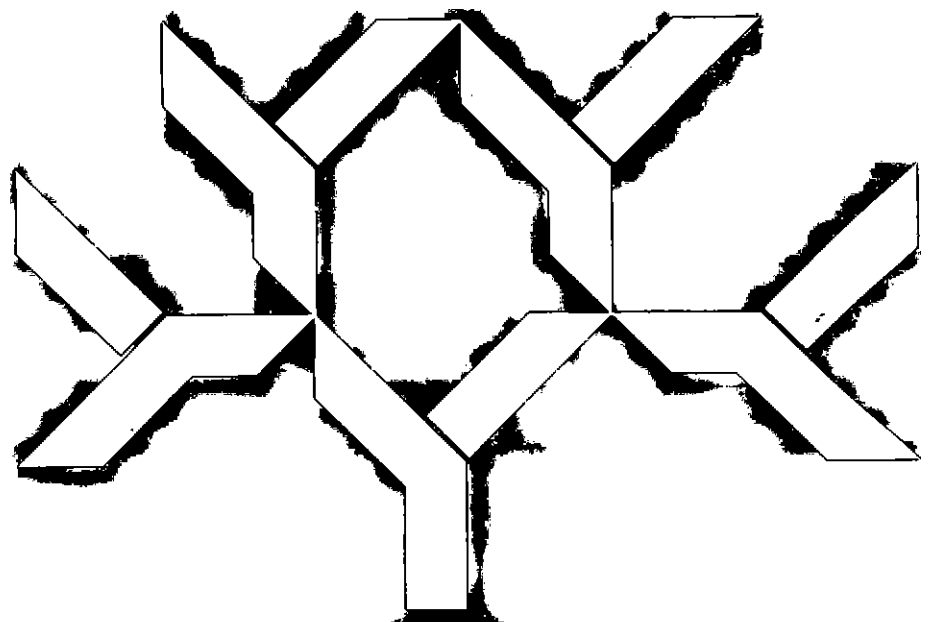


The Council of the City of Sydney

**Application for Appointment
to assist Council in preparing
The Strategic Master Plan**



The Urban Systems Corporation Pty Limited
Sydney

in association with

McConnel, Smith and Johnson

Sydney

and

W. D. Scott and Company

Sydney

2 March 1970

The Council of The City of Sydney

**Application for appointment to assist council
in preparing The Strategic Master Plan
to guide the immediate and long term
development of the City of Sydney**

**The Urban Systems Corporation Pty Limited Sydney
in association with
McConnel, Smith and Johnson Sydney
and
W. D. Scott and Company Sydney**

2 March 1970

Contents

- A Application and Letters of Support**
- B Additional Specialist Experts to Assist Applicant**
- C Appreciation of Council's Requirements and
the City's Needs**
- D Work and Decision Schedule**
- E The Project Team Organisation and Key Personnel**
- F Fee Basis and Cost Assessment**
- G Schedule of Professional Personnel
Available to serve Council**
- H Schedule of Comparable or Relevant Work**
- J Appendices**

A Application and Letters of Support

Cables
Urbsearch Sydney

The Town Clerk,
The Council of the City of Sydney,
Town Hall,
SYDNEY. NSW 2000

Also at
Melbourne Perth
Parramatta NSW
& Southport Qld

2. 3. 1970

Dear Sir:

Application for Appointment to assist Council in preparing
THE STRATEGIC MASTER PLAN to guide the immediate and
long term development of the City.



The Urban Systems Corporation seeks appointment by Council to carry out this task. We act in association with the Sydney firms, McConnel, Smith and Johnson, Architects and Planners; and W.D. Scott and Company; Management, Operations Research, and Economic Consultants.

USC is a Sydney-based, multi-disciplinary organisation of 80 personnel, providing comprehensive services in urban research; city planning; traffic and transportation engineering; urban design; development decision-making and implementation processes; and citizen participation procedures. USC is the successor to the urban planning and architectural firm of Clarke, Gazzard and Partners, founded in Sydney in 1960. CGP has a record of ten years achievement in assisting City Councils and State Governments to successfully implement Strategic and Action planning. W.D. Scott and Company, and McConnel, Smith and Johnson, have even longer records of practical achievement on behalf of governmental clients.

Our three firms combined have 190 full-time staff available in Sydney, and further enjoy the advice and assistance of a comprehensive range of additional specialist experts in Sydney and from the UK and the USA.

To supplement our local knowledge and experience, we have, over recent months, given intensive study to Council's specific problems and the City's needs. We are prepared to submit the Strategic Master Plan within 36 weeks of your commission, for a professional fee not exceeding \$100,000. The Schedules you require, and other details of our submission, are attached.

Yours faithfully,
URBAN SYSTEMS CORPORATION PTY. LTD.

George Clarke, Master of City Planning (MIT),
Dip TP (London), B.Arch (Syd), MTPI (UK),
FAPI, Chartered Town Planner, (UK), Certificated
Town Planner (NSW),
Managing Director.

Divisions
Urbsearch Pty Ltd
Transportation Systems Pty Ltd
Development Implementation Pty Ltd
Clarke Gazzard Pty Ltd Architects
Clarke Gazzard Planners Pty Ltd
Clarke Gazzard International Pty Ltd
Clarke Gazzard Management Pty Ltd

McConnel, Smith & Johnson

Architects and Planners

90 Ocean Street, Edgecliff, NSW
PO Box 80, Edgecliff, 2027

Telephone 32 2222

City Mutual Building, Hobart Place,
Canberra City, 2601

Telephone 48 7783

Partners:

S. B. Smith, BArch, FRAIA
Professor R. N. Johnson, BArch, FRAIA, ARIBA
T. F. Heath, BArch, MBdgSc, ARAIA
P. Keys, BArch, DipTP(Lond), FRAIA, ARIBA, MAPI
W. W. Workman, AASTC, ARAIA
A. L. Teece, BArch, MBdgSc, ARAIA
A. W. Erickson, BArch, ARAIA
R. D. Jackson, AADipl, ARAIA, ARIBA
C. W. Carlo, AASTC, ARAIA
A. J. Moore, AADipl, FRAIA (Office Manager)

Consultant:

K. H. McConnel, BArch, FRAIA, FRIBA, FAPI

Associates:

J. D. Chesterman, BArch, ARAIA, ARIBA
F. D. Willis, ASTC

The Town Clerk
Council of the City of Sydney
Town Hall
SYDNEY 2000

2 March 1970

Dear Sir

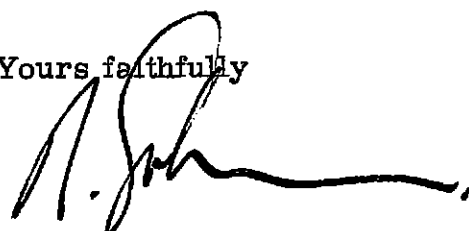
We support the application of The Urban Systems Corporation in response to Council's request for assistance in preparing a Strategic Master Plan for the City of Sydney. Together with USC and W D Scott & Company, we have carefully examined the Brief which Council has prepared. We consider that the planning skills of USC, the ability and experience of W D Scott & Company, and our own experience of building in Sydney, place our three firms in a strong position to advise the Council.

MSJ is an organisation of 57 people which has operated in Sydney since 1954, but with antecedents going back a further 25 years. It provides services in architecture, planning, urban design, industrial and interior design, in programming and in economic feasibility studies. MSJ has a record of successful consultation in the City of Sydney to the Commonwealth Government, the NSW Government, the Sydney Water Board, the Workers Compensation Commission of NSW, the University of Sydney, the Sydney Stock Exchange and many private organisations.

As architects and planners for the Commonwealth-State Law Courts and the Queen's Square development, we have practical experience of the problems and inter-departmental relationships involved in the implementation of imaginative public schemes for the City.

Our three firms bring together a group of people with contacts and interests ranging over many aspects of Sydney life and who have been involved in the critical examination of many of Sydney's problems. We can make a positive contribution to the solution of these problems and consider that there could be no more important task in which to be involved.

Yours faithfully



(Professor) R N Johnson

W. D. SCOTT & CO. PTY. LTD.
Management Consultants

37 MOUNT STREET
NORTH SYDNEY, N.S.W. 2060
TELEPHONE: 92 6045
CABLES: "MANAGEMENT" SYDNEY

March 2, 1970

The Town Clerk,
The Council of the City of Sydney,
Town Hall,
SYDNEY. NSW 2000

Dear Sir,

W.D. Scott & Co. Pty. Ltd. takes pleasure in associating itself with this proposal to assist Council in preparing a Strategic Master Plan for the City of Sydney.

We have closely examined the Brief in conjunction with our professional associates from The Urban Systems Corporation, and McConnel Smith & Johnson. Following detailed discussions, we believe we have together defined an approach which is in every way sound, practical and progressive. Our three organisations all "know" Sydney, and can bring a wealth of experience and expertise to the project, to the ultimate benefit of the City itself.

W.D. Scott & Company is the largest Australian-owned management consulting practice, and has nearly 150 professional consultants on the staff world-wide. It has completed assignments for no less than 10 different national Governments, and, as a further indication of its international standing, it is at present working for three United Nations agencies, in The Philippines, Malaysia and Singapore.

Notwithstanding its international expansion and reputation, however, W.D. Scott & Company remains distinctively an Australian-based and Australian-led management consulting practice. It has worked for some 25 Commonwealth Government Departments and Instrumentalities, with every State Government, and with well over 50 local government authorities.

It should also be said that W.D. Scott & Company is, and always has been, Sydney based. The Company was founded in Sydney in 1938 by Mr. (now Sir) Walter Scott, and Sydney has always been its headquarters and the largest office.

Thus it is natural that many of W.D.S.'s most significant and successful assignments have been closely linked with the City of Sydney and its developments. For example -

- . Our feasibility study relating to the relocation of the Sydney City Markets has won commendation from our client, and the N.S.W. Parliament has adopted all its major recommendations.
- . On several occasions we have been commissioned by companies (such as the Australian Gas Light Company) to develop forecasting models relating to the growth of the city.
- . Major city developers (like L. J. Hooker Ltd.) have commissioned studies which have required long-term economic and market forecasts of office space requirements in the city.
- . Studies relating to organisation and strategic planning (like David Jones) and to plant or office location (like Swire & Yuill) are frequently commissioned by major retailing and service firms in the city.

Like many others, we have seen Sydney grow to its present size and status. We recognise the great problems of complexity and congestion now confronting the city, but we also see the great opportunities and benefits which a systematic approach to strategic master planning can bring.

We believe that the response to your Council Brief, as described in this proposal, can lead to realisation of these opportunities and benefits, and we look forward to the high privilege of being associated with the study.

Yours faithfully,



Brian W. Scott, B. Ec. (Syd.), M. B. A. (Stanford),
D. B. A. (Harvard).

Director

B Additional Specialist Experts

Additional Specialist Experts

Available to assist and advise the Applicant
in service to

The Council of the City of Sydney

Sydney-based Specialist Expert Advisers

Other Australian Specialist Expert Advisers

Overseas Specialist Expert Advisers

Sydney-based Specialist Expert Advisers

University of New South Wales School of Traffic Engineering

- 1 **Professor W. R. Blunden**, BSc, BE, Head
- 2 **R. D. Munro**, BSc, BA, PSS, Senior Lecturer
- 3 **Dr D. J. Buckley**, BE, MEngSc, PhD, AMIE Aust, MSS, MORSA, Senior Lecturer
- 4 **J. I. Tindall**, BE, ME, AMIE Aust, Lecturer
- 5 **P. Fitzwarryne**, MSc (Hons) (London School of Economics)

University of New South Wales School of Sociology

- 6 **Professor Sol Encel**, MA, PhD, Head
- 7 **Associate Professor A. A. Congalton**, MA, DipEd
- 8 **S. O. D'Alton**, MEd, Lecturer
- 9 **S. C. Hill**, BSc, PhD, Lecturer
- 10 **A. Kondos**, BA, Lecturer
- 11 **R. A. Nies**, MA, PhD, Lecturer
- 12 **Zula Nittim**, BArch (Melb), Dip Civic Design (NSW), ARAIA, Part time Lecturer
- 13 **A. Jakubowicz**, Post Graduate Research
- 14 **E. Isaacs**, Post Graduate Research
- 15 **D. Buckland**, Post Graduate Research

University of Sydney

- 16 **Dr John Power**, AM, PhD (Harvard), BA (Melb), Department of Government
- 17 **R. T. M. Whipple**, ACIV, Dip TCP (Syd), MAPI, Valuer, Town Planner and Urban Land Economist, Senior Lecturer, Department of Town and Country Planning
- 18 **Amos Rapoport**, BArch, MArch, DipTRP, ARAIA, ARIBA, Senior Lecturer, School of Architecture

Governmental and Administrative Expert

- 19 **J. T. Monaghan**, formerly Under Secretary
NSW Department of Local Government

Acoustical, Wind, Civil and Structural Engineers

- 20 **Ronald Carr and Roger Wilkinson**,
Environmental Acoustic Engineers, Sydney
- 21 **Woolacott, Hale, Corlett and Jumikis**,
Consulting Civil and Structural Engineers, Sydney
- 22 **Vincent Smith**, Sydney expert on wind effects of high buildings

**Quantity
Surveyors**

- 23 **Wolferstan, Trower & Partners**, Quantity Surveyors, Sydney
24 **Cameron & Middleton**, Quantity Surveyors, Sydney

**Jones Lang
Wootton, Sydney**

- 25 **J. A. Robinson**, FRICS, FCIV
26 **F. B. Charnock**, FRICS, ACIV
27 **M. S. Burrells**, FRICS, FCIV
28 **J. A. Steinhilber**, FREI
29 **S. Howes**, ARICS, ACIV

**Raine & Horne
Pty. Ltd., Sydney**

- 30 **D. W. Higgins**, FREI, REIV (Aust), QRV
31 **M. S. Raine**, AREI, ACIV, QRV
32 **G. E. Hall**, REIV (Aust), QRV
33 **C. R. Lord**, ACIV

Other Australian Specialist Advisers

- 34 **Professor Gordon Stephenson**, BArch (Hons) (Liverpool),
MCP (MIT), FRIBA, FRAIA, FAPI, MTPI, Hon MTPIC (Canada),
FILA
35 **Dr Ross Robinson**, BA, DipEd, MA, PhD, Lecturer, School of
Geography, Wollongong University College, University of
New South Wales

Overseas Specialist Advisers

- 36 **Graeme Shankland**, MA (Cantab), AA Dip, ARIBA, RIBA Dist TP,
MTPI, City Planner, Shankland Cox & Associates, London
37 **Professor Alan Proudlove**, MEng, MI Mun E, AMIHE, Professor
of Transport Studies, University of Liverpool
38 **Isadore Candeub**, Candeub & Fleissig, Urban Planning and City
Centre Renewal Consultants, New Jersey, USA
39 **Edwards & Kelsey**, Traffic, Transportation and Mass Transit
Engineers and Economists, New Jersey, USA

Appreciation of Council's Requirements and the City's Needs

C

Appreciation of Council's Requirements and the City's Needs

The Municipality of the City of Sydney is now re-emerging as the "headquarters" city of Australasia and Oceania. Here, within the 3,310 acres (5.17 square miles) of the Municipality of the City, are increasingly concentrated the most highly specialised business, commercial, professional, governmental, educational, cultural, entertainment and recreational activities, services, institutions and facilities. These serve not merely the Sydney Region, not merely the State of New South Wales, but, increasingly, the whole of Australasia and of Oceania.

Sydney is a world city, and Sydney's core 400 acre business district is what urban economists call the "general central place" of a significant international region.

Historically, Sydney was the mother city of Australia, but during the second half of the 19th Century, following the Victorian gold rushes, it was overshadowed by Melbourne in size and international significance. During the first half of the 20th Century, Melbourne remained the "financial capital" of Australasia, and became the seat of the first Commonwealth Parliament and of the Commonwealth Public Service. Over the last ten years, these latter functions have been transferred to Canberra, closer to Sydney. Recent research has established that more Australian finance and commerce is now controlled from Sydney than from Melbourne.

Since the Second World War, shifts in both political and economic geography have increasingly favoured Sydney as a central location for business and commerce. Australian political, trade and investment links have been expanding with North America and with Asia, while links with the UK have tended to be less and less dominant. In this context, location in Sydney is proving to be more convenient to a greater proportion of the new firms being formed, and to an increasing proportion of the Australasian head offices of multi-national corporations. Sydney's climate and topography have probably also influenced the making of many decisions to locate in Sydney.

At the 1966 Census, the workforce of metropolitan Melbourne was weighted more towards secondary manufacturing industry than was that of Sydney. Metropolitan Sydney, however, has a larger percentage of its workforce in "tertiary" employment—people engaged in "Finance, Property, Public Authority, Community and Business Services". This is the growth sector of the workforce and of the economy. It is also the type of employment and economic activity which is most highly concentrated within the central business district and within the Municipal City.

It seems, therefore, that a combination of factors of political, economic and physical geography are now increasingly favouring the growth of the City of Sydney as the most central place in a widening region of influence.

The sheer physical volume, scale of investment, and rate of recent new private construction in the City of Sydney certainly lends credence to this judgement. All available evidence underscores the responsibility of the duly constituted government of the Municipal City, to plan, guide, manage and control growth and change within this international city centre with skill and sensitivity, so as to gradually create a functionally convenient and culturally stimulating environment for the concentration of activities that are competing with one another for space within it.

It is both true and useful to repeat that "a problem well stated is a problem half solved". Sydney's core City has been rebuilding and changing haphazardly for twenty years. Significant areas of the City have been reshaped and redeveloped by the unco-ordinated acts of a multitude of private developers and a number of separate State Government authorities.

The immediately urgent need is for the City Council to enunciate a strategy—a series of principles, policies, priorities, programmes and procedures for city development and change. The existing pace of change is so rapid that it would not be wise to delay the enunciation of these strategic statements any longer than is absolutely necessary.

Most members of our Project Team have lived and worked in Sydney for most of their professional lives. In many cases, they have worked for years with the State Government Departments and with the University Departments engaged most directly in survey, research, planning and controlling land use, transportation and urban development in Sydney. They are therefore intimately aware of all existing sources of data, and of the policies and procedures of all of the relevant authorities and institutions.

Furthermore, in their professional and academic work in Sydney over many years, members of our Project Team have given much private consideration to the problems of Sydney's city centre, and to possible and desirable policies and actions which civic authorities could adopt.

We believe that Council requires the enunciation of basic strategies, of interim codes, and of high-priority action plans, without unnecessary delay. We believe that Council and the City will be best served if these enunciations can be published before the end of this year, and if interim policies and codes on urgent matters, such as car parking in the basements of city buildings, can be prepared and submitted to Council within the first two months of the strategic plan study. Planning must, of course, be a continuing process, and the early enunciation of policies and priorities will permit action planning work on particular problems or deficiencies to proceed without delay, and to continue at a determined rate during late 1970 and 1971. We believe that, in view of the forethought we have given to Sydney's problems and potentialities, in view of our team's local experience and knowledge of available data, and in view of the numbers of professionals we have immediately available in Sydney, we are able to schedule the submission of the consultant's final draft Strategic Plan Report within 36 weeks from receipt of your commission.

In order to ensure that the plan, when submitted, will meet Council's requirements and will satisfy Council's judgement of the City's needs, we propose to work in close liaison and cooperation with Council Officers and Servants.

In doing similar work for other Councils, we have found that the work proceeds most smoothly and with minimum delay if our client Authority appoints a special Sub-Committee of Council to meet regularly with the Project Director and his Associate Directors to supervise and regulate the consultant's work. We therefore suggest that Council appoint a small "Strategic Plan (Consultant Liaison and Direction) Sub-Committee". Council may decide that this should be a sub-committee of the City Development Committee. As part of our "Work and Decision Schedule", we have allowed for 10 meetings of this Sub-Committee during the scheduled 36 week project period (see Section D).

In Section E herein, "The Project Team Organisation", we have shown by means of an organisation chart, the direct line of authority between this sub-committee and the Policy Group of the Project Team. We also believe that the City and the Council would benefit from a programme of public information and education, launched and conducted by Council Aldermen and Servants, with assistance by ourselves, during the course of the Strategic Plan Study, and that this programme should be expanded into one which stimulates and channels the effective participation of the public, of business, civic and citizen groups, in Council's on-going planning process. The Work-Decision Schedule Chart (Section D) and the Project Team Organisation Chart (Section E) both make provision for the gradual development and implementation by Council of such public information and participation programmes during and following the Strategic Plan Study period.

D Work and Decision Schedule

Work and Decision Schedule

This fold-out Schedule illustrates how, by close integration of consultant work and Council decision-making, the Final Draft Strategic Plan Report could be submitted to Council's City Development Committee within 36 weeks following the first meeting of Council's Strategic Plan Sub-Committee with the consultant Project Director and his Associate Directors, at which the first item of business would be the formal passing of Council's letter of commission to the consultant.

This Work and Decision Schedule is sufficiently flexible for it to be refined and amended in detail as the work proceeds through successive review meetings of Council's Strategic Plan Sub-Committee with the Project Director and his Associates.

If Council so desires, the time target of 36 weeks may be extended. Its achievement will depend upon the readiness and authority of Council's Strategic Plan Sub-Committee and of the City Development Committee to approve the first, second and third drafts of the Strategic Plan and Interim Action Recommendations at the stages and within the times set by the Schedule.

One important element of the Work and Decision Chart is the provision of these Progress Reports and Interim Recommendations by the 8th, 18th and 27th weeks of the Schedule. The substance and contents of these Reports will have been considered and discussed at previous meetings of the Strategic Plan Sub-Committee and, by this machinery, it is hoped that when the Progress Reports and Interim Recommendations are formally submitted to the City Development Committee and thence to full Council, it will be possible for Council decisions to be made with a minimum of delay, so that the Project Team can continue with its work in the next successive phase.

PRESENTATION
OF PROGRAM
PARTICIPATION
PROCESS.

CITY
DEVELOPMENT C'TEE
REPORT TO
COUNCIL

COUNCIL IMPLEMENTATION
OF FURTHER INTERIM
POLICIES &/OR CODES, &
CONTINUANCE OF
PUBLIC PARTICIPATION
PROGRAM

CITY
DEVELOPMENT C'TEE
REPORT TO
COUNCIL

OPPORTUNITY FOR
COUNCIL TO
COMMISSION FIRST
ACTION PLANS
WHILE CONTINUING
PUBLIC PARTICIPATION
PROGRAM

DRAFT
STRATEGIC
PRINCIPLES &
PROCEDURES
WITH
DRAFT
PROGRAMS
&
RES

CITY
RE
MAP

DRAFT
ELEMENTS
DEFINITIONS
&
S

ES
POLICIES
ELEMENTS
SELECTED
PLANS

SECOND PROGRESS REPORT & INTERIM RECOMMENDATIONS
TO CITY DEVELOPMENT C'TEE FOR REVIEW & DECISION

MOVEMENT SYSTEMS
PLANNING SYNTHESIS:

* AT CITY STRUCTURE SCALE & LONG
TERM POLICY LEVEL

* AT LOCAL OR FUNCTIONAL ELEMENT
SCALE & ACTION LEVEL

ACTIVITIES SYSTEMS
PLANNING SYNTHESIS:

* AT CITY STRUCTURE SCALE & LONG
TERM POLICY LEVEL

* AT LOCAL OR FUNCTIONAL ELEMENT
SCALE & ACTION LEVEL

MANAGEMENT SYSTEMS
PLANNING SYNTHESIS:

* AT CITY STRUCTURE SCALE & LONG
TERM POLICY LEVEL

* AT LOCAL OR FUNCTIONAL ELEMENT
SCALE & ACTION LEVEL

THIRD DRAFT
OF STRATEGIC
PRINCIPLES,
PRIORITIES &
PROCEDURES
WITH DRAFT
PROGRAMS FOR
IMPLEMENT-
ATION.

REVISED
CITY
STRUCTURE
POLICY MAP

REVISED
PROBLEMS &
DEFICIENCIES
DEFINITIONS.

DRAFT
PROGRAMS
BRIEFS &
BUDGETS FOR
ACTION PLANS.

THIRD PROGRESS REPORT & INTERIM RECOMMENDATIONS
TO CITY DEVELOPMENT C'TEE FOR REVIEW & DECISION

MOVEMENT SYSTEMS
REPORT WRITING &
COMPILATION:

* AT CITY STRUCTURE SCALE
& LONG TERM POLICY LEVEL

* AT LOCAL OR FUNCTIONAL
ELEMENT SCALE & ACTION
LEVEL

ACTIVITIES SYSTEMS
REPORT WRITING &
COMPILATION:

* AT CITY STRUCTURE SCALE
& LONG TERM POLICY LEVEL

* AT LOCAL OR FUNCTIONAL
ELEMENT SCALE & ACTION
LEVEL

MANAGEMENT SYSTEMS
REPORT WRITING &
COMPILATION:

* AT CITY STRUCTURE SCALE
& LONG TERM POLICY LEVEL

* AT LOCAL OR FUNCTIONAL
ELEMENT SCALE & ACTION
LEVEL

FINAL DRAFT
STRATEGIC
PLAN REPORT
EDITING &
PRODUCTION
(30 COPIES)

SUBMISSION
OF
CONSULTANT'S
FINAL
DRAFT
STRATEGIC
PLAN
REPORT
TO
COUNCIL'S
CITY
DEVELOPMENT
COMMITTEE

FURTHER ACTION AS DETERMINED BY COUNCIL

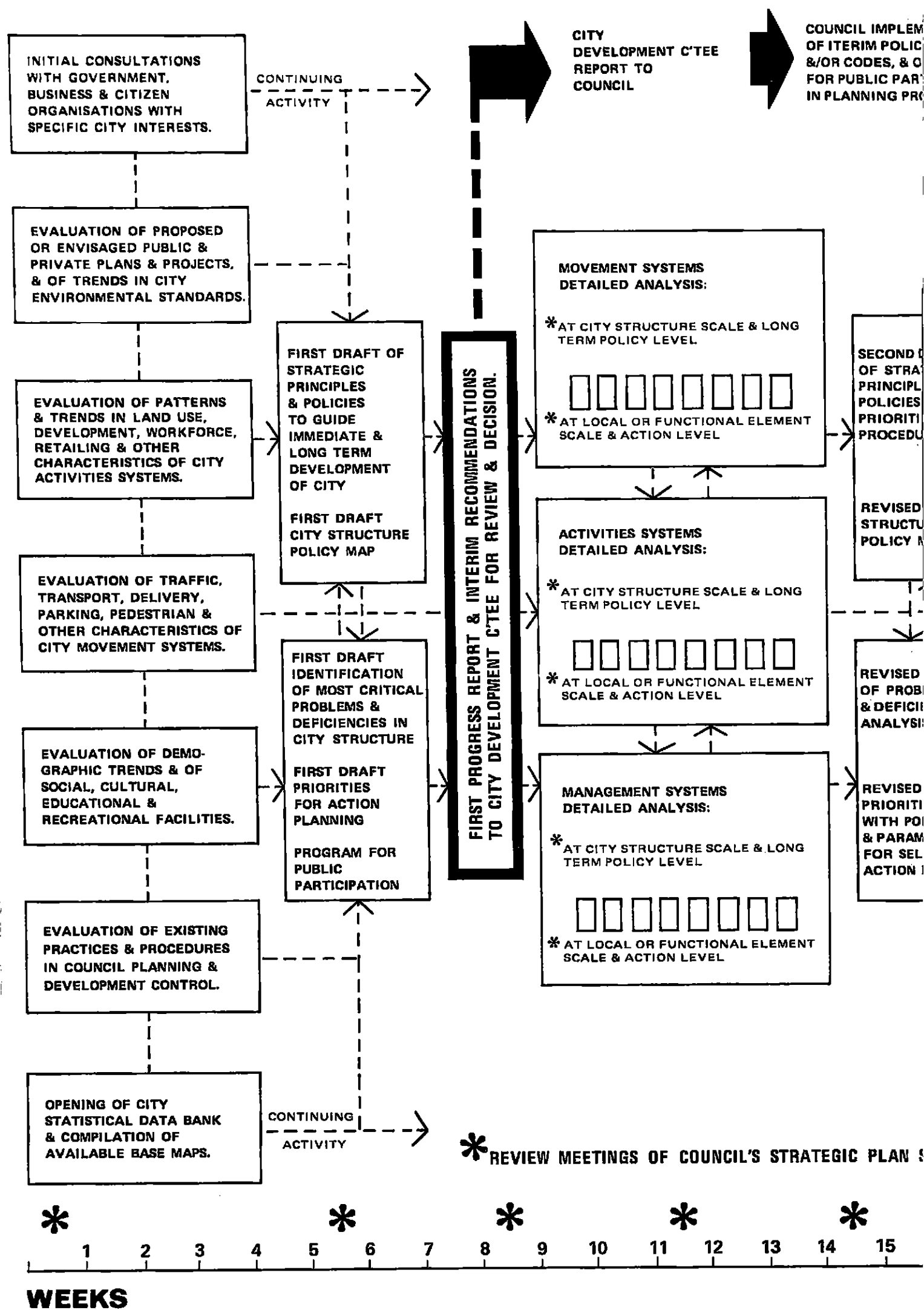
COUNCIL OF THE CITY OF SYDNEY

WORK AND DECISION SCHEDULE

URBAN SYSTEMS CORPORATION
SYDNEY 2.3.1970

UB-C'TEE WITH CONSULTANT POLICY GROUP

16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36



E The Project Team Organisation and Key Personnel

5

Decision Group

COUNCIL OF THE CITY OF SYDNEY

City Development Committee
Strategic Plan Sub-Committee and Officers

Policy Group

PROJECT DIRECTOR
and Chairman,
Policy Group: George Clarke.
City Planner

ASSOCIATE DIRECTORS
Liaison with Ministries,
Authorities, Business &
Finance Interest Groups

Dr. Brian Scott
Roger Fortescue
Peter Knox

ASSOCIATE DIRECTORS
Liaison with Ministries,
Authorities, Citizen &
Civic Groups

Prof. R.N. Johnson
Donald Gazzard
Peter Keys

SPECIALIST EXPERT POLICY ADVICERS:

Graeme Shankland, UK

Prof. Alan Proudlove, UK

Isadore Candeub, USA

Edwards & Kelcey, USA

Prof. Ross Blunden, Sydney

Prof. Sol Encel, Sydney

J.T. Monaghan, Sydney

Services Group

PROJECT MANAGER & COORDINATOR
Bruce Hyland, City Planner

CARTOGRAPHIC COMPILATION
C. Wilkinson, Cartographer
B. Stark, Cartographer

STATISTICAL CORRELATION
C. Bennett, Economic
Geographer and Planner
N. Ingham, Surveyor and
Planner

Technical Group

ENVIRONMENTAL PLANNING
LEADER
Andris Stenders, City Planner

MANAGEMENT, BUDGETING
AND PUBLIC INFORMATION
LEADER
Roger Fortescue
Management & Operations
Consultant

TRAFFIC & TRANSPORTATION
PLANNING LEADER
Colin Atkins, Traffic and
Transportation Engineer

SPECIALIST EXPERT TECHNICAL ADVISERS:

Dept. of Traffic Engineering, (NSW)

Dept. of Sociology (NSW)

Prof. G. Stephenson, Perth

R.T.M. Whipple, Sydney

Dr. J. Power, Sydney

A. Rapoport, Sydney

Carr & Wilkinson, Sydney

Vincent Smith, Sydney

Woolacott, Hale, Corlett & Jumikis, Sydney

Jones, Lang, Wooton, Sydney

Raine & Horne, Sydney

Wolferstan, Trower & Partners, Sydney

Cameron & Middleton, Sydney

MOVEMENT SYSTEMS

ACTIVITIES SYSTEMS

MANAGEMENT SYSTEMS

Principles, Policies, Priorities, Programs & Procedures Re:

Integration of traffic flows
with long, medium and
short term parking facilities,
codes, pricing and
regulations systems

Council's response to
currently proposed or
envisaged governmental
and private city
development projects

Council-Governmental
coordination and
co-operation in machinery
and methods for decision
making

Integration of rail, bus,
ferry, taxi and other
public transportation
facilities, pricing and
regulation systems

Council's response to the
Draft Statutory
Sydney City Planning
Scheme

Citizen participation,
community interaction
and liaison in city government
and planning processes

Pedestrian Amenity –
the swift and convenient

Development control
codes and regulations

Restructuring of
Council Planning and
Development Control

movement of people, paper and parcels

Delivery systems for heavy and light goods, methods, regulations and hours

Balance between accessibility, activity intensities, and environmental standards

Peter Casey
Ken Hatten
Doug March
C. Bennett
S. Lyneham
N. Ingham
M. Hipkins
R. Munro

Definition of critical problem areas and environmental deficiencies

Facilities for social and civic purposes, children, the infirm and injured

Urban environmental planning and design for areas with particular problems and potentialities

Future City Structure
— Policy Map

Don Gazzard
Peter Keys
Stephen Wanat
Darrel Conybeare
Ian Breden
David Jackson
David Chesterman
G. Atherden
M. Mallam
Zula Nittim

Operations

Council forward budgeting for city planning and implementation processes

Public information programs through news media

Peter Knox
Keith Higgins
John Donovan
Michael Gardiner-Hill
John Ross

ACTION PLANNING TO IMPLEMENT RECOMMENDED PROGRAMS and PROCEDURES

CITY OF SYDNEY STRATEGIC PLAN

PROJECT TEAM ORGANISATION AND KEY PERSONNEL March 2, 1970

F Fee Basis and Cost Assessment

Fee basis and cost assessment

Professional institutes set the basis for the calculation of professional fees per man hour. We accept and use the conventional formula—

$$\text{Hourly rate} = \frac{\text{Annual salary} \times 2.5}{1,540}$$

This is our standard fee basis.

In order to assess our professional fees for the strategic civic aspects of this particular project, Principals' time has been budgeted at \$640 per man week, and other staff on the basis of the formula above.

We have calculated the following time-cost budget for completion of our Final Draft Strategic Plan Report submission within 36 weeks of elapsed time during this calendar year.

Time Cost Assessment

Policy Group

Project Director.

Policy formation at PG meetings.

Client liaison, correspondence, administration and direction.

Consultations with Ministries, statutory authorities, business, citizen and community interest groups.

Progress and Final Draft Report Editing.

Operational assistance and liaison with Specialist Advisers,

Project Manager and Technical Group Leaders.

16 man weeks @ \$640 \$10,240

Associate Directors, Policy Group Members, and

Local Specialist Expert Policy Advisers

Contributions to PG meetings.

Consultations with Ministries, statutory authorities, business, community, civic and citizen interest groups.

Consultations with news media.

Contributions to Final Draft Report Editing.

20 man weeks @ \$640 \$12,800

Total Policy Group Budget \$23,040

Central Service Group

Project Manager and Co-ordinator.

Co-ordination of information from and to Policy and Technical Groups and Specialist Expert Advisers.

Supervision and direction of statistical and cartographic collation and correlation work.

Co-ordination and supervision of operations of Technical Group Leaders.

Progress and Final Draft Reports writing.

Supervision of Progress and Final Draft Reports, text, illustrations, proofing and printing.

20 man weeks @ \$640 \$12,800

**Statistical and Cartographic Collation and
Correlation Service Team**

Statistical:

28 man weeks @ \$350 \$9,800

Cartographic:

8 man weeks @ \$350 \$2,800

Total Central Service Group \$25,400

Technical Group

Environmental Planning Leader

10 man weeks @ \$640 \$6,400

Transportation Planning Leader

10 man weeks @ \$640 \$6,400

Management Planning Leader

6 man weeks @ \$640 \$3,840

Total Technical Group \$16,640

**Task forces, including contributions by specialist technical
expert advisers:**

Movement Systems

16 man weeks @ \$500 \$8,000

Activities Systems

20 man weeks @ \$500 \$10,000

Management Systems

8 man weeks @ \$500 \$4,000

Total Task Forces \$22,000

Specialist Overseas Expert Policy Advisers

12 man weeks \$12,680

Overseas Advisers \$12,680

Total Project Budget \$99,760

We therefore assess the cost at Ninety-Nine Thousand, Seven
Hundred and Sixty Dollars Australian (\$A99,760), and are
prepared to negotiate the terms of a fixed lump sum contract
at that figure.

It should be noted that this is for strategic planning professional
fees only and that Council should draw the costs of such other
incidental or contingent items, such as public relations,
advertising, exhibitions, models, report printing, circulars,
as well as any additionally desired primary research surveys, or
base mapping, from the normal allocations for such items in
Council's overall budget. Our cost assessment assumes that
there will be no delays caused by Council to any part of the
Consultants' work, and that the Consultants receive the normal
full professional courtesies and cooperation from Council staff
in the provision of data extracted from Council records and files.

**G Schedule of Professional Personnel
 Available to serve Council**

Urban Systems Corporation

KEY PERSONNEL

Management organisation and operations control group
Market research, economic analysis and feasibility evaluation group
Development studies, project design and implementation planning group
Engineering services group
Architectural services group
and
Specialist personnel retained on contract or consultant basis

Management Organisation and Operations Control Group

Name	Qualifications	Length of Professional and/or Academic Experience	Fields of Special Competence
Walter George CLARKE	B Arch (Syd) Dip TP (London) Master of City Planning (MIT) FRAPI MTPI ARAIA ARIBA Architect and Certificated and Chartered Town Planner	20 years	Strategic and action planning processes; organisational and managerial techniques for planning organisation and urban project design and implementation; citizen participation techniques
Walter Geoffrey FAITHFULL	Dip TCP (Syd) MIE (Aust) FRAPI Honorary Fellow of the Philippine Institute of Architects Certificated Town Planner	30 years	National regional and city planning techniques; planning organisation and administration; planning implementation
William Arthur DALE	BA (Melb) BE (Syd) Dip TRP (Melb) FIE (Aust) MRAPI Certificated Town Planner	42 years	Local Government administration; planning implementation; civil engineering
Frank DUFFY	MRAPI Certificated Town Planner	15 years	Local Government planning and developmental control
Thomas BALFOUR	Certificate in Law (Adel)	10 years	Urban planning law; Statutory Planning

Market Research, Economic Analysis and Feasibility Evaluation Group

Name	Qualifications	Length of Professional and/or Academic Experience	Fields of Special Competence
Bruce HYLAND	ASTC (Hons) Dip TCP (Syd) Master of Regional Planning (Cornell) MRAPI Architect and Certificated Town Planner	21 years	Urban redevelopment project evaluation planning and implementation; zoning and development control techniques; practical negotiations with developers
Doug MARCH	BA (New Eng) MA (Newcastle)	14 years	Economic performance analysis; development feasibility studies
Ken SHORT	BA (New Eng) MA (Newcastle)	12 years	Market research surveys; retail market analysis; development programming; demographic studies
Carleen BENNETT	BA (Syd) Dip TCP (Syd)	11 years	Urban land economics; market research; economic feasibility studies; workforce analysis
Sonja LYNEHAM	BA (Syd) MTCP (Syd)	7 years	Urban systems analysis; central area distribution economics; optimisation and threshold analysis
Geoffrey David WILMOTH	BEc (Hons) (Qld)	4 years	Retail research studies; tourist development studies; urban development economics
Philomena Anne HORAN	BA (NSW)	4 years	Market research; urban sociology; demographic analysis

Development Studies, Project Design and Implementation Planning Group

Name	Qualifications	Length of Professional and/or Academic Experience	Fields of Special Competence
Andris STENDERS	B Arch (Hons) (Qld) Master of Civic Design (L'pool) MRAPL (Pending) Architect and Planner	12 years	Urban planning; development of three-dimensional illustrative and analytical methodology for urban framework establishment and public involvement; environmental landscape and large-scale civic design
Ron DEVINE	B Arch (NSW) MTCP (Syd) ARAIA Architect and Planner	18 years	Large-scale development planning; civic and environmental design
Stephen WANAT	BA (Arch) (Princeton) B Arch (Harvard) M Arch (Penn) Master of City Planning (Penn) MRAPL (pending) Architect and City Planner	12 years	Metropolitan and city planning; civic and architectural design
Darrel CONYBEARE	B Arch (Syd) M Arch (Penn) Master of City Planning (Penn) Architect and City Planner	12 years	Large-scale planning and design; visual communication techniques
Ian BREDEN	B Arch (NSW) Architect and Planner	10 years	Large-scale development and town layouts; civic and environmental design
Michael GERNER	B Arch (Melb) Diploma of Town and Regional Planning (Melb) ARAIA Architect and City Planner	12 years	Large-scale urban redevelopment; programming and coordination of staged construction of projects

Engineering Services Group

Name	Qualifications	Length of Professional and/or Academic Experience	Fields of Special Competence
J. Eric JACKSON	Dip TP (London) AMI Mun E; MTPI MRAPI Engineer and Planner	25 years	Pre-investment and development evaluation; project planning methods and practice
Colin Keith ATKINS	Civic Eng Dip (Gordon Inst) M Sc (Traffic and Transportation) (Birm) Traffic and Transportation Engineer	15 years	Urban transport systems; traffic and transportation research and planning; economic and policy research on automobile traffic and parking
Peter CASEY	BE (NSW) Dip TCP (Syd) M Eng Sc (Traffic) (NSW) AMITT Traffic and Transportation Engineer	17 years	Urban road network planning; traffic and transportation engineering
Ken HATTEN	BE (NSW) M Eng Sc (Traffic) (NSW) Traffic and Transportation Engineer	10 years	Urban traffic and transportation studies; market analysis; business administration
Neil INGHAM	Dip TCP (Syd) MRAPI Registered Surveyor and Planner	16 years	Services planning and general engineering development work
Max HIPKINS	B Arch (Melb) Bachelor of Town and Regional Planning (Melb) MRAPI Architect and City Planner	9 years	Central city transportation and development planning

Architectural Services Group

Name	Qualifications	Length of Professional and Educational Experience	Fields of Special Competence
Donald GAZZARD	FRAIA ARIBA Architect	20 years	Architectural and large-scale civic design; job programming coordination and cost control techniques; contract documentation and construction supervision
Richard YOUNG	ASTC ARAIA Architect	21 years	Contract documentation job programming and coordination for large-scale development and redevelopment projects
Ralph Charles BRADING	B Arch (Syd) M Arch (Yale)	18 years	Industrial development and multi-storeyed parking garages
David RAY	B Arch (Hons) (NSW) Dip Bldg Sc (Syd) Architect	17 years	Industrial development and high-rise city buildings; building science

**Specialist Personnel Retained on
Contract or Consultant Basis**

Name	Title	Length of Experience	Fields of Special Competence
R. T. M. WHIPPLE	Senior Lecturer on Urban Land Economics in the Department of Town and Country Planning University of Sydney	21 years	Urban systems analysis economic and market research
Ross ROBINSON	Lecturer, School of Geography Wollongong University College, University of New South Wales	14 years	Traffic mobility; retail location; port development
Zula NITTIM	Lecturer, School of Sociology, University of New South Wales	12 years	Urban morphology; urban sociology
Amos RAPOPORT	Lecturer, School School of Architecture, University of Sydney	20 years	Environmental planning; civic and architectural design

WALTER GEORGE CLARKE

Date of Birth
Educational and
Professional
Qualifications

17 February, 1932.

Master of City Planning (Massachusetts Institute of Technology) ; Diploma in Town Planning and Civic Architecture (University of London) ; Bachelor of Architecture (University of Sydney) ; Member of the Town Planning Institute; Fellow of the Australian Planning Institute; Associate of the Royal Australian Institute of Architects, Associate of the Royal Institute of British Architects; Chartered Town Planner (UK) ; Certificated Town Planner (NSW) ; Registered Architect (NSW) .

Experience

Prior to entering private practice, Mr Clarke's major experience was gained with the Cumberland County Council, Sydney's Metropolitan Region Planning Authority, the London County Council, the Downtown Providence (R.I.) Master Plan Project, the office of I. M. Pei and Associates, Architects and Planners, New York, and Webb and Knapp Inc., Real Estate Developers, New York.

In his work on the Downtown Providence City Master Plan, Mr Clarke was responsible for the design of the Weybosset Hill redevelopment area. He was also deeply involved in the process of fostering a public/private partnership concept, as applied to urban development operations, and in expanding the importance of the citizen participation element of planning procedure.

Mr Clarke returned to Australia late in 1959 and has since practised city planning throughout Australia and in New Guinea, Iran and Mauritius. Over these years, Mr Clarke has been responsible for over 100 projects in the fields of Urban and/or Regional Research and Planning and/or Urban Design for National, Federal, State and Local Government Authorities and Agencies, finance institutions, development companies and investors. He was, for six years, the Editor of the Australian Planning Institute Journal and is the author of more than 25 articles and papers on urbanisation and urban planning subjects. His first book *The City in Australia* will be published by Penguin Books in 1971.

Mr Clarke introduced into Australia the concepts of strategic and action planning and has significantly contributed to the increasing emphasis now being placed on the role of the citizens in shaping their own community development objectives.

Fields of Special
Competence

Strategic and action planning processes; urban design; organisational and managerial procedures as applied to planning administration and implementation; techniques for achieving inter-governmental, business and citizen participation in the planning process.

WALTER GEOFFREY FAITHFULL

Date of Birth	27 August, 1922.
Educational and Professional Qualifications	Diploma of Town and Country Planning (University of Sydney) ; Member of the Institution of Engineers (Australia) ; Fellow of the Australian Planning Institute; Honorary Fellow of the Philippine Institute of Architects; Certificated Town Planner (NSW) .
Experience	<p>Mr Faithfull has had a long and distinguished career in the New South Wales public service, culminating in his appointment to the position of Principal Planning Officer (Investigations and Development) with the State Planning Authority of New South Wales. He has worked abroad in developing countries for over five years, including a United Nations national and regional physical planning assignment in Ghana. At present, he is Project Manager of the United Nations Special Fund Project at the Institute of Planning, University of the Philippines.</p> <p>Mr Faithfull was largely responsible for the establishment of the Institute, as an earlier United Nations assignment, and he is now directing the expenditure of approximately \$650,000 in United Nations Special Fund assistance in a programme to strengthen and expand the Institute in a number of ways, including the establishment of five Centres of Regional Development Studies jointly with universities in the main growth areas of the Philippines. Two of these Centres are already established, and the Institute is now moving into the fields of national and metropolitan regional planning and the development of suitable planning organisational, administrative and legislative procedures.</p> <p>Mr Faithfull also advised on and assisted in the establishment of a Public Affairs Complex at the University of the Philippines, and he acts as a Visiting Professor. He has written more than twenty articles and monographs on planning subjects.</p>
Fields of Special Competence	National, regional and metropolitan planning techniques; planning organisation and administration.

WILLIAM ARTHUR DALE

Date of Birth	18 November, 1904.
Educational and Professional Qualifications	Bachelor of Arts (University of Sydney) ; Diploma of Town and Regional Planning (University of Melbourne) ; Certificated Local Government Engineer; Certificated Town and Country Planner; Certificated Water Supply Engineer; Certificated Local Government Health Inspector; Certificated Town Clerk; Fellow of the Institution of Engineers (Australia) ; Member of The Australian Planning Institute.
Experience	<p>Mr Dale has had forty two years' professional experience in civil engineering, town planning and local government administration. He has designed and supervised engineering works in Borneo, Cocos Island, Indonesia, Japan, New Guinea and the Philippines. He was, for ten years, the Town Clerk of a municipality in the Sydney Metropolitan Area and he has had a great deal of experience in town planning at the local government level.</p>
Fields of Special Competence	Local government administration, planning and engineering.

FRANK DUFFY

Date of Birth
Educational and
Professional
Qualifications
Experience

29 August, 1936.

Member of the Australian Planning Institute; Certificated Town Planner (NSW) .

Mr Duffy has had fifteen years of professional experience in civil engineering and town planning in Australia. He has worked for five years with the New South Wales Department of Main Roads and for ten years with New South Wales state and local government planning authorities.

Fields of Special
Competence

Local government planning and development control.

TOM BALFOUR

Date of Birth
Educational and
Professional
Qualifications
Experience

14 September, 1941.

Final Certificate in Law (University of Adelaide) , an academic qualification to the S.A. Bar.

Mr Balfour had three years' general experience in architectural offices in South Australia, before commencing his law studies. He is currently completing his LL.B. degree and has written a number of essays on administrative law relating to town planning.

Fields of Special
Competence

Town planning administrative controls; formulation and implementation of development controls.

BRUCE HYLAND

Date of Birth	27 August, 1931.
Educational and Professional Qualifications	Associate of the Sydney Technical College in Architecture (with Honours) ; Diploma of Town and Country Planning (University of Sydney) ; Master of Regional Planning (Cornell University) ; Member of the Australian Planning Institute; Certificated Town Planner (NSW) ; Registered Architect (NSW) .
Experience	<p>Mr Hyland has had twenty one years' professional education and experience in Australia, the United States of America, Canada, Fiji and Mauritius. In the United States of America, Mr Hyland was a Teaching Assistant in Planning Design at Cornell University, before joining the firm of Candeub, Fleissig and Associates, then the largest firm of urban renewal consultants in the country. As Senior Planner with this organisation, Mr Hyland was responsible for a number of central city urban renewal projects and special studies throughout the eastern states. On leaving the United States of America, he was appointed to the post of Director of Development Projects with the City of Toronto, Canada, in which position he was responsible for all redevelopment projects initiated by the City and for liaison and negotiation with entrepreneurs for important private redevelopment projects. These experiences have brought him into close contact with all aspects of development by private entrepreneurs and redevelopment authorities.</p> <p>He has, as well, a record of considerable experience in governmental planning practices and procedures with the New South Wales Department of Local Government and the State Planning Authority of New South Wales.</p> <p>Since returning to Australia, he has been Project Manager for a 4,000 acres Satellite City and Regional Centre Project at Rockingham, Western Australia, as well as for a number of other large-scale land subdivision and housing developments. He has, also, directed the firm's statutory planning activities and has undertaken a great deal of legally oriented planning work, including numerous appearances to give expert evidence in disputes and appeals.</p> <p>Mr Hyland was, until recently, the Honorary Secretary of the Australian Planning Institute (NSW Division) , and his published articles include The Urbanisation of Mauritius (1968) and Possible Approaches to Master Planning in the Sydney Region Context (1969) .</p>
Fields of Special Competence	General urban planning; redevelopment project planning; zoning and development control techniques.

DOUG MARCH

Date of Birth
Educational and
Professional
Qualifications
Experience

3 August, 1938.

Bachelor of Arts (University of New England) , Master of Arts
(University of Newcastle) .

Mr March has had fourteen years' professional education and experience in economic survey and analysis work, the preparation of economic development plans and the preparation of project feasibility studies. Before joining the Urban Systems Corporation, Mr March was Senior Research Officer with the Hunter Valley Research Foundation and a tutor in micro-economics at the University of Newcastle.

Mr March has served in Bangkok as a special consultant to ECAFE on regional planning.

Mr March has published a number of works on the subjects of land resources research, water resources research and economic performance research.

Fields of Special
Competence

Economic performance analysis; development feasibility studies.

KEN SHORT

Date of Birth
Educational and
Professional
Qualifications
Experience

1936. .

Bachelor of Arts (University of New England) ; Master of Arts
(University of Newcastle) .

Mr Short has had twelve years' professional education and experience in urban geography and urban research. He spent two years with the Research Branch of the Department of Education, two years as Senior Lecturer in Geography at the Newcastle Teachers' College and three years on retail market research with the Hunter Valley Research Foundation, before joining the Urban Systems Corporation.

Mr Short is highly experienced in field survey techniques and in demographic analysis.

Fields of Special
Competence

Market research surveys; retail market analysis; development programming; demographic studies.

CARLEEN BENNETT

Date of Birth
Educational and
Professional
Qualifications
Experience

10 August, 1941.

Bachelor of Arts (University of Sydney) ; Diploma of Town and Country Planning (University of Sydney) .

Miss Bennett has had eleven years' experience of which three years were gained overseas. This included two years as technical assistant in the Transportation Planning Section of De Leuw Cather and Company in New Zealand and Canada, and one year in the transportation planning section of the Greater London Council's Planning Division. She was responsible for a large part of the essential analysis work on the 1961 London Journey-to-Work Survey and carried out studies into evaluation of the environmental effects of traffic. In Canada, she carried out considerable research into central city pedestrian movement systems.

Since returning to Sydney, she has been principally engaged on socio-economic surveys, retail market analysis and urban activities projections for city and development project planning. She has also carried out analysis and planning work for community facilities programmes.

Miss Bennett was awarded The Late H. F. Halloran Prize for best student of the year (1969) ; the Municipality of Willoughby Prize for Planning Law; and the Commonwealth Institute of Valuers (NSW Division) Prize for Land Economics, during her studies in the Town Planning Department of the University of Sydney.

Fields of Special
Competence

Geographical and economic analysis of land use distribution; effect of land uses on movement patterns; demographic studies of workforce population.

SONJA LYNEHAM

Date of Birth
Educational and
Professional
Qualifications
Experience

26 May, 1947.

Bachelor of Arts (University of Sydney) ; Master of Town and Country Planning (University of Sydney) .

Mrs Lyneham has had seven years' professional education and experience. Since joining the Urban Systems Corporation, Mrs Lyneham has been involved with work for private developers and government authorities and has been engaged on a variety of planning studies, ranging from strategic planning to detailed statutory planning for local Councils.

Mrs Lyneham has participated in the preparation of various project feasibility studies and reports on location economics. She has also examined methods of applying computer optimisation techniques to decision-making on urban development alternatives.

Fields of Special
Competence

Physical, geographic and economic analysis; central area industrial dynamics and distribution economics; optimisation analysis techniques applied to urban development problems.

GEOFFREY DAVID WILMOTH

Date of Birth
Educational and
Professional
Qualifications
Experience

4 November, 1946.

Bachelor of Economics with First Class Honours in Geography (University of Queensland) .

Mr Wilmoth has had four years' professional education and experience, principally in the fields of retail marketing and resort development research. He is at present studying for his Ph.D. degree on a specialist facet of urban development economics. Retail research studies; tourist development studies; urban development economics.

Fields of Special
Competence

PHILOMENA ANNE HORAN

Date of Birth
Educational and Professional Qualifications
Experience

23 August, 1948.
Bachelor of Arts (University of New South Wales) .

Fields of Special Competence

Miss Horan is an urban sociologist with considerable experience in the techniques and implementation of market research surveys. She is currently engaged on the collection and analysis of social survey data related to the Darling Point Redevelopment Plan. Market research; urban sociology; demographic analysis.

ANDRIS STENDERS

Date of Birth
Educational and Professional Qualifications
Experience

18 June, 1939.
Master of Civic Design (University of Liverpool) ; Bachelor of Architecture with First Class Honours (University of Queensland) ; Memberships and Associateships of the API, RAlA, TPE and RIBA pending; Registered Architect.

In 1964, Mr Stenders was awarded the RAlA Silver Medal and won a Commonwealth Scholarship to undertake post-graduate studies in the United Kingdom. While in the UK, Mr Stenders worked with the joint planning team of Professors H. Myles Wright and A. E. Weddle, engaged by the Republic of Ireland to prepare an urban regional plan for the City of Dublin. He was responsible for the production of analytical and visual urban design material, related to the future city structure and to specific urban nodal areas.

In 1966 he joined the practice of Professor A. E. Weddle, Architect, Landscape and Planning Consultant, and became responsible for its Liverpool office in early 1968, a post he held until his return to Australia in February, 1969. This practice was engaged in a range of national and regional projects including planning/landscape and urban design consultancy to the University of Liverpool, Skelmersdale New Town, the Central Electricity Generating Board, Herriot-Watt University, Edinburgh and the Clyde Estuary Development Group. As well as project management involved in these commissions, Mr Stenders was responsible for the coordination of the town centre redevelopment at Booke, Lancashire.

Fields of Special Competence

On his return to Australia, Mr. Stenders was appointed Queensland Regional Director of the Clarke-Gazzard organisation (now USC) . He was directly involved in the formulation of Strategic Plan Policies and responsible for Action Plan and implementation policy documents for the City of Gold Coast. Strategic, statutory and action planning frameworks; detailed urban design and transport processes; amenity, landscape and environmental planning; development of three-dimensional illustrative and analytical methodology and application of these techniques to civic design, urban regional structure design and public information and involvement programmes; project coordination, implementation and management.

RON DEVINE

Date of Birth
Educational and Professional Qualifications

26 October, 1933.

Bachelor of Architecture (University of New South Wales) ;
Master of Town and Country Planning (University of Sydney) ;
Associate of the Royal Australian Institute of Architects;
Registered Architect (NSW) ; MRAPI (pending).

Experience

Mr Devine has had eighteen years' professional education and experience of which five years was overseas. This consisted of two years as a Supervising Architect in Ghana and throughout West Africa, for Kenneth Scott (Architects) of London, Lagos and Accra, one year as a Design Architect, in Kuala Lumpur, for James Cubitt and Partners, Architects, and Booty Edwards and Partners, where he worked on the design of an 800-bed teaching hospital, one year in the United Kingdom designing housing developments in Malta and London, and one year in Switzerland, working on the Lausanne Hospital.

On returning to Australia, he was awarded an Ian Buchan Fell Research Grant to study "Residential Street Environment" for the degree of Master of Town and Country Planning.

Since joining Urban Systems Corporation, Mr Devine has worked on the strategic and action planning of Royal Prince Alfred Hospital, Sydney, the detailed planning and three-dimensional design of Rockingham Regional Centre, Western Australia, and the overall planning and programming of the Artarmon Redevelopment Plan.

Mr Devine has been in charge of the firm's planning activities in Papua and New Guinea where he has completed the design work for a large extension of the Port Moresby urban area at June Valley. He has also been engaged on analysis and design work for Oro Bay New Town and Port.

Fields of Special Competence

Civic and environmental design; large-scale development and town layouts.

STEPHEN WANAT

Date of Birth
Educational and Professional Qualifications

18 October, 1940.

Bachelor of Arts with High Honours in Architecture (Princeton University) ; Bachelor of Architecture (Harvard Graduate School of Design) ; Master of Architecture (University of Pennsylvania) ; Master of City Planning (University of Pennsylvania) .

Experience

Mr Wanat has had twelve years' overseas experience as architect, urban design and planning consultant, and lecturer.

He has worked with Reed, Torres, Beauchamp and Marvel in Puerto Rico as a design architect. Subsequently, in Pennsylvania, he was engaged as Urban Designer on the Camden City Centre Urban Renewal Area project, with T. R. Vreeland, and, later, he worked with O. E. Reichart on a similar project. Mr Wanat was also engaged as a planning consultant in urban design for several Californian towns with Planning Associates, San Francisco, and for a period of two years, he lectured in City Planning and was Studio Master in Urban Design and Architecture at the University of Oregon and California Polytechnic.

Since joining Urban Systems Corporation, Mr Wanat has been responsible for general direction of and all design work associated with the Darling Point Redevelopment Plan.

Fields of Special Competence

City planning; civic and architectural design.

DARREL CONYBEARE

Date of Birth	31 May, 1938.
Educational and Professional Qualifications	Bachelor of Architecture with First Class Honours (University of Sydney) ; Master of Architecture (University of Pennsylvania) ; Master of City Planning (University of Pennsylvania) ; Registered Architect (NSW) .
Experience	<p>Mr Conybeare has had twelve years' professional education and experience in Australia, United Kingdom and the United States of America.</p> <p>In 1965, he worked with Wallace McHarg Roberts and Todd of Philadelphia on the plan for Wilmington, Delaware, and carried out the design, drawing and presentation models for the DuPont Plaza project associated with this study. In 1966 and 1967, he worked with the Planning Department of Marin County, California, on a range of town centre, civic centre, development project and general planning studies. In 1968 and 1969, he was employed in the Office of Charles Easme, Los Angeles, on a number of important visual and graphic design projects, including the National Fisheries Centre and Aquarium and the IBM Computer Museum.</p> <p>Mr Conybeare is particularly skilled in communication techniques and has had wide experience in the preparation of exhibitions and the production of motion pictures designed to educate and involve the public in the planning process.</p>
Fields of Special Competence	Large-scale planning and design; visual communication techniques.

IAN BREDEN

Date of Birth	31 August, 1937.
Educational and Professional Qualifications	Bachelor of Architecture with Second Class Honours (University of New South Wales) ; Registered Architect (NSW) .
Experience	<p>Mr Breden has had ten years' professional experience as a student and qualified architect, including three years' overseas experience one year of which was spent with the Architectural Association in London at the School of Town Planning and Civic Design. He spent one year as Design Architect with the Owen Luder Partnership, London, supervising design work on shopping centres, hotels and high density residential development, and one year was spent in Rome with Whiting and Associates, Planners, Omaha, Nebraska, on a 20-Years' Plan for the Tripoli Region of Libya. His duties there involved him in the design of a civic centre and numerous small towns, as well as in general planning work.</p> <p>In Australia, Mr Breden was employed as an architect under Jorn Utzon of the Sydney Opera House for one and a half years. Since joining Urban Systems Corporation, he has been directly involved with the redevelopment of Royal Prince Alfred Hospital which includes three-dimensional site planning and architectural design and computer optimisation studies for development programming. He has also worked on the designs of the Regional Centre and housing areas in the Rockingham Park Satellite City, Western Australia, and the civic centre and medium-density housing areas at June Valley, Port Moresby.</p>
Fields of Special Competence	Civic and environmental design; large-scale development and town layouts.

MICHAEL GERNER

Date of Birth
Educational and Professional Qualifications

26 May, 1941.

Bachelor of Architecture, Melbourne University; Diploma of Town and Regional Planning, Melbourne University; Associate of the Royal Australian Institute of Architects; Registered Architect, Victoria; MRAPI (pending).

Experience

Mr Gerner has had twelve years' professional experience and education in architecture.

He worked for a number of Melbourne architectural firms on the design and supervision of commercial and industrial buildings during the first three years of his professional career. Mr Gerner then spent two years in the United Kingdom, during which time he was employed by the Greater London Council as a project architect on major urban redevelopment schemes. These schemes were of a comprehensive nature and encompassed a wide cross-section of urban land usage.

Fields of Special Competence

Large-scale urban redevelopment; programming and coordination of staged projects and constructions.

J. ERIC JACKSON

Date of Birth
Educational and Professional Qualifications

18 August, 1922.

Diploma in Town Planning and Civic Engineering (University of London); Member of the Town Planning Institute; Member of the Australian Planning Institute; Chartered Engineer (UK); Member of the Institution of Municipal Engineers.

Experience

Mr Jackson's twenty five years' town planning and municipal engineering experience includes six years with local authorities in the United Kingdom, seven years as town planner for Kuala Lumpur Municipal Council, three years as planning officer with the Government of Hong Kong and seven years as development consultant to a major Hong Kong land investment and development company.

In the United Kingdom, Mr Jackson served with several borough councils and was a member of the Max Lock team which carried out the Portsmouth District Survey and Plan. In 1951, Mr Jackson moved to Malaysia as Planning Officer with the Kuala Lumpur Municipal Council which then administered an area with a population of about 200,000 people. His seven years in Kuala Lumpur covered a period of intensive growth and great pressure of development, and, amongst other matters, he was involved in the preliminary studies for the siting of Petaling Jaya New Town. In Hong Kong, as Town Planner with the Public Works Department, he was responsible for design and coordination of two new towns of 650,000 and 350,000 population. This work involved negotiations with village committees, selection and development of new village sites for those displaced by the new towns, coordination of public works, location of public housing, and community facilities, and collaboration of layout of private housing, industrial development and shopping centres. Mr Jackson then joined a private Hong Kong development company, advising on project feasibility. The work involved covered luxury and low-cost housing schemes, inner-city development projects, and the replanning of the Hong Kong Docks to provide for the redevelopment of surplus land.

Mr Jackson has recently completed preliminary studies on a \$30 million redevelopment project in South Melbourne.

Fields of Special Competence

Town planning methods; pre-investment and development evaluation.

COLIN KEITH ATKINS

Date of Birth	25 August, 1933.
Educational and Professional Qualifications	Civil Engineering Diploma (Gordon Institute of Technology, Geelong) ; Diploma in Graduate Studies (with Distinction) Highway and Traffic Engineering (Birmingham University) ; Master of Science (Transportation and Environmental Planning) (Birmingham University) ; Member of the Institution of Engineers, Australia ; Associate Member of the Institution of Highway Engineers ; Municipal Engineer's Certificate (Victoria) .
Experience	<p>Mr Atkins has had fifteen years' professional experience, including seven years' overseas experience in the United Kingdom. He spent three years as a Research Associate with the Department of Transportation and Environmental Planning at Birmingham University, and later worked for three years with Arthur Ling and Associates, Consultant Town Planners, Traffic Engineers and Architects, as an Associate. With this firm, he played a major role in the development of a Master Plan for Runcorn New Town, in the preparation and analysis of alternative road proposals for part of Central Nottingham, in the examination of Development Plans and preparation of evidence in connection with Public Inquiries into these Plans for Edinburgh, Cheltenham and Grimsby, and in a brief study of the transportation problems in Glasgow.</p> <p>During the three years he spent in Nottingham, he lectured in the Department of Architecture and Civic Planning of which Professor Ling is Dean. The subjects he lectured in were Structures and Land Surveying, Highway and Traffic Engineering, and Statistics. Mr Atkins is the author of <i>People and the Motor Car</i>, published by the Department of Transportation and Environmental Planning, University of Birmingham.</p> <p>Since his return to Australia, Mr Atkins served with the National Capital Development Commission in Canberra, before joining USC.</p>
Fields of Special Competence	Urban transport systems; traffic and transportation research and planning; economic and policy research on traffic and parking.

PETER CASEY

Date of Birth	4 March, 1934.
Educational and Professional Qualifications	Bachelor of Engineering (University of New South Wales) ; Diploma of Town and Country Planning (University of Sydney) ; Master of Engineering Science (Traffic) (University of New South Wales) ; Member of Institution of Engineers, Australia; Associate Member of the Institute of Traffic Technology.
Experience	<p>Before joining the Urban Systems Corporation, Mr Casey was Deputy Chief of the Engineering Division of the Commonwealth Bureau of Roads, where he was responsible for the organisation and operation of the road needs survey of all the Australian capital and major provincial cities, carried out preparatory to the formulation of the 1969-74 C.A.R. Act. This task involved liaison with consultants and the various State Road Authorities during the survey, and during the subsequent assessment of the validity of the roadworks requirements advanced by the State Authorities. Mr Casey was Transportation Planner for the NSW State Planning Authority in 1966 and 1967. He represented that Authority on various technical Committees set up for transportation planning and operation, and his duties at that time included investigations into the efficiency and operating characteristics of bus-rail interchange terminals as they might apply to the Sydney Metropolitan Area.</p> <p>Between 1959 and 1966, Mr Casey was employed by the Department of Highways in Washington DC, and the Department of Main Roads, New South Wales. The greater portion of this period was spent on investigation and design of expressway and major arterial road systems in urban areas. Mr Casey worked in conjunction with De Leuw, Cather and Company who were consultants to the Department of Main Roads and responsible for outline designs of Sydney's Expressway System.</p>
Fields of Special Competence	Urban road network planning; traffic and transportation engineering.

KEN HATTEN

Date of Birth
Educational and
Professional
Qualifications
Experience

18 August, 1943.

Bachelor of Engineering (Civil) (University of New South Wales) ; Master of Engineering Science (Traffic and Transportation Engineering) (University of New South Wales) .

Mr Hatten has had five years' professional experience in road and bridge construction and two years' experience in urban road planning and design.

During this latter two year period, Mr Hatten worked in the Urban Investigations Section of the Department of Main Roads of New South Wales. He was engaged on the route investigation and design of the Castlereagh Expressway and the Southern Expressway. He was also involved in the administration of the Department's developmental control process which was first introduced through the County of Cumberland Planning Scheme. Since joining the Urban Systems Corporation, Mr Hatten has been responsible for a traffic study for the Gold Coast Strategic plan, and highway and expressway location and design on the various planning schemes carried out by the Corporation which include the new town of Rockingham Park, Western Australia.

Mr Hatten has also been responsible for extensive research into current metropolitan growth and retailing trends. He was responsible for the Capital Cities Shopping Centres Survey carried out for Myer Shopping Centres Pty Ltd, as part of their five year corporate expansion programme.

Fields of Special
Competence

Urban traffic and transportation studies; market analysis; business administration.

NEIL INGHAM

Date of Birth
Educational and
Professional
Qualifications
Experience

24 November, 1934.

Registered Surveyor (New South Wales) ; Diploma of Town and Country Planning (University of Sydney) ; Member of the Institution of Surveyors (Australia) .

Mr Ingham has had sixteen years' professional education and experience, including work with state and local government authorities, such as the New South Wales Department of Railways and the Sydney Metropolitan Water, Sewerage and Drainage Board.

Since joining the Urban Systems Corporation, he has been engaged on a wide variety of planning and development studies, including both action and statutory planning for the Council of the City of Gold Coast.

Fields of Special
Competence

Services planning and general development engineering work.

MAX HIPKINS

Date of Birth
Educational and
Professional
Qualifications
Experience

2 September, 1943.

Bachelor of Architecture (University of Melbourne) ; Bachelor of Town and Regional Planning (University of Melbourne) ; Member of The Australian Planning Institute.

Mr Hipkins has worked throughout Australia with federal, state and local government planning authorities and with private consulting firms.

Before joining the Urban Systems Corporation, he was employed with the Perth Metropolitan Region Planning Authority and, for two years, with the Town Planning Department of the Perth City Council, where he was concerned with transportation and planning in the central city area.

Fields of Special
Competence

Central city transportation and development planning.

DONALD GAZZARD

Date of Birth
Educational and
Professional
Qualifications
Experience

4 August, 1929.

Fellow of the Royal Australian Institute of Architects; Associate of the Royal Institute of British Architects.

Mr Gazzard has had twenty years' professional education and experience, consisting of two years in engineering and eighteen years in architecture and urban design. Prior to entering private practice, Mr Gazzard had four years' experience in the Housing Division of the London County Council and several years' varied experience in Montreal, Canada, principally on central city redevelopment projects and shopping centres.

He returned to Australia in mid-1960 and has since practised architecture and large-scale civic design throughout Australia and New Guinea. Since 1960, Mr Gazzard has personally been responsible for and has directed the architectural and three-dimensional design work of the Urban Systems Corporation. This work has covered all types of housing, office and retail developments and community buildings. In 1961, Mr Gazzard was the recipient of the Wilkinson Award for Architecture in New South Wales from the Royal Australian Institute of Architects. Mr Gazzard is a Councillor of the Royal Australian Institute of Architects (NSW Chapter) and the author of *Australian Outrage — The Decay of a Visual Environment* (Ure Smith, 1966). He has another book, *Australian Vernacular Architecture*, being published at the moment.

Fields of Special
Competence

Architectural and large-scale civic design; job programming, coordination and cost control techniques; contract documentation.

RICHARD YOUNG

Date of Birth
Educational and
Professional
Qualifications
Experience

29 June, 1928.

Associate of the Sydney Technical College in Architecture;
Associate of the Royal Australian Institute of Architects.

Mr Young has had twenty one years' professional education and experience of which two years were in engineering and nineteen years in architecture. He spent some years working in both the western and eastern provinces of Canada and also in Italy. During this period, he was responsible for major institutional and commercial projects, including theatres, hospitals, apartment houses and shopping centres.

Since returning to Australia in 1964, he has carried out major works in New South Wales, Queensland and the Australian Capital Territory.

At present, he is responsible, amongst other things, for the architectural design and documentation of many of the buildings for two new towns on Bougainville Island in the Territory of Papua and New Guinea.

Fields of Special
Competence

Contact documentation; job programming and coordination;
construction supervision for large projects.

RALPH CHARLES BRADING

Date of Birth
Educational and
Professional
Qualifications
Experience

31 January, 1934.

Bachelor of Architecture (University of Sydney) ; Master of
Architecture (Yale University) .

Mr Brading has had six years' professional training and twelve years' professional experience in architecture, covering design and supervision of work ranging from single-family dwellings to resort motels. Of this time, two and a half years were spent in England, working on commercial and industrial projects in England and France, and three and a half years were spent in the USA, working on department stores, shopping centres, factories, industrial research laboratories and parking stations. Work in Australia has included design and supervision of factories in New South Wales, Victoria, South Australia and Western Australia for the printing and food processing industries, and design and coordination of hotel and commercial projects.

Mr Brading has acted as visiting design critic to senior classes at the School of Architecture, University of Sydney.

Fields of Special
Competence

All types of industrial development, including factories, research laboratories, amenities and storage buildings; multi-storeyed parking garages.

DAVID RAY

Date of Birth
Educational and Professional Qualifications
Experience

28 August, 1935.

Bachelor of Architecture (with Honours) (University of New South Wales) ; Diploma of Building Science (University of Sydney) .

Mr Ray has had seventeen years' professional education and experience in Australia, with special experience in industrial work with an international "Design and Construct" firm. His recent experience has been as Manager of Design Office for a Sydney development firm, constructing multi-storeyed city buildings and apartments.

Since joining Urban Systems Corporation, he has been Project Architect for a \$3 million office and shopping complex. His special interest in building science has given him particular expertise in acoustics and critical path scheduling.

Fields of Special Competence

Industrial architecture; high-rise city buildings; building science.

R. T. M. WHIPPLE

Title
Date of Birth
Educational and Professional Qualifications
Experience

Senior Lecturer on Urban Land Economics in the Department of Town and Country Planning, University of Sydney.

21 June, 1931.

Diploma of Town and Country Planning (University of Sydney) ; Associate of the Commonwealth Institute of Valuers (Australia) ; Member of the Australian Planning Institute.

Mr Whipple's twenty one years' professional experience have included seven years as a Valuer working in mortgage lending with the Commonwealth Banking Corporation, four years in private real estate and valuation practice, three years as a Manager of a public company engaged in estate and property development in Melbourne, Sydney and Brisbane, three years as a Manager of the US firm of real estate economic consultants, two years as Research Director of URBSEARCH, and two years in teaching and research at the University of Sydney which he combines with part-time consulting for Urban Systems Corporation with whom he maintains a close association.

Mr Whipple possesses a rare and valuable fund of practical experience with a knowledge of practical town planning and urban research techniques. He now specialises in the field of integrating urban systems analysis with the pragmatic realities of urban planning practice.

Fields of Special Competence

Urban systems analysis; economic and market research.

ROSS ROBINSON

Title	Lecturer, School of Geography, Wollongong University College, University of New South Wales.
Date of Birth	30 November, 1937.
Educational and Professional Qualifications	Bachelor of Arts (University of New England) ; Diploma of Education (University of New England) ; Master of Arts (University of New South Wales) ; Doctor of Philosophy (University of British Columbia) .
Experience	<p>Dr Robinson has had fourteen years' professional education and experience, focused principally on Transportation Economics and Transportation and Development Planning. He has recently returned to Australia, after five years in Canada, and Switzerland working on problems of port efficiency, operational simulation and investment optimisation programmes.</p> <p>Dr Robinson's doctoral dissertation was entitled Spatial Structuring of Port-Linked Flows (1955) and was concerned with aspects of port capacity, efficiency, and organisation. Subsequently, he worked with the Port Research Team of UNCTAD in Geneva developing these techniques further and applying them to a case study of the Port of Casablanca.</p>
Fields of Special Competence	Traffic mobility; retail location; port development.

ZULA NITTIM

Title	Lecturer, School of Sociology, University of New South Wales.
Educational and Professional Qualifications	Bachelor of Architecture (University of Melbourne) ; Diploma of Civic Design (University of New South Wales) ; Doctor of Philosophy (University of New South Wales) (pending) ; Associate of the Royal Australian Institute of Architects; Registered Architect (NSW) .
Experience	<p>Miss Nittim is an experienced urban sociologist and urban planner, with a special interest in and knowledge of the city-building process at the neighbourhood scale. Miss Nittim's doctoral dissertation was entitled Urban and Architectural Development of Kings Cross, 1831-1969.</p>
Fields of Special Competence	Urban morphology; urban sociology.

AMOS RAPOPORT

Title Educational and Professional Qualifications

Senior Lecturer, School of Architecture, University of Sydney.
Bachelor of Architecture (University of Melbourne) ; Master of
Architecture (Rice University) ; Diploma of Town and Regional
Planning (University of Melbourne) ; Associate of the Royal
Australian Institute of Architects; Associate of the Royal Institute
of British Architects; Member of the Environmental Design
Research Association; Member of the International Society for the
Study of Symbols; Registered Architect (NSW and Victoria) .

Experience

Mr Rapoport was an Australian Fulbright Scholar to the US
between 1956 and 1958. In this time he made extensive studies
on the environmental aspects of planning and engineering in
North America and Europe.

His professional career covers a period of twenty years during
which he has been Assistant Professor in Architecture at the
University of California, Berkley, for five years; a lecturer at
University College London, and a visiting lecturer at Cambridge
University.

Mr Rapoport has practised as a town planner and urban designer
throughout his career by participating as a consultant in a number
of significant urban development projects including an important
public housing project: "Low Income Housing Demonstration".

This project was undertaken by the University of California and
controlled by H. Sanoff. The work was completed in 1966.

Mr Rapoport also contributes a column on "Environment" to The
Australian newspaper.

Fields of Special Competence

Environmental planning; civic and architectural design.

McConnel, Smith & Johnson

Key Personnel

Name	Qualifications	Length of Professional and Educational Experience	Fields of Special Competence
Professor R. N. (Peter) JOHNSON	B Arch (Hons) FRAIA ARIBA	24 years	Large Scale Development planning; civic and environmental design; architectural design documentation and supervision
Peter KEYS	B Arch (Hons) Dip TP (Lond) FRAIA ARIBA MAPI	25 years	Large Scale Development planning; civic and environmental design; architectural design documentation and supervision
Stanley B SMITH	B Arch (Hons) (Melb) FRAIA	32 years	Large Scale Development planning; civic and environmental design; architectural design documentation and supervision
David JACKSON	AA Dipl ARAIA ARIBA	20 years	Large Scale Development planning; civic and environmental design; architectural design documentation and supervision
Angus TEECE	B Arch M Bdg Sc ARAIA	19 years	Architectural design documentation and supervision; programming
Tony MOORE	AA Dipl FRAIA	26 years	Programming; management costing; professional administration
David CHESTERMAN	B Arch ARAIA ARIBA	15 years	Civic and environmental design; architectural design documentation and supervision
David WILLIS	ASTC (QS)	9 years	Building economics; feasibility studies; site optimisation analysis
Geoffrey ATHERDEN	B Arch ARAIA	10 years	Civic and environmental design; architectural design documentation and supervision
Patrick GALLAGHER	B Arch (Man)	7 years	Civic and environmental design; architectural design documentation and supervision
Marc MALLAM	B Arch MCD (Liv)	8 years	Civic and environmental design; town and regional planning

R. N. (PETER) JOHNSON

Partner, BArch, FRAIA, ARIBA.

**Date and Place
of Birth**

Melbourne, 1923.

EDUCATION

BArch (Hons), University of Sydney, 1950.

**PROFESSIONAL
EXPERIENCE**

1954-present

Since 1954 experience as partner-in-charge of a wide variety of projects from major developments to small scale individual buildings.

These have included:

Sydney Water Board Offices.

University of Sydney Law School.

The Commonwealth-State Law Courts.

In 1964 the Wilkinson Award was made to Professor Johnson's house at Chatswood. He has undertaken overseas trips to study developments in architecture, urban design and planning.

**ASSOCIATED
ACTIVITIES**

Professor of Architecture,

Dean of the Faculty of Architecture,

University of Sydney.

Fellow of Senate, University of Sydney.

Member of Council, NSW Institute of Technology.

President, NSW Chapter of the Royal

Australian Institute of Architects.

Member of the Board of Architects of NSW.

Writer and lecturer in architecture and planning.

PETER KEYS

Partner, BArch (Hons), DipTP (Lond), FRAIA, ARIBA, MAPI

Date of Birth and Place

Hay, NSW, 1927.

EDUCATION

University of Sydney, 1945-1950, BArch (Hons),
Department of Town and Country Planning.
University College, London, 1954,
DipTP (Lond).

Award:

Hounsfield Prize.

Diploma Theses: "Regional Planning in Australia".

PROFESSIONAL EXPERIENCE 1950-1957

Resident, London, UK.

Various Offices.

Senior Assistant on offices and retail buildings, in London,
industrial projects for Crawly New Town.

1957-present

McConnel, Smith & Johnson.

Kindersley House Offices

Senior Assistant, design, documentation and supervision.

Sydney Water Board Offices

Senior Assistant, design, documentation and supervision.

War Veterans Homes Estate

Partner.

Estate planning, and design of aged persons' housing to
accommodate a total of 800 persons.

Turner Offices, ACT

Partner-in-charge.

Offices in ACT

Partner.

Wynyard Square

Planning project for comprehensive city block development.

Partner.

Farmers & Graziers Co-operative Society Offices

Partner.

ASSOCIATED ACTIVITIES

Federal Councillor, RAIA.

RAIA NSW Chapter Representative on

the Height of Buildings Advisory Committee.

Chairman of Editorial Committee RAIA Publications.

Joint Imprint Committee RAIA and Angus and Robertson.

Member of the Advisory Panel of Architects to the Minister of
Social Services on Aged Persons' Housing.

Member of Central Urban Committee RAIA.

Member of Competitions Committee RAIA.

Member Practice Co-ordination Committee RAIA.

Part-time Lecturer in Final Year Design at the University of
New South Wales and Institute of Technology.

STANLEY B. SMITH

Partner, BArch, FRAIA

**Date and Place
of Birth**
EDUCATION
PROFESSIONAL
EXPERIENCE
1940 to present

Tamworth, 1919.

B Arch (Hons), University of Melbourne, 1940.

Since 1961 experience as partner in charge of many projects from commercial developments to small churches. These have included:

Kindersley House (including premises for the Sydney Stock Exchange);

Swire Building;

and Commonwealth-State Law Courts.

He has studied overseas developments of large-scale city redevelopments and commercial and civic buildings.

DAVID JACKSON

Partner, AADipl, ARAIA, ARIBA

Date and Place of Birth	England, 1931.
EDUCATION	Architectural Association, School of Architecture, London, 1950-1955 (Marling Governor's Scholar, Thomas Wall Scholar). Thesis work in 5th year combining post-graduate Tropical Course with architecture and town planning interests under Dr Koeningsburger, Maxwell Fry and Peter Smithson; a new town in Israel, particular reference given to climatic, sociological aspects and industrialised building methods.
1950-1955	
1955-1956	Yale School of Art and Architecture. Graduate, School of City Planning (King George VI Memorial Fellow, additional graduate scholarships declined); studied urban renewal. Awards AA 5th year prize.
PROFESSIONAL EXPERIENCE	
1952	Barbican Development Scheme London County Council Planning Department, Assistant.
1953	Coastal Hotel and Recreational Development Dov. Karmi, Architect and Planner, Tel Aviv. Assistant.
1955-1956	Emergency Evacuation Routes, City Parks Rejuvenation Throughway Development and Slum Clearance Architectural Advisor, New Haven (Conn.). City Planning Commission under Mayor C. Lee.
1956-1959	Airport Location and Planning and Construction for West Indian Islands, particularly Jamaica Assistant, Norman and Dawbarn, Architects and Engineers, London and West Indies.
1957-1959	Montego Bay and Kingston Airports Resident in Jamaica, supervising construction, also assistant on master planning. University College of West Indian Campus and Kingston Technical College Campus. McConnel, Smith and Johnson.
1959	Riker Pharmaceutical Laboratories Senior member of team for master planning. Sydney Water Board Offices, University of Sydney Law School, Commonwealth-State Law Courts and associated environment planning of Queen's Square.
ASSOCIATED ACTIVITIES	Chairman, Architecture Association Students' Committee, 1953-1955. Founder Member, Jamaica Society of Architects, 1958. Chairman, NSW Chapter, RAIA Careers School Committee, 1968 Chairman, NSW Chapter, RAIA Centenary Convention Committee, 1969. Australian Standard Association Committee PL 15, 1965. Various part-time teaching activities at University of NSW and University of Sydney since 1961.

ANGUS TEECE

Partner, BArch, MBdgSc, ARAIA.

**Date and Place
of Birth**

Sydney, 1931.

EDUCATION

Faculty of Architecture, University of Sydney, 1956.

Post-Graduate work at the University of Sydney, Department of Architectural Science, and the degree of MBdgSc in 1967.

Awards:

Board of Architecture Prize for merit in Town and Country Planning BArch degree.

RAIA award for thesis "The Cause, Effect and Significance of Building Delays in Multi-storey City Buildings".

**PROFESSIONAL
EXPERIENCE**

1957

Various City projects

Architectural assistant with Walter Bunning for three years.

1959

Joined McConnel, Smith & Johnson.

Swire House.

University of Sydney Law School.

Medical Precinct Parking Station.

Commonwealth-State Law Courts.

**ASSOCIATED
ACTIVITIES**

1966-present

Conducting a lecture course at the University of Sydney in the Department of Architectural Science.

1969

Lecturing in Department of Architecture.

1969

Elected as an Alderman of the Woollahra Municipal Council in 1968 and serves on that Council's Local Planning Committee which has been concerned with setting objectives for planning for the municipality to the year 2000, with detail and action plans for Darling Point, Double Bay, Bondi Junction, Paddington and West Woollahra.

Representative of the Council on a committee under the guidance of the State Planning Authority to consider the Church of England Glebe land at Edgecliff.

**1967, 1968,
1969, 1970**

Councillor of the Building Science Forum of Australia (Northern Division) in 1967 and 1968 and a member of that organisation's Industrialised Building Study Group from its inception to the formation of the Rationalised Building Study Group of State and Federal Governments in 1968. Served on several committees of the RAIA. Served on six committees of the SAA from 1964 to the present. Contributor to several seminars including Man/Environment Seminar 1970, Architectural Management 1969 and part contributor to Australian Building Research Congress 1968.

TONY MOORE

Partner, AADipl, FRAIA.

Date and Place of Birth	Sydney, 1925.
1944-1947	Service with Royal Australian Naval Reserve: two years with Hydrographic Branch (seagoing service). Rank on discharge: sub-lieutenant.
EDUCATION	Architectural Association, School of Architecture, London. Full-time course. AA Diploma, 1953.
PROFESSIONAL EXPERIENCE	Assistant architect: Moore, Walker and Croaker, Architects, Sydney.
1953-1956	
1956-1959	Partner: Moore, Walker and Croaker. School and University buildings, houses and commercial projects. Experience in all aspects of architectural work.
1960-1962	Private practice.
1962-present	Office Manager, McConnel, Smith & Johnson, Architects and Planners.
1969-present	Partner, McConnel, Smith & Johnson. All aspects of office management and administration, office systems and equipment, office costing, preparation and implementation of contracts for professional services, accounting, liaison with firm's solicitors and accountants, interviewing and reporting on staff applications, premises, etc.
FURTHER EDUCATION	1969 to date: Graduate Diploma in Business Administration —enrolled in course at University of New South Wales (2-year part-time course: equal first in first-year examination).
ASSOCIATED ACTIVITIES	
Royal Australian Institute of Architects NSW Chapter	Service as Councillor for 1½ years. Membership of the following Committees: Building Regulations and Standards Committee (since 1955). Younger Members Committee, Programme Committee for 1962 Convention, Board of Architectural Education, Jury for Project House Award, Chapter representative on the Department of Technical Education Architectural Draughtsman's Course Advisory Committee, Chapter representative on the Standards Association of Australia Code of Practice for Brickwork.
Building Science Forum of Australia (Northern Division)	Joint Convenor for forum "Regulation for Building" (1967).

DAVID CHESTERMAN

Associate, BArch, ARAIA, ARIBA.

**Date and Place
of Birth**

Sydney, 1937.

EDUCATION

Sydney University, BArch, 1960.

Currently in third year of Diploma of Town and Country
Planning Course, Sydney University.

**PROFESSIONAL
EXPERIENCE**

McConnel, Smith & Johnson.

1960-1962

Sydney Stock Exchange Premises

Design and supervision.

Sydney Water Board Offices

Sketch plans.

1962-1965

Resident in London. Twelve months' travelling in Europe,
Russia and Scandinavia.

1962-1963

Theatre and University Projects

Assistant Architect, Bryan and Norman Westwood and Partners.

1963-1965

Hounslow Cavalry Barracks

Project Architect, The Austin-Smith Salmon Lord Partnership.
Site planning and building design.

Navy Shore Base in Gibraltar

Project Architect, The Austin-Smith Salmon Lord Partnership.
Design and involving site visit to assess constructional methods.

1965-1967

Resident New York City. Travelled in USA extensively.

Project Architect, Tippetts Abbett McCarthy Stratton.

Mount Newman Town and Housing at Port Hedland

Prepared town plan and sketch building designs (visited
Australia for TAMS on this project). Selected townsite,
prepared and presented preliminary proposals for urban
development assisted with the **Zig Dam in Morocco**
(visited Morocco for TAMS).

Poughkeepsie, New York

Planning and architectural design of urban renewal
residential area.

Federal Highway Proposal

Prepared report on its use as major down-town renewal
generator in Poughkeepsie, NY.

Dallas-Fort Worth Regional Airport

Member of multi-disciplinary team on conceptual design and
responsible for presentation.

Pan Am Terminal, Kennedy Airport

Design work on extension.

1967-present

McConnel, Smith & Johnson.

Commonwealth-State Law Courts

Project Architect.

City Projects

Feasibility studies.

**ASSOCIATED
ACTIVITIES**

1960-1962

Member, NSW Chapter, RAlA Public Relations Committee
and Historic Building Committee.

1965-1967

Architects Renewal Committee in Harlem, community work and
design of low cost housing for displaced plantation workers
in Mississippi.

1968

Part-time lecturing, School of Architecture,
NSW Institute of Technology.

1967-1970

Occasional member of marking panel,
Sydney University Faculty of Architecture.

1969

Assisted in preparation of NSW Chapter report to Minister for
Local Government on City Plot Ratios.

DAVID WILLIS

Associate, ASTC (QS)

Managing Director—Project Organisation Pty. Ltd.
England, 1933.

**Date and Place
of Birth**

University of New South Wales, 1966, ASTC (QS).

**EDUCATION
PROFESSIONAL
EXPERIENCE
1960-1963**

Building Economics

Cameron and Middleton, estimating, cost planning and feasibility investigation.

1963-present

Building Economics

McConnel, Smith & Johnson.

Investigation of the general economic and physical practicability of projects. Optimisation of selected factors, such as rate of return, etc. Feasibility studies include legal, technical and economic criteria. Legal matters cover statutory requirements, such building and town planning legislation and regulations which determine reasonable development. Planning and building studies involve negotiation with the various authorities concerned with the project. Investment analysis investigating a given problem with the intention of securing optimum investment. A significant element in the study is the selection of the appropriate financial basis such as discount and cash flow or cost of funds.

**ASSOCIATED
ACTIVITIES**

RAIA and University of Sydney.

Joint post-graduate course in Management Technique for Architects and joint designer and co-ordinator of the course and gave lectures.

Presently retained as property consultant by clients including Adult Deaf and Dumb Society, Australian Dental Association, Insurance Companies, Merchant Banks, Hotel Chains and Growth Funds.

1967

Research Assistant on Building Economics in the Faculty of Commerce, University of NSW.

GEOFFREY ATHERDEN

Senior Assistant, BArch (Hons); ARAIA.

Date and Place of Birth

Sydney, 1948.

EDUCATION

BArch (Hons), University of Sydney, 1965;
Teaching, University of Sydney, 1965-6.

Awards:

Stephenson and Turner Scholarship and Medal in 1963.
Graduated with honours and distinctions in Design and
Architectural Science in 1965.

PROFESSIONAL EXPERIENCE 1964-1966

Worked in private practice on several small houses.

Redevelopment of 29 acre site in Edgecliff

Architects: Peddle, Thorp and Walker,
research analysis, initial studies and presentation.

Sports Centre, Newcastle

Initial studies, competition entry.

Large City Block Development, Brisbane

Initial studies, sketch plans, presentation.

1967

Commenced work with McConnel, Smith & Johnson.

Wynyard Square Project

Research, analysis, initial studies,
sketch plans, presentation, team coordination.

Industrialised Housing Project

Research, development of system, documentation.

Commonwealth-State Law Courts

Design, detailing, sketch plans, presentation, coordination of
team, coordination of consultants, documentation.

Presbyterian Church, Bankstown

Detailing, documentation, administration,
site inspections, client liaison, interior design.

Yuill Building Project

Analysis, feasibility study, sketch plans, presentation.

ASSOCIATED ACTIVITIES

Employed as full-time Teaching-Fellow in School of
Architecture, Sydney University, for two years, 1965, 1966.
Taught design and construction in First and Second years.
Chairman of Careers School Sub-Committee of NSW Chapter,
RAIA, Schools and Seminars Committee.

PATRICK GALLAGHER

Senior Assistant, BArch (Man.).

**Date and Place
of Birth**

Sydney, 1941.

EDUCATION

BArch, 1968, John A. Russell School of Architecture,
Fort Garry Campus, University of Manitoba, Canada.

Awards:

1966 Manitoba Association of Architects.
1967 Manitoba Association of Architects.
1968 Manitoba Association of Architects.
1968 Royal Architectural Institute of Canada Medal.
1968 Gold Medal of the University of Manitoba.

Bursaries:

1966 Board of Governors.
1967 Board of Governors.
1968 Board of Governors.

Scholarships:

1966 Green, Blankstein, Russell Scholarship.
Highest Standing in Architectural Subjects.
1966 Manitoba Association of Architects.
Highest Standing Academics.
1966 Kerr, Cullingworth, Riches and Associates Scholarship.
1966 Highest Standing in Design.
1967 Canadian Pittsburgh Industries Limited Scholarship.
1967 Highest Standing in Design.
1967 Lighting Materials Limited.
Highest Combined Standing in Electrical
Illumination and Industrial Design.
1967 Edward Langley Scholarship of the AIA.
By recommendation of the staff.
1967 Teaching Assistantship in Urban Sociology.

**PROFESSIONAL
EXPERIENCE**

1964

Office Buildings

Architects: Bates, Smart & McCutcheon (Melbourne).
Design development.

1965

National Art Centre, Ottawa

Architects: Affleck Debarats Dimakopolous
Lebensold Sise (Montreal).
Design development.

1967

Campus Planning

Architects: Campus Planning Office,
University of Manitoba (Winnipeg).
Research and implementation.

1969

Center Point Project

Architects: Number Ten Architectural Group (Winnipeg).
Initial design and development.

MARC MALLAM

Architectural Assistant and Planning BArch (1st Class Hons), MCD (Liv.).

Date and Place of Birth

Peshawar, NWFP, Pakistan, 1944 (Nationality—British).

EDUCATION

University of Liverpool, 1967, BArch (Hons), MCD, University of Liverpool, 1968 (the degree covered town and regional planning); experience in architecture and planning in public and private offices in UK and Germany.

Awards:

1966 British Paints Prize (Architecture).

1967 British Paints Prize (Architecture).

PLANNING THESIS

1968

"A Study of the need for Planned
Obsolescence in Mass Housing".

Obsolescence as an economic factor in marketing techniques
and its use by manufacturing industry.

Nature of obsolescence in buildings and its relationship with
growth change and flexibility of the environment.

Physical obsolescence in housing: Relationship with maintenance
and repair operations. Maintenance and repair activity and total
new building activity and their association with total
housebuilding activity of given countries is interpreted in the
form of an Identity Model.

Notions of initial total and annual costs of dwellings and their
use for comparison of housing types, systems or policies.

Functional or Social obsolescence in housing.

Internal and external social pressure on the housing environment.

Family life cycle as a determinant of obsolescence.

Societal factors such as public standards, state of technology and
the state of the economy as determinants of obsolescence.

The state of the housebuilding industry.

Its size, place in the economy of the country structure, nature of
its product and market for this product and its
financial organisation.

Current ideas for rationalisation of the industry.

The effect of housing obsolescence on land, its use and value and
its relationship to planning techniques and policies.

Conclusions, recommendations and proposals.

PROFESSIONAL EXPERIENCE

1967

Centre Quadrant of Chester

A redevelopment scheme for Chester involving survey work,
analysis of surveys and detail proposals for city centre housing,
retail development, commercial and industrial developing and
recreation facilities, presented to Chester Civic Trust.

1968

Lower Mersey Valley

A study examining the administrative, economic and physical
planning problems of that part of the N.W. region that lies
astride the Mersey, between the conurbations of Manchester and
Liverpool; devising the best administrative structure for
physical planning in this area.

1968

Central Lancashire

A study in the light of current proposals for a Central Lancashire City
of 250,000 pop. (Robert Matthew, Percy Johnson-Marshall,
consultants) and a review of the situation that led to the
decision to authorise this new city.

1968

Freudenberg—town in W. Germany

A group of planning graduates from Liverpool, together with
Prof Tom Seiferts from the THBK (West Berlin School of

Architecture and Planning), were consulted by the Amt Freudenberg in preparing a strategic plan for a town in W. Germany, analysing the effects of the proposed Frankfurt/Cologne Autobahn; study of the expansion of the tourist industry and manufacturing industries in the area and the solution of particular traffic problems both existing and in the future.

1967-1968

Skelmersdale New Town

Layouts and final design for large housing areas in Skelmersdale New Town with the Christopher Riley Partnership, Liverpool.

1964/65/66

Mass Produced Housing

Research with Christopher Riley Partnership, English Electric Plastics Division, Liverpool Corporation, MOHLG and Ministry of Technology, re-development of mass produced housing systems and their effect on national housing policies.

1968

Neighbourhood Shopping Centres

The development of briefs in and around Liverpool and their detailed design (Gerald Beech and Associates, Liverpool).

1969

Joined McConnel, Smith & Johnson.

Commonwealth-State Law Courts

Initial studies, sketch plans and presentation.

Wynyard Square

Initial studies, sketch plans and presentation.

W. D. Scott & Company

Key Personnel

W. D. Scott & Company's Professional Resources

Professional Personnel available to serve Council

W. D. Scott & Company's participation in this project would be carried out under the direction of Dr Brian W. Scott DBA (Harvard), MBA (Stanford), BEc (Sydney).

It is anticipated that the operating team would be drawn from the following list of consultants. These consultants would be supported, where appropriate, by specialists equipped to carry out specific studies.

Brian W. Scott

DATE OF BIRTH: April 23, 1935.

Qualifications

Bachelor of Economics, University of Sydney, 1955. Master of Business Administration, Stanford University, USA, 1959. Doctor of Business Administration, Harvard University, USA, 1963.

Experience

1964-1969: W. D. Scott & Company, Director, Planning and Development.
1963-1964: Assistant Professor of Management, University of Southern California.

Publications

Text Book—"Long Range Planning in American Industry," American Management Association, New York, 1965.

Lectures

1967, 1968, 1969: Top management seminars on Long-Range Planning, conducted in Sydney and Melbourne (each year), and once in Adelaide, Perth and Wellington (New Zealand).
1969: "Long Range Marketing Forecasting," given to the Australian Institute of Management, Adelaide Division.
1969: "Management Information Planning," given to the Australian Gas Association.
1968: "Trends in Marketing," given to the sixth national convention of Agricultural and Veterinary Chemicals Association of Australia.
1967: "Long-Range Regional Planning," presented to the International Union of Local Authorities, XVIII Congress, Bangkok, Thailand.
1966: "Government Allocation of Resources to Roads," given to the New South Wales Regional meeting of the Australian Roads Federation.

Dr Scott also lectures regularly on long-range planning and marketing strategy for Australian Universities (particularly the University of New South Wales and Macquarie University, Sydney) and the Australian Institute of Management, Sydney Division.

Relevant Assignments

Date	Organisation	Type of Assignment
1969	Australian Gas Light Company	Organisation study.
1969	Department of Decentralisation and Development (NSW)	Economic research.
1969	Farley & Lewers Ltd	Long-Range Planning.
1968	Manukau City Council, Auckland, New Zealand	Urban development planning and Long-Range Forecasting.
1968	Department of Immigration	Sociological research study (carried out mainly in Britain).
1968	Industrial Development Branch, Premier's Department, South Australia	Industrial Development Strategy.
1966	Department of Defence	Sociological research into* community attitudes to the armed services.
1964-65	St Regis-ACI Pty Ltd	Long-Range Planning.

Roger Edward Fortescue

DATE OF BIRTH: December 19, 1938.

Qualifications

Bachelor of Science, University of Sydney, 1959.
Bachelor of Engineering, University of Sydney, 1961.
Master of Engineering Science, University of NSW, 1969.

Relevant Assignments

Date	Organisation	Nature of Assignment
1969	The Australian Gas Light Company Ltd	Organisation Studies of the Research and Development Group.
1969	Australian National Travel Association	Long-Range Planning of the activities of ANTA after the formation of the Australian Tourist Commission
1968-69	Major Perth Commercial Group	Project Leader for: (1) Site Re-development Feasibility Study (2) Diversification opportunities.
1967-69	The Coca-Cola Export Corporation	Project Leader for Distribution Analysis: resulting in site selection for plants and warehouses.
1967	Leading Sydney Manufacturer	Site Layout and Utilisation—Production and Inventory Control aspects.
1967-68	Sydney textile group	Site selection and warehouse layout.
1967-69	Commonwealth Bureau of Roads	Assistance to the Bureau in its submission to the Commonwealth Government on a revised Commonwealth Aid to Roads grant. Study covered the Cost/Benefit Analysis of 50,000 separate rural road improvement projects nominated by the State Highway Authorities.
1966-67	Department of Local Government and Department of Agriculture	Project Leader for City Markets Feasibility Study. Responsible for co-ordination of all studies covering forecasting, layouts, traffic and parking; cost/benefit analysis, capital and operating budgets.

1965-66	Public Works Department of NSW, BC & M Branch	(1) Stock Control (2) Warehouse Layouts (3) Transport facilities.
1965-66	Maritime Services Board	Project Leader for development of Management Information System. Port Statistical System designed for Computer Operation.
1964-65	Australian National University	Management Information System for IBM 360/50; Stores; Accounts Payable; Staff Records; General Ledgers.

Peter James Knox

DATE OF BIRTH: October 22, 1931.

Qualifications Memberships

Professional Experience

Journalist A1.
Australian Journalists' Association.
Junior Chamber of Commerce (life member).
1966-1970: Public Relations Manager, W. D. Scott & Company,
Sydney.
1964-1966: Public Relations Manager, Decimal Currency Board,
Sydney.
1963-1964: Liaison Officer, Overseas Investment in Australia
for Commonwealth Government's News and Information Bureau,
Melbourne.
1960-1963: Programme Director for International Junior
Chambers of Commerce, Miami Beach, Florida, USA.

Relevant Assignments

Mr Knox has carried out a number of major public education
campaigns. The majority of these have been with Government or
public bodies.

For example, he was mainly responsible for planning and
supervising the public education drive which accompanied the
1966 introduction of decimal currency to this country. The
campaign, possibly the most intensive of its kind in Australia,
called for close identification of Government and news media
interests, backed by careful promotion, advertising, publications,
displays and capital-city information centres.

On the international front, he was responsible for planning
important Commonwealth Government publications to attract
North American investment to Australia. He was also
responsible, in association with public bodies and voluntary
organisations in the USA, Canada, Japan and Israel for devising
public education and publicity programmes (1960-63) to
promote the employment of handicapped workers and to promote
the growth of the international Junior Chambers of Commerce
movement.

Further public education projects have embraced publicising the
1956 Olympic Games in Melbourne (there he had particular
responsibility for press information services), and the 1954
Royal Tour of Australia by Queen Elizabeth and the Duke of
Edinburgh. On that tour, Mr Knox was liaison officer to the
overseas Press party.

Additional Commonwealth Government bodies for whom he has
worked include the Commonwealth Department of Civil Aviation
(press relations) the Commonwealth Department of Works
(special publications) and the Commonwealth Department of
Social Services (for overall public relations throughout
Australia).

Within W. D. Scott & Company, Mr Knox is responsible for the
Company's public relations, publications and internal editorial
services.

John B. Donovan

DATE OF BIRTH: July 6, 1929.

Qualifications Membership

Bachelor of Economics (Honours) , University of Sydney, 1950.
Economic Society of Australia and New Zealand, New South
Wales Branch. Market Research Society of Australia.
International Society for Development.

Experience

1957-1969: W. D. Scott & Co Pty Ltd, Consultant, Supervising
Consultant, Managing Consultant, Service Manager, Associate
Director. Engaged on assignments principally in economic
research, marketing research and marketing. Areas of work have
included New South Wales, Victoria, South Australia,
Queensland, New Zealand, United States, Canada, South Africa,
Rhodesia, Zambia, Israel, Thailand, and the Philippines.

Relevant Assignments

Date	Organisation	Business	Type of Assignment
1969	Asian Development Bank	Lending Authority	Regional transportation study of Thailand, Malaysia, Singapore, Indonesia, Brunei, Philippines, Republic of Vietnam and Laos under sub-contract to Arthur D. Little, Inc.
1969	Commonwealth Dept. of Shipping and Transport and the Government of Tasmania	Government	Study of transport needs and transportation facilities for King Island. Included study of livestock production and marketing.
1969	Commonwealth Office of Aboriginal Affairs	Government	Regional economic development study (South Coast of New South Wales) in the interests of Aboriginal advancement.
1968	Commonwealth Dept. of National Development	Government	Forecast of throughput of the port of Darwin 1970-1990; included study of buffalo meat and sorghum production.
1967	South Australia Dept. of Local Govt. and Highways	Government	Cost/benefit study of upgrading the Birdsville Track.
1967	Commonwealth Bureau of Roads	Government	Study of rural road requirements.

Michael Anthony Gardiner-Hill

DATE OF BIRTH: June 11, 1928.

Qualifications Professional Experience

MA Oxford University in Politics, Philosophy and Economics.
1967-69: Consultant; Economic, Marketing and Research Services, W. D. Scott & Company.
1964-67: Manager, Group Marketing Research Department, Laporte Industries Ltd in the UK.

Relevant Assignments

Date	Organisation	Type of Assignment
1969	David Jones Ltd	Organisation audit and organisation development planning.
1969	Tooheys Ltd	Market research and planning marketing strategies.
1968-69	Bradmill Industries Ltd	Developing marketing plans, strategies, product plans, product planning procedures, marketing organisation, preparing "Guide to the development of marketing plans".
1968	Jardine Waugh Ltd (Singapore)	Marketing aspects of product planning assignment.
1968	Onkaparinga Woollen Mills	Marketing research and market forecasting.

Keith Frederick Higgins

DATE OF BIRTH: June 20, 1929.

Membership

Fellow—Australian Society of Accountants.

Associate—Chartered Institute of Secretaries.

Professional Experience

1969-70: Manager, NSW—Economic, Marketing and Research Services, W. D. Scott & Company.

1966-69: Senior Consultant—W. D. Scott & Company.

1965-66: Group Accountant—Marrickville Holdings Ltd with responsibility for financial planning.

1963-65: Senior Accountant—Dairy Farm Ice & Cold Storage Co Ltd, Hong Kong.

1961-63: Secretary & Financial Controller of various subsidiaries of the Lend Lease Group of Companies—specifically:

Richardson & Wrench Ltd—Real Estate.

J. Connolly Pty Ltd—Window Mfrs.

Lend Lease Investment Pty Ltd—Property and Motel Investors.

1956-61: Supervising Consultant—W. D. Scott & Company.

Relevant Assignments

Date	Organisation	Type of Assignment
1969	L. J. Hooker Corp	Office Procedures.
	Presbyterian Church of Australia	Forward Planning.
	State Govt of Selangor (Malaysia)	Organisation. Financial Planning. Rating. Accounting Procedures. Management Controls.

1968	Evans Deakin Co Pty Ltd	Management Controls Organisation.
	Burdekin Sugar Mfrs Assoc	Transportation Analysis.
1966-68	Penang Port Commission (Malaysia)	Organisation. Financial Planning. Office Clerical Procedures. Management Controls. Computer Installations.

John Alexander Ross

DATE OF BIRTH: June 26, 1938.

Qualifications Professional Experience

Bachelor of Economics, University of Sydney.
1968-70: Consultant; Economic, Marketing and Research Services, W. D. Scott & Company.
1965-67: Economist; Acres Research and Planning Ltd, Niagara Falls, Ontario, Canada. Specialised in regional economic development, industrial location and development, industrial feasibility studies.

Relevant Assignments

Date	Organisation	Type of Assignment
1969	Fairfield Council	Socio-economic analysis and population projections of municipality.
1968	Presbyterian Church of Australia	Building development feasibility study.
1968	Hospitals Contribution Fund of Australia	Building development feasibility study.
1968	Leading Perth commercial group	Site development study.
1968	South African industrial company	Industrial feasibility and location study.

Additional Specialist Experts

**Schedule of Professional Personnel
Available to serve Council**

School of Traffic Engineering University of New South Wales

Professor W. R. Blunden, Head, BSc, BE

Sometime Visiting Professor of Transportation Engineering, University of California, and SEATO Graduate School, Bangkok, and Department of Transportation and Environmental Planning, University of Birmingham, UK.

Professor Blunden has wide experience in teaching, research and consultative work in the fields of transportation system planning and traffic engineering. At present, for example, he is Chief Transportation Consultant to the Singapore Urban Research and Development Project, which is being carried out under the auspices of the World Development Bank and the United Nations Organisation.

Professor Blunden is most conscious of the interaction between land use and transportation systems: in fact, he has devoted considerable energy towards the development of an understanding of this philosophy in a wide circle of planners, architects, engineers and administrators.

His conceptualisation of the need for a balance between proposed and planned land uses and transportation system capability, has led him to study in great depth the effects of land use changes on the utilisation of the transport system, and the complementary effects of transport system changes on land use. To these ends he has directed the energy of his School towards studies of the City of Sydney and changes that have occurred in it over the past ten years.

He has carried out systems analysis of the one-way street system of the central business district of Sydney, and has studied pedestrian movements through the business district in some depth.

R. D. Munro, BSc, BA, FSS, Senior Lecturer

Mr Munro is a specialist in transportation economics and the techniques of statistical research as applied to transportation survey and analysis. He has considerable consulting experience in these fields and has worked for various public authorities, such as the Commonwealth Bureau of Roads, and consulting engineers.

Mr Munro has undertaken extensive research into the traffic generating potential of various types of urban land use. He has published papers on the traffic generation of Sydney AMP building and the Sydney Garden Island Dockyard. This work continues the theme established by Professor Blunden as it is a documentation of a particular set of land use—transportation system interactions. As such, it is a valuable contribution to our knowledge of the dynamics of central business district land usage, and is directly applicable to the development of a plan for the City of Sydney.

Mr Munro's statistical ability, coupled with his economic expertise, make him a valuable addition to the planning group.

**Dr D. J. Buckley, BE, MEngSc, PhD, AMIE Aust, MSS, MRSA,
Senior Lecturer**

Dr Buckley has had very considerable experience in practical applications of the theory of traffic behaviour and operations research to engineering problems. He has undertaken applied research work into the timing and coordination of traffic signal systems to maximise the utilisation of available time for both pedestrian and vehicle flows.

Dr Buckley has also contributed to the development of principles of road safety engineering, particularly as they relate to urban road conditions.

J. I. Tindall, BE, ME, AMIE Aust, Lecturer

Mr Tindall is a specialist in field survey techniques for traffic and transportation studies.

He has also investigated the costs of urban road accidents and the applications of physical and other forms of traffic control technology to urban road systems.

Mr Tindall has specialised in the design and location of parking stations in the central business district. He has had considerable consulting experience in this field.

**P. Fitzwarryne, MSc (Economics) (Hons)
(London School of Economics), Doctoral Candidate**

Mr Fitzwarryne has had fifteen years' experience in the commercial transportation industry. He is acutely aware of the problems and difficulties of the various modes of transportation adopted commercially for person, goods and materials transfer.

Mr Fitzwarryne has recently completed a United Nations assignment during which he was involved in the planning of Taiwan as an economic analyst. His function was to analyse the economic feasibility of investment in a new public transport system.

At present, Mr Fitzwarryne is studying the costs and benefits derived from and attributable to urban transportation investment, with a view to applying the results of his study to the development of an optimum process of transport planning.

School of Sociology, University of New South Wales

Professor Sol Encel, MA, PhD, Head

Professor Encel's academic career began in the field of Political Science and this field has held his interest. His first book, *Cabinet Government in Australia* (Melbourne University Press, 1962), deals extensively with decision-making at cabinet level and the interaction of cabinet and high levels of the administrative bureaucracy.

Professor Encel has devoted a considerable portion of his professional activity to the study of administrative decision-making and is uniquely aware of the intricacies and complexities of government and intergovernmental administration.

One of his decision-making studies, in *Decisions* (F. W. Cheshire, Melbourne, 1965) is a detailed case study of the decisions leading up to, and decisions made during, the extensions of the Sydney General Post Office in 1939, and is one of the most complete documentations and commentaries on government decision-making yet published in Australia.

Professor Encel has, during the period he has headed the School of Sociology, developed it as the major centre of urban sociological research in Australia.

The school pays particular attention to the contemporary Australian social structure and to community interaction processes. His own work and that of his staff and students, is particularly relevant to the problems of urban redevelopment. The School of Sociology has worked with the Town Planning Departments of the Schools of Architecture of the University of New South Wales and the University of Sydney on studies of Paddington, Kings Cross, Darlinghurst and Surry Hills.

Associate Professor A. A. Congalton, MA, DipEd

Professor Congalton has done a considerable amount of work in the field of urban sociology. One of his most significant works was a social survey to the new community of Hawera, in New Zealand, in 1954.

His recent book, *Status and Prestige in Australia* (F. W. Cheshire, Melbourne, 1969), has been widely referred to in popular magazines and newspapers.

S. O. D'Alton, MEd, Lecturer

Mr D'Alton, before joining the University, was the Market Research Manager for Colgate-Palmolive and he is an expert in the field of statistical sampling and interpretation.

A. Kondos, BA, Lecturer

Mr Kondos is principally responsible for the teaching of urban sociology in the School. In this capacity, he has supervised a number of investigations, including some carried out through the Schools of Architecture of the University of New South Wales and the University of Sydney.

Currently, Mr Kondos is engaged on a large scale survey of home unit dwellers throughout Australia for the Commonwealth Department of Housing. His doctoral thesis, which is nearly complete, deals with the reactions of people to the styles of life imposed on them by different forms of housing and urban planning.

Mrs Zula Nittim, BArch (Melb), Dip Civic Design (NSW)

Mrs Nittim is a qualified architect and town planner who has undertaken considerable research into the problems of urban change.

Recently, her interests have been focused on the Kings Cross/ Potts Point area and her work deals with the development of patterns of community life in these areas. Her doctoral thesis is entitled Urban and Architectural Development of Kings Cross 1831-1969.

The impact of changes caused by urban development on community life are an important part of this work and give it particular relevance to the preparation of a Strategic Plan for the City of Sydney.

Mr A. Jakubowicz, Mrs Eva Isaacs, and Mrs Dorothy Buckland, Doctoral Candidates

The School of Sociology's Doctoral Candidates are currently engaged on research into social change in Darlinghurst and Surry Hills, whose future will be affected by replanning. The School is investigating the problems of migrant communities in these areas, the occupational structure, and patterns of community activity in these areas.

Mr A. Jakubowicz is working on social change and urban redevelopment in Surry Hills. Mrs Eva Isaacs and Mrs Dorothy Buckland are studying community interaction processes in the Greek community of East Sydney.

GORDON STEPHENSON

Professional Education

School of Architecture, University of Liverpool, (Elmes Scholar); Institut d'Urbanisme, University of Paris (Chadwick Fellow); Department of City and Regional Planning, Massachusetts Institute of Technology (Commonwealth Fellow and MIT medallist). Degrees: BArch (1st Class Hons. Liverpool) 1930; MCP (MIT) 1938.

Institute Memberships

FRIBA, FRAIA, FAPI, MTPI, Hon. MTPIC (Canada), FILA.

Professional Work

Architectural assistant with Wallace K. Harrison, New York City, 1929; Le Corbusier and Pierre Jeanneret, Paris, 1930-32; in private practice, Liverpool, 1932-36 (winning competitions for housing and a factory), London, 1938-40 (militia and school camp); Divisional Architect with Sir Alexander Gibb and Partners (responsible for the High Explosives group of an Ordnance Factory), and under William (now Lord) Holford, chief designer and site planner of accommodation for 24,000 war workers, 1940-42; Senior Research Officer, with Lord Reith's 'Reconstruction Group', and later Chief Planning Officer, Ministry of Town and Country Planning, London, 1942-47 (seconded to help Sir Patrick Abercrombie prepare Greater London Plan 1943-44 and, in Ministry, chief professional adviser on reconstruction of bombed cities and the design of the Greater London New Towns); senior partner, Stephenson, Young and Partners, Liverpool, 1948-53 (university buildings, industrial and office buildings, several large housing schemes); chairman of planning group for new National University campus, Dublin, 1952-53; consultant to the Government of Western Australia, preparing a plan for the Metropolitan Region of Perth and Fremantle, and also prepared plans for the University of Western Australia and the City of Perth, 1953-55; planning consultant in Canada to the cities of Toronto, Ont., Halifax, N.S., Kingston Ont., London, Ont., Sudbury, Ont., and Ottawa, and planning consultant to the universities of Toronto and British Columbia, 1955-60; Consultant Architect, University of Western Australia, responsible for campus planning and, as architect in association for several major buildings, 1960-69; planning consultant to the National Capital Development Commission, 1960-66; consultant site planner, Flinders University, South Australia, 1963-64; for short periods planning consultant to the cities of Christchurch and Wellington, NZ, member of design committee, new Commonwealth Reserve Bank, Perth, and consultant architect for the St. George's Cathedral Square project, Perth, 1960-69; member National Capital Planning Committee, 1967-; currently working with Cameron, Chisholm and Nicol on an 'experimental' residential neighbourhood in Canberra, and as consultant to the Commonwealth/State Joint Planning Committee (for the new \$18,000,000 law courts building in Sydney).

Academic Appointments

Lecturer, School of Architecture, University of Liverpool, 1932-36; Studio Master, Architectural Association School of Architecture, London, 1939-40; Lever Professor of Civic Design, University of Liverpool, 1948-53; Professor of Town and Regional Planning, University of Toronto, 1955-60; Professor of

Architecture, University of Western Australia, 1960- ; visiting Mellon Professor, College of Environmental Design, University of California, and visiting Professor of Architecture, University of Pennsylvania, 1967; member of President's Committee, University of Pennsylvania Survey, 1957; member, President's advisory committee, Faculty of Fine Arts, Yale, 1958-60; member President's advisory committee, Faculty of Architecture and City Planning, MIT, 1959-60.

Publications

(with Flora C. Stephenson) Community Centres, 1941; (with F. R. S. Yorke) Planning for Reconstruction, 1944; Editor, Town Planning Review, 1948-53; (with J. A. Hepburn) Plan for the Metropolitan Region of Perth and Fremantle, 1955; A Redevelopment Study of Halifax, Nova Scotia, 1957; (with G. G. Muirhead) A Planning Study of Kingston, Ontario, 1959; (with G. J. Harrison) Site Planning Report, the University of Adelaide at Bedford Park, 1964; papers and articles in professional and technical journals in Great Britain, Sweden, Denmark, France, Netherlands, USA, Canada and Australia.

Carr and Wilkinson, Environmental Acoustic Engineers

Personnel

Sydney

Roger C. Wilkinson — Partner, aged 34 years.
BMechE, BEE, MIE Aust. Member, National Council of Acoustic Consultants (USA), Member, Acoustical Society of America, Member, Australian Institute of Refrigeration, Airconditioning and Heating, member various Standards Association Committees on Acoustics and Noise.

Consulting Experience: 10 years.

Peter J. Martin — Acoustician with wide experience in architectural and electronic acoustical problems and designs.

Caleb Smith — Acoustician with wide experience in industrial, commercial and residential noise problems.

Melbourne

Ronald J. Carr — Partner, aged 36 years.

Member, National Council of Acoustic Consultants (USA), Member, Acoustical Society of America, Member, Australian Institute of Refrigeration, Airconditioning and Heating.

Lecturer in Environmental Physics, University of Melbourne.

Studied Structural Engineering at Royal Melbourne Institute of Technology. Wide and consolidated experience in Acoustics, Noise and Vibration Control.

Consulting experience: 11 years.

James H. Watson

BE (Mech) AMIE Aust. Member, Australian Institute of Refrigeration, Airconditioning and Heating.

Widely experienced in Airconditioning System design and applications before joining this Partnership as Senior Engineer, Melbourne.

John A. Moffatt

BE (Electronics), Grad IE Aust.

General experience with this partnership as a Design Engineer.

Graeme F. Moss

BSc 20 years' experience with CSIRO Building Research Division, currently heads our Research and Development Section.

John Dunne

Sound Reinforcement Specialist with this Partnership, having prior experience in PA Systems sales, design and installation.

Richard Sherman

Electronics technician, having experience in Acoustics, Noise and Vibration Control.

David Tuck

Laboratory technician, having experience in Acoustical and Air Diffusion measurement.

H Schedule of Comparable or Relevant Work

Urban Systems Corporation
Schedule of Comparable or Relevant Work

Gold Coast Urban Region Strategic and Action Master Plans

Client	Gold Coast City Council.
Description	<p>Long-term planning for tourist resort and urban development planning to accommodate population of 200,000 people. The Gold Coast has the second-fastest rate of growth of any urban area in Australia (after Canberra), and the problems of pre-planning and controlling urban development could only be adequately dealt with by a crash programme of strategic and action planning to identify critical difficulties and produce realistic operational solutions to the region's problems. These problems are aggravated by the fact that the urban region spreads through two States and three local government areas.</p> <p>The study carried out involved a practical assessment of the existing population structure and physical character of the region, a review of important current proposals, such as the Gold Coast Freeway, a demographic and geographical analysis of future needs, and the preparation of a physical land use plan to illustrate the strategic principles of development and the action planning programme which would be necessary to implement them.</p>
Services Provided	<p>Detailed investigations of existing and potential land use; assessment of future workforce potential; evaluations of alternative highway and freeway locations and designs; identification of the needs for community facilities and services; Strategic Master Plan proposals for regional development, 1970-1990, subject to regular reviews; detailed project studies for Civic Centre, regional hospital, business district parking, road requirements and construction programming; preparation of Action Plans based on these studies; statutory planning controls; advice on development applications; assistance with development appeals.</p>
Status	<p>Gold Coast Urban Region Strategic Master Plan adopted by Council on 14th March, 1969, and now being implemented; detailed action plans for 50 square miles of Gold Coast now completed or in course of preparation; Paradise Point Action Plan adopted by Council in June, 1969; Southport Action Plan and Southport City Centre Action Plans adopted by Council in December, 1969; Benowa Action Plan completed and adoption awaiting decisions by State authorities; Broadbeach, Surfers Paradise, Surfers Paradise City Centre, Miami-Burleigh, Burleigh Central Area, Palm Beach, Palm Beach Commercial Centre and Currumbin-Coolangatta Action Plans completed and adoption by Council pending; Coolangatta Central Area Action Plan in course of preparation; Gold Coast Traffic and Transportation Plan and Gold Coast Draft Statutory Planning Scheme to be completed by March, 1970; Civic Centre Comparative Site Evaluation Report completed; Civic Centre Land Acquisition Economic Feasibility Report completed; Miami Regional Hospital Demographic and Siting Data completed; Codes for Multi-unit Residential Development adopted by Council in February, 1970; Codes for Industrial Development submitted to Council and adoption pending.</p>

Client Description	<p>Victorian State Planning Organisation</p> <p>Town and Country Planning Board of Victoria.</p> <p>An analysis of metropolitan growth in Victoria and recommendations on methods of Organisation for Strategic Planning.</p> <p>The study involved the preparation of a Strategic Plan for the Melbourne Metropolitan Region and an assessment of the administrative problems involved in controlling and guiding the growth of Melbourne and of other urban centres within the State. The final report set out proposals for a planning structure which would allow strategic action and detailed planning to be carried out at the appropriate level in the community and to provide for the vertical integration of various planning processes.</p>
Services Provided	<p>Comparative studies of alternative proposals; conferences with relevant authorities; recommendations on legislative and administrative reorganisation.</p>
Status	<p>The recommendations were adopted by the Town and Country Planning Board and published as the report, Organisation for Strategic Planning, which was submitted to the Minister for Local Government in 1967; all of the recommendations were incorporated in the Town and Country Planning (Amendment) Act 1968; all administrative arrangements have now been made, and several of the recommended regional authorities have been set up. The Victorian State Cabinet also adopted the strategic physical planning principles to guide the shape and character of Melbourne's regional growth to 5 million.</p>
Client Description	<p>Melbourne Satellite Cities Strategic Plan</p> <p>Melbourne and Metropolitan Board of Works.</p> <p>A study to evaluate the potential of satellite cities on the edge of the Metropolitan Urban Region.</p> <p>As a result of the administrative changes provided for in the Town and Country Planning (Amendment) Act, 1968, the Melbourne and Metropolitan Board of Works was given control over an enlarged Melbourne Region. One of the Board's proposals was to provide for population overspill in new satellite cities, and the study was intended to set down procedures for testing the feasibility of such cities, as part of the strategic planning process.</p> <p>The evaluation work was intended to include general planning, transport and services planning, real estate and market analysis, and inducement cost studies.</p>
Services Provided	<p>Recommendations on the suitability of available techniques for application to the problem; discussion of the principles of threshold analysis and optimisation techniques; investigation of computer systems applications; study of administrative and financial implications.</p>
Status	<p>Report is being considered by Melbourne and Metropolitan Board of Works for inclusion in strategic planning programme for metropolitan region.</p>

Client Description	<p>Royal Prince Alfred Hospital</p> <p>Board of Directors, Royal Prince Alfred Hospital.</p> <p>Redevelopment of the largest hospital complex in Australia, on a 45 acre site near Sydney's central business district. Royal Prince Alfred Hospital has developed over the years into Sydney's largest and most important teaching hospital. However, the haphazard processes of construction and the inadequacies of the site have brought about a situation where the hospital is facing serious limitations on operational efficiency. Many of the buildings are at the end of their useful life, but before any rebuilding was carried out it was felt necessary to have a long-term strategic redevelopment plan, to guide budgeting and work programming activities, and a short-term action plan, to provide an architectural design framework for immediately needed buildings.</p> <p>The first phase of the study has now been completed, and work is proceeding concurrently on the building programme and on a more detailed study of the long-term strategic plan.</p> <p>\$40 million.</p>
Cost Expected Completion Date Services Provided	<p>1985.</p> <p>Surveys and analyses of traffic and patient movements; advice on statutory planning provisions; outline conceptual designs; strategic planning to guide long-term redevelopment; short-term action planning; computer analysis to develop an optimal three-dimensional development plan; first stage architectural design, costing and construction programme.</p>
Status	<p>Plan and programme adopted in principle by hospital board; budget and study proposal submitted to Hospitals Commission with request for funds.</p>
Client Description	<p>Martin Place Pedestrian Plaza</p> <p>Council of the City of Sydney.</p> <p>Conversion of western end of Martin Place to pedestrian traffic. This important project is one of the first steps by the City Council to improve downtown amenity for workers and visitors in the central business district. Creation of the proposed pedestrian plaza will enhance the significance of the Cenotaph and will allow the façade of the General Post Office to be fully appreciated for the first time in many years, as well as providing a useful civic space unique in Sydney.</p> <p>Conversion of the space will involve complete repaving of the area and the replacement of existing street furniture with new and appropriate designs.</p> <p>\$250,000.</p>
Cost Expected Completion Date Services Provided	<p>1970.</p> <p>Preliminary design evaluation; negotiations with authorities and interested parties; architectural documentation and costing; job organisation and site supervision.</p>
Status	<p>Architectural documentation has been authorised by Council and is proceeding; it is anticipated that tenders will be called in the near future; procedures for opening of Martin Place for pedestrians are in hand.</p>

Edgecliff Redevelopment Project

Client Description

Glebe Administration Board of the Church of England in Australia. A large-scale redevelopment project at Edgecliff, near the fringe of Sydney's central business district.

This project represents what is, in effect, the first large-scale urban renewal proposal in Sydney to be actually implemented (other than Housing Commission projects). It covers an area of 29 acres, at present built-up with small-scale obsolete housing served by an inadequate and unsuitable road pattern. It is intended to redevelop the entire area with mixed high-density residential and commercial uses, integrated with automobile parking, a bus interchange and an underground railway station. The intention of the project is to provide high-quality inner-suburban residential accommodation, with a full range of services and observing the highest environmental standards. In addition, the location of the project on top of the Edgecliff Station of the Eastern Suburbs Railway will be exploited to create a retailing/office employment node as a commercial sub-centre. The project is seen, in civic design terms, as providing a link between the small-scale, historically important residential area of Paddington and the rapidly redeveloping high-density residential area of Darling Point.

Cost \$45 million.

Expected Completion Date Services Provided

1980.

Market research; action planning and outline design; pre-investment feasibility studies; negotiations with authorities and developers; detailed development planning; architectural documentation and site supervision of buildings.

Status

Planning and marketing proposals adopted by client and now being implemented; project controls adopted by Minister for Local Government and incorporated in determinations of City of Sydney Statutory Planning Scheme; agreement on planning proposals have been reached with Department of Main Roads, Department of Railways and Department of Government Transport; first two buildings have been completed and third is under construction, to be opened in April by Her Majesty The Queen; feasibility studies and negotiations with authorities and developers are proceeding on the next buildings to be erected.

Client Description	<p>Rockingham Park New Town</p> <p>Rockingham Park Pty Ltd, Western Australia.</p> <p>A satellite city about 35 miles south of Perth which is being developed by a private company in conjunction with the 7,000 acre Kwinana Industrial Area.</p> <p>Rockingham Park covers 4,000 acres of land near the coastal resort area of Rockingham and is intended to be developed on a staged basis to provide a full range of residential accommodation for 50,000-60,000 people and all community facilities. The city centre will serve a regional population of about 100,000 people and will include the local government offices, regional offices of State governmental departments and a sub-metropolitan shopping and office complex.</p>
Cost Expected Completion Date Services Provided	<p>\$400 million.</p> <p>1980.</p> <p>Market research and initial negotiations with local and State authorities; strategic master planning and pre-investment feasibility studies; detailed town design and precinct action planning; landscaping, house and site designs; detailed planning and design of the city centre; general advice on staging and marketing of the project.</p>
Status	<p>Strategic master planning proposals have been adopted by client and authorities and incorporated in Shire of Rockingham Statutory Planning Scheme; Precinct One has been constructed in accordance with Action Plan; Action Plan for Precinct Two has been adopted, engineering and landscaping works have been carried out, and housing is under construction; Action Plans for next two Precincts now in course of preparation; Action Plan for regional centre adopted and now being implemented; development applications for first regional centre buildings now being prepared, contract documents are under way.</p>
Client Description	<p>Capital Cities Shopping Centres Survey</p> <p>Myer Shopping Centres Pty Ltd, Melbourne.</p> <p>Research and planning for the development and expansion of a chain of department stores in Sydney, Perth, Adelaide and Brisbane for one of Australia's largest retailing organisations. During the late 1950's and the early 1960's, Australian retailers first established suburban shopping centres. The first generation centres were, generally, rather tentative steps towards providing convenient facilities for shopping outside the Central Business Districts. These centres, however, did effect a discernible change in the proportions of retail trading carried out in the Central Business District and the suburbs. Recently, a further change in merchandising methods has occurred with the introduction of discount-type stores.</p> <p>Myer Shopping Centres Pty Ltd are already well represented in central area and suburban area shopping centres but have no discount store organisation to give full retailing coverage of the potential market. As a result of a policy decision to enter this field, it was decided to undertake a full evaluation of the development potential of Sydney, Perth, Adelaide and Brisbane for this type of outlet and to prepare a seven-year development programme for the establishment of a chain of discount stores. This survey covered all of the basic research, market evaluation and development strategy recommendations associated with such a programme.</p>

Status	<p>Shortly after the completion of the study, Myer Shopping Centres Pty Ltd announced plans for a \$100 million expansion programme, involving 25 new stores spread through the major metropolitan cities of Australia; in Western Australia, the Myer Emporium Pty Ltd made a successful takeover offer for Bairds, the second-largest Western Australian retail firm; currently, the development programme for a new national chain of discount stores is being implemented.</p>
Client Description	<p>Kawerong and Arawa New Towns</p> <p>Conzinc Riotinto of Australia Bougainville Copper Project. New urban settlements being developed on Bougainville Island in association with the CRA copper-mining project. Kawerong will be located in high mountainous terrain and will accommodate 2,500 people. Arawa will be on the coast and will accommodate 12,000 people. Because of the area's isolation and because of the shortage of administration funds, CRA will provide all community facilities and services for its towns and will make provision for the administration to establish in Arawa township.</p> <p>One of the most difficult design problems associated with these developments was to produce a physical layout which could adapt to the gradual change of population from a largely expatriate character in the early years to a fully indigenous occupancy in the long term, while reinforcing a conscious CRA programme of integration at all stages of development. This has been done by the careful distribution of housing types and the studied arrangement of pedestrian and vehicular movement patterns.</p>
Cost	\$20 million.
Expected Completion Date	1975.
Services Provided	Outline planning and urban design; architectural design and documentation of all community buildings; design of housing and advice on construction techniques.
Status	All town development work is in hand and the building construction programme is well advanced; all first-stage architectural documentation will be completed in 1970.
Services Provided	Research into metropolitan growth and retailing trends; preparation of an inventory of existing shopping centres and potential sites; evaluation of development potential of these centres and sites; comprehensive investigations into housing trends, urban density, socio-economic changes and population changes in each of the metropolitan regions at the local government area and census collector's district levels; projection of retail sales trends in each metropolitan region for sites and centres where expansion and development was apparently feasible; recommendations as to centres and sites suitable for development; programme of development strategy, timing and investment staging for the seven-year period 1969 to 1975/76.

Western Australian Residential Development Regulations

Client Description

Metropolitan Region Planning Authority, Perth.
Integrated control codes for all forms of residential development, covering provisions for building bulk, car parking, recreation space and relationships between buildings.
The Western Australian Residential Codes represent the first attempt in Australia to produce a fully integrated set of development controls which relates all the physical characteristics of a building to one another. The controls provide for different ranges of densities in different zones and for a sliding scale of plot ratio related to site size. One of the objectives of the Codes was to foster amalgamation of sites, so that better environments could be produced through large-scale design. Another objective was to set down performance standards which would allow the compatible development of different residential accommodation types in association.
Because of the care taken in the preparation of the basic Codes and the full programme of participation to engage professional and political support, the regulations were gazetted in the shortest possible time and have gained almost universal acceptance.

Services Provided

Comprehensive research and investigation; public participation programme; negotiations with professional and business organisations and local authorities; feasibility testing of proposals.

Status

The Residential Codes were gazetted by the Governor in Council as part of the Western Australian Uniform Building Bylaws on 11th March, 1966; at the present time, the Australian Institute of Urban Studies has recently commissioned a comprehensive review and expansion of the Codes by the Clarke-Gazzard Organisation to incorporate improvements which might seem desirable after three years' operating experience.

Coleambally New Town

Client Description

Murrumbidgee Shire Council.
A new town in the Coleambally Irrigation Area in south-western New South Wales.
Coleambally is the first new town sponsored by the New South Wales State Government for many years and it was intended to provide service centre facilities for the rural population of the Coleambally Irrigation Area. The plan of the town adapts current urban planning practices to the scale and life-style of a small Australian country town and is closely integrated with the topography and landscaping of the site. Detailed investigations were made of tree coverage and ground slopes, and the design of road centre-lines was actually carried out on the site to ensure minimum interference with existing vegetation.
The town provides for a probable population of about 2,500 people and includes areas to be developed for all business and community purposes. Provision has also been made for industrial development which will probably be of a service or primary processing character.

Services Provided

Civic design aspects of the town plan have been commended by the Royal Australian Institute of Architects.

Economic base studies and population estimates; strategic and action planning; capital budgeting; detailed design and construction supervision of the first-stage works.

Status

Plan has been approved by Murrumbidgee Shire Council, the State Planning Authority and the Minister for Local Government; first-stage plan has been gazetted as interim development order; community buildings and shops are completed, and housing development is proceeding.

Oro Bay New Town

**Client
Description**

Department of Lands, Port Moresby.

A satellite town, associated with new port facilities, to be constructed on the northern coast of Papua, near Popondetta, for the Department of Lands.

As part of the administration's regional development programme, it is proposed to construct port facilities at Oro Bay and to encourage associated industrial and urban development.

Because of land ownership problems, only an extremely restricted site could be made available for the town area, and this site was further limited by difficult topography and problems of access.

As a result of preliminary investigations, it was concluded that the site was inadequate, and recommendations have been made for the acquisition of additional land. While purchase negotiations are being carried on, planning and engineering design work is proceeding on the residential, town centre and industrial areas.

The ultimate population of the new town is expected to be about 10,000 people.

Services Provided

Regional economic analysis; projections of population numbers and socio-economic characteristics; estimates of land use requirements; site evaluation studies; strategic and action master planning; engineering feasibility studies; detailed design work.

Status

Outline design work has been completed, and preliminary engineering studies are now being made; current phase of the work covers detailed land use and subdivision layout.

Iranian National Planning Organisation

Client

Government of Iran National Economic Plan Organisation, Teheran.

Description

A study of existing arrangements for strategic and action planning in Iran and a report on the Establishment of a Practical System for the Guidance of Urbanisation and the Control of Land Development throughout Iran.

The report was based on studies of the various alternative administrative and legal procedures used to control, guide and stimulate the urbanisation process and the redevelopment of moribund urban areas.

Iran is a country which has only recently entered a phase of rapid and extensive industrialisation. Accompanying this industrial change have been complementary changes in the distribution of population. The population shift to major centres has caused many social problems, and the recommendations of the report were designed to put land development control on a rational and efficient basis and to provide an effective means of integrating economic and physical planning.

Services Provided

Comparative studies of alternative proposals; meetings, discussions and educational briefings with Iranian authorities; recommendation of proposed administrative and legal structure for urban management.

Status

Recommendations have been adopted by the national Government, and administrative organisations have been set up; investigations are now being made into systems of recording cadastral information and dealing with the problems of property titles.

Yanchep Leisure Region Strategic and Action Master Plan

Client	Taylor Woodrow Bond Pty Ltd.
Description	<p>A new coastal urban centre to the north of Perth, to accommodate 200,000 to 250,000 people.</p> <p>Taylor Woodrow Bond Pty Ltd is the owner of 20,000 acres of land, including about 10 miles of coastline, located approximately 26 miles north of Perth. It is intended to develop the land with a wide range of residential accommodation and resort activities, providing for generous open space reservations and integrating the design with the adjoining Yanchep National Park.</p> <p>Detailed investigations are being made of geological, hydrographic and meteorological criteria to be observed in development of foreshore land, and all design work will be carried out with the preservation of existing landscape forms as a prime concern.</p>
Services Provided	Market research and feasibility studies; preliminary town designs, negotiations with local and State government authorities; project management.
Status	Preliminary plans have been completed, and negotiations with authorities are proceeding. This work began only in January, 1970.

Mauritius Economic Development and Investment Survey

Client	Anglo-Mauritius Insurance Company, Port Louis, Mauritius.
Description	<p>Evaluation of economic growth potential of Mauritius and recommendations on preferred investment fields.</p> <p>The Anglo-Mauritius Insurance Company is a fully owned subsidiary of the London-based Anglo-Ceylon Estates and operates in all fields of insurance in Mauritius. Until recently, it was the Company's policy to make its capital investments in the United Kingdom, but, due to new currency restrictions, it is now forced to look for avenues of investment in Mauritius itself. Before embarking on an investment programme, it was decided to carry out a comprehensive evaluation of the range of possibilities, with particular emphasis on urban development opportunities.</p> <p>The study involved background reviews of trends in the Mauritian economy and in socio-economic characteristics of the population, together with property surveys and ownership searches to assist in predicting likely directions of urban growth. Information was obtained on services, transportation and other factors affecting development policies, and discussions were held with developers and financial institutions to assist in making feasibility studies of potential projects. The results were presented in the form of a programme for land acquisition and development on a staged basis.</p>
Services Provided	Comprehensive social, economic and physical surveys and analysis; recommendations on investment procedures; identification of projects in housing, industry and commerce.
Status	Recommendations have been adopted by company, and first development site has been acquired.

Tullamarine Industrial Park

Client Description

Department of Civil Aviation.

An Airport Industrial Park to be developed in association with the Tullamarine international jetport.

The concept of an airport industrial park was developed to utilise land which was adjacent to the airport and basically unsuitable for residential usage. Furthermore, the close proximity to a major air terminal was expected to encourage specialised industries to take maximum advantage of the location. The industries recommended as being suitable were carefully reviewed and a marketing programme was drawn up, oriented to those operations which have an import-export function in capital intensive industries producing goods with high value per unit bulk weight. These potential users of air freight were felt to be prime prospects for location in the proposed park. While the ultimate development of the park will probably be integrated with the operation of the airport, the park will function separately in the early stages of development.

Services Provided

Comprehensive investigations of the industrial land market in the Melbourne Metropolitan Region; research into the transport requirements of high value per unit bulk or weight goods producers; estimates of growth of air freight demand; assessment of the competitive effects of nearby employers on the labour market at Tullamarine; research into industrialists' requirements for various categories and sizes of industrial lots; preparation of detailed subdivisional plans; staging programme and budget. Implementation of the plan is being further investigated by the Property Section of the Department of Civil Aviation, following consultant recommendation that project was still premature.

Status

Launceston Civic Centre

Client Description

Launceston City Council.

Development of a Civic Centre for Local, State, and Commonwealth Government offices and for cultural, entertainment and community facilities.

Launceston City Council owns or is acquiring a substantial area of land in the central business district of Launceston, with the intention of establishing a Civic Centre which will accommodate all the important public offices and community cultural and entertainment facilities needed to service the Launceston region. Before commissioning architectural designs, it was decided to carry out a market investigation and outline feasibility study to estimate the extent of demand and provide a strategic planning framework for the long-term development of the project.

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The conclusions of the first-stage report are now being refined in further studies.

Services Provided

Market surveys and feasibility studies for various alternative types of development; strategic planning proposals for the ultimate development; action planning for the first-stage construction; project management.

Status

First-stage report has been adopted by Council and accepted by Tasmanian State Government; second-stage investigations and negotiations are now proceeding to refine architectural brief for initial building programme and to obtain commitments from prospective occupants; third-stage work will cover architectural documentation and construction supervision.

Multi-unit Residential Development on the Inner North Shore

Client	A private development company.
Description	<p>A study of past and current building trends in the redeveloping areas of the Inner North Shore Suburbs of Sydney.</p> <p>The study involved a detailed evaluation of statistics published by the Commonwealth Bureau of Census and Statistics, and of the requirements of the various Local Government Multi-Unit Residential Codes. The results of this evaluation and analysis were then used, in conjunction with an analysis of recent land sales, to determine the likely movements of both the multi-unit housing market and the redevelopment land market.</p> <p>A detailed study was undertaken of the factors affecting the demand for unit residential dwellings in the municipalities on the Inner North Shore. Also, land sales trends were analysed and the potential value of redevelopable land assessed.</p> <p>Based on this information, and on architectural and economic evaluation of the restrictions imposed by the various Local Government Codes, the potential market for unit residential dwellings was predicted for the six-year period from 1969 to 1975.</p> <p>This market analysis and survey was used as a basis for the recommendations as to areas suitable for redevelopment, the types of redevelopment that would provide an economic return to the investor, and a time schedule for redevelopment activity in different Local Government areas and specific parts of them.</p>
Services Provided	<p>Analysis of past and current trends in multi-unit residential development, together with data on the nature and occupancy of self-contained flats; analysis of population shifts in both numbers and structure; market demand estimates for various categories of multi-unit housing; examination of Local Government land use zoning and residential development control codes; identification of potential multi-unit housing areas; land acquisition and development programming for 1969-1975.</p>
Status	Report has been used to guide land acquisition and development decisions.

South Melbourne Feasibility Study

Client	Australian Paper Manufacturers Pty Ltd.
Description	<p>A feasibility study for the redevelopment of a site of about six acres in South Melbourne, opposite Melbourne's Central Business District.</p> <p>The study involved an evaluation of the expansion of the Melbourne Metropolitan Region and of the effect of this expansion on the Central Area of Melbourne.</p> <p>The redevelopment site is very favourably located relative to the central business district, because of its proximity to it in both distance and time. However, it offers many advantages not available in the CBD proper.</p> <p>Various land use categories were studied and a recommended land use policy was advanced to the client.</p> <p>The suitability of the redevelopment site for various types of structure was assessed and included considerations of foundation geology, accessibility and land tenure.</p> <p>Preliminary architectural drawings of proposed redevelopment alternatives were prepared, and various financing plans were advanced.</p> <p>After consultation with the client, a final budget and stage development programme was prepared and recommended.</p>
Services Provided	Evaluation of population and land use trends; investigations into land ownership and value patterns; discussions with development control authorities; testing of redevelopment possibilities for physical feasibility; market analysis and profitability estimates; outline planning and architectural design; suggestions for development programming.
Status	Report has been adopted by client and is being used in negotiations with prospective developers.

Battery Point, Tasmania, Action Area Redevelopment and Conservation Plan

Client	Hobart City Council.
Description	<p>Redevelopment plan for 238-acre historic area on fringe of Hobart central business district.</p> <p>Battery Point is an environmental area of distinctive character and unique value in Australia. It was one of the first settled areas of Hobart and contains a number of buildings of historic or architectural merit. In recent years, there has been a trend towards high-density residential building in some parts of the area, and the Council felt that it required expert advice on the ways in which this redevelopment trend could be reconciled with the area's historic character.</p> <p>As part of the background to the plan, studies were made of the topography, street pattern, intensity of development and imageability of the area. An intensive programme of citizen involvement was also undertaken. This led to the definition of civic design; and townscape objectives for the area. In the light of these civic design objectives, proposals were drawn up to control the form and intensity of development in different parts of the area, and model developments were tested for economic and practical feasibility. Detailed proposals for landscaping works, the creation of pedestrian malls and pathways, and the protection of historic buildings were prepared.</p> <p>All of these proposals were incorporated in statutory development control documents.</p>
Services Provided	Townscape and civic design analysis; preparation and testing of redevelopment standards; proposals for preservation of historic buildings; citizen involvement and education programmes; preparation of statutory development control documents.
Status	The redevelopment plan has been adopted by Council and by the Town Planning Commissioner of Tasmania and placed on exhibition for public information and objection.

Artarmon, Sydney, Redevelopment Plan

Client Description

Willoughby Municipal Council.

Redevelopment plan for 105 acres of residential land adjoining Artarmon Railway Station, six miles north of the Sydney Central Business District. The Artarmon Study Area is well defined by the railway line to the east, a proposed expressway and County Road (Pacific Highway) extension to the south and west respectively, and a major secondary distributor (Mowbray Road) to the north. Consequently, it has lent itself to being planned as a district neighbourhood unit.

Single family dwellings between forty and fifty years old predominate in the area, with a small shopping centre opposite the railway station. During the past ten years, there has been an influx of three-storeyed, walk-up apartments due mainly to the area's proximity to fast commuter transport to the City. In some instances, this has led to lowered environmental standards and a decrease in land prices where houses have become isolated between blocks of new units. With this in mind, the Council sought advice as to how future redevelopment could be controlled in order to maintain and improve the quality of the area. As a prerequisite to formulating a plan, studies were made of the topography, street pattern, socio-economic characteristics, services and land market characteristics of the area. At the same time, a market survey was carried out to determine the future of the shopping centre. During all these investigations, close contact was maintained with local organisations, such as the Artarmon Progress Association and the Artarmon Chamber of Commerce, while an intensive programme of involving the local citizens generally in the planning process was undertaken. The analysis of this collected data led to the definition of development control and civic design objectives for the area.

In the light of these objectives, proposals were drawn up to control future development throughout the area; to define where multi-storey buildings could be located; to rationalise the road system and shopping centre; and to provide a network of open spaces and pedestrian ways throughout the neighbourhood. All of these proposals were incorporated in statutory development control documents.

Services Provided

Survey and analysis of existing and projected conditions and characteristics; preparation and testing of redevelopment standards; recommendations for future shopping centre development based on market research; citizen involvement and education programmes; preparation of statutory development control documents.

Status

The redevelopment plan has been adopted by Council and is being implemented. See testimonial letter from the Willoughby Council.

Darling Point Redevelopment Action Plan

Client Description

Woollahra Municipal Council.

Detailed redevelopment action plan for the inner-suburban area of Darling Point.

This of Woollahra, consisting of approximately 200 acres of prime residential land on a peninsula in Sydney Harbour, has seen substantial residential flat development since 1961, with an accelerated rate of building since 1966. High-rise flat buildings have sprung up in an uncontrolled way, blocking valuable harbour views and causing discontent among residents.

Woollahra Council recognised the pressures for redevelopment and the unique value of this area for high-rise residential buildings. On the other hand, it also realised that many residents and property owners were disturbed by the scale and form of some redevelopment projects and apprehensive of the results, if redevelopment were allowed to continue on the then-existing basis. The Council, therefore, decided that it required expert analysis and advice before it could reach a decision on the long-term role of Darling Point as a residential area.

Detailed analyses were made of topography, outlook, streetscapes, building forms, traffic volumes and urban structure, to provide a basis for formulating civic design objectives for the area.

Sample interview surveys were undertaken to obtain expressions of residents' opinions. In the light of this preliminary work, redevelopment proposals are being formulated.

Services Provided

Interim development control formulation: detailed investigations into population structure and other socio-economic factors: investigations of all service utilities in the area; analysis and tabulation of all development since 1961; analysis and review of existing development control procedures and codes; design of a questionnaire to study the characteristics of the population and ascertain the residents' attitudes, desires and needs; at-home discussions with the residents, based on a random sample of 450 households; solicitation of written opinions by the residents; interviews with all interested church, school and social organisations in the area; discussion groups with interested residents; computer analysis of completed questionnaires and related data; physical development control proposals based on the above studies.

Status

An Interim Code has been adopted by Council, to prevent undesirable development while the final plan is being formulated; investigations have been made into population structure and residential development since 1961; studies have been made of the physical characteristics and townscape elements of Darling Point; the questionnaire survey has been completed and is currently being computer-analysed; Interviews and discussions with interested groups are almost complete; a review of existing controls is being made, and new development control proposals are being formulated and tested.

Buildings over \$600,000 in value for which full Architectural Services have been provided by Clarke Gazzard Architects

1 Edgecliff Glebe, Precinct B, Stage 1

Description A major project with a shopping centre on the lower levels and office space above, constructed over and integrated with the Edgecliff bus-rail-interchange station on the Eastern Suburbs Railway.

Client Crown Agents, London.

Cost \$3 million.

Status Building is under construction and is scheduled for completion in 1970.

2 Parramatta Retarded Children's Centre

Description An integrated hospital and school for handicapped children in an outer suburb of Sydney.

Client Department of Public Works, New South Wales.

Cost \$3 million.

Status Tenders have been called, and construction is expected to commence shortly.

3 Commonwealth Bank Stores Building

Description Central printing and storage facilities for the Commonwealth Bank of Australia.

Client Commonwealth Bank of Australia.

Cost \$1.5 million

Status Building is under construction and is scheduled for completion in 1970.

4 Goodwin Village

Description A Church of England Retirement Village for 206 elderly people, in self-contained units with communal facilities.

Client Church of England Retirement Villages, Sydney.

Cost \$1.1 million.

Status Building is under construction and is scheduled for opening during 1970 Royal Tour.

5 Hornsby Big Top Shopping Centre

Description Community shopping centre in outer suburb of Sydney.

Client Woolworths Ltd.

Cost \$600,000.

Status Building has been completed and operating since 1966.

6 Edgecliff-Glebe Rental Flats

Description Two five-storeyed apartment blocks, containing a total of 106 units.

Client Church of England Glebe Administration Board of Sydney.

Cost \$600,000.

Status Buildings were completed and occupied in 1969.

The Council of the Municipality of Willoughby

TELEPHONE 41 0133

BOX 57 P.O., CHATSWOOD

PLEASE QUOTE REF. RC:SB



411 VICTORIA AVENUE
CHATSWOOD, N.S.W.
2067

ALL CORRESPONDENCE IS TO BE
ADDRESSED TO THE TOWN CLERK

20th February, 1970.

TO WHOM IT MAY CONCERN.

We are pleased to state that Messrs. Clarke, Gazzard and Partners were commissioned by this Council in 1968 to undertake a study of the Artarmon region of the Municipality of Willoughby, with a view to the production of a report and plan for the redevelopment of that area.

A unique feature of the study was the extent to which the residents of the affected area were interviewed by the consultants during the course of their research. This public participation resulted in a ready acceptance of the Council's proposal to replan the area and ultimately, upon presentation of the detailed reports and associated plans by the consultants, a greater public understanding of the scheme was evident.

During the conduct of the survey Messrs Clarke Gazzard and Partners conferred regularly with Council's Officers and submitted progress reports to the Council.

Liaison was good at all times and, at the conclusion of the study, Council received from the consultants reports in two volumes, viz -

Volume 1 - Survey and Analysis
Volume 2 - Redevelopment Plan and Implementation Procedures.
together with accompanying plans.

Subject to certain amendments to comply with Council's wishes, the proposals - now known as "The Artarmon Redevelopment Plan" - submitted by Messrs. Clarke Gazzard and Partners were adopted by Council on 5th January, 1970, and are now formally recognised as part of the Council's Planning Scheme.

The Council is pleased with the manner in which the study was undertaken and with the end result of the study, a fact which is evidenced by the Council's action in adopting the proposals submitted by Messrs. Clarke Gazzard and Partners.

A large, stylized handwritten signature of the Mayor, written in dark ink, is positioned above the word "MAYOR." which is printed in a small, bold, sans-serif font. Below this, another handwritten signature, presumably of the Town Clerk, is written in a similar style, positioned above the words "TOWN CLERK." which are printed in a small, bold, sans-serif font.

MAYOR.

TOWN CLERK.



MAYOR'S OFFICE

City of Gold Coast

Council Chambers, Southport, Queensland, 4215, Australia
Telephone 2 4272

Mr. George Clarke,
Clarke, Gizzard & Partners,
117 Harrington Street,
SYDNEY N.S.W. 2000

25th February, 1970.

Dear George,

I have been very pleased to see the flow of Action Plans coming through progressively and dealing with the varied zones agreed with Council along the coast. These follow on very happily the Strategic Plan which has created a very good and marked impact wherever it has been seen.

The best evidence of this is the fact that we have had to call for a reprint in response to the demands which have reached us from all over Australia, and in some instances from overseas countries.

The comment concerning it has been quite eulogistic, and you can imagine is a source of great satisfaction to us.

The delay by the contractors in completing the topographic cadastral mapping has quite understandably slowed down the completion of your work, but it is good to know that you will successfully overtake the time factor for us.

I take this opportunity of expressing to you my personal appreciation and thanks for the skillful, as well as dedicated way in which you have applied yourself and your organisation to the tasks entrusted to you by my Council. The services rendered by your staff have at all times been similarly characterised by a self-sacrificing readiness to respond to what at times I have felt to be unreasonable demands from these offices, but never have I heard the slightest complaint or protest.

I sincerely believe that the ultimate destiny of this City of Gold Coast of ours will reflect the wisdom and scientific application of the town planning art which you and your colleagues have contributed in this tremendously significant plan


.../2

- 2 -

In conclusion please again let me say how much
I feel the city is indebted to you.

Kind regards.

Yours sincerely,


(Bruce Small)
MAYOR

McConnel, Smith & Johnson

Examples of Experience

1 MASTER PLANNING AND DESIGN

- a **Woden District Centre, ACT**
Master planning for government offices and retail components.
- b **CSIRO Headquarters, Ainslie, ACT**
Master planning and design of offices.
- c **War Veterans' Homes, Narrabeen, NSW**
Master planning and design for 500 Aged Persons' Homes.
- d **Riker Laboratories Australia Pty Ltd
Thornleigh, NSW**
Master planning and design of pharmaceutical research and development laboratories.
- e **Randwick Technical College, Randwick, NSW**
Master planning and design of a Technical College.
- f **Medical Precinct Parking Structure,
University of Sydney**
Master planning and design of underground car parking.
- g **Commonwealth-State Law Courts,
Queen's Square, Sydney**
Environmental design and documentation of courts and ancillary accommodation.
- h **Wynyard Square, George Street, Sydney**
Master planning of consolidated city block development.

2 DESIGN AND DOCUMENTATION

- a **Kindersley House, Bligh Street, Sydney**
Design and documentation of office building including the Sydney Stock Exchange.
- b **Swire House, Spring Street, Sydney**
Design and documentation of office building.
- c **Sydney Water Board, Bathurst Street, Sydney**
Design and documentation of office building as headquarters for the Metropolitan Water, Sewerage and Drainage Board.
- d **Law School, University of Sydney
King Street, Sydney**
Design and documentation of accommodation for the Faculty of Law.
- e **Farmers and Graziers Co-operative Co Pty Ltd
Spring Street, Sydney**
Feasibility study, design and documentation of office building. (In association with Ancher Mortlock Murray & Woolley.)
- f **University Club, Phillip Street, Sydney**
Feasibility study and development analysis for city club.
- g **Turner Offices, Turner, ACT**
Master planning, design and documentation of office building to accommodate government departments.

1a WODEN DISTRICT CENTRE

Description	A district centre, consisting of offices, retail provisions and pedestrian plazas. The project involves accommodation for 3,000 government employees.
Location	Woden, ACT.
Client	National Capital Development Commission, ACT.
Services Provided	Master planning; detailed planning design; control of development by government and private enterprise.
Status	First stage buildings under construction, private enterprise buildings out to tender.

1b CSIRO HEADQUARTERS

Description	Administration offices, theatres, laboratories for Commonwealth research organisation.
Location	Ainslie, ACT.
Client	National Capital Development Commission and Commonwealth Scientific and Industrial Research Organisation.
Cost	First Stage—\$1½ million.
Services Provided	Master planning; detailed planning design; negotiations with authorities, architectural documentation; supervision.
Status	First Stage—under construction.

1c WAR VETERANS' HOMES

Description	A large-scale development of 50 acres of natural bushland setting for 500 ex-service aged persons' housing with associated community and welfare facilities.
Location	Narrabeen, NSW.
Client	War Veterans' Home Board of NSW.
Cost	1st, 2nd and 3rd stage of building—\$3 million.
Services Provided	Master planning; feasibility studies; detailed design of roads, services, landscapes and buildings; documentation and supervision.
Status	1st, 2nd and 3rd stages—Completed.

1d RIKER LABORATORIES

Description	A development of pharmaceutical research laboratories.
Location	Thornleigh, NSW.
Client	Riker Laboratories Australia Proprietary Ltd.
Cost	1st and 2nd stages—\$1 million.
Services Provided	Master planning; feasibility studies; detailed planning design of roads, services and buildings; documentation and supervision.
Status	1st and 2nd stages—Completed.

1e RANDWICK TECHNICAL COLLEGE

Description	A large-scale urban development of technical college premises.
Location	Randwick, NSW.
Client	New South Wales Public Works Department.
Cost	\$8 million.
Services Provided	Master planning; detailed design of roads, services and buildings; negotiations with Authorities and Department of Technical Education, documentation.
Status	1st and 2nd stages—Completed. 3rd stage—documentation nearing completion.

1f MEDICAL PRECINCT PARKING

Description	A parking station structure built under St. Andrews' College Oval, including dressing rooms for use with the Oval.
Location	University of Sydney.
Client	University of Sydney.
Cost	\$½ million.
Services Provided	Detailed planning and design of car parking structure; layout of oval; landscaping; documentation and supervision.
Status	Completed.

1g COMMONWEALTH-STATE LAW COURTS

Description	<p>A project, jointly undertaken by the Commonwealth and State Governments to house 44 courts together with judges' chambers, conference rooms, registries, offices and ancillary accommodation, resulting in the largest public building in Australia.</p> <p>The design also includes a number of important civic spaces adjoining the building and the nearby historic St. James Church.</p>
Location	Queen's Square, Sydney.
Client	Commonwealth and State Governments.
Cost	\$20 million.
Services Provided	Environmental planning; detailed planning and design; negotiations with authorities; documentation.
Status	Documentation nearing completion.

1h WYNYARD SQUARE

Description	<p>A large-scale urban redevelopment of an existing city block, consisting of accommodation for offices, banks, theatres, churches, parking and pedestrian plazas providing overhead bridges and tunnel links with Wynyard Park, Qantas Centre, Australia Square and Wynyard Station.</p>
Location	Block bounded by George, Margaret, Jamison and York Streets.
Client	Lend Lease Corporation.
Cost	\$45 million.
Services Provided	Master planning; market research; feasibility studies; negotiations with authorities and developers; outline architectural documentation.
Status	Pending site consolidation.

W. D. Scott and Company
Schedule of Comparable or Relevant Work

Professional Experience

W. D. Scott & Company is an international management consulting firm, with its head office in Sydney.

The Company has considerable experience, both in Australia and overseas, of Long-Range Planning, regional development studies, urban development studies, organisational planning and economic research.

A list follows of representative W. D. Scott & Company assignments in Federal, State and Local Government and in private enterprise.

Representative Assignments by W. D. Scott & Company in Economic and Market Research

Field	Client	Nature of Work
General Building	Committee of Economic Enquiry ("Vernon Report") Lend Lease Corporation	Forecast of new buildings to be commenced in Australia to 1975. Studies of the Australian Economy and forecasts for the Building Industry.
Regional Development	Development Finance Corporation Ltd. West Lakes Ltd. F.A.C.T. Study — jointly commissioned by Manukau City Council and Fletcher-Mainline-Dillingham Department of Main Roads, Queensland	Market Research for a new 1,000 acre estate North of Adelaide. Market Research and Economic Feasibility Study of the development of a new District Centre including major retailing facilities in the South Auckland Region. Urban Development Study of the Surfers Paradise Area of the Gold Coast.
Office Buildings	L. J. Hooker Investment Corporation Herbert F. Hely (Architects)	Survey of Sydney Office Space. Office Building Forecasts for Sydney.
Parking Stations	Miller Anderson Ltd. (Adelaide)	Prospects for the operation of a Parking Station in conjunction with the Department Stores.
Analysis of Alternative Development Proposals	Hospitals Contribution Fund of Australia Presbyterian Church of Australia	Evaluation of Alternative Proposals for Development of Liverpool St. site. Evaluation of Alternative Proposals for Development of the Assembly Hall site.

Feasibility
Studies
Including
Preparation
of Action
Plans for
Development

Department of
Local Government
Department of
Agriculture

Feasibility Study of the
relocation of the Sydney
City Markets, including
Market Research,
Preliminary Site Layout
Drawings, Parking and
Traffic Arrangements,
Capital and Operating
Budgets (in liaison with
Dept. of Public Works,
N.S.W. and the Dept. of
Main Roads and the Dept.
of Railways).

Feasibility
Studies
Including
Preparation
of Action
Plans for
Development

Development
Finance
Corporation Ltd.
West Lakes Ltd.

F.A.C.T. Study
jointly sponsored by
Manukau City
Council and Fletcher-
Mainline-Dillingham

Standard Telephones
and Cables Pty. Ltd.

Market Research —
Budgetary Planning —
Organisation for the
development of a new
1,000 acre estate North
of Adelaide.
Development of a plan for
the Regional Centre of
South Auckland jointly
with
Stephenson & Turner —
Architects
Peter Bagnall &
Associates — Urban
Planning Consultants
Gray Watts & Beca —
Consulting Engineers
and Surveyors.
Preparation of a Master
Plan Layout for the
Liverpool site of 50 acres,
to determine costs and
benefits for any proposed
changes to existing
structures, and to indicate
priority and timing of such
changes.

Lyndhurst Shire	1969	Survey of Industrial Development Potential
Newcastle City Council	1969	Review of Road Maintenance Operations
Queanbeyan Municipal	1965	Health Department Inspection and Clerical Procedures
Wollondilly Shire	1967	A Study of the need for provision of Technical Education facilities

**Victoria
Council**

	Date	Nature of Assignment
Camberwell City	1954	Administrative, Accounting and City Engineering Activities
Country Roads Board	1962	Organisation of Chief Engineer's Branch
Doncaster and Templestowe Shire	1961	Organisation, Methods and Procedures
Melbourne City Council	1955	Organisation and Procedures
Oakleigh City	1957-58	Organisation, Methods and Procedures
Preston City	1958	Organisation, Methods and Procedures
Sale City	1960	Organisation, Methods and Procedures
Warrnambool City	1958-59	Organisation, Methods and Procedures

**Queensland
Council**

	Date	Nature of Assignment
Brisbane City	1956-58	Review of all aspects of Transport Operations of the City
Roma Town	1968	Organisation
Townsville City	1958-62	Organisation, Methods and Procedures with particular reference to City Engineer's Department
Townsville Regional Electricity Board	1958 1960	Methods and Procedures
Warwick City	1969	Study of Industrial Development Potential

Representative Studies in Organisation and Procedures

State and Federal Government Departments

Date	Government	Department
1966	Federal	Government Aircraft Factory
1965-66	Federal	Royal Australian Navy: H.M.A. Naval Dockyard, Garden Island
1961-64	Federal	Post Master General's Department
1966-69	Federal	Repatriation Department
1962-63	Federal	Department of Supply
1965		
1959	NSW	Milk Board
1966-67		
1964		
1965-66	NSW	Public Works Department
1961	NSW	NSW State Lotteries Office
1962	NSW	Department of Public Health
1968	NSW	Registrar General's Department
1969	Queensland	State Government Insurance Office
1969	Victorian	Chief Secretary's Department
1960-64	Victorian	Gas and Fuel Corporation
1969	Victorian	Victorian Railways
1965	Victorian	The State Electricity Commission of Victoria
1969	Queensland	State Government Insurance Office
1968-69	South Australian	Department of Aboriginal Affairs
1967-68	South Australian	Premier's Department, Division of Industrial Development
1969	Western Australian	Western Australia Coastal Shipping Commission
1968	Western Australian	Fremantle Port Authority
1966-68	Western Australian	WA Public Service Commission: Land Titles Office
1964-65	Western Australian	Fire Brigades Board
1963-64	Western Australian	WA Government Railways

Representative Assignments for Local Government

New South Wales

Council	Date	Nature of Assignment
Ashfield Municipal	1965	Review of Library Services
Central West County	1962	Organisation and Financial Controls
Coffs Harbour Shire	1965-66	Review of Procedures
Fairfield Municipal	1969	Improvement Programme covering administrative procedures and basic planning data

South Australia		
Council	Date	Nature of Assignment
City of Adelaide	1959	Central Markets; Layout and Shopper Circulation; Parking; Bearing on a long range plan
City of Burnside	1965-66	Ways and means of reducing costs and improving service to Ratepayers in Outwide Works and Maintenance
City of Enfield	1961	Procedures, Methods and Organisation
Town of Murray Bridge	1969	Review of Operations of the Olympic Swimming Pool
District Council of Salisbury	1962-63	Organisation; Procedures — Works Planning and Control; Building and Health Section Review; Report on long term development plan for the district
City of Woodville	1958	Methods, Procedures and Organisation
City of Marion	1957	Methods, Procedures and Organisation
Western Australia		
Council	Date	Nature of Assignment
Canning Shire	1966	Position Evaluation
Fremantle City	1962-63	Organisation and Methods
	1965	
	1967	
Nedlands City	1967	Improved Administration and Service
South Perth City	1969	Organisation
Tasmania		
Council	Date	Nature of Assignment
Fingal	1959	Planning and Control of Field Activities
Glenorchy	1957	Organisation and Methods
Hobart	1956-59	Organisation and Methods
Launceston	1958	Organisation and Methods
New Zealand		
Council	Date	Nature of Assignment
Auckland City	1957-58	Organisation; Administration, Works and Services; Water Supply; Zoological Park
Auckland Regional Authority	1966	Organisation Survey
Auckland Transport Board	1955	Accounting and Costing Procedures
Manukau City	1968-69	Urban Development Planning
Transport Committee of the Wellington City Corporation	1956	Organisation and Administration
Wellington City	1969	Study of Gas Usage
Whakatane County	1969	Organisation

**Carr and Wilkinson
Environmental Acoustic
Engineers
Sydney and Melbourne**

**Services, Facilities, and Schedule of Comparable or
Relevant Work**

**Acoustical Aspects
of City Planning
Projects**

This partnership is by far the largest organisation practising as Consulting Acoustical Engineers in Australia and we enjoy a reputation for practical solutions to problems encountered. This situation is largely due to the facilities and resources available to any project in hand. These facilities include:—

Staff — refer to separate listing of Staff and Qualifications.

Laboratories — capable of providing Standard or Site-Mockup conditions for Acoustical, Noise and Vibration Control, Ultrasonic, Air Diffusion and special projects, including scale model studies.

On-Site Work — enabling collection of data and optimisation of proposals.

Instrumentation — providing comprehensive coverage of all aspects of Acoustics, Noise, Vibration and Air Diffusion.

Applied Research and Development—providing progressive concepts and solutions to problems encountered.

Some Major Projects undertaken by this Partnership are listed hereunder.

Experience gathered in these, together with our ability to liaise with overseas consultants, equip us to engage in all acoustical aspects of large-scale Town Planning projects.

We consider that some of the major acoustical problems encountered in City Planning are:—

Road Traffic Noise,

Construction Noises (Building, Civil and Service Works) ,

Train Traffic Noise (airborne and groundborne noise and vibration) .

Airconditioning Component Noise (to, from and within buildings) .

Aircraft Noise,

Shipping and Waterfront Activity Noises.

Practical solutions are available to each of the above problems, providing they are tackled at the planning stage of a development or redevelopment. It is at this stage that maximum effect can be gained, with minimum cost and inconvenience. You are, no doubt, aware of many of the fundamental requirements of the Acoustical/City Planning aspects of various projects. For your further guidance we list some proposals for solutions to each of the above problems. Actual solutions would depend on the parameters involved in any particular project but may be generally summarised as follows:—

Road Traffic Noise: Roadway planning and layout, together with considerations of traffic flow are the major factors influencing successful road traffic noise control. Presupposing the adoption of an S.A.A. Standard for Vehicle Noise control, currently under preparation, this aspect of City Planning is now capable of quite specific design and control.

Construction Noises: In our opinion, current 'Regulations' governing the hours of operation available to construction organisations are impractical and unrealistic. Optimum construction times for Building, Civil and Service works usually necessitate working on-site for more than the currently-restrictive hours set down by various Municipal and Legal authorities. Regulations regarding working hours for construction work should take cognisance of the fact that much of the construction programme can be conducted without causing interference to neighbours, providing noise levels and other annoying aspects of the construction works are controlled below predetermined levels appropriate to the time of desired operation.

Train Traffic Noise: The Sydney city area is fraught with problems associated with Railway Noise and/or Vibration. We consider the main problems here are associated with airborne noise (created by train traffic on suspended railways, e.g. Sydney Cove and Harbour Bridge areas) and groundborne noise and/or vibration transmitted to building footings located in the proximity of railway tunnels. Economical treatments could be devised for control of both of these problems, with the cooperation of the respective authorities.

Airconditioning Component Noises: You are no doubt familiar with Noise and/or Vibration problems associated with the operation of some Airconditioning equipment. Several aspects of each installation require consideration to ensure adequate noise and vibration control to, from and within each building planned.

Aircraft Noise: Considerations of aircraft flight paths and possible future helicopter and hovercraft activity should form part of the analysis envisaged.

Shipping and Waterfront Activity Noises: Whilst these do not frequently interfere with the acoustical amenity of large areas of the city of Sydney, we consider that some regulations should be developed for the guidance of operators of ships and waterfront equipment, regarding their interference with others' amenity.

Summarising, we feel that the Acoustical aspects of City Planning warrant serious analysis and design, especially within high-density occupation areas. This Partnership is conversant with the problems associated with Town Planning projects and would be willing and able to act as your Consultants in these matters. We could undertake to ascertain the existing acoustical 'climate' at selected points within the areas of interest, to consider acoustical ramification of projected land use and to suggest appropriate land use to satisfy foreshadowed acoustical criteria or zoning requirements. In addition we could prepare draft Regulations or Specifications and suggest methods of applying and assessing acoustical performance criteria. Further, we could report to Council through City Planning Consultants and/or Committees on specific applications and train and educate Council officers in the implementation of Regulations or subsequent assessment of complaint situations.

Examples of Experience in Comparable or Relevant Projects

Project & Client	Acoustical Tasks Performed
Australian Chancery, Washington (USA), Bates, Smart & McCutcheon & Comm. Dept. of Works. Eastern Freeway, Melb., MMBW via EFCC, Casey Airfield, Berwick Shire Council Altona Petrochemical complex, Vic. Nunawading, Doncaster, etc. Municipal Councils, etc. Numerous Legal and Neighbourhood Reaction cases High Court of Australia, Melb. Comm. Dept. of Works	Project Consultants, including, 'spy proofing'
State Offices, Sydney, PWD, D. Rudd & Partners, Morlite and Barber Colman	Town Planning with respect to Traffic Noise. Flight Zone control re noise Interaction of Industrial and Residential areas Interaction of Industrial and Residential areas Interaction of Industrial and Residential areas External and Internal noise control, Speech Privacy and Internal Acoustics
Sydney Water Board Building McConnel, Smith & Johnson	Structural, mechanical and airconditioning noise and vibration control, air diffusion testing and assessment Airconditioning and structural noise control, Auditorium design
Appeals Court. Citra Building PWD	Speech Privacy and Internal Acoustics design
Reserve Bank, Sydney D. Rudd & Partners	Airconditioning noise control and testing
Suva Civic Centre, Fiji Larsen & Holtam, D. Rudd & Partners	Project Consultants, Auditorium design and airconditioning noise control
SGIO Theatre, Brisbane Conrad Gargett & Partners	Project Consultant, Auditorium design and airconditioning noise control
Ampol Building, North Sydney Kevin J. Curtin, Rankine & Hill	Speech Privacy and airconditioning noise control
NMLA Building, Melbourne Coombs-Frigrite Ltd.	Airconditioning noise control
Vibration Analysis & Control Matraville, ICIANZ Ltd.	Vibration control of process compressors and equipment
Qantas House, Sydney Qantas Airways Ltd.	Airconditioning noise and air diffusion control
AMP Buildings (2) Melbourne	Project Consultants
Bates, Smart & McCutcheon Nunawading Civic Centre, Vic. C. & R. Block	Project Consultants, including Sound Conditioning installation
University of Melbourne School of Architecture	Auditorium and Lecture Theatre design
Various Churches and Halls Various architects	Acoustical design and acoustical correction
Teachers Colleges (3) NSW PWD & Consulting Architects	Project Consultants (work in progress)

J Appendices

Appendix 1

Current and Projected Proposals and Plans for the City of Sydney

This appendix lists a number of proposals and plans by Government, semi-Government and private organisations which must be taken into account in the preparation of the Strategic Master Plan.

The proposals are listed without comment to indicate the extent of the work which must be urgently examined.

- 1 Current Commonwealth and State Government Sponsored Proposals and Plans.
- 2 Government Transportation and Highway Projects.
- 3 Commonwealth or State Government Building Programs.
- 4 City Council Policies (and Plans).
- 5 Significant Private Developments Proposed or Commencing (indicating trends).
- 6 Independent Proposals.

1 CURRENT COMMONWEALTH AND STATE GOVERNMENT SPONSORED PROPOSALS AND PLANS

Sydney Cove Redevelopment.
Circular Quay Proposals.
East Macquarie Street (NSW Government).
MSB Plan for Darling Harbour.
MSB Plan for Woolloomooloo (incorporated in SPA
Woolloomooloo Plan).

NSWGR Air Rights Central Station.
NSWGR Air Rights Darling Harbour.
Hospital Commission: Policies for Sydney, Children's,
Eye Hospital, and RPA and St. Vincents.
Department of Navy.
Garden Island and Elizabeth Bay.

State Owned Brisbane Street Site.
NSW Department of Lands—Study of Sydney Showground.
Sydney University Expansion, Darlington.

2 GOVERNMENT TRANSPORTATION AND HIGHWAY PROJECTS

Western Distributor.
Eastern Distributor and Oxford Street.
Kings Cross Tunnel and New South Head Road
(air rights).
Eastern Suburbs Railway.
Stations Kings Cross,
Martin Place,
Town Hall.
South Dowling Street and Mascot Expressway.

3 COMMONWEALTH OR STATE GOVERNMENT BUILDING PROGRAMS

Sydney Opera House (and Associated Parking).
New State Offices, Chifley Square.
New State Offices, Bridge Street.
Commonwealth-State Law Courts (and closure of
King Street).
NSW Institute of Technology.
Sydney Technical College.
New State Offices—Central Square.
Conservatorium.
Art Gallery.

4 CITY COUNCIL POLICIES (AND PLANS)

Martin Place.
William Street Boulevard.
Woolloomooloo Re-development (SPA for CCS).
Draft Statutory City Planning Scheme (not yet prescribed).

5 SIGNIFICANT PRIVATE DEVELOPMENTS PROPOSED OR COMMENCING

AMP Sydney Cove.
Bond Street—Stock Exchange.
Qantas Centre.
Wynyard Square (Lend Lease).
Bank of NSW, Martin Place.
Martin Place between George Street and Pitt Street.
AMP Centrepoint and Pedestrian Links.
Royal Arcade/Adams Hotel.
Trocadero Site (Hoyts) and adjacent site.
Anthony Horderns.
Tivoli Site/Hotel Sydney.
St. Andrews Cathedral Close.
Kings Cross—top of William Street.
Metropole Site.
Paris Cinema, etc.
Offices and Residential (Crookes, Michel, Peacock & Stuart).
Oxford Square (Lend Lease) Ansett Terminal.
Offices (H. Stossel), College Street.
Offices—St. Martin's (Crookes, Michel, Peacock & Stuart).
St. Vincent's Hospital Expansion.
Theatre Royal Site.
The Australia Hotel Site.
Block south of GPO.
Bligh-O'Connell-Hunter Street Development.
YWCA Site.
St. Philips Offices.
Blind Institute, William Street.
Federated Ironworkers' Association (Pitt Street).
Commercial Parking Stations—West Rocks,
Darling Harbour, Kent Street.

6 INDEPENDENT PROPOSALS

Queen Victoria Buildings.
Sydney Arts Foundation, Universities, Archanon
(also Sydney Civic Centre proposals—Univ. of NSW).
Uptown Development Association.
National Trust—West Rocks, etc.
Civic Reform Election Proposals.