

NEW VILLAGES

COMPONENTS FOR SUSTAINABLE DESIGN
BILL BERRETT

N E W V I L L A G E S

COMPONENTS FOR SUSTAINABLE DESIGN

BY

BILL BERRETT
DIP ARCHITECTURE DIP TOWNPLANNING

Cover Illustrations
Earthsong Eco-Neighbourhood,
Auckland,
New Zealand.
www.earthsong.org.nz

CONTENTS

INTRODUCTION	9
MY PERSONAL VIEWPOINT	12
ORIGINS	19
NEW VILLAGES PROPOSAL, SUMMARY.	20
LOCAL CONSIDERATIONS	20
OPPORTUNITIES	20
Abilities to Respond to Change	
Sustainability	
Values and Goal Setting	
Efficiency	
Quality of Life	
Profitability	
New Partnerships	
Demonstrations	
Experimentation	
World Example	
Current Initiatives	
DESCRIPTION OF A NEW VILLAGE	26
Why a Description?	
Overall Shape and Size	
Density	
Transport	
Identity	
Homes	
Work	
Recreation	
Facilities	
Health	
Education	
Support	
Commercial	
Village Centre	
Community Development	
'The Dark Side'	
Economic	
Government	

	Management Responsiveness Evolution Age, Gender, Ethnicity, Heritage, Time Design Vision Conclusions Dangers	
PROBLEMS		43
	Land Assembly Land Acquisition Site Definition Resources Planning Implementation Construction Disposal of Assets Management of Assets Responsiveness	
BALANCE OF DIFFICULTIES		44
WHAT,WHERE,WHEN AND HOW		44
	Growth Transport N W Locations Communities, Urban Villages, Townships Existing Communities Phasing	
CONCLUSIONS		46
	New Villages are proposed A new Agency is needed Governance and Participation	
ACTION - THE NEXT STEPS		47
EPILOGUE		48

ILLUSTRATIONS

EXAMPLE	Earthsong, NZ.	11
ORIGINS	Village model, N.B.N.C. UK, 1964	19
PLAN ONE	Strategy Plan, New Villages in the South East, UK.	24
	Strategy Plan, New Villages in the South Kaipara NZ	25
PLAN TWO	New Village Diagrammatic Layout	26
PLAN THREE	New Village Centre	35
PEDESTRIAN & TRAIN CROSSING, HASTINGS, NZ.		49
NOTES		50
BIOGRAPHICAL NOTE		51

INTRODUCTION

This Study is an effort to distill my knowledge and experience of the creation of new communities which has developed over forty years of 'hands on' work. First from the creation of a New City in the UK called Milton Keynes which is now approaching a population of 250,000. Second from my experience of the problems and characteristics of the Auckland area over a twenty-five year period initially as Director of Planning and Social Development for Auckland City Council and as a resident of New Zealand and England.

Few can have had experience of creation of a new city from scratch and the management of an existing city. This experience is not academic or theoretical but derived from the hard lessons of implementation and the compromises resulting from the political and development world.

What I have learnt however is that imagination, vision and daring are also the components which drive real achievement.

This study then takes a real problem, the need to accommodate part of the growth of Auckland in a sustainable way, which is achievable, profitable, practical and contributing to the quality of life of those who might live there. It also took a real location, the area to the north west of the metropolitan area between Swanson and Kumeu. Also an area in the South East of England is used to illustrate the idea.

Although the Study makes feasible proposals for a particular locality, it should be considered as illustrating the whole scope of sustainable environments and the factors necessary to bring them about. The important message is not in technical fixes or well known issues like recycling, eco-friendly materials or puritan restrictions - we already know a lot about these. More, it is about the human interactive factors which lie at the heart of change.

The current trend in UK under a Government devoted to the operation of market forces, the disposal of community provision to profit oriented corporations and of major infrastructure issues directed to only utilitarian goals, bodes ill for holistic Communities.

The notion of local self determination without the provision of funds or technical support is an unsustainable illusion. This derives from the doctrinaire pursuit of US 'small government' political doctrine rather

than a belief in self empowerment. Communities without financial, technical and social support are doomed gently to slide into tiredness, apathy and factionalism and become unsustainable.

The major urban problems lie in the management of already existing development - this I know. I also know that to illustrate with clarity the complex interactions which make for sustainable communities, something like a new village most directly reveals the basic issues.

In my situation it is not a practical proposition to produce plans minutely detailed and researched to every last legal nicety, but I do know that even within the severe constraints of the prescriptive approach of planning and resource management in New Zealand a great deal more could be achieved.

As Central and Local Government becomes more involved in proactive measures towards sustainability and some of the old fashioned rule oriented ways of regulating development give way to more responsive and hence sustainable processes, then even more satisfactory developments will result. The Colonial methods of survey based rules of Subdivision, the prescriptive 'zoning' and certainty based the 1930s American planning approach and the 'effects' founded provisions of the present Resource consent system will need to be modernised if responsiveness, adaptability and hence sustainability are to be achieved.

It is worth remembering that the above sequence of control in much of the English speaking world has its origins in the colonial dividing up and ownership of 'virgin' (!) land to ensure 'legal' title and rights of 'owners' and having its beginning in the European settlement of North America, Southern Africa and Australia. European planning regulation has long superseded these colonialist restrictions with methods more appropriate to the sustainable development pressures of today.

This book is an effort to show that there is another way in which Communities can come about which are self regulating and self run and could continue to be Sustainable for decades to come.

Around the world initiatives are being created by committed and creative people to demonstrate to a hungry public that there is a better way.



Earthsong, NZ.

MY PERSONAL VIEWPOINT

This work 'New Villages' was undertaken for two major reasons. The first was to stimulate interest by decision makers, to explore new ways of satisfactorily dealing with peripheral urban growth by the creation of sustainable communities.

The second reason was more general and personal. That was to show the importance of interpersonal skills to the sustainable planning, design, building, establishing and evolution of communities.

This study, should be considered as illustrating the scope of whole environments and the factors necessary to bring them about. The important message is not in the detail of homes, transport or retailing strategy, we already know a lot about these. Indeed much practical has already been achieved for example in Milton Keynes [UK], Curitiba [Brazil], in Europe and in proposals in Australia.

The major point is in the inclusiveness of what is required, in partnerships, interdisciplinary working, effective agencies, decision making bodies with vision and in cooperation.

From my own experience I know that we have become increasingly competent in the technical planning, implementation and managing of developments. Modeling techniques, financial planning, risk assessment and scenario building are all reaching higher degrees of sophistication.

There remains a major gap in our skills, which I believe provides a key to sustainable communities, that is the skill of empowering users to envision, create, and continue to evolve satisfaction in their lives and in their environment.

Working as I have over many years in the creation of environments both within existing cities and in the creation of a new one, I know that every part of an environment is indivisibly and continuously part of the whole and that individual parts cannot be separated out or considered independently. Traffic for example is not just dealing with volumes of transfer from one location to another however sophisticated the model, but includes the desire to travel, the ability to move, the diurnal response to human physiology, the economic factors of location, the social aspects of communication and employment, the perceptions of delays, convenience and true costs. Many of these factors particularly those most readily quantified, e.g. capacities, have

been extensively studied. On the other hand those concerned with perceptions, attitudes, preferences, environmental penalties, have not. We even have difficulty in creating inter-professional and inter-disciplinary teams to work on environmental projects.

I feel ready to state that the environment is seamless, it must and can only be dealt with as a whole. This demands a willingness and an ability to do that. Our education and hence our skills and professions are organised towards greater and greater specialisation. We do not either think or operate in ways which enable the environment to be worked with holistically. We don't educate generalists, we don't train for holism. The skills we teach are analytical. The creative, intuitive, inspirational and visionary, we have are neglected.

Hence this work shows how important to the creation and future health of developing communities are the skills and operation of vision-building, empowerment, facilitation, participation and involvement, negotiation, conciliation and conflict resolution. All of these have at their core the skills of interpersonal understanding and empathy. Skills we can do a great deal more to disseminate. In exploring this family of skills, we also discover that other rich and wonderful part of ourselves, namely our spirituality, manifested in whatever form it takes, 'reason', belief, religion, skepticism and of course nihilism.

Environments have always and I suspect will always, have major 'spiritual' components, whether it the celebration of global capital in Manhattan, totalitarian power in Red Square, Moscow, or in the Parish Church and Manor House.

But there is another aspect of the spiritual which receives scant attention in environmental work - the 'Dark side'. That aspect of creation which is negative, corrupt, oppressive, criminal and destructive. Sustainable environments if we were able to create them, and if physical, economic and social needs were substantially satisfactory to the citizens, would still be damaged by the 'Dark' aspects of humanity. We need to recognise and work with this. To do this with a mechanistic, utilitarian approach will not take us far.

On the other hand enhanced perception of self, of others, of nature and the world that surrounds us as whole continuums, can become a very creative, celebratory, fulfilling and enjoyable addition to our quality of life, this both individually and in a community.

People working with the health and well-being of their fellows, have over the years come to the concept of the whole person. Therapists, Counsellors, Facilitators have no difficulty in exploring this idea. They have worked initially through a therapeutic mode of understanding and alleviating trauma and stress. Their skill is not to direct but to empower; to reflect and to reveal. Their work has evolved over the last forty years initially from the crisis issues of suicide, alcoholism, death and disaster; to lower level trauma of the workplace, corporate organisational issues and to teen-age counseling.

Those considering the distress of others, have perforce to consider themselves, their own health and balance, and in doing that to recognise the shift this implies to specialisms and professional stances - not least an understanding of a need for a shift from 'director' to 'facilitator'. But each of us does have quality, charisma and an ability to lead too.

If there is a sceptical or dismissive reaction to these points, ask yourself this question - 'Why should I conserve?' Our society has legislated to avoid pollution, recycle, protect environments - but why?

I would be surprised if the response to yourself did not include aspects of what has been discussed so far.

So, I have asserted that people are whole and environments are whole, and the interactions between people and between people and their environments are whole.

How then is all this to be applied to the creation of new environments or for that matter to existing environments? I have chosen for this purpose the creation of some new communities because I can make my points more clearly this way - working with whole environments is pretty difficult anyway!

I have tried to envision some communities with as many of the aspects of new community development contained in the description as I can. I have indicated the contributions towards sustainability that 'conventional' approaches can achieve. I've also tried to indicate and imply where the additional 'people oriented' skills can make a major difference to the ongoing health and sustainability of evolving communities.

These then are my reasons for creating this proposal for new villages, to record and share my thoughts based on experience, study and creativity. Some of them go back to when I was first asked to consider a new city in the 1960s, some on recent personal work. The intention is also to encourage others to advocate their own ideas and to step-out courageously to work with the whole, the seamless, the interactive.

In this document, I have indicated where contributions can be made by the involvement of people with special skills in interpersonal relationships. The main areas are these :-

1. Values and Goal setting by decision makers
2. Vision building by designers, decision makers, local people and potential citizens
3. Inter-professional and inter-development partner mediation.
4. Creation of Government, Local Body and Community regulatory mechanisms for new communities.
5. Understanding and prioritisation of aspirations, preferences, attitudes, perceptions, cultural stances, beliefs, needs, prejudices, hopes and fears of whoever participates in the development process, including future users of new developments.
6. Shaping and conducting processes of participation and involvement in the development process and the understanding and elucidation of findings.
7. Preparing and monitoring of briefs to designers, builders and users.
8. Facilitating the continuing evolution of the community, the resolution of conflicts and challenges, the taking of opportunities, the responses to disaster, the celebration of achievement and the forward vision of the community.
9. Helping the understanding of the complexities of a seamless environment, the shift from defined objectives to working with processes and the passage of individuals and communities through time.
10. Together with spiritual and philosophical aspects of communities, help understanding of the position of people in the 'scheme of things', the environment, the planet, in time and in relation to others.

To sum up, we are all individuals, we are parts of families, communities and nations, and yet to all of us Earth is our home. Without the earth we are nothing. Earth is part of the Cosmos which created and

sustains continuing life. We are an indivisible part of it. The Cosmos created the building blocks from which each of us is made, water for example. We each are about 94% water which has been around since early on in time. We 'borrow' the water; through our lives the water is changed and replenished and returns with us to the earth when we die. We are an indivisible part of our environment.

Humanity has been around in its presently evolving form for many thousands of years and on the basis of present knowledge, spread over the Earth to many different environments. So not only in a physical sense are we part of a whole but also culturally we are part of a whole. We have common instincts which are perhaps the oldest parts of us, fight or flight, the drive to reproduce - to survive.

We have come to exist in communities, families, tribes - communities defined by location and territory - towns, cities, nations. Also in communities defined by society - castes, classes, gender, religion, culture and power.

These communities we give expression to in the form of codes, laws and practices. A more tangible form of expression is in the form of the environment we build around us from the temporary shelter of Amazonian people to the temporary constructions of the ever-changing megalopolis of say Tokyo - Yokohama [with over 30 million people]

The built environment reflects the characteristics of the people who build it, in all parts of the spectrum.

The age old cycles which are built into the cosmic structure of the solar system, the sun, the moon, still profoundly effect our being and the environments we inhabit.

We come into life - we are born - we develop and learn, we establish our individuality, we reproduce, work, play, fight, become aged and die. We sleep, we wake [and create traffic jams because we wake at roughly the same time.]

We work, we play, we tire and need rest and diversion [and destroy environments we wished we lived in.] We experience bodily changes into and out of reproduction, we experience immediate awareness of the cycles of the moon, the sun.

Above all, in the built environment we have the need to celebrate, to record, to aggrandise and much more particularly to accommodate all these aspects of ourselves.

In moving through this process from our ancestors in the Brazilian forests [we are still living concurrently with them!], we have experienced greed, oppression, dominance, fear and hope. The fear of the unknown, of Death, still drives the dark side forces built into us. We have steadily and at an accelerating rate moved away from our contact with those few centimetres of soil and few kilometres of atmosphere which make that object of desire, life, possible on Earth our home.

Now, irrespective of 'natural' cycles of climate change, human activity is accentuating the peaks of change, filling the troughs of change and accelerating the pace.

Although pollution, global warming, and turbulent weather are serious enough our Planet would still have major problems of Sustainability. These are filling up our consciousness at the moment but to pursue these issues of Global Warming, only is to misunderstand the critical phase we are in.

Crises of population, food, inequality, globalisation, competition for resources, all align together and demand our urgent attention.

At the centre of this conundrum is the way we live, and at the heart of that is the way we come into being, our conscious existence and our passing to reunite with Earth our Home.

In the twenty first century a way of working has grown which seeks to empower the individual and the group to influence and ultimately steer the specialists and power players who shape our places of living, working and playing. This family of skills evolved from the work of the great pioneers in the understanding of the human condition, Freud and Jung. Later in the period since the 1960s, spearheaded by the work of Carl Rogers, a role shift between the user and the provider has taken place. The theoretical basis of this work has been derived in a largely empirical way based on the observation of people, groups and organisations and analysed using our centuries old basis of reasoned thought.

Now a new and fundamental dimension is influencing our understanding of human behaviour; reasoning and intuition. This is because we are just starting to be able to observe and measure through Neuro-Science how our minds actually work. In this regard then, issues related to inspiration, intuition, foresight, envisioning and

instinct are seen to play a far more important role than we believed previously.

This change is bound, profoundly, to influence that trend towards empowerment and ability to choose and to illuminate more clearly the foundations on which the skills of facilitation and the involvement of people shaping their own environments. We can as yet merely glimpse the implications of this development.

What has become orthodoxy since the 1960s will have to change to respond to and use what we are finding out. Just as the integrity of the Facilitator has been key to the empowerment process, so too will have to be the resistance to the possibility of massive human manipulation of people by the powerful in the future.

Notwithstanding this danger, the continuing evolution towards self-generating and regulating communities as advocated here, will carry on.

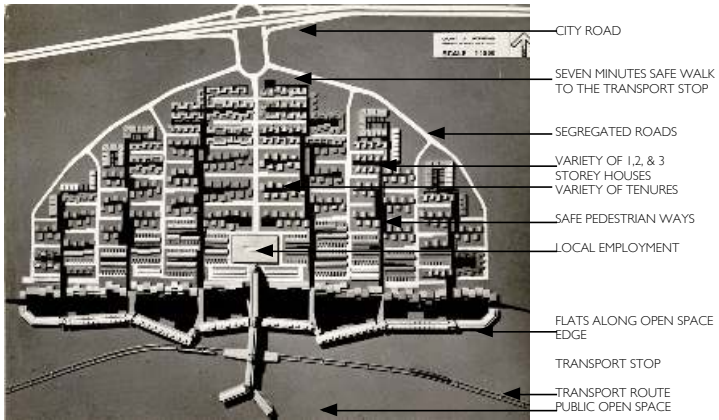
In conclusion then, this is why I believe in the importance, when working with the environment, of the extra dimension provided by inter-personal skills, facilitation, counseling - call it what you will - which will help us at least to make a somewhat better job of it than we have done in the past. I also believe this family of skills complements and completes current best practice in management, in community life and indeed in being healthy in the personal internal environment of each one of us.

I have come to these views through the practicality of applied theoretical investigation, modified by the processes of law and governance, changed by the passage of time and of aspiration, to produce tangible environments in which people can live fulfilling lives.

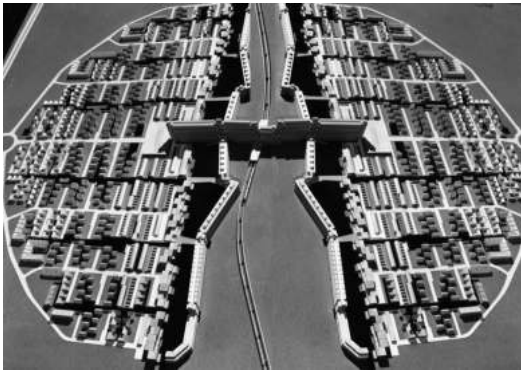
Although there grew to be a team of many working on Milton Keynes, a new city of nearly 250,000 now exists and flourishes, it originated from a vision of which I contributed a significant part - but my background and experience is strictly practical! The operation of politics, the law, technical expertise and the skills of implementation all operate through people who have prejudices, problems and rivalries and to work with these is the ultimate test of practicality. It is from working with this practicality that my viewpoint derives.

ORIGINS

Some of the thoughts and ideas in this document are evolved from the proposals made for a new city in North Bucks. This proposal of the early 1960's was for a series of 'villages' linked by a public transport system which would be fare free to riders. This project became Milton Keynes, UK, population now 250,000, and being extended. The new city as built, opted for a road based structure, and without focus on public transport.



North Bucks New City,Village, 1964. [1]



NEW VILLAGES PROPOSAL

SUMMARY

This is a realistic proposal to develop attractive and sustainable new villages. It is impossible seriously to consider a scheme even for a discussion in principle without reference to a site. The original document used an area north of Auckland in New Zealand. The Auckland metropolitan area is expected to double its population over the next 20 to 30 years so its problems are not untypical. Every location, society, culture and climate is unique, but there are issues which can be discussed at a more general level. The ideas expressed here have a much wider application and could be appropriately applied in UK, or US as well as Australasia.

LOCAL CONSIDERATIONS

Auckland's anticipated growth is unlikely to be checked over the next decades even with the intervention of national Government to divert part of the growth to other areas. Suggestions have been made that a portion of Auckland's growth might be incorporated in new settlements, some of them in northwest Auckland, particularly in what is at present Rodney County.

A previous study [2] examines the opportunities and problems of such solutions and concludes that a linked corridor of a number of smaller new settlements, "Villages", is a practicability.

Particular issues arise from the Governmental structures in New Zealand, the powers of Local bodies, the 'Planning' system, matters of scale and the unique position of the the Maori people, the indigenous population. However similar problems exist in all societies and locations and this is part of the issue that each place is unique and must be treated as such, yet also general principles also apply.

OPPORTUNITIES

In our culture there is a long and honourable history of creating intentional communities, some of which have failed miserably, but many have become examples for better practice. Some of the work leading to this has been literary, but often it is an image portraying opportunities which captures the imagination and illustrates what

could be. There is no substitute for demonstration to disseminate and to encourage vision.

ABILITIES TO RESPOND TO CHANGE

Developments planned using responsive techniques have a greater ability to change sensitively in the face of social, economic, technical, political and sustainability issue changes - much more so than with the current market-led approach.

SUSTAINABILITY

Planned communities are able to take an holistic approach and adjust to evolving and improving standards for reducing pollution, land take, and damage to the environment. They provide the opportunity to work out the complicated interactions necessary to achieve sustainable communities by being proactive towards change.

VALUES AND GOAL SETTING

A planned sustainable development can define attitudinal values to guide its evolution and to set goals and objectives to be reached, and clarify problems, which can then be modified by community consensus.

EFFICIENCY

Planning enables a much more efficient use of land and resources, and enables major savings to be made in pollution levels, distances travelled, increased average speeds, better community health, and more peaceable community regulation.

QUALITY OF LIFE

In an overall sense, a planned series of communities can produce better living environments by the use of design, by enabling the community to involve itself in the shaping of the environment and empowering the community to be self regulating and socially self assisting.

PROFITABILITY

Greater efficiency and certainty enables the community as a whole to accrue profits from the development and the management of the assets created. Businesses and developers also profit from new and innovative forms of enterprise.

NEW PARTNERSHIPS

Development can be undertaken through government stimulus, but also by partnerships between national, regional and local government.

In addition partnerships are possible between local government and business, and local and regional government, local land owners, business and the development industry.

DEMONSTRATIONS

We are used to only a limited range of models of urban and suburban development. There are relatively few comparable models for better urban lifestyles, more environmentally friendly construction, more sustainable urban form in one location. We do have some examples of housing clusters, but demonstration is required on a much larger scale. A City or part of a City region is a great deal more complicated than a number of small housing developments added together [2]. Demonstration is needed to show that in everybody's terms there are more satisfying and totally profitable ways of building and running sustainable communities.

EXPERIMENTATION

We are very inexperienced in building for sustainable urban development. There are many lessons to be learned and many demonstrations to be undertaken before best sustainable practice is achieved. This means a degree of experimentation. A major project of a planned series of communities would give much more scope for this than piecemeal projects within existing urban areas.

WORLD EXAMPLE

In the 50s, 60s, and 70s, many lessons were learned in the European and British New Towns. These are currently having to be rediscovered and updated for a rapidly changing world, e.g. London and the south-east of England having to accommodate one million new households. Today much Sustainable City work is entirely theoretical and has not yet endured the tests and revisions of implementation. Also the work in the Adelaide area of Australia and the American "New Urbanism" movement offer very optimistic pointers to the future.

CURRENT INITIATIVES

What this study does NOT do is to restate many of the practices which have received considerable attention in recent time and can now be considered to be 'best practice' in sustainable development. For example careful use of fresh and reused water and the conserving use of surface water run-off, and the use of organic effluent treatments.

Also the recycling of 'waste' materials and the careful disposal unavoidable waste. In addition the prevention of the generation of waste in the first place.

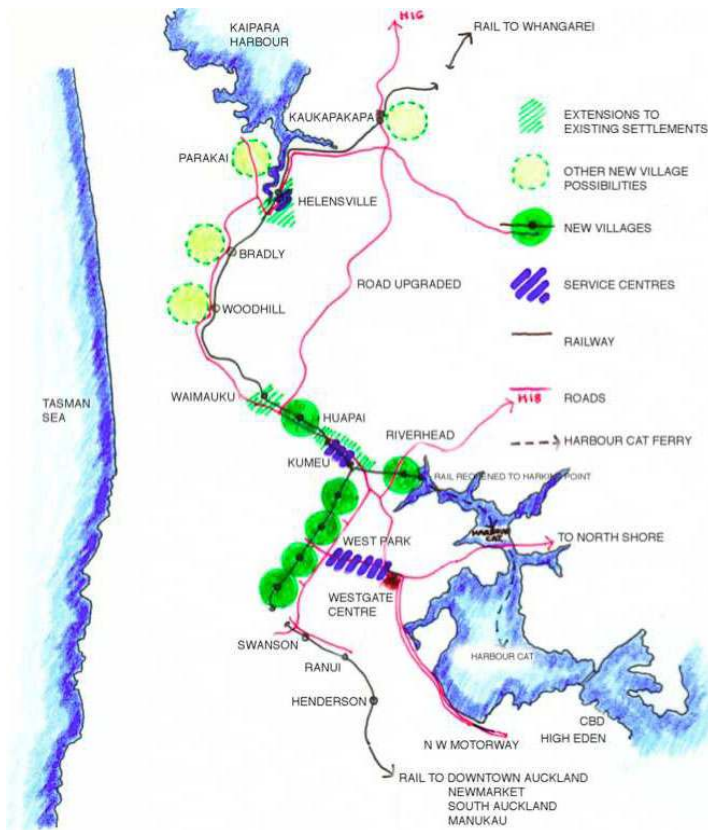
Next the importance of landscaping and extensive companion planting, the use of organic methods of public space management and the creation of 'fruitful landscapes'. The propagation to a wider community of systems which work with natural processes such as 'Permaculture'.

Detailed aspect of movement such as cycling and walking provision, electronic communication and the details of telecommuting are presumed to be part of the general process of creating sustainable communities.

These and many other initiatives are the subject of much work and implementation.

However emphasis has been given in this study to aspects usually given less attention. The partnerships, agencies, and skills needed to facilitate sustainable development and creation of communities. What talents are needed to work with users, their attitudes and aspirations, to achieve co-operation from the many players in the process. Above all the study seeks to show the scope of actions required to produce whole sustainable environments and thereby to reveal that current models are inadequate.

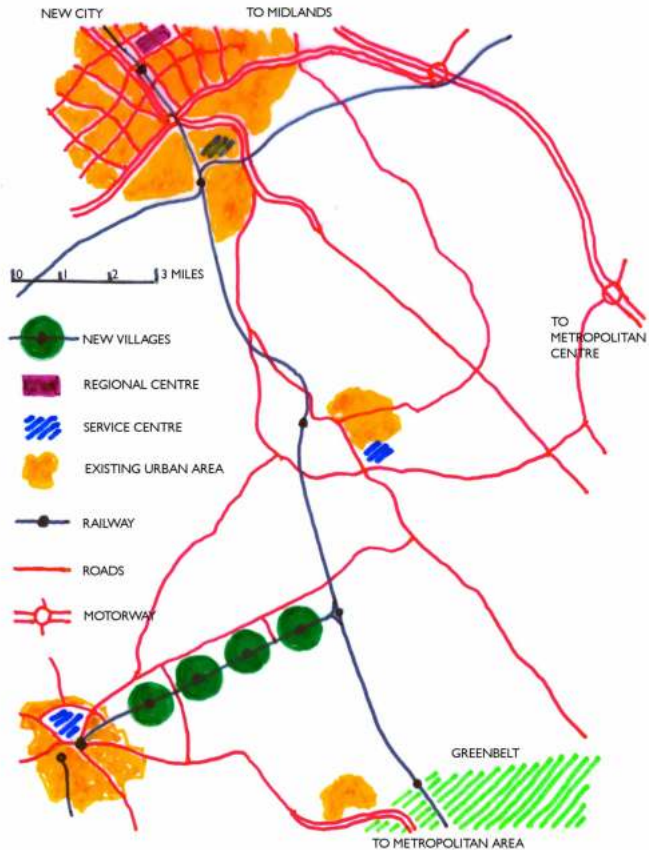
PLAN ONE, a.



NEW VILLAGES, SOUTH KAIPARA, NZ.

This exercise grew out of the likelihood that Auckland NZ would increase considerably in population. The present pattern of development is of two kinds. First the low density sprawl of typical 'New World' suburbs, with little regard for environmental or sustainability issues. The second pattern fashionably advocated by Planners, who have little understanding of the many consequences, is to intensify the existing urban fabric, particularly around 'transport nodes'. To be socially, environmentally and successful in Urban Design terms this requires much greater management, regulation, design skill than is now available.

PLAN ONE, b.



NEW VILLAGES IN SOUTH EAST ENGLAND, UK.

This is based on a much earlier idea to accommodate development in the Vale of Aylesbury. A disused rail link joining the town and the outer suburban services of the West Coast Main line. Planning powers and the model set by the Buckingham Development Company (a partnership between Buckingham, The Aylesbury Vale District Council and Bucks County Council) would enable a realistic implementation of such a project. However these proposals are intended to give ideas for holistic approaches to the development of Sustainable communities, rather than real life intentions.

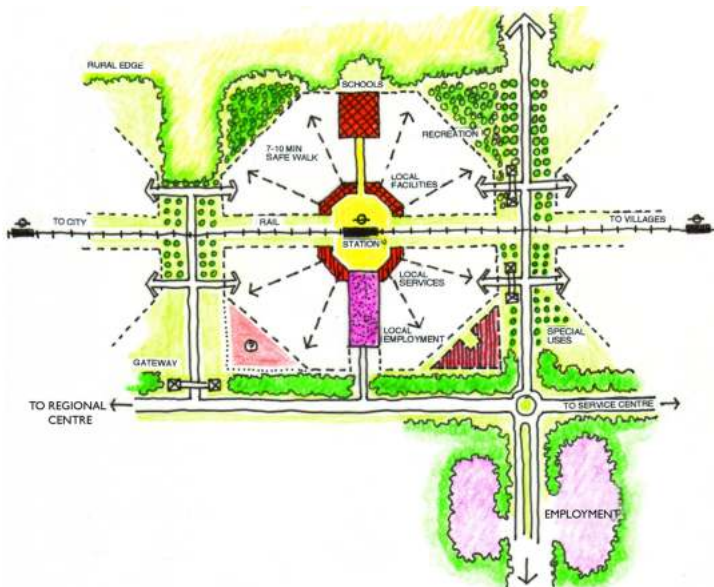
DESCRIPTION OF A NEW VILLAGE

WHY A DESCRIPTION?

Descriptions of proposals are usually in the form of maps, plans, diagrams and architect's perspectives. It is the community organisation, social and economic fabric and the spiritual and community well-being which are the most important contributions to the sustainable success of a planned, linked village. These are less tangible (perhaps this is why they are usually neglected by architects and planners). The method of description is not a 'walkthrough' or 'story' but a setting out of components and characteristics.

OVERALL SHAPE AND SIZE: COMMUNITIES, URBAN VILLAGES, NEW VILLAGES, TOWNSHIPS.

PLAN TWO



NEW VILLAGE, - DIAGRAMMATIC LAYOUT.

Diagrammatically communities focussing on a transport spine would have the following characteristics:

- a. No one would be more than 10 minutes safe walk from a public transport stop.
- b. Types of homes, their style, layout, density, price range, would vary between and within Villages, thereby offering a wide variety of choice.
- c. Villages would be constructed in sequence, permitting varying rates of development.
- d. Villages would allow a range of development agencies, forms of development partnerships and developers to be involved at any one time.
- e. They would contain all local facilities such as local shops, primary schools, some local employment and services.
- f. Their form would encourage contact with surrounding countryside and with areas of Urban/Rural activities at their edges.
- g. The diagrammatic structure of villages would facilitate community cohesion, permit both association and separation and encourage the development of distinctive identities for and within each Village.

The village is centred on a stopping place on a public transport system - station, its outer limits would be determined by an approximate radius of 7 - 10 minutes walk from the train station. This would be influenced in detail by the particular site and its unique characteristics. The village would have a clear edge and not sprawl into the surrounding countryside. The transport method is not a critical issue. The particular circumstances influence the mode. The approach should be to formulate a performance specification and conclude from that what is appropriate or to use existing facilities if that is appropriate. So new rail, existing rail, light rail, tram, electronic guidance system, 'monorail' or even bus could be appropriate.

DENSITY

Because it is planned, land would be economically used and the gross density of the overall village would be higher than a typically sprawling suburb. There would be a variety of net densities along with a variety of house development types, prices and tenure, hence average net densities would be higher and more land efficient than unplanned suburban areas, but the village would not be high density, and there would be ample garden space, public open space, green corridors and green edge zones.

Overall the village would contribute to sustainability by the imaginative and efficient use of land at a higher gross density i.e. overall more homes on less land

TRANSPORT

Because of safe, easy and quick access to public transport the proportion of journeys made using public transport, cycle, and on foot would be considerably higher than in a comparative residential area.

The average annual journeys made per person by car would be considerably reduced thus contributing significantly to sustainability by pollution reduction. Because job opportunities at local level are made more available and more accessible the annual average journey to work distance would be reduced. Therefore speed of average journey to work would be increased, contributing considerably to sustainability in fuel use and fuel efficiency.

Because facilities are located locally and centrally total average journeys outside the village are reduced thus contributing to sustainability by further reducing the need to travel. None of these are achieved through compulsion, cost penalties or restrictions, but by creating opportunities for sustainable choices to be made.

Each home or use would have road access, but within the village priority would be given to the pedestrian or bike rider. There would be a degree of pedestrian segregation at locations such as schools or accommodation for the aged or infirm. Car accommodation would be provided with homes and proximate to the train station and vehicle access to the region's road network would be direct and congestion free. Through the community opportunities created within each village, encouragement would be given to reduce danger, pollution, travel congestion and attenuation of the urban fabric.

Thus the community contributes to sustainability by lowering the total demand on the region's transport facilities.

IDENTITY

The identity, image, style or design of the village is not predetermined. Each village could be different, be its own place, as determined by the site, the people who inhabit it and those who develop it. It would be a requirement however that a positive distinguishing identity should

form part of the design process and that the 'nowheresville' anonymity of suburbia be improved upon.

The sense of place, of ownership, of community and of commitment is an important contribution to the sustainability of the village itself, and a demonstration to others.

HOMES

A variety of homes in terms of form, size, tenure, affordability, location, section size and flexibility would be included. This would be to encourage a balanced community of young and old, wealthy and low income, large families and small households. The different skills, resources, experience and wisdom which a variety of people bring are well known in rural communities.

This can be facilitated by skillful design and creation of opportunities. We know that mixing on too fine a level is not acceptable from the point of view of marketability or on the basis of social behaviour. We can do better however in maximising the benefits to be derived from a well balanced community. Within a village areas of different tenure, type and price range would come together at the First School location. The community meeting points of the schools, the local facilities such as doctors, churches, shops and pubs facilitate contact and interaction. The creating of opportunities for all kinds to live in a village avoiding territorial and boundary frictions can be designed for. Similarly homes for different age groups and special needs are associated either within similar areas or the areas of community interaction.

The form of homes like cul-de-sacs, small groupings and self-policing streets all contribute to stable and sustainable communities.

The design of homes is shaped by guidelines which help the creation of a coherent form of streets, places and groupings. Community activity is encouraged by spaces like verandas, porches, footpaths and squares which help public and neighbourly contact. Materials and building shapes which are harmonious one to another are recommended as well as idiosyncratic and imaginative initiatives.

More overt efforts towards environmental sustainability such as lifetime environmental costs, real environmentally friendly materials, energy conserving designs for insolation, insulation, ventilation, water heating, cooling, water use and reuse, water collection and distribution, waste water disposal, and sewage treatment are encouraged

particularly by information availability, energy certification, cost bonuses and waste penalties. All these things offer the opportunity to produce overall improvements above the average for those of the traditional patterns of suburbia.

The overall energy efficiency and use of scarce and polluting materials would be considerably reduced below levels for conventional developments by the availability of eco-friendly design guidance, accessible environmental advice and bonus schemes for reducing high energy consumption, minimising waste, recycling and for incorporating eco-safe components.

Traditional forms of house such as cottages, bungalows and villas are encouraged because of their appeal as perceived archetypes and their elegant solutions to family living, but support would also be given to innovations responding to the living patterns of other cultures like the different perceptions of privacy by Muslims, the importance of geomancy to the Chinese and the extended family requirements of the Polynesians and territorial integrity to Europeans.

Other forms which respond to the realities of the modern world such as for the aged, for single parent families, for cooperative living, for people with shared disability, physical or social, or with very specific needs, are all part of a truly balanced community and have a place. All play a part in creating a truly sustainable community.

WORK

Provisions in the design of homes would encourage non-disturbing work from home to take place, such as telecommuting, services, crafts etc. Some work places of 'Good Neighbour' employments would be encouraged in the village centre adjacent to the transport station as well as the employment in locally based services. Jobs oriented towards the 'carer' of the household would be encouraged and community organised child-care facilities provided.

The rural location of the villages provides an accessible work force for surrounding agricultural activities so that families can share in the benefits of the village life.

The linkages of the villages to existing local service centres and to specialist business employment areas, expand job opportunities (which would match the environmental and sustainability goals of the villages)

and would provide a wide spectrum of jobs, skill requirements and income levels.

A major component of jobs would be in proximate metropolitan centres [4]. The transport linkages would facilitate this particularly for the young and female workers who may prefer central locations.

Access to paid work in all senses is the foundation of a community. This is facilitated by location, by skill base, by a willingness to be adaptable and by innovation. Good location, transport, a sense of well being and community health enable a community to be positive in a changing world. It also means confidence is generated in investors with vision.

The consciousness of the community towards eco-friendly businesses, employers concerned for their social responsibility and people-centred activities encourages a movement towards sustainability in the workplace, in turn contributing to the overall sustainability of the region.

RECREATION

One of the characteristics of late twentieth century living is the blurring of the boundaries between work and leisure. It is in leisure trips by car where the largest growth has recently taken place. To increase the opportunities for locally based leisure could make a major contribution to traffic reduction. This would be particularly so for teenage and young singles and for the second and third car in a household. The scope of leisure and recreation provision is very much for the evolving village community to decide, therefore the structure and design of the village must not inhibit possibilities and must encourage opportunities for things to happen. Three areas which do need consideration are secure play for children, recreation associated with schools and community facilities, and recreation provided commercially. Very important too is the current trend towards health sustainability through fitness programmes. The association of leisure, fitness and recreation under one roof could be located near the village centre.

It is in leisure and recreation where much current growth lies, but it may not be for all the community, nor always continue. Leisure also can be a major polluter and may be unsustainable in the broadest sense (e.g. socially, polluting, and destructive of local quality). This is an

area where a planned village could do some really creative work towards sustainability.

FACILITIES

HEALTH

So often the term Health is concerned with the cure of illness. In contemplating a planned community with people participation then opportunities arise for greater involvement in total health, prevention of illness, promoting good living conditions, stress-free environments and mutual care in the community.

In the village centre there would be a Medical Centre providing GP services and, if the community wished it, access to non-traditional health skills. This should have some link with education, community meeting and retailing provision. In addition it should be associated with care for the ageing, for the handicapped and special need facilities.

The bias towards public transport use gives good access for the less mobile to sub-regional and city scale Health facilities.

A community healthy in all senses contributes towards sustainability.

EDUCATION

Education facilities form a focal point for village life. They are used by most of the residents in some form or other. Their buildings, physical and human resources give the opportunity for many otherwise disparate groups to come together and share in the talents they bring to the education process. In this proposal the schools are at the heart of the community with easy access to other facilities and to open space. The buildings are closely integrated, not behind a fence, and can be used by a wide community, not just within school hours.

Access to education facilities is by pedestrian and cycle routes which are safe from traffic and molestation, achieved by careful design and alignment and by self policing organisation.

Education is encouraged also to take itself into the community particularly in Health and Environmental issues, and in the involvement of youth in the life of the community and the evolution of responsibility in the young, together with respect for and use of the wisdom of the aged.

Where secondary education is required then access is facilitated via the rail and public transport services. If a new secondary school is needed by the group of linked planned villages then it would form an integrated part of one new village with very close association to a rail station and with good cycle way links. Also major facilities such as a major swimming pool, auditorium or sports hall would be located here, In fact a new secondary school and its centre would resemble a village in its own right.

SUPPORT

A healthy community requires facilities for its support and sustainability. It will be very much up to each community to determine what these are. Requirements will also change over time so it is important to design these with flexibility built in and to reserve sites for uses not initially determined. Whilst these sites are awaiting a community determination they should be located and managed for a useful purpose.

Spiritual activities are important support services and these will vary according to the aspirations of the evolving community. They will have specific site requirements, e.g. Churches, Synagogues and even alignments, e.g. a mosque. Their location would preferably be with other village centre activities.

At the heart of the concept of sustainability lie spiritual values in a wide variety of manifestations which are not the monopoly of any particular doctrine. A purely utilitarian approach is inadequate to support the decisions needed for sustainability. The spiritual well-being of the village in whatever form it takes is the foundation of coherent action. The physical, aesthetic and practical form of the village facilitates the creation of a broader more sustainable way of life.

A community such as this facilitates the linkage of Health and Sustainability into a concept of people being more in charge of their own well being over their life's span. That will be true Sustainability.

COMMERCIAL

The trend of commercial activity over many years is towards larger groupings, nationally and internationally owned, drawing customers from ever widening catchments. These forces are unaccountable, powerful and often remote. There is recent evidence of a greater

community concern on the part of these Corporate organisations which may be more than just enhancing their public image.

The community must exercise its own not inconsiderable power (if it chooses to use it) to insist that commerce earns its profit by feeding back some of it into the community. This it can do by making more services available at village scale. These would be located in the village centre and at junctions with shared access roads between villages. If these are not forthcoming then the community, being better organised, could take steps to facilitate its own local commercial activities in the form of cooperatives and even local banks and initiatives like the LETS system.

THE VILLAGE CENTRE.

The Village Centre is a key concept of this proposal. It is the place where village identity is focused, the meeting point of the community, the place of interaction and celebration and the point at which the community physically connects with a wider region via the train station. It is the focus of many activities provided by many agencies, therefore a sense of coherence is required.

This can be achieved through good design guidance and an overall vision as well as a planned structure. A sense of generosity, graciousness, intricacy, formality and mystery can be achieved by inspired 'Urban Design'.

Self-policing, 'defensible' spaces, avoidance of antisocial behaviour, vandalism and crime, are all facilitated by combining community action with good design. Attractiveness to all ages, territorial 'ownership' for all groups e.g. teenagers, and the sustainable maintenance of these things also can be achieved through continuing design commitment and community involvement.

A sustainable healthy community needs a location which reflects its identity and pride. This will develop and change with the community evolution. Continuing resolve to maintain that pride will be facilitated by the involvement of the residents themselves.

PLAN THREE VILLAGE CENTRE, A COMMUNITY WITH HEART. NOT TO SCALE



Population between 4,000 and 5,000 people

COMMUNITY DEVELOPMENT

Proposals for Sustainable Developments usually place great emphasis on the hardware of our current notion of conservation, recycling, wind and solar power; organic gardening, bicycling, building materials etc. These are important but in fact they are the things we know most about and already have more than enough technology to solve.

The key factors however lie in much more difficult areas, behaviour, attitudes, prejudices, crime, disaffection, disadvantage, conflict and lack of consideration for others. We are only just beginning to develop skills in cooperacy, facilitation, mediation, conflict resolution, and true citizen involvement [5]. These are much more difficult, but it is in these areas that positive hope lies for the achievement of truly healthy and sustainable new villages.

These matters are impossible to represent in drawings or plans or in 'sound-byte' slogans but they are achievable and not utopian dreams lacking in realism.

But as we have seen in the best of recent senior management practice these approaches are profitable, effective, efficient and sustainable.

'THE DARK SIDE'

Everything proposed here is achievable today, with people as they are and in the current economic situation. But there is a 'Dark Side' to human nature. There will continue to be crime, oppression, violence, perversion, bullying and all those things we know exist and don't talk about (e.g. the fear of death). Our age-old concepts of Justice, Rule of Law, Policing and Social retribution continue.

A Sustainable community can reduce the stresses of living today, it will introduce new issues, but such a community could have the chance of greater visibility, transparency and compassion. 'The Dark Side' is every bit as important as the positive, and must be confronted and discussed if a community is to be sustainable and healthy.

ECONOMIC

It is within the grasp of new village communities to have a much greater say in the economic development of their community beyond the well known areas of local and regional government. They can insist that a greater proportion of their spending is retained within their community by the purchase of local goods and services. They can ensure that the savings they invest through their community effort are reinvested in projects which benefit their community and are not environmentally destructive. They can ensure that local produce and specialisms are maximised, reducing importation and transport. They can also ensure that the wealth they create is not expended on infrastructures of other regional growth activities which are less

sustainable than their own. The community could also decide to enable desirable but not immediately profitable activities to be attracted in, to the benefit of the community.

The creation of a new village community enables new economic initiatives to take place which enhance sustainability but which are beyond current 'conventional wisdom'.

The really creative thing the local community could achieve is to find many ways of genuinely involving village people in the sustainable evolution of the community.

GOVERNMENT

The creation of planned linked villages does require the creation of an implementation agency. However existing elected bodies will still be required to provide services and in turn will achieve a much enhanced rate base as well as voters and rate payers who will have views and responsibilities for continuing development.

The concept of sustainability as exemplified by these proposals does imply a greater concern and involvement by the citizen to ensure that what they achieve is not destroyed by external powerful influences. Also implied is greater empowerment of the local inhabitants of the village and a consequent reduction in some of the central powers of local and regional authorities.

Sustainability is not a handout from on high, rather it demands participation and involvement. The return is an overall profit to the community, not only in value but in true quality of life.

MANAGEMENT

To create and sustain a balanced and dynamic community its management is as critical as its design. Some aspects will be the responsibility of the local bodies, some will be that of the commercial concerns involved, and some will lie with individuals. The major player will be the community itself.

It is perfectly feasible for the community to invest in itself and for there to be major profits returned not only in the conventional sense but also related to quality issues. Community empowerment facilitates this and a community cannot truly claim to be sustainable without being in

the driving-seat of management. Partnerships between Developers, Authorities and Residents are possible if the will to achieve them is facilitated.

RESPONSIVENESS

The popular view of planning is that it is bureaucratic, restrictive and rigid. People think of planning as a legalistic activity concerned only with effects at a point of time. This is a very old fashioned view of an old fashioned process. Present day planning is pro-active, positive, designed to facilitate the reaching of agreed goals and capable of adaptation. In other words planning is responsive to changing aspirations, circumstances and attitudes.

This village, to be truly sustainable must have mechanisms which empower the residents to participate in this responsive process. This will need a change in mind set of present day planners who see planning as little more than building regulation, who see resource management as countering the effects of individual unrelated proposals and planners who have little understanding of design as a discipline. It will need adjustment to their attitude and professional base to hand over true power to the village residents. It will also require greater accountability from business and broader and more generous thinking from politicians both right and left. In empowering the residents an educative process is also needed to deal with 'the management of change'.

To achieve a sustainable community, the plan must build in a responsive approach from day one. This is quite as important as getting the architecture right. A village attractive and successful today to be considered sustainable must continue to be so for decades to come

EVOLUTION

A community, planned or otherwise does not come into being overnight nor does it stay static. There will be a planning stage in which people already in the location will need consideration. Then there will be an implementation stage, perhaps the most difficult time for existing inhabitants. Then there will be the intake stage for the first residents. At this time the social coherence of the future community will be founded. It would be an essential stage of community development to provide for welcoming, induction, creating facilities and associations.

These processes can be facilitated and made more speedy and effective. The development agency is the catalyst, its job is to enable the community to stand on its own feet. Then there will be the settling down period which will be the time for learning, working out ways to live together and provide mutual support. This can be facilitated. Indicators will arise showing trends and early warnings and by then an aware community will be able to respond.

The community will continue to evolve. This need not be a reactive process in which the community is powerless because the power is usually held by central players.

Part of the process is to empower the community to be confident of its own capabilities for self determination. A pitfall of course lies in success. As notably higher standards of life quality will be achieved and the community is manifestly more sustainable, the tendency to keep others out, to become restrictive and doctrinaire would militate against continuing sustainability

AGE, GENDER, ETHNICITY, TIME OF LIFE, HERITAGE, TIME.

If we look at human settlements historically, especially those which can be said to have 'sustainable' qualities, factors emerge which are not usually part of conventional planning processes. These nevertheless have historically played significant parts and have to do with our humanity. They are to do with who we are and our passage through life and the way we mark and deal with these characteristics. A planned sustainable village will respect these and build them into its evolving fabric.

AGE The welfare of mothers and unborn children, the safety and autonomy of children, the participation of young people, the elder role and care for the ageing all have physical and 'governance' implications. Age balance with a meaningful role for all ages is essential for sustainability

GENDER Gender and sexual orientation also create physical, organisational and regulatory requirements in planning. A sustainable community more readily enables self-regulation to take place.

ETHNICITY People of different backgrounds and cultures have varying needs, views and constraints on behaviour and community organisation.

A community which is sustainable must decide for itself initially and continually how it deals with these opportunities and conflicts.

TIME OF LIFE Communities which have survived for long periods of time have put much energy into marking those rites of passage, of birth, achievement, ceremonial, ritual, welcoming, farewelling and death. These reflect deep human needs yet have recently received little attention in the planning process.

An essential component of community sustainability is the civic celebration of these markers (cf Funerals, Historical pageants, Seasonal celebrations [Christmas], Twinning, Football games etc.)

HERITAGE Wherever and whenever we develop communities the land already has a heritage, (the foliage, the wildlife,) and the local people all have a heritage. This is more than the constructed artefacts, it is also the 'genius loci', the spirit of the place, everywhere is to some degree sacred.

Sustainability cherishes, extends and enhances these qualities.

TIME The passage of time is reflected in the spirit and shape of a community. Not only in things like style, fashion, materials, form and organisation, the relationship to the land, the daily rounds of sun and moon, the tides, the seasons, the climate, also the human rounds of work, leisure and rest. The noting and celebration of events, changes and aspirations, not only to mark, but to observe and attempt to influence. We think we are 'scientifically' superior to all this, but consider the cycle of our own year and even more clearly observe local traditions, festivals and ceremonial.

The passage of time and our successful negotiation of events, opportunities and catastrophes is the major key to sustainability. We need to recognise what we actually DO as well as what we reason. We are creatures of great antiquity with instincts, feelings, creativity and intuition as well as rationality. Sustainable communities cannot exist without these qualities - sustainable communities nurture these qualities.

VISION, VALUES, QUALITY, PRIDE, DEMONSTRATION

These intangibles are the topics many are most uncomfortable with, yet these qualities are what influence most of the choices we make. People the world over expend much resource in visiting environments they find attractive, Dales and Cotswold villages, Italian hill towns, Arab bazaars, country towns in America. Design enables us to distil some of the qualities people find attractive. This is not to do with style, but concerns human scale, harmony of shape and material, excitement and tranquillity and an overall sense of form. In traditional form of suburbia we know, a great deal of energy and money is spent on the individual home and its section so we must conclude people are very concerned with aesthetic issues. This concern can be extended to the village environment as a whole to create at home those qualities people go away to visit. Not to copy them but to design for their particular locality using the same criteria - it is possible to do this successfully. The movement for a New Urbanism has done this in USA in places like the new village of Seaside in Florida. There is the new village of Poundbury near Dorchester in UK, and a number of other projects now being built.

But to design effectively there first must be a vision to achieve a better and more sustainable community. We rarely have the opportunity to explore what could be, we spend much time in objecting to what is. The process of community vision building can be facilitated in workshops and charettes so that all have a chance to take part and shape their vision and wishes. The vision will be both a wish picture and at the same time what is achievable.

Arising from the envisioning process will emerge the values, congruencies and dysfunctions which the designers must encompass. Focus on these matters will bring a clear sense of quality, which can be achieved in a community and will enable explicit targets to be set. Passage through the process itself facilitates the evolution of community pride which becomes the motivating energy for ongoing well being.

These things are not 'pie-in-the-sky', they are already being achieved. These successful examples invariably attract visitors from around the world. **THERE IS NO SUBSTITUTE FOR DEMONSTRATION.** People are hungry to see practical demonstrations of a better urban way of life.

CONCLUSION

Many areas have been faced in the past by rapid population growth, rural influx and household structural change. Now we have become aware of considerable additional issues, consumption of scarce resources, pollution, congestion, and a newly discovered respect for the land and its heritage.

The lead time and infrastructural costs of intensification of existing urban areas mean that quality of life in those areas will decline and become even more environmentally unsustainable before they can be improved.

Peripheral growth in the model of conventional suburban development has already been shown to be environmentally destructive, greedy of land and resources and only serving to burden further the existing overused infrastructures.

This proposal shows that there is a considerably more sustainable, cost-effective and user-friendly way of creating new homes, new jobs and environmentally friendly communities.

DANGERS

What is being described is the realisation of ordinary people's visions and dreams. Specialists, by the very nature of the training they have usually received and the background from which they come, are focussed firmly on their own skill and the beliefs and values that go with their professional culture. They rarely see themselves as Facilitators to the visions of a wider public so they often give too much emphasis to Stylistic Aesthetics, Planning principles, Engineering standards, Social dogma, Economic orthodoxy or Political correctness. It requires an important change in professional and skill based outlook by individuals and corporate bodies to update old attitudes, for example the arrogance of architects so blatant in the 60's is alive in a new guise [post-modernist, new modernist, hi-tech call it what you will] in the new century!

But there are difficulties which laissez-faire market-oriented development sweeps under the carpet, as we have seen to our cost in recent time. These matters are not insoluble: as in all of humankind's history, conventional wisdom, orthodoxy and dogma all militate against better qualities of life.

PROBLEMS

LAND ASSEMBLY

Without some way of designating land for new settlements, site acquisition is exceptionally difficult.

LAND ACQUISITION

Without some means of compulsory purchase and the ability to buy at values prior to the intention to build, it is very difficult to consolidate appropriate sites and any worthwhile development can be rendered economically unsound.

SITE DEFINITION

Problems of public (n.i.m.b.y) resistance, environmental considerations and the difficulty that elected representatives experience in taking tough far-sighted decisions make finalisation of localities very difficult. An Agency is required to transcend short-termism and implement a more general public good.

RESOURCES

Water, drainage, power, investment, human and environmental resources need to be aligned in ways very different from the current "User Pays" or "Old Labour" ethos.

PLANNING

We now believe in public participation, and it is possible to work with existing residents. Their stance is likely to oppose change unless substantial benefits to them can be demonstrated. But it is hard to interact with users who are not yet resident! Plans for the realisation of new communities should consist of initial responsive concept plans, responsive alternative strategies, phasing plans, a process for frequent monitoring, evaluation and review and a structure for community involvement in ongoing management.

IMPLEMENTATION

Any community consists of a very wide range of interests, services, facilities, providers, authorities and responsibilities. It is essential that these are coordinated by a special Agency which has delegated executive powers.

CONSTRUCTION

A construction and development industry willing to respond to the new types of opportunity is necessary. service providers, particularly in transport, have to develop new outlooks. These businesses have a

profound effect on the phasing and hence the cash flow and financial viability of the new villages, so their commitment is essential, so far their corporate cultures are slow in realigning towards sustainability.

DISPOSAL OF ASSETS

Because the assets created in new ways (often from the use of funds involving the public and in complex partnership arrangements) need to be efficiently and profitably disposed of, a special Agency is required to do this also.

MANAGEMENT OF ASSETS

A wide range of created assets will have to be held and managed democratically and efficiently in both the short and long term. A special Agency would be required to do this, and their processes would need to influence the Planning and Implementation stages.

RESPONSIVENESS

Tendencies to over-define, rigid controls, non-holistic planning and the negative and restrictive attitudes current in some of the Planning, Engineering, Administrative and Architectural professions must be avoided.

BALANCE OF DIFFICULTIES

The problems are considerable. On the one hand there will be increasingly severe growth related constraints to profitability and quality of life within the existing built-up areas. On the other hand there is a lack of political experience and foresight and will to be bold, visionary and innovative. We know about the grinding slowness of statutory planning and bureaucracy, now is the time to try the other course and give talent, vision; enterprise and empowerment a chance. The problem is essentially attitudinal in shifting from the constraints of '(illusory) certainty' to the opportunities of 'responsiveness'.

WHERE,WHAT,WHEN AND HOW

GROWTH

Population growth is from natural growth of the existing population, in-migration from the region, from the rest of the nation and from overseas. In addition a major factor is the reduction of household size and the formulation of more households. The rate of growth will largely depend on national and international and global prosperity and

the creation of job opportunities. The affordability of homes and the quality of life available will also be factors.

Accommodation of this growth will be by many means - intensification of existing areas, infilling of previously "unsuitable" sites, peripheral extension in the conventional way, new settlements and development of regional small towns.

The rate of growth is likely to accelerate. None of these possibilities is likely to outweigh the others. The development of large planned new settlements or towns requires much new legislation, skill and technique. New villages, each one individual, offer a much more deliverable opportunity. It is important to note however that the existing urban infrastructure and fabric will dominate all through the period under discussion.

TRANSPORT

Physical movement is the major structuring element of any new settlement or grouping of settlements, the home/work relationship still being the key component although the major growth area is in leisure time trips which is much more diffuse and unpredictable. The regional/national centre nature of growth, despite the likelihood of some metropolitan dispersal, means that linkages to the major centres remain important. A move to less polluting more sustainable developments requires that Public Transport be prioritised.

EXISTING COMMUNITIES

The existing communities must form part of the structure of the series of linked new villages and would be extended on the same principals described above. The existing business centres should be encouraged to evolve as a service sub-centre for the pattern of new settlements. Older settlements with historical and heritage values are vulnerable to damage by excessive development [facilitated by the increase of adjacent population and prosperity] destroying the character and quality of the settlement. The principles of sustainable development and facilitation of community well-being advocated in the New Villages proposal should be applied in the very different circumstances of an historic town.

PHASING

The beneficial balance between expenditure on infrastructure and construction and the returns (environmental, social and financial) from development is the key factor to "profitable" implementation of planned communities. The form proposed permits incremental construction with low investment of infrastructure. It also permits

opening up a number of sites at the same time, thus giving better range of choice and regulation of production. The sequence of 'Villages' is capable of adjustment during planning and implementation in response to demand and the abilities of the building industry's performance.

CONCLUSIONS

NEW VILLAGES ARE PROPOSED

I have shown the spectrum of issues which may be taken into account in creating new settlements which show a much higher degree of sustainability. These provide a perfectly achievable and practical course of action for future development. What is particularly required is an understanding that to achieve sustainability 'joined up thinking', holistic working and a shift towards working with users.

A NEW AGENCY IS NEEDED

If anything of this kind were to be attempted, then above anything else there should be an Agency created to Consult, Plan, Develop, Build, Manage and Review the process of bringing the Communities into being. This need not be a large organisation, but it must have executive "clout" and be staffed by talented and capable people with vision.

I would go so far as to say that proposed projects like this one are bound to fail, despite the most worthy of environmental intentions, academic correctness and administrative legality, unless some such Agency is established.

GOVERNANCE & PARTICIPATION

Issues of Sustainability are capable of quantification, analysis, monitoring and review. However at the heart of the matter lies decisions which are ethical, moral, spiritual and individual. Current thinking is moving in the direction of understanding that our systems of Governance, local, national and global need rapid evolution to cope with these new requirements. It is likely that huge investment of personal energy will be made in pursuit of the goals of better and more globally even environmental Governance as the next step in our quest for a sustainable planet.

But there is another matter more urgent than this if trends within the planet's most evolved societies are indicators - that of public involvement.

Having achieved sophisticated, uncorrupt, efficient methods of Governance, the participation rates of those intimately involved in societies such as our own are low and falling.

The task to motivate citizens in shaping their own, their communities, their nations and our planet is critical in making effective and rapid change. To be able to harness the enthusiasm and energy communities show towards soccer for example, would be a great step forward for the wellbeing of all. We could learn much by examining why and how people allocate their time, energy, money and commitment into this global trend.

ACTION - THE NEXT STEPS

What is needed to do this? First a wish to change, then a knowledge and conviction that things could be much better than what people already know. It is very difficult in public participation for people to comment on the possibilities of what they do not know about.

What is needed next is a willingness to work in profitable partnerships, with business, with local, national and regional authorities, land owners and cultural and environmental custodians and with communities. Then to bring together people of vision from each sector willing to achieve. These will not be theorists but people of experience of implementation, willing to challenge orthodoxy. There are ways to facilitate this process, so that all players win and all players profit.

Not the least to profit is our environment, our society and most important our children and grandchildren. These proposals are practical not Utopian, cost-effective not extravagant, popular not elitist and are achievable.

THERE JUST HAS TO BE A BETTER WAY to create profitable, sustainable and fulfilling communities **THAN THAT WHICH WE ARE USING AT PRESENT!**

In this fast changing world where social, financial, technical and environmental changes threaten our futures, established practices are no longer adequate. I urge Governments to be courageous in enacting new processes to enhance the total quality of life in new developments and in sustaining existing communities. This requires less bureaucratic regulation, more scope for vision, imagination and creativity and a planning and resource management system which is more responsive to change, more pro-active and less prescriptive. It also requires that Central, Regional and Local Government can become more creative in their roles and innovative in shaping their

partnerships with other players. Above all, effective strategies are essential to ensure that all communities share in the nation's prosperity. I hope the bigger picture can be envisioned and the hard steps taken towards it.

EPILOGUE

The pace of technical, social and political change continues to accelerate. Major revolutionary things have happened but two recent ones in my view influence what I have set out here, the first is the shift in mind-set of the environment movements from only low tech approaches to far more radical and high tech innovations. High tech in this sense also applies to our understanding of the human mind and behaviour. Neuro-Science is demonstrating that what is now regarded as established practice in understanding individual's behaviour and reasoning, the conduct of groups and organisations may need review and generate even more radical understandings than those brought by Freud and Jung. Our skill to ride the waves of change is at the heart of sustainability and healthy communities.

May I suggest a reading of 'The Social Animal' by David Brooks. The virtue of this book is the way in which the wide field of new understandings of the way in which the mind works is set out. It is not perfect but it is accessible. It is worth first listening to Brooks on TED.

http://www.ted.com/talks/david_brooks_the_social_animal.html

I found it worthwhile to miss the first seven minutes of his talk but pay attention to the rest, then read his book.

TRAIN & PEDESTRIAN MIX,, HASTINGS NZ.



NOTES

- [1] The Worlds First Eco-City? by Bill Berrett, 2011.
- [2] New Villages for the South Kaipara, Bill Berrett, 1998.
- [3] The developments in Waitakere City are good but are not comprehensive as they are infill parts of an existing fabric.
- [4] High Eden, Auckland, NZ. see proposal by Bill Berrett dated 1999.
- [5] See the work of 'Zenergy' also Dale Hunter, John Heron and Russell Withers in NZ and of Bryce Taylor and 'Oasis' in UK.

BIOGRAPHICAL NOTE

Bill Berrett, born in Birmingham, UK. A British and New Zealand citizen, married to Sheila and with two daughters. 1933

Diploma of Architecture from the Birmingham School of Architecture. 1950 - 1955

Diploma of Town Planning from the University of North London. 1981 - 1982

Member of the Royal Institute of British Architecture. 1956 - 2001

Member of the Royal Town Planning Institute. 1983 - 2001

Registered Architect 1956 - 2001

Chartered Town Planner 1983 - 2001

Architect with City of Coventry,
Department of Architecture & Planning. 1955 - 1961

Architect with Tom Lupton, John Morton, Tom Hancock,
Tony Hunt and Ivor Smith in Townmaker. 1961

P. A. to the County Architect of Buckinghamshire - F. B. Pooley, CBE,
PPRIBA. 1961 - 1968

Deputy Chief Architect and Planning Officer; then Director of
Planning, Milton Keynes Development Corporation. 1968 - 1975

Director of Planning & Social Development, Auckland City, New
Zealand. 1975 - 1979

Senior Lecturer in Architecture, University of Leeds. 1980 - 1991
Senior Research Fellow, Institute for Transport Studies

Visiting Lecturer, University of Southampton. 1991 - 2006

Governor, Giggleswick School. 1982 - 1999

Also with I.D.T, Zenergy Global and Oasis School of Human Relations.



Bill Berrett, Architect and Urban Planner, uses the idea of creating new villages to illustrate the many components which may be considered in creating sustainable communities. This is done to enable greater clarity to be brought to the complex interactive issues to be studied for a community to be sustainable, not just in its initial stages, but for years to come. His experience in helping to create a new city, Milton Keynes and his work with Facilitators, Counsellors and practitioners in the world of Human Relations has demonstrated that a keystone in the structure of sustainable communities is the skill of empowering all participants in the processes of sustainable development. Economists, Accountants, Builders and Engineers are all part of the team. We know a great deal about the conventional remedies of energy conservation, recycling, eco-friendly materials and so on. We all know much less about working cooperatively and creating true participatory decision making structures. This book is about putting all these things together in a holistic way.

<http://billberrett.info>