
JANET L. CRAWFORD

Planning Consultants Ltd
PO Box 47859
Ponsonby
AUCKLAND 1144

Ph (09) 378 1891
Mobile 021 130 1443
jan.crawford@xtra.co.nz

www.jancrawford.co.nz

PERSONAL DETAILS

| | |
|----------------------|-----------------------------|
| Date of birth | August 14, 1951 |
| Citizenship | New Zealand, United Kingdom |

EDUCATION

Harvard University

John F. Kennedy School of Government (now Harvard Kennedy School)
Mid-career Masters in Public Administration, 1993
Concentration in Environmental Conflict Resolution and Environmental Economics

University of Auckland, New Zealand

Diploma of Town Planning, 1975
Bachelor of Arts (Geography), 1973

CURRENT POSITIONS (2014)

Planning Consultants Ltd

Director and Proprietor of a company specialising in resource management planning, particularly plan development, implementation and outcome evaluation. I facilitate and/or mediate multi-party multi-issue resource management projects e.g., district plans, infrastructure projects and pre-hearing meetings associated with matters such as air discharge consents. Research, teaching & training is a major focus of my work e.g., USNSF-funded research on implementation of sustainability in the USA and NZ. I also peer review reports, projects and plans for both private and public sector clients e.g., integrated catchment management plans.

AUPIHP

Appointed to the Auckland Unitary Plan Independent Hearings Panel in December 2013.

www.aupihp.govt.nz

PROFESSIONAL EXPERIENCE

Plan development, implementation and outcome evaluation

- [District plan-making
- [Evaluation of RMA plan quality, implementation and outcomes
- [Evaluation of integrated catchment management plans and their effectiveness
- [Editorial Panel, Quality Planning website (MFE)
- [Expertise in land use planning, integrated catchment management planning, solid waste management and the conservation of historic buildings and neighbourhoods
- [Contributed to environmental and social impact assessments
- [Presented expert planning evidence before hearing panels, Select Committees, tribunals and courts

Facilitation & mediation

- [Facilitation of public policy dialogues and consultation on major projects, including community liaison post-development
- [Leading public consultation processes associated with writing RMA plans
- [Facilitation of pre-hearing meetings for resource consents
- [Mediation of neighbours' disputes e.g., trees on boundaries

RMA decision-making

- [RMA Commissioner (accredited until 30 June 2013)

Research, Teaching and Training

- [Training workshops for central government, companies, community groups and local authorities e.g., Accreditation of RMA Decision Makers (2005- 2012)
- [University courses in environmental impact assessment, consultation, negotiation & mediation, planning practice and Industrial Ecology
- [Active in continuing professional development for NZPI
- [Conducted research in sustainability and resource management (1993-present)
- [Published in books and academic journals

Project Management & RMA consenting

- [Led technical team through site selection and permitting process for three major landfills in Auckland
- [Provided expert advice and/or managed permitting processes for subdivisions and developments, including shopping malls, office towers, industrial premises and housing

Latest publication

Laurian, Lucie, and Janet Crawford. Institutional factors of sustainability implementation in local government. Article submitted to Environment and Planning C, July 2014 (pending).

Latest presentation

Workshop on planning practice, New Zealand Planning Institute Conference, Blenheim, May 2012. *Monitoring the Long Bay structure plan; indicator prioritisation for earthworks and sediment control.* Co-authors are Susie Wood and Dr Megan Carbines.

PROFESSIONAL ACTIVITIES AND DISTINCTIONS

- [Member, New Zealand Planning Institute since 1976.
- [Served on various committees and participated in professional affairs since 1975.
- [Currently on the advisory panel for continuing professional development.
- [Initiator and sponsor of the annual Rodney Davies Research Symposium.
- [Member of The University of Waikato advisory panel on planning education.
- [Distinguished Service Award, New Zealand Planning Institute, 1998.
- [Brookfields Award 1996, New Zealand Planning Institute (assists contributions to planning practice).
- [Panel Member, The University of Auckland's review of the Department of Town Planning, April 2000.
- [Associate, Program on Public Policy for Industrial Ecology, John F. Kennedy School of Government, Harvard University, Cambridge, USA, 1995 - 96.
- [Published in NZPI & international journals and conference proceedings.
- [Frequent public speaking engagements, including presentation of papers to professional conferences.
- [Co-founder of the Mediators Institute of New Zealand (1990), now Arbitrators & Mediators Institute of New Zealand.
- [Appointed by the Minister of Conservation to a Committee of Inquiry investigating the adequacy of land and water management in the Hauraki Gulf, an important inshore fishery, tourism and recreational area adjacent to Auckland, 1991-2.

CURRENT PROJECTS

USNSF-funded research on implementation of sustainability in local councils

With Associate-Professor Lucie Laurian, University of Iowa, I am researching the implementation of sustainability by local councils in both the USA and NZ. This project involves a survey of planners in medium-sized councils, case studies and peer review by an international expert panel (2011-2015).

RECENT PROJECTS

Waitakere Ranges Local Board – visitor management plan for the Waitakere Ranges

I worked on the consultation and plan development tasks as part of a team preparing a visitor management plan for the Waitakere Ranges Heritage Area, its 'gateways', local parks, roads, private land and the coastline (July 2013- May 2014).

Private land owners

Dealt with a dispute relating to removal of trees on the boundary in a special character zone; lodged resource consent applications relating to heritage homes; advised on development potential of rural land near Muriwai and Drury.

Massey University – teaching mediation & facilitation and plan outcome evaluation

I have contributed to teaching planning practice to 4th year planning students in Palmerston North.

New Zealand Planning Institute – Continuing professional development workshops

I have delivered training workshops for NZPI members requiring continuing professional development credits. Recent topics, offered nationwide, include ethics and professional practice, expert conferencing in the Environment Court and plan outcome evaluation methods.

Other Teaching & Training

I have taught planning practice and dispute resolution at various universities and have carried out training in:

- *0 Second generation plan-making
- *1 Plan outcome evaluation
- *2 Effective leadership for councillors on District Plan Development Committees
- *3 Negotiation Analysis
- *4 How to Make Meetings Work
- *5 Mediation and the Environment Court
- *6 Expert conferencing and the Environment Court
- *7 Consultation and Assessments of Environmental Effects
- *8 Preparing AEEs (for scientists and engineers)

PAST PROJECTS

Ministry for the Environment – Training programme – Accreditation of RMA Decision Makers

In collaboration with the Centre for Continuing Education, The University of Auckland, I helped to develop and deliver training for councillors and professionals making decisions on resource consents under the RMA. I was a subject matter expert contributing to the Workbook, teaching materials and learning assessments as well as a facilitator and tutor from 2005-2012.

Centre for Continuing Education, University of Auckland – Professional Development courses for RMA practitioners

In partnership with Lee Beattie, Town Planning & Design Ltd and Nigel Mark-Brown, environmental engineer, the development and delivery of training workshops on a wide variety of RMA matters, including resource consent processing, preparing regional & district plans, compliance & enforcement, and 'cutting edge' topics such as managing the risks of climate change in RMA plans (2007-2012).

University of Auckland – teaching Planning 305 Governance & Planning course

Taught 3rd year planning students in the first semester 2013.

Auckland Council – an integrated monitoring plan for Long Bay

With Landcare Research, Susie Wood and Clare Feeney, I have developed an integrated monitoring framework for the Long Bay catchment. Plan Change 6 (now operative) gives effect

to the Long Bay Structure Plan, enabling urbanisation of parts of two catchments. With Susie Wood and Dr Megan Carbines, I have prepared an integrated monitoring plan which will provide information useful for evaluating the effectiveness of the plan in avoiding or minimising impacts on the sensitive coastal receiving environment. Members of the community are involved.

Auckland Council – objectives for catchment management plans

For the Stormwater unit, I contributed to the development of a set of measurable objectives to include in a “toolbox” for engineers and planners preparing catchment management plans. These objectives are linked to the guiding and requiring documents which CMPs must give effect to e.g., Auckland Plan, Long Term Plan and RMA plans (2012).

Auckland Council – Unitary Plan peer review role

With Greg Hill, I reviewed the draft objectives and policies for the forthcoming unitary plan. My role was to develop and apply criteria for identifying well-written provisions. The results informed an in-house workshop on plan making (2012).

Environmental Communications Ltd – evaluating the outcomes of catchment management plans for Auckland Council

With Clare Feeney, Susie Wood and Dr David Kettle, I evaluated the results of three major catchment management plans in the Auckland region, including the costs and benefits of various interventions. Our recommendations informed decision-making on funding and resourcing ICMPs in the Long Term Plan.

SIGNIFICANT PROJECTS

PLANNING UNDER CO-OPERATIVE MANDATES - A Joint Research Project between The University of Waikato and University of Auckland, NZ, University of North Carolina, USA and University of Iowa USA (1995 – 2009).

A comparative research project evaluating the quality of regional and district planning under the Resource Management Act 1991 funded by the Foundation for Research in Science and Technology, New Zealand.

Phase 1 considered plan quality (1995-99) and Phase 2 examined plan implementation via resource consents (1999-2002).

Phase 3 tested a methodology for establishing causal links between plan intentions and environmental outcomes (2003 – 2007).

Phase 4 involved educating planners and other professionals about the research findings and their application to planning practice.

The research also studied the effectiveness of long term council community planning under the Local Government Act 2002.

Quality Planning Website – Editorial Panel Member (2001-2010)

I was a foundation member of the Editorial Panel responsible for the content of the Quality Planning Website set up and managed by the Ministry for the Environment.

Hearings commissioner - Franklin District Council – Plan Change No. 24 - Pokeno Structure Plan (2009-2010)

Member of a panel of independent commissioners appointed to hear submissions and further submissions to this proposed plan change, August 2009 – February 2010.

Waste Disposal Services – Consultation – Whitford Landfill, Manukau City (1999 – 2009).

Ongoing role in community liaison.

Far North District Plan Re-write - Mediation & Technical Advice

In the latter part of 1997, I mediated between the Far North District Council and the many community groups who were disaffected both by the process for preparing, and the provisions of, the Proposed Far North District Plan. In 1998, I was engaged to facilitate the re-writing task in an open, collaborative process. This was successfully done. I gave technical advice to the hearings panel. I also assisted the Council to resolve several Plan appeals (2005).

SELECTION OF PAST PROJECTS

Auckland Regional Council – facilitation of pre-hearing meetings

Facilitated a number of pre-hearing meetings relating to applications for air discharge consents where odour and/or dust are an issue e.g., scrap metal recycling depot, concrete roof

Land Transport NZ – Waterview Connection – Meeting Facilitation

Facilitation of a series of meetings intended to inform the community about the environmental effects of building a road tunnel on air quality, November 2008.

Environmental Communications Ltd – Integrated Catchment Management Plan – training workshops for Auckland Regional Council

In association with Environmental Communications Ltd (Clare Feeney) and the International Global Change Institute, The University of Waikato (Dr Peter Kouwenhoven), development and delivery of training workshops for the Auckland Regional Council. The workshops are being held to build a better mutual understanding of the roles of the ARC and territorial local authorities for catchment management and monitoring. Training focuses on scoping and preparing integrated catchment management plans.

Environmental Communications Ltd – Integrated Catchment Management Plan – Evaluation of draft Central Papakura ICMP

In association with Environmental Communications Ltd (Clare Feeney) and the International Global Change Institute, The University of Waikato (Dr Peter Kouwenhoven), I have completed an evaluation of the draft ICMP for Central Papakura. My role was to assess compatibility with the strategic intention of various guiding and requiring documents and to recommend changes designed to ensure that the ICMP gave effect to those strategies, September 2008.

Auckland Regional Council – Hauraki Gulf Marine Park Act

Implementing the HGMPA requires RMA plans to give effect to the management objectives. Project involves developing guidance for plan makers on how to approach this task (2007).

North Shore City Council & Bayswater Marina Ltd – Facilitation – Future of the Bayswater Marina

Facilitation of a workshop exploring the potential interest in a collaborative approach to determining the future use & development of the marina, 2006.

Auckland City Council – Facilitation – Hauraki Gulf Islands District Plan Review

Part of a team facilitating a series of workshops on sustainability with members of the Waiheke Island community (2005).

Auckland City Council- Facilitation - Protocol with Utility Operators

Facilitating discussions between the Council and the Auckland Utility Operators Group with a view to reaching agreement on a protocol governing the placement and design of utility services located above ground within road reserves (2003).

Fairhaven Walk Association - Negotiation – Local Government

Advised the Association on a roading issue which was negotiated with interested parties & Rodney District Council (2003).

Office of the Prime Minister – Facilitation – Business to Government Forum

I advised the Office of the Prime Minister on setting the agenda for the Forum, and selected and briefed the facilitators responsible for running the workshops. I also facilitated two workshops during the Forum, which was held on 24 October 2000.

Beca Planning Ltd – Facilitation – SH20 Avondale

Facilitation of a workshop on the preferred option for the Avondale motorway route, involving ARC and Transit NZ (October 2003)

Transit New Zealand – Facilitation – SH20 Mt Roskill

Facilitation of two workshops on SH20 Mt Roskill Extension and, specifically, the treatment of the Mt Roskill cone (November 2003).

Brierley Investments and Fletcher Property – Consultation – Mt Wellington Quarry

Undertook a region-wide consultation process on the future use and development of the 110ha Mt Wellington Quarry and associated private plan change to the Operative Auckland City Isthmus District Plan.

Waitakere City Council – Facilitation – West Coast Plan

Facilitated preparation of a community-initiated environmental management plan for the West Coast.

Auckland Regional Council – Facilitation – Mode Selection

Facilitated a meeting of politicians and officers representing all the councils in and around the Auckland region to develop criteria by which to select the preferred mode of transport on the various corridors. (December 2000)

Auckland Regional Council – Facilitation – Growth Forum

Facilitation of a workshop on setting priorities for Regional roading projects as part of the Regional Land Transport Strategy update.

Rodney District Council – Consultation – Whangaparaoa Road Markings

Member of a team that carried out community consultation in order to test various options for solving peak hour traffic delays on Whangaparaoa Road between SH1 and Vipond Road (December 2000 – January 2001).

Auckland City Council – Facilitation – Intersection Upgrades

In late 1998, the Council proposed to upgrade several intersections on Dominion and Manukau Roads to accommodate cars and buses using the priority lanes. Involved in facilitating a series of workshops with interested parties.

Waitakere City - Mediation - Large Properties Project

Facilitated a multi-party investigation into the “fair and reasonable use” of four unique properties in the Waitakere Ranges, with a view to producing plan changes to implement the findings (1996-8).

Auckland Regional Council – Facilitation – Stormwater Project

Facilitation of a series of meetings of the sub-group reporting on the evaluation criteria for assessing the environmental quality of catchments and receiving environments, September - December, 1996.

Transit NZ – Consultation – Ngati Kahu

In 1996, I assisted Ngati Kahu, a hapu (sub-tribe of indigenous peoples) based at Bethlehem, Tauranga, to prepare an assessment of environmental effects in relation to the various options for realigning State Highway 2. While this role was funded by Transit New Zealand to facilitate the required consultation, I worked as a member of the Ngati Kahu Resource Management team.

Sky City Ltd - Social Impact Assessment

Co-author of a report on the social impact of the Sky City Casino and Entertainment Complex, Auckland, prepared for Sky City Ltd, November 1996.

Public Policy

Specialist contribution on local authority activities in heritage preservation in the report entitled Historic and Cultural Heritage Management in New Zealand, prepared by the Parliamentary Commissioner for the Environment and tabled in Parliament, June 1996.

Industrial Maturation Multiplier

An international research project studying industrial systems and promoting the dissemination of information about Industrial Ecology. This research was funded by the Foundation for the Progress of Humankind and the Principal Investigator, Suren Erkman, was based in Geneva, Switzerland (1996-99).

PUBLICATIONS

Organisational factors influencing implementation of sustainability 2011-2015

Crawford, Jan & Lucie Laurian, 2014. *Organisational factors influencing implementation of environmental sustainability (Part 1)*. Planning Quarterly, June 2014.

Plan effectiveness monitoring 2009-2011

Wood, Susie, Jan Crawford, Michael Krausse and Clare Feeney. (2010) Long Bay Structure Plan Monitoring Framework. A report prepared for North Shore City Council (now Auckland Council).

Krausse, Michael, Susie Wood, Jan Crawford, Clare Feeney, Helena Keum, Celia Davison and Jan Heijs: Measuring Success in Stormwater Management – A structured approach to monitoring through linking issues and objectives with outcomes. Paper presented to the Water New Zealand 7th South Pacific Stormwater Conference 2011.

Feeney, Clare, Peter Kouwenhoven, Jan Crawford, Phil le Gros and Larry Shui, Writing Catchment Management Plans: Threading Planning Inputs through to Action Outputs and Monitoring of Outcomes – A Practical Approach. Paper presented to the NZ Water & Waste Association Conference, Auckland, April 2009.

Planning Under Cooperative Mandates: Book, Research Reports & Papers 1995-2009

Backhurst, M., Day, M., Crawford, J., Ericksen, N., Berke, P., Laurian, L., Barfoot, C., Chapman, S. and J. Dixon, 2002: [The quality of district plans and their implementation: towards environmental quality](#). Paper presented to NZPI Conference, Wellington, 8-12 April 2002.

Berke, P., Backhurst, M., Day, M., Ericksen, N., Crawford, J., et al, 2006. What makes plan implementation successful? An evaluation of local plans and implementation practices in New Zealand. *Environment and Planning B; Planning & Design*, 33; 581-600

Berke, P., Crawford, J., Dixon, J., and Ericksen, N., 1999: Do co-operative environmental planning mandates produce good plans? Empirical results from the New Zealand experience. *Environment and Planning B: Planning and Design*. 26:5; 643-664.

Berke, P., Crawford, J., Dixon, J., and Ericksen, N., 1998: Making plans in New Zealand under the Resource Management Act, 1991. PUCM Report # 4. The International Global Change Institute, University of Waikato, Hamilton; Department of Resources and Environmental Planning, Massey University, Palmerston North; Department of City and Regional Planning, University of North Carolina at Chapel Hill.

Berke, P., Crawford, J., Dixon, J., and Ericksen, N., 2002: Planning and Indigenous People: Human Rights and Environmental Protection in New Zealand. *Journal of Planning Education and Research*, Volume 22, Number 2, 115-134.

Berke, P., Crawford, J., Dixon, J., and Ericksen, N., 2000: Plan quality in district councils. *New Zealand Planning Quarterly*. No. 138, September 2000. pp. 17-19.

Berke, P., Ericksen, N.J., Dixon, J. and Crawford, J. 1996: What Makes a Good Plan? Principles and Methods for Evaluating Plans.

Borrie, N., Memon, A., Ericksen, N. & Crawford, J. (2004). Planning and governance under the LGA: Lessons from the RMA experience. Report prepared by PUCM: Planning Under Co-operative Mandates. Hamilton, New Zealand: The International Global Change Institute (IGCI), University of Waikato. Publisher: The International Global Change Institute (IGCI), University of Waikato.

Crawford, J. District Planning: A Game of Two Halves, Planning Quarterly, no. 161, September 2006.

Crawford, J., More Effective Policy & Plans, Environmental Defence Society Conference Proceedings, Auckland, May 2007.

Crawford, J., Backhurst, M., Laurian, L., Berke, P., Dixon, J.E., and Ericksen, N., 2000: Planning Under a Co-operative Mandate: Proceedings of the Peer Review Workshops (Hamilton and Wellington), June 2000.

Crawford, J., Berke, P., Dixon, J. and Ericksen, N., 1996: What makes a good plan? Planning Quarterly, no. 120, March 1996. p. 6-7.

Crawford, J., Day, M., et al. Achieving anticipated environmental outcomes: how effective is the district plan? Hamilton: IGCI, PUCM Summary Report to Papakura District Council, June 2008.

Crawford, J., and Rowan, J., Getting Value from the Local Government Act 2002 and the Resource Management Act 1991, NZ Community Boards Conference Proceedings, Auckland, June 2007.

Day, M, Backhurst et al; Confessions of a Resource Consent: A report to Government on Plan Implementation, 2003

Day, Maxine., Greg Mason, Jan Crawford & Peter Kouwenhoven. (2009) Evaluating the Effectiveness of District and Regional Plans Prepared under the Resource Management Act: Planning Practice Guide 4. The International Global Change Institute, The University of Waikato. www.waikato.ac.nz/igci/pucm/

Dixon, J., Ericksen, N., Berke, P., and Crawford, J., 1996: Planning Under a Cooperative Mandate: New Plans for New Zealand. Paper presented at the Joint International Congress of the Association of Collegiate Schools of Planning and the Association of European Schools of Planning, 25-28 July 1996 at Toronto.

Dixon, J.E., Ericksen, N.J., Berke, P. and Crawford, J. 1996: Planning Under a Cooperative Mandate: New Plans for New Zealand. Paper presented at the Joint International Congress of the Association of Collegiate Schools of Planning and The Association of the European Schools of Planning, 25-28 July 1996 at Toronto. (CEARSPres-96-2-PUCM-2)

Dixon, J., Ericksen, N., Crawford, J., and Berke, P., 1997: Planning under a cooperative mandate: new plans for New Zealand. Journal of Environmental Planning and Management. 40 (5), pp. 603-614.

Ericksen, N.J., Berke, P.R., Crawford, J.L., and Dixon, J.E., Planning for Sustainability: NZ under the RMA. Ashgate, 2003.

Ericksen, N., Crawford, J., Berke, P. and J. Dixon, 2001: [Plans the Next Generation: a Report to Government on Resource Management, Plan Quality and Governance](#). International Global Change Institute, University of Waikato, Hamilton.

Ericksen, N., Dixon, J., Berke, P., Crawford, J. and Gibson, C., 2000: Planning Under a Co-operative Mandate: Newsletter no. 1. IGCI, University of Waikato, School of Resource and Environmental Planning, Massey University at Albany.

Ericksen, N., Dixon, J., Berke, P., Crawford, J. and Gibson, C., 2000: Planning Under a Co-operative Mandate: Newsletter no. 2. IGCI, University of Waikato, School of Resource and Environmental Planning, Massey University at Albany.

Fookes, TW & Jan Crawford, 2004: A Planning Studio Assessing Plan Effectiveness: A Trial at the University of Auckland Planning Department. Paper presented at the Australia New Zealand Association of Planning Schools, Perth, 24-26 September 2004.

Jefferies, R., Warren, T., Berke, P., Chapman, S., Crawford, J., Ericksen, N. & Mason, G. (2002). Iwi interests and the RMA: An evaluation of the quality of first generation council plans. PUCM Maori Working Paper No.1. Hamilton, New Zealand: Kōkōmuka Consultancy Ltd.; The International Global Change Institute (IGCI), University of Waikato.

Laurian, L., Crawford, J., and Day, M. with Kouwenhoven, P., Mason, G., Ericksen, N., and Beattie, L "Evaluating the Outcomes of plans: theory, practice, and methodology." *Environment and Planning B Journal*, Vol. 37, pages 740-757.

Laurian, L., Crawford, J., Day, M., Kouwenhoven, P., Mason, G., Ericksen, N., and Beattie, L: "Can Effectiveness of Plans be Monitored? Answers from POE – a New Plan Outcome Evaluation Method," *Planning Quarterly* No. 179 pp26-30, September 2008.

Laurian, L., Crawford, J., and Ericksen, J. (2008): "Measuring the Effectiveness of RMA Plans: A New Plan Outcome Evaluation (POE) Methodology," *PULSE* (the magazine of SOLGM - Society of Local Government Managers).

Industrial Ecology

Frosch, Robert A., William C. Clark, Janet Crawford, Ambuj Sagar, F. Ted Tschang and Audrey Webber: The industrial ecology of metals; a reconnaissance. *Phil. Trans. R. Soc. London* (1997) 355, 1335-1347.

Mediation & planning

Ministry for the Environment; Keeping It Fair. Dorothy Wakeling, with Jan Crawford & Joan Forret, July 2001.

Crawford, Jan. Evaluating Mediation in the Environment Court, *Journal of Resource Management Theory & Practice*, November 2008.

Fookes, TW & Jan Crawford, (2009): chapter on New Zealand in the *International Manual of Planning Practice*. Eds. Judith Ryser & Teresa Francini.

EMPLOYMENT HISTORY

Research Associate

International Global Change Institute, The University of Waikato (1999 - 2009).

The University of Waikato and Massey University

Senior Research Fellow (part-time) at both universities from July 1995 to June 1998.

Harvard University

Research Associate, Harvard Project on Public Policy for Industrial Ecology, Center for Science and International Affairs, John F. Kennedy School of Government (Sept. 1993 - June 1995).

Research Assistant, Harvard Energy Project, Center for Business and Government, John F. Kennedy School of Government (Jan. 1993 - Aug. 1994).

Teaching Assistant, Program on Negotiation, Harvard Law School (Fall 1993 and Spring 1994).

Bentley and Co

Associate Director in an environmental consulting and property development company (1985).

Harrison Grierson Consultants Ltd

Senior Planner and Associate Director in a surveying and engineering practice (Mar. 1982 - Dec. 1984).

Jan Crawford, Consulting Planner

Self-employed consulting planner (Feb. 1979 - Feb. 1982).

Waitemata City Council

Senior Planner, responsible for evaluating subdivision consent applications and land use policy for the industrial areas of the city (Dec. 1975 - Feb. 1979).

Auckland City Council

Assistant Planner, responsible for permitting buildings and district plan administration (Nov. 1973 - Nov. 1975).