment.gov.au/heritage/places/commonwealth/index.html">http://www.environment.gov.au/heritage/places/commonwealth/index.html</a></p>
Commonwealth Heritage criteria Commonwealth Heritage values	<p>Commonwealth Heritage criteria are outlined in the EPBC Act and are used in assessments to determine if places have Commonwealth Heritage values.</p> <p>There are nine criteria covering historic, rarity, scientific, representative, aesthetic, creative/technical, social, associative and Indigenous values. A place need only to have values against one of the criteria to be eligible for inclusion on the CHL.</p>
Commonwealth Heritage management principles	<p>Commonwealth Heritage management principles are contained in the EPBC Regulation 10.03D, Schedule 7B.</p> <p>The Commonwealth Heritage management principles provide a guiding framework for managing Commonwealth-owned heritage places. They set the standard for managing places to protect heritage values for future generations.</p> <p>These principles should be used when preparing and implementing management plans and programs. In the absence of a management plan, they provide the guidance needed for managing the heritage values of a property.</p>
<i>Environment Protection &amp; Biodiversity Conservation Act 1999 (Cwth)</i> (EPBC Act)	<p>The EPBC Act is the Australian Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places—defined in the EPBC Act as matters of national environmental significance.</p> <p>The legislation also governs the identification, protection and management of natural and cultural heritage on Commonwealth land or management by Commonwealth agencies. The ANU has obligations arising from the EPBC Act as it has campuses and sites that are on Commonwealth land and managed by the ANU, a Commonwealth agency.</p>

Name (Acronym)	Description and ANU example document
Heritage Administration Plan	<p>The ANU's Heritage Strategy 2010–2012 includes a heritage administration plan in Appendix A. It sets out heritage administration goals for the ANU in the period of 2010–2012. The goals include:</p> <ol style="list-style-type: none"> <li>1. The identification of heritage on land under ANU control;</li> <li>2. The effective conservation and management of places with identified heritage values; and</li> <li>3. The interpretation of heritage values for the management, users and visitors of the sites. Noted in the heritage administration plan as particularly important is the lead-up to the centenary of the founding of Canberra in 1913.</li> </ol>
Heritage Impacts Statement/Assessment (HIS/HIA)	<p>A significant impact is an impact which is important, notable or of consequence having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts. All of these factors should be considered when determining whether an action is likely to have a significant impact on matters of National Environmental Significance (NES). A HIS is prepared when activities are planned for sites that have, or are likely to have, heritage values. The assessment will determine whether or not the activities will impact on the values, the likely extent of impacts and guidance on how to avoid or mitigate these impacts. Options for the proposed activities are considered, with the most suitable option seen as having the least effect on the heritage values.</p>
Heritage Interpretation Plans	<p>An Interpretation Plan is a document that provides the policies, strategies and detailed advice for interpreting a heritage item. It is based on research and analysis and plans to communicate the significance of the item, both during a conservation project and in the ongoing life of the item. The plan identifies key themes, storylines and audiences, and provides recommendations about interpretation media. It includes practical and specific advice about how to implement the plan.</p>
Heritage Interpretation Strategy	<p>A Heritage Interpretation Strategy provides a broad framework of how a place could be interpreted by outlining principles and objectives, identifying audiences, themes and key messages, indicating suitable communication means and media, and advising on evaluation and review.</p>
Heritage Interpretation Policy	<p>Interpretation policy consists of clauses and guidelines that provide an intellectual and conceptual framework for communicating the significance of an item. Policies may deal with fabric, setting, history, archaeology, audiences and other people, contents, related places and objects, disturbance of fabric, research and records.</p>
Heritage Management Plan (HMP) or Management Plan	<p>Under the EPBC Act, a Commonwealth Agency must prepare a management plan for all Commonwealth Heritage places under their control or ownership.</p> <p>The ANU must prepare a management plan for the places included in the CHL. A management plan guides future works or developments at the place. The term Heritage Management Plan (HMP) has been adopted by some Commonwealth agencies to avoid confusion with other types of site-asset 'management plans'. An HMP is not dissimilar to a CMP. The ANU has prepared some HMPs for places on the CHL.</p> <p>The requirements of a management plan for a Commonwealth Heritage place are contained in the EPBC Regulation 10.03B, Schedule 7A. A management plan must be consistent with the Commonwealth Heritage management principles.</p> <p>The EPBC Act, its regulations and associated guidelines provide details about how the specific heritage values of the place should be identified and managed. <i>Working Together: Managing Commonwealth Heritage Places, A guide for Commonwealth agencies</i>, 2008, is a quick reference guide prepared by the (then) Department of the Environment, Water, Heritage and the Arts.</p>

Name (Acronym)	Description and ANU example document
Heritage Significance (also referred to as heritage values in the EPBC Act)	Heritage significance refers to meanings and values in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic importance of the item. Heritage significance is reflected in the fabric of the item, its setting, use, associations, meanings, records, related places and related objects. Items may have a range of values and meanings for different individuals or groups, over time.
Heritage Strategy	<p>The ANU Heritage Strategy 2010–2012 is a primary policy document and strategic planning for heritage. Refer to:  <a href="http://heritage.anu.edu.au/files/1602_ANU%20Heritage%20Strategy%202010-12.pdf">http://heritage.anu.edu.au/files/1602_ANU%20Heritage%20Strategy%202010-12.pdf</a></p> <p>It has been prepared in accordance with obligations under the EPBC Act Chapter 5, Part 15, Division 3A, Section 341ZA and Schedule 7C of the Regulations, regulation 10.03.</p> <p>The ANU Heritage Strategy outlines the strategic management of heritage assets at ANU; it includes information on internal University mechanisms, as well as legislative responsibilities for heritage management and establishes a timeframe for achievable objectives. Under the legislation the ANU Heritage Strategy is due for revision every 3 years. The ANU Heritage Strategy is complemented by the ANU Heritage Management Manual 2010.</p>
Heritage Study	<p>ANU Heritage Studies are prepared to identify the heritage values of a place. They provide a historical overview, description and condition of the asset, and assessment of heritage values in compliance with the criteria of the CHL or other recognised heritage registers, where applicable. Heritage studies could also identify opportunities for conservation and interpretation, or constraints or concern or risks to these values.</p> <p>A heritage study does not include heritage management policies or recommendations for works, which would normally be included in a management plan.</p> <p>ANU Heritage Study—Acton Campus 2012 is one such study. Others for the Acton Campus include the Old Administration Area study, June 2010.</p>
Heritage Management Tools	<p>Heritage Management Tools are all the components used to identify, assess, protect and manage the heritage values of a place or item, such as the ANU Heritage Strategy 2010–2012 and ANU Heritage Management Manual 2010.</p> <p>At present ANU does not have a heritage 'toolkit' document. Such a document could be developed to assist asset managers and contractors understand and manage places and things of heritage value within the ANU, with practical guidance on how to progress development proposals, methods for managing heritage, and where to go for further information in particular circumstances. A toolkit could provide advice and easy to follow guidance on heritage issues throughout ANU planning, development and operational exercises, and show how the existing heritage management tools are interlinked and interdependent.</p>
Heritage Management Manual	<p>ANU Heritage Management Manual 2010 is a complementary component of the ANU Heritage Strategy 2010–2012.  <a href="http://heritage.anu.edu.au/site1/_includes/Files/342_ANU%20Heritage%20Manual.pdf">http://heritage.anu.edu.au/site1/_includes/Files/342_ANU%20Heritage%20Manual.pdf</a></p> <p>It is document which provides general information and guidelines for heritage management and procedures for use by the ANU. It explains ANU's statutory obligations regarding heritage, broad principles under which ANU acts in these matters, guidance on progressing development proposals, general methods of managing heritage, and contact lists for further information.</p>
Matters of National Environmental Significance (NES)	<p>A matter of NES is defined in the EPBC Act. There are seven matters of NES but the only ones likely to apply at ANU are matters of National Heritage Significance (if ANU is assessed as having National Heritage values; threatened species and ecological communities). Refer to:  <a href="http://www.environment.gov.au/epbc/publications/neg-guidelines.html">http://www.environment.gov.au/epbc/publications/neg-guidelines.html</a></p>