Central Fraser Valley Regional Plan

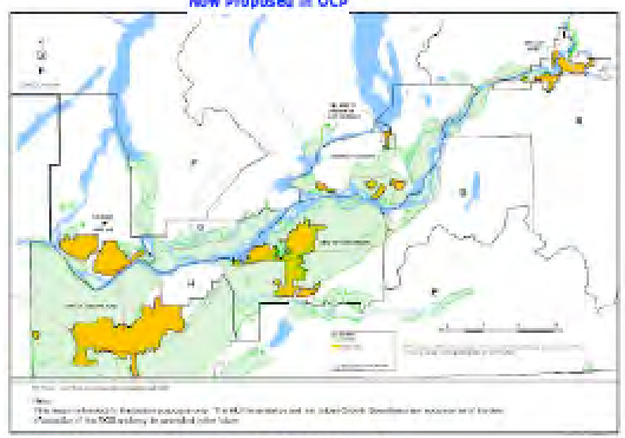
OCP Submission 2003

Balfour & Co. Architect

David N. Spearing Architect Inc.

Map 3 Municipal Land and ALR Boundaries

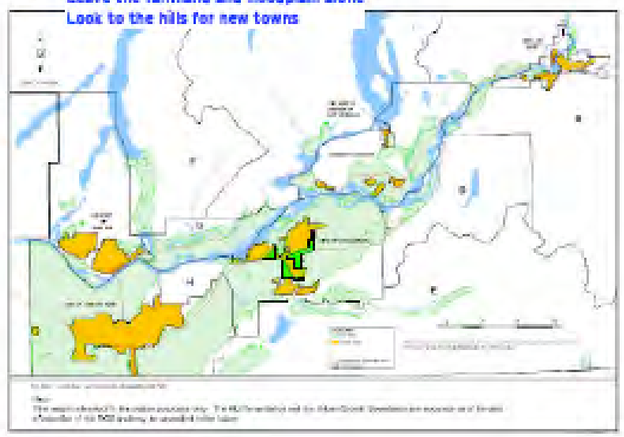
Now Proposed in OCP



Map 3 Municipal Land and ALR Boundaries

Leave the farmland and floodplain alone

Look to the hills for new towns



Soils vs Shape

So many good points are made of compact and contiguous communities. However there are circumstances where an alternate pattern is justified. In the case of Chilliwack, there are alternatives to urbanizing Class 1 and 2 soils which are on the floodplain as well.

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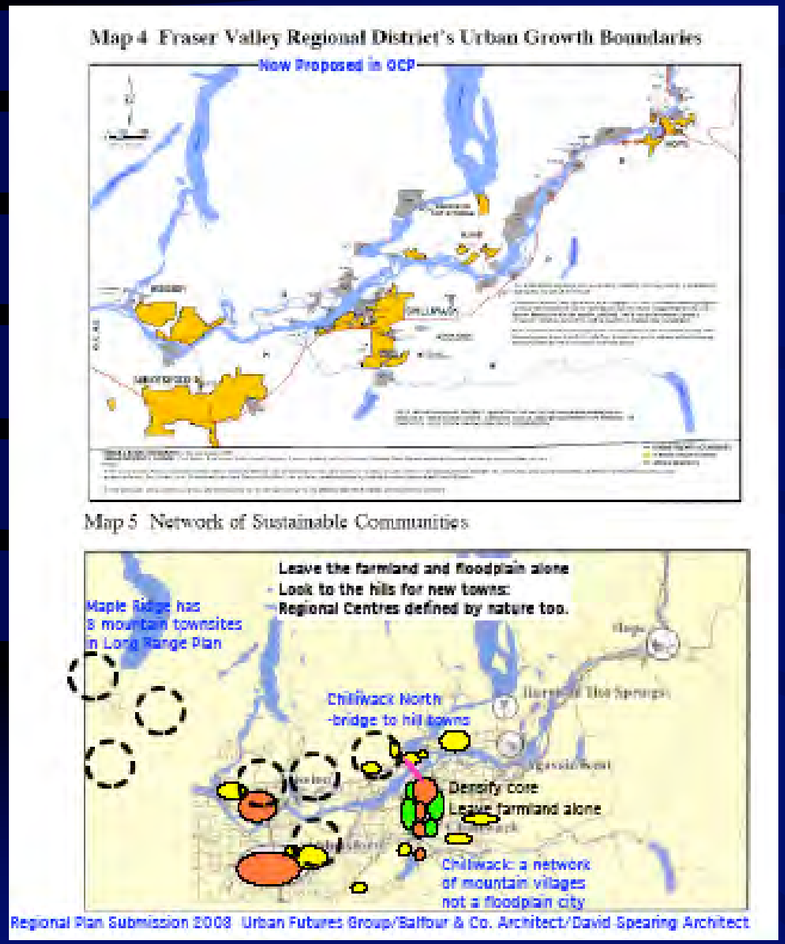

Alternatives

The old Lower Mainland Regional Plan showed historic communities growing in the long term over the best of soils. In 1973 some of these areas were deleted for future urban growth in order to save the best farmlands for future generations. While this was lauded by many at the time, others cried foul that profits of land use changes would go to somebody else.

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Farmlands

- In 1973 the planning team which worked out the new ALR also pointed out new urban alternatives for Chilliwack, and there are many. While much of that work has likely gone missing by now, the principles are the same. Chilliwack can remain a compact city on the floodplain without need of urbanizing the grand miles wide swath shown in the new regional plan.

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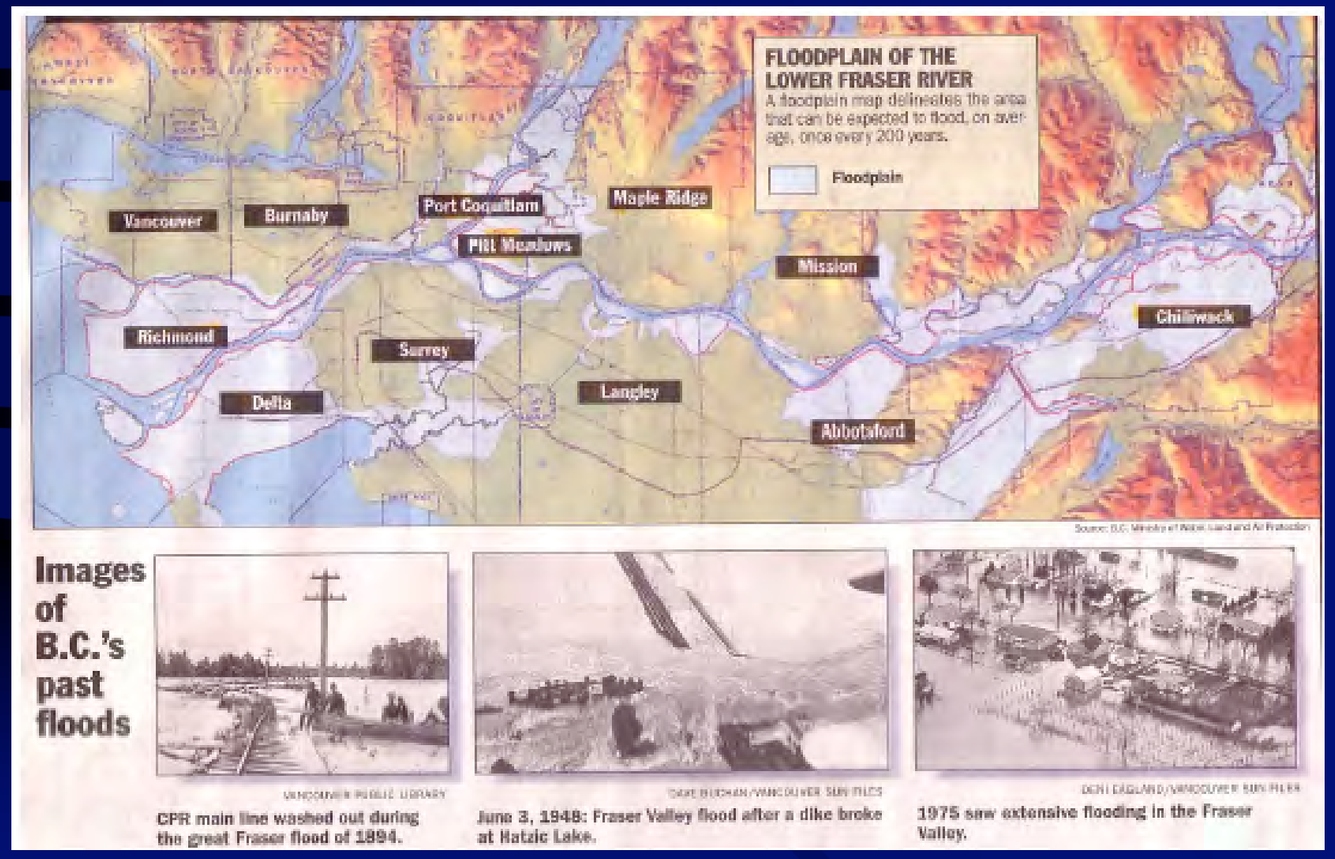
Floodplain: A Huge Public Liability,

who is going to pay?



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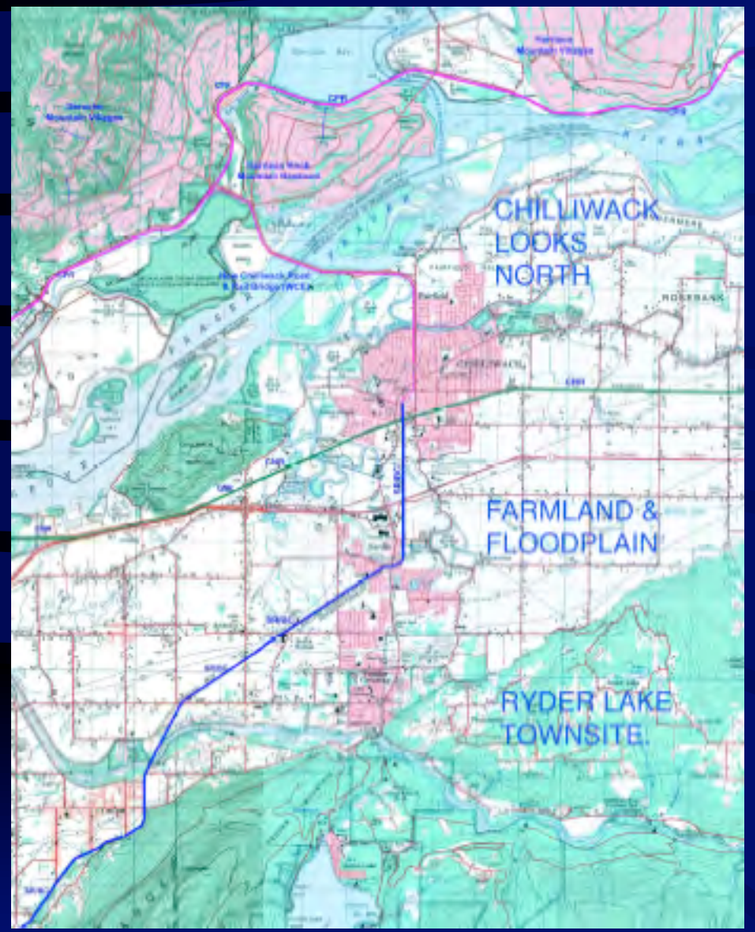

River Links

It is not only not needed, it is the worst of solutions given all the alternatives. There are social and economic pressures pushing to develop ‘the easiest land’, and based on a rounded out or contiguous urban area. But that is not justified given all of the alternatives. The other solution of course is to say no to growth at some point, which we have to do or nature will do it for us.

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Historic Pattern!

- Attached are plans indicating current plans and showing lands that should not be urbanized but left for farming. The current built up corridor of strip development might be intensified but should not be widened. Alternative urban townsites in Ryder Lake , Majuba Hill, Chilliwack Mountain etc have started to develop in one way or another but all should be seen as more intensely urban and communities in their own right.

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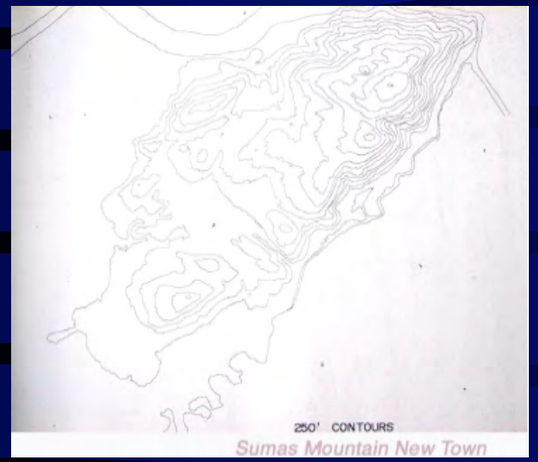
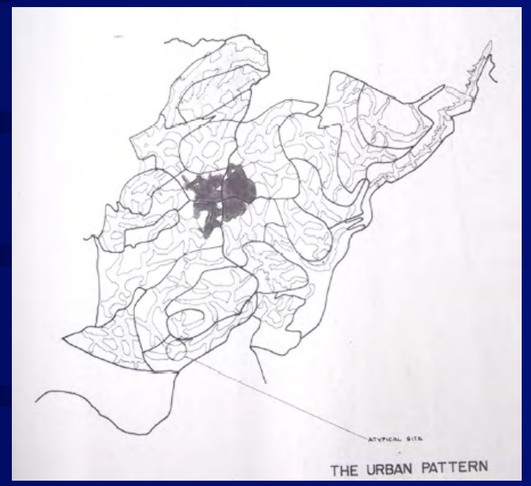
A Generation Later: 1974-2004

- In 1975/76, David Spearing, an Architect and Slope Development Specialist, presented realistic and long range options to your communities in public meetings in Chilliwack. Rick Balfour's architectural thesis in 1974 was based on Abbotsford as a New Town on Sumas mountain, a town left half undeveloped but still capable of housing 500,000 people mostly in attached single family houses. Each house had an urban front door and a rural back door

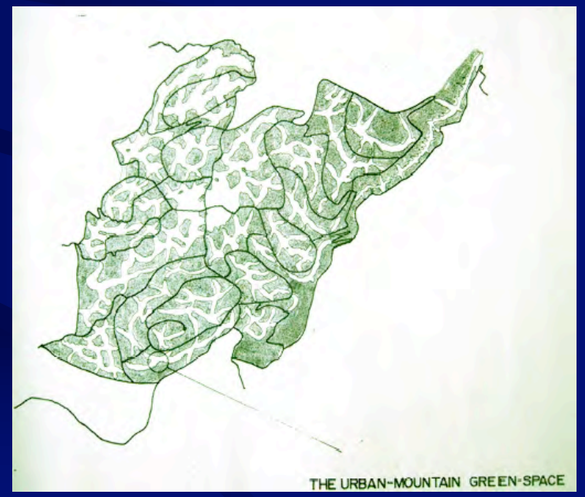
Balfour & Spearing 2004





Sumas Mountain 1974 Example Study

Mountain, City
50% Greenspace
and 500,000 population.



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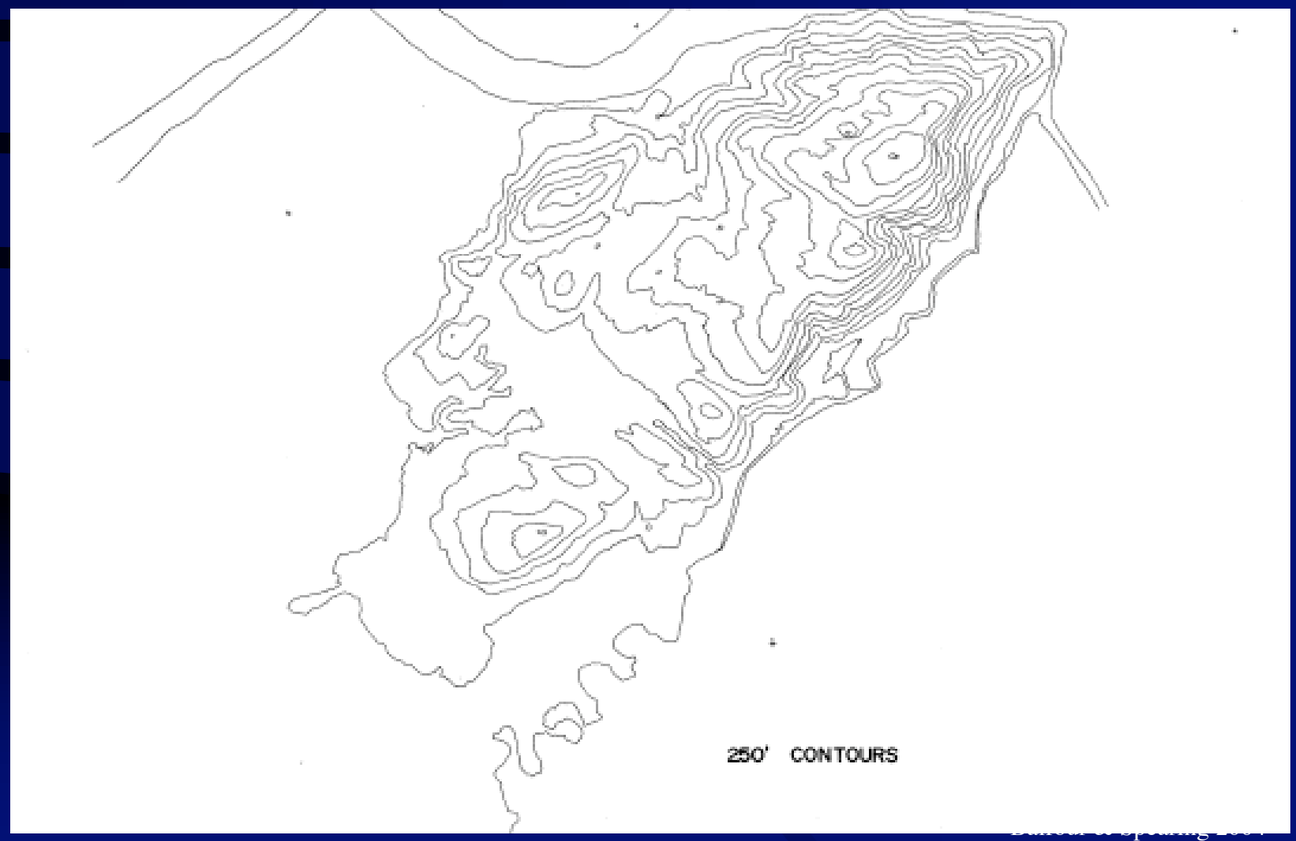
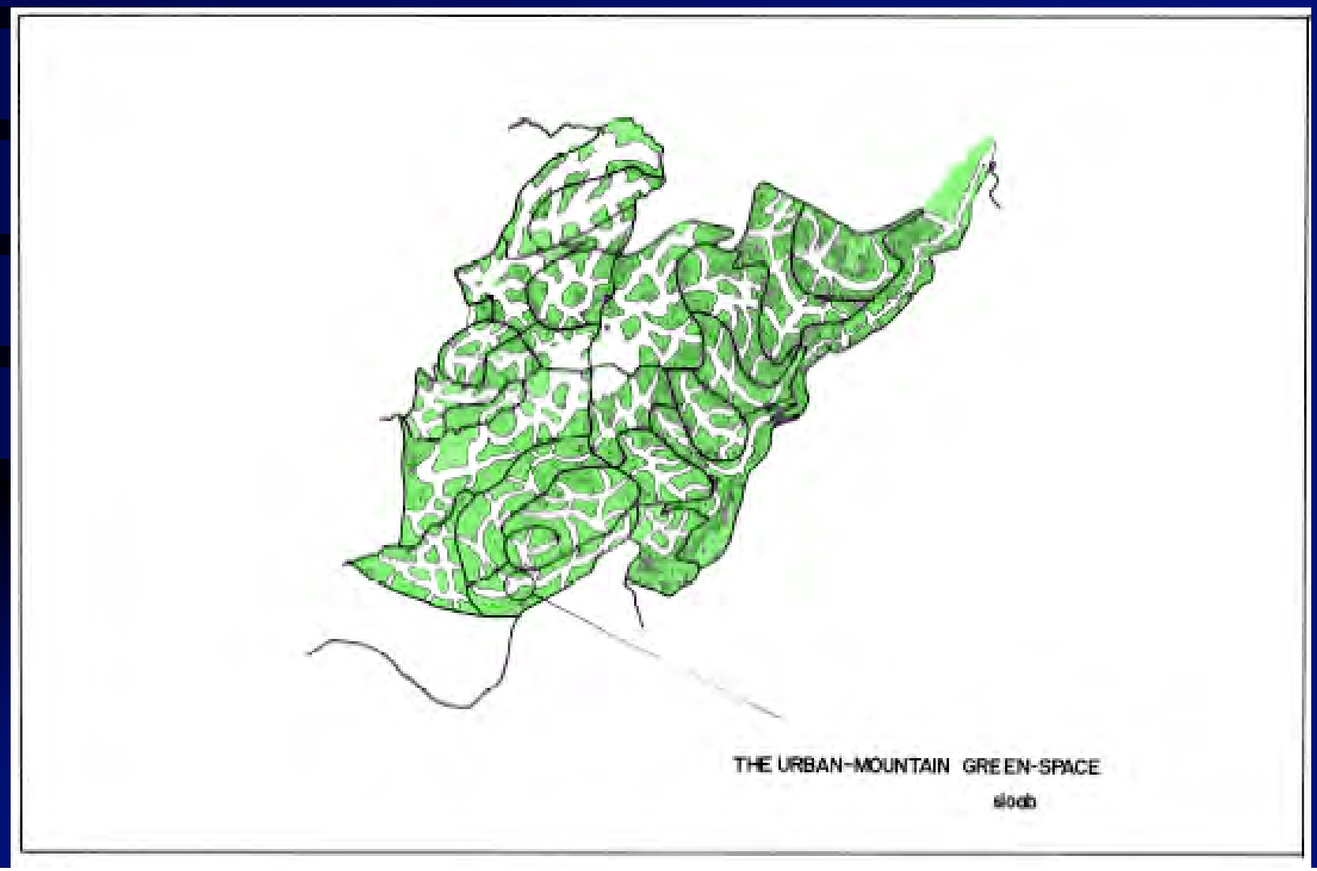
Sumas New Town Contours



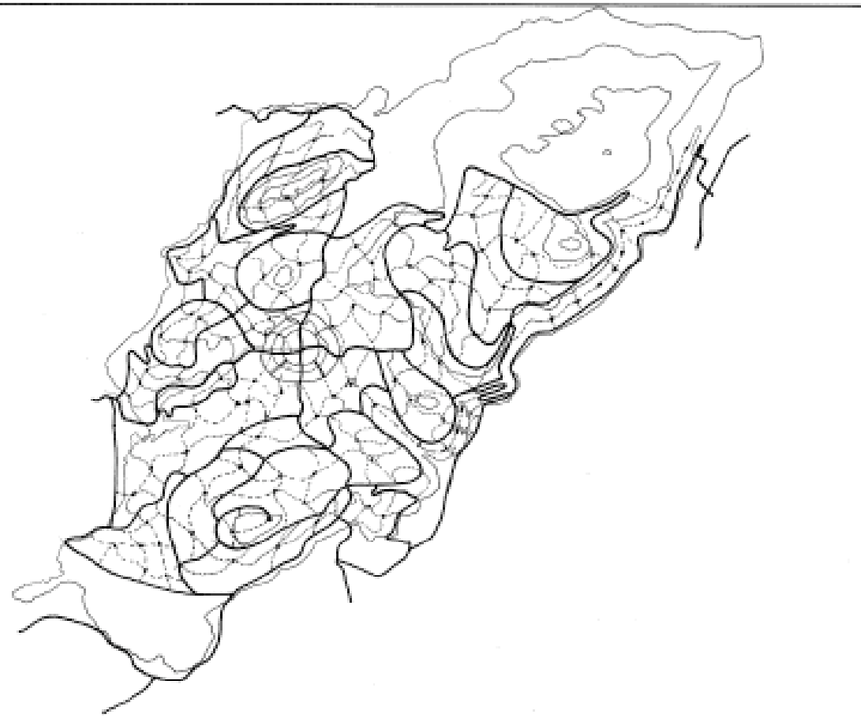
Mountain Urban Pattern

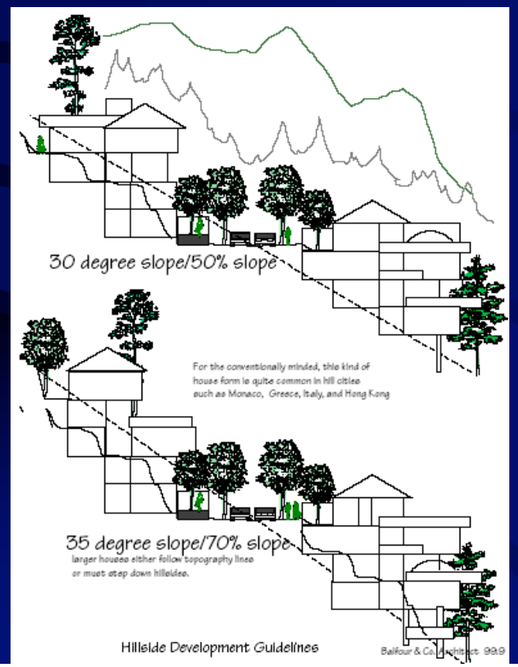
THE URBAN PATTERN

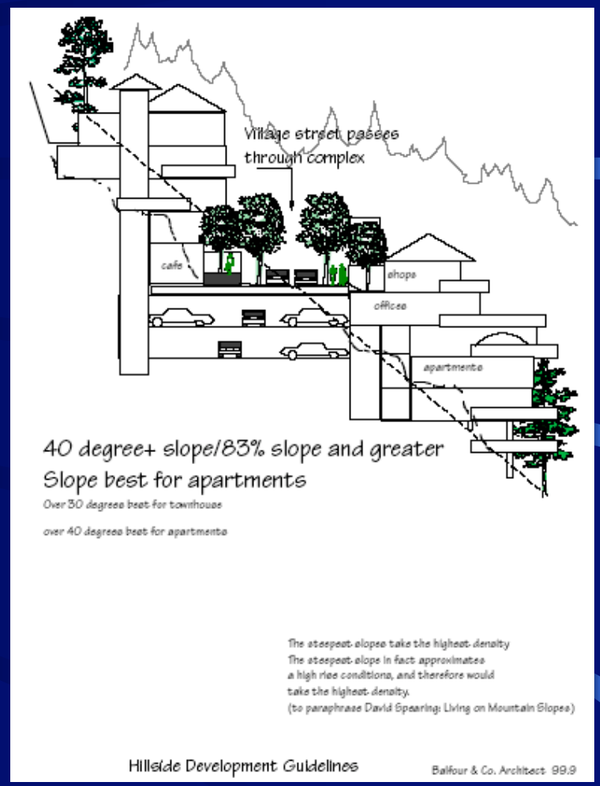
Mountain Green Spaces



Mountain Street Systems







Adapting to Slopes

"slope= density"

David Spearing

Balfour & Spearing 2004

Mountain Villages

- It was not flat land subdivision, but it is a community vision that can be made to work in the areas suggested in this letter and as shown on the maps attached. If urban land is needed, it does not have to be taken from the farmland. The current urban area of Chilliwack and other valley cities all should increase density within their urban boundaries as well, keeping a small and more intensively used footprint. In so doing you will also address conveniently, the risk from the next 200 year flood which we all know can come any year at all.

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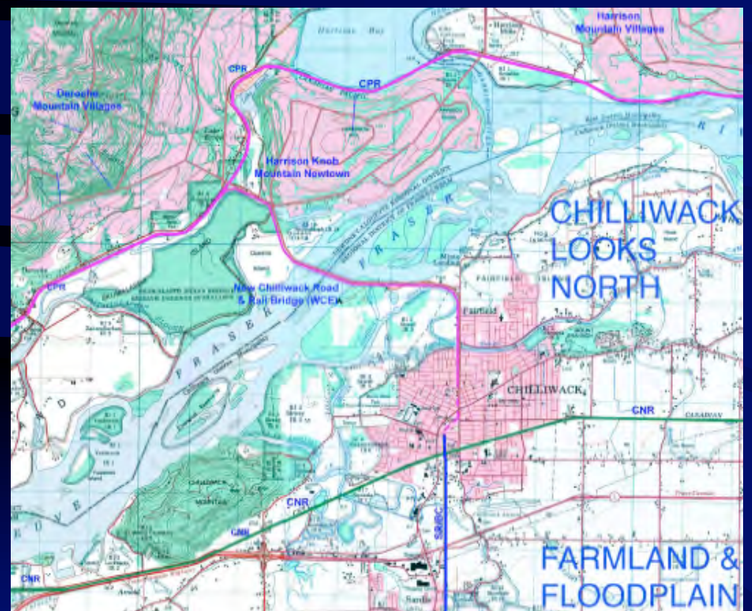
Bridges, Rail, Community



- However, what is mostly likely overlooked, and it seems missing from your files today, is the most exciting prospect. It depends on a large capital outlay but can be justified on several levels; a new bridge north of Chilliwack downtown to the north bank of the Fraser. (See maps attached, a modern version of the 1973 materials, from memory)

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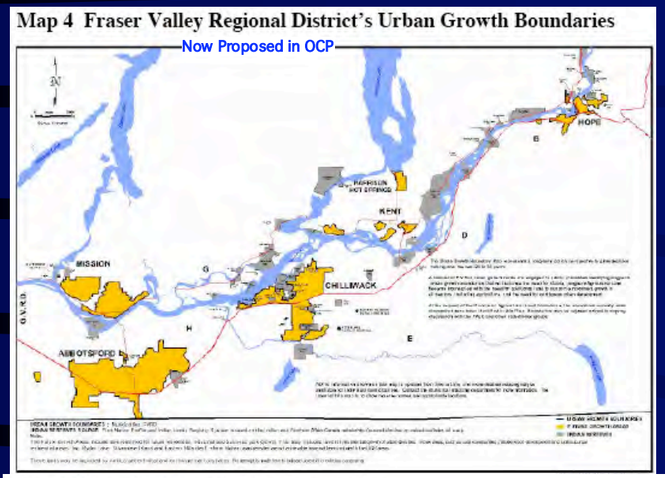
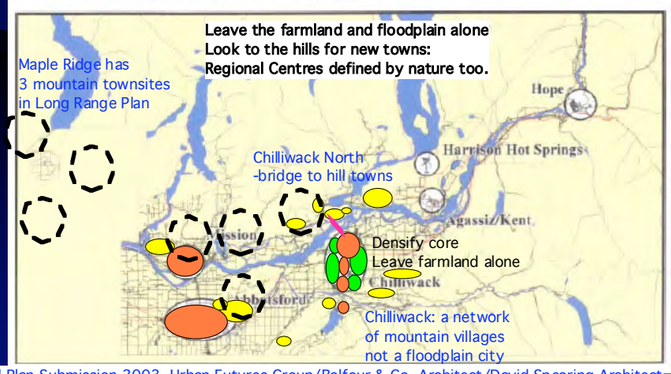
Re-focus





Regional Plan Submission 2003 Urban Futures Group/Balfour & Co. Architect/David Spearing Architect

- This is a big commitment, however the very close north shore mountains provide
- 1) townsites that are not farmland
- 2)urban land not in the floodplain,
- 3) it is more contiguous to the downtown centre than all others and
- 4) it provides an expansion to the transportation network.

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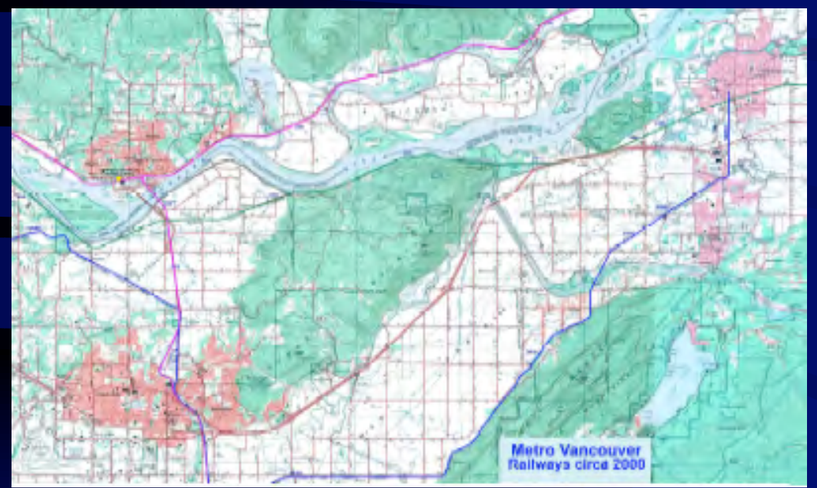
Beyond Kyoto



- If it also was designed to take a rail connection, Chilliwack would be just an easy addition to the West Coast Express extension as would be Abbotsford. In this alternate pattern, urban Chilliwack would become a closer neighbour of urban townsites of the Mission area, triangulating the economies with Abbotsford for a more inter-related and dynamic local economy.

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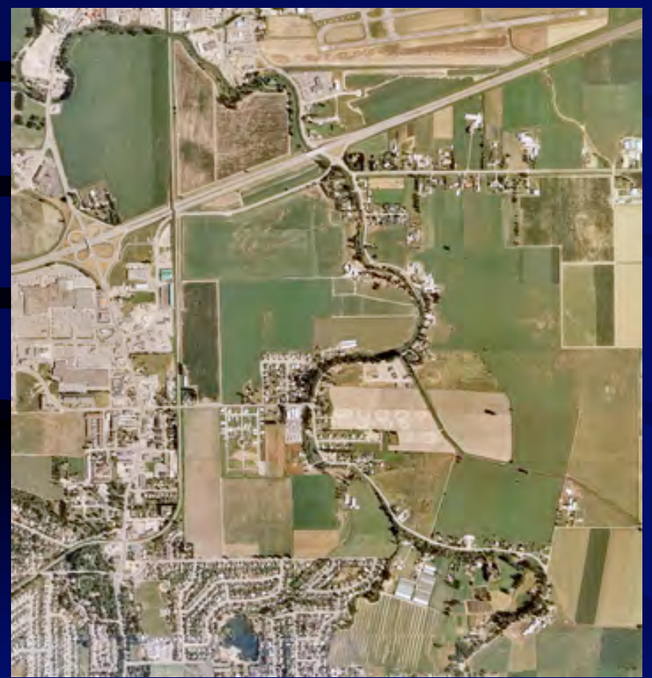
Farms and Watercourses



- In this case a barrier becomes a new opening and opportunity, much more exciting than just more consumption of farmlands.
- The river crossing is fairly short and can be based upon the existing island formations with minimal environmental impact. The environmental benefits compared to developing floodplain and farmland is obvious.

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Barriers to Opportunity

- The hillsides to the north of Chilliwack are fairly gentle with large areas of southern exposure. Granted, the hills are steep enough to warrant more care than the usual flatland development approaches, but this is something that has to be addressed in other hillside townsite areas as well.

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A Sober Second Look

- In a short form, this is both a stated concern over the current plan and a vision of alternatives, which it seems have gone missing in the interim.

Go Up, Not Out.

- We would ask that with all considerations, that at the very minimum,
- -the area south of Chilliwack to Vedder Crossing NOT be urbanized,
- -but concentrated in a thin ribbon, and
- -these other alternatives be explored. This presentation is meant to demonstrate these points, for the public hearing.

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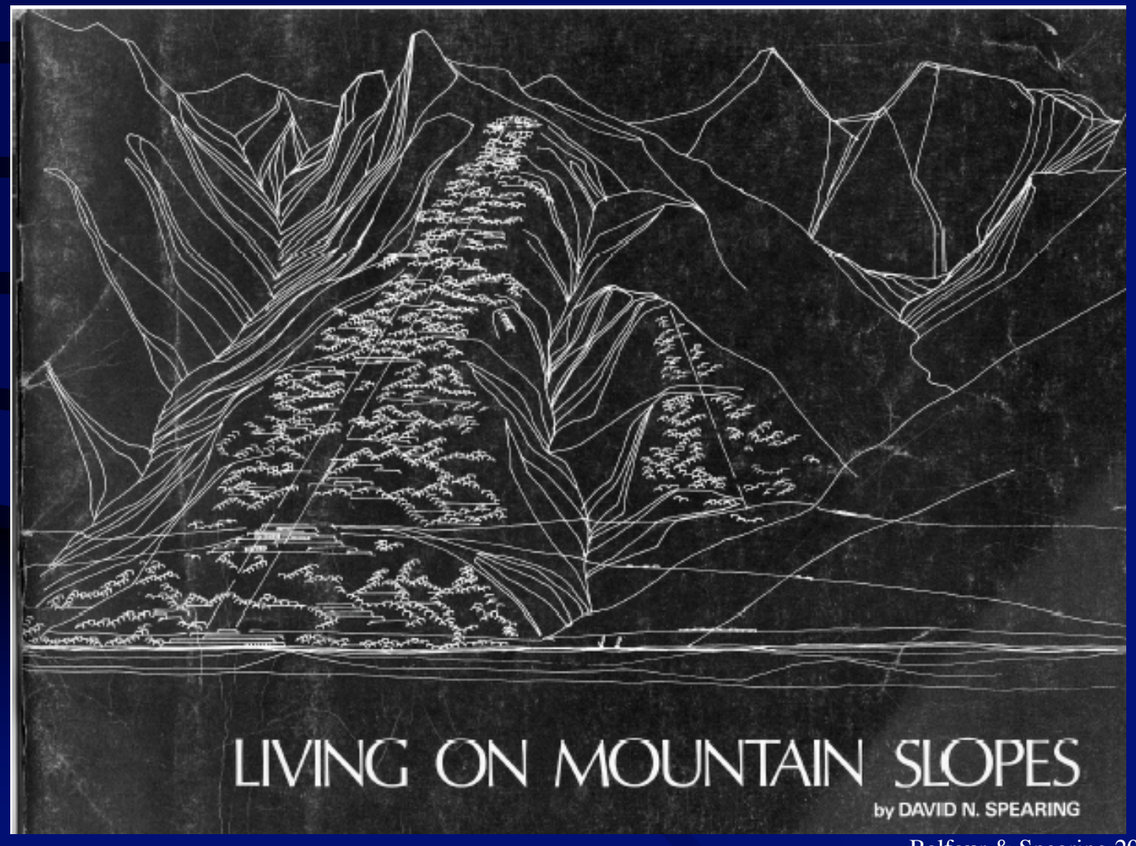
Mountain Towns: reference 1974



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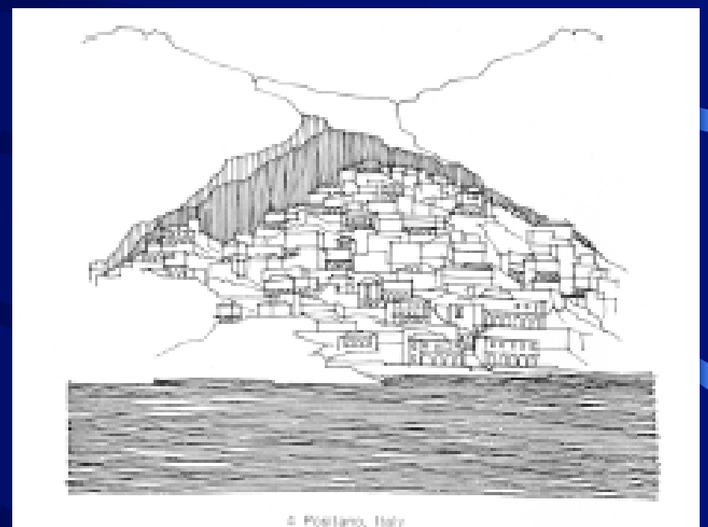
History: Kashmir, Italy

3 Kashmir



4 Positano, Italy

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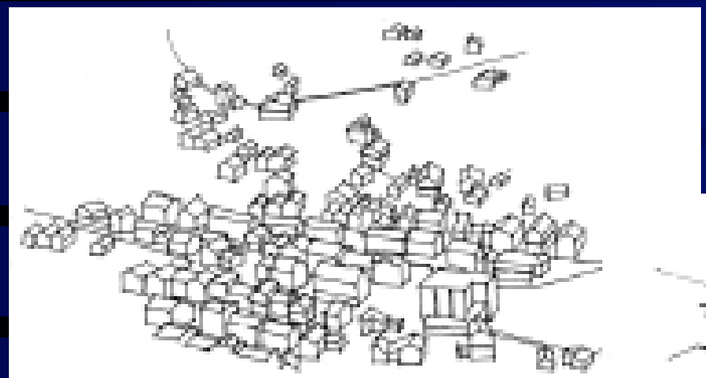
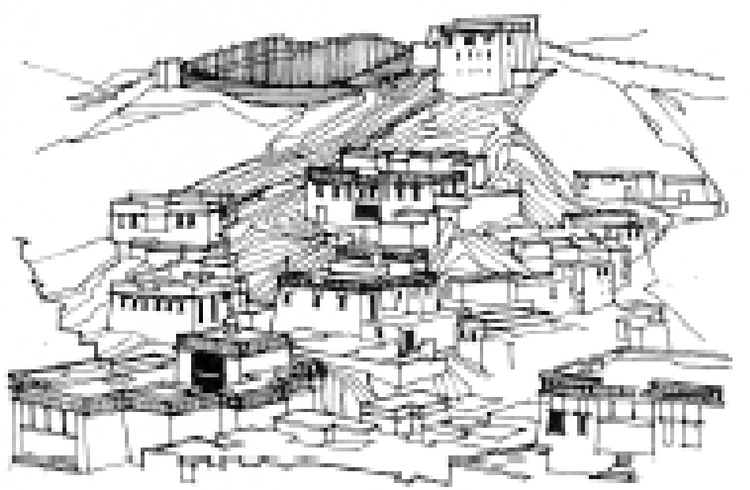
History: Mediterranean





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History: in Asia


7 Darjeeling


8 Hong Kong terraces

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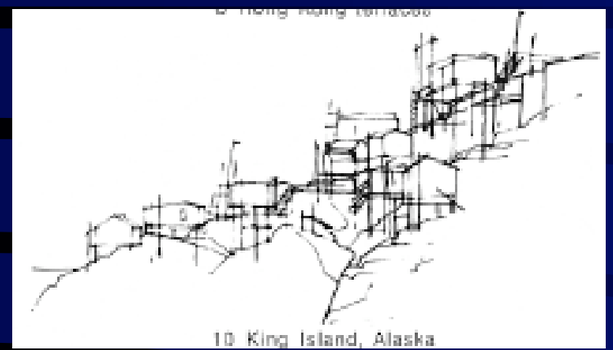
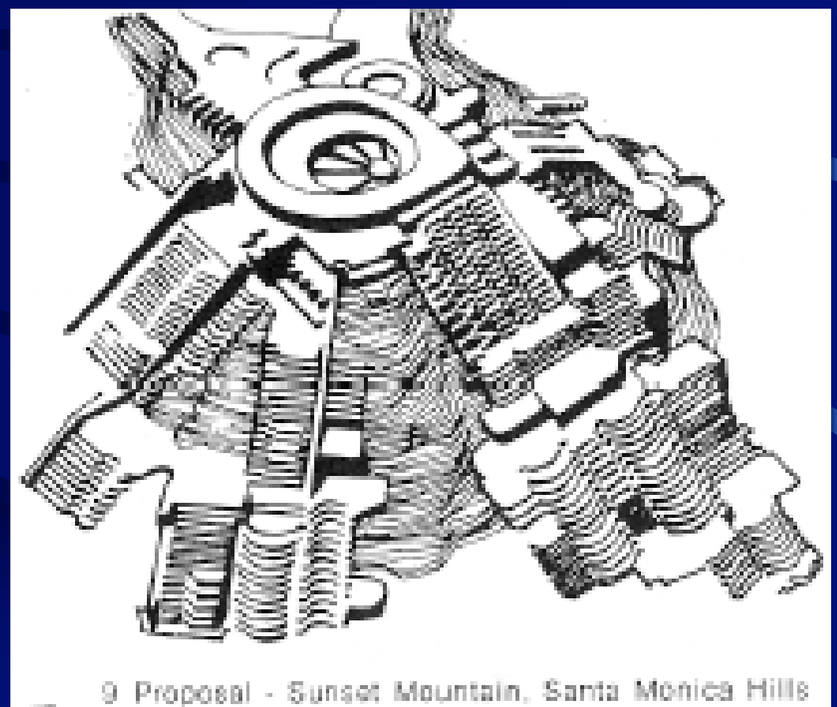
History: even North America

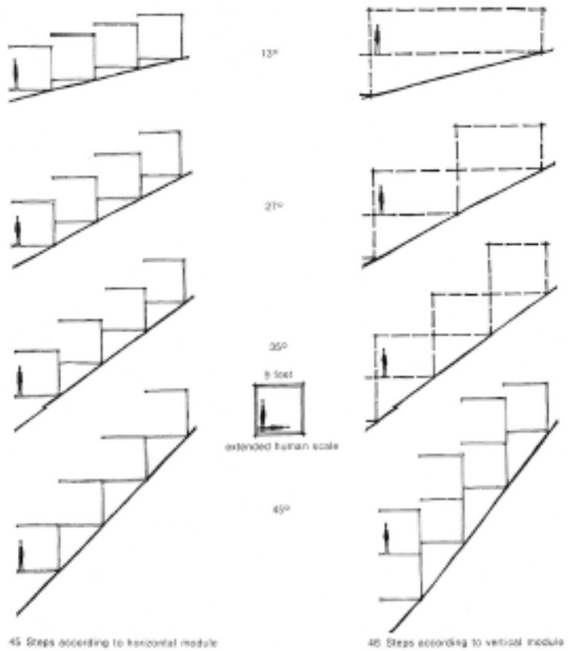




Steep Slope?= Higher Density

In vertical projection, the extension of the scale of man is necessary to provide for light, ventilation, and the structural depth required to support and shelter the platform or unit of flatness. A rough estimate of this vertical scale is approximately nine feet as well.

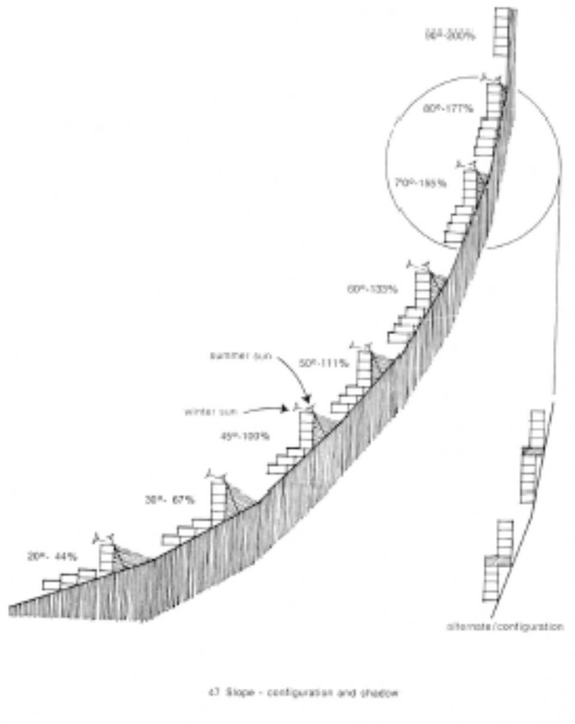
For the above reasons, nine-foot vertical horizontal modules were used as steps down the various slopes to illustrate the effects of the slopes on living space. The first method in each case was to step the space as required by the horizontal module; the second was to step the living space as required by the vertical module.



45 Steps according to horizontal module

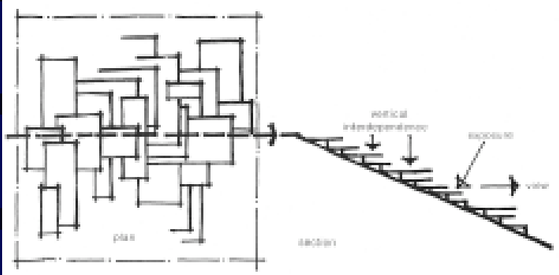
46 Steps according to vertical module

A third series of diagrams follows, showing the relationships of wider spaces, slopes and sun angles, to give some indication of the effects of stacking, related to the potential use of various slopes and sun angles for southern British Columbia.



47 Slope - configuration and shadow

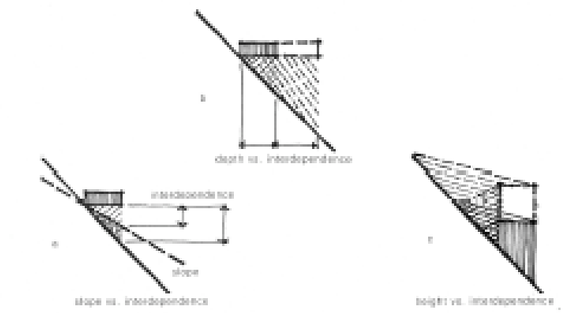
Slopes: what not to do:



50 Three dimensional development

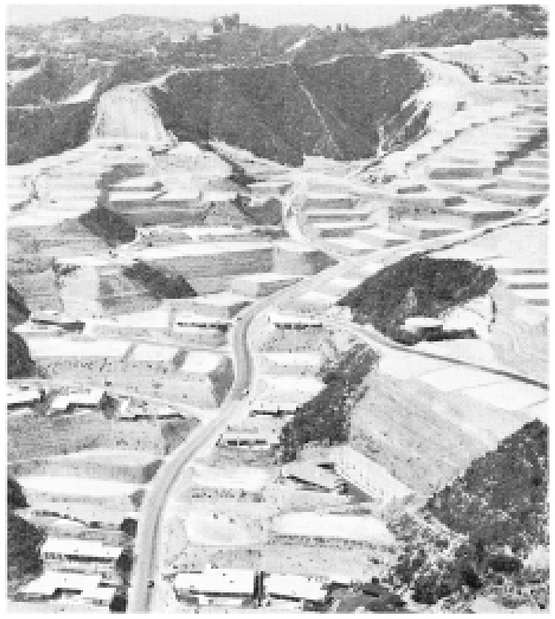
space is to go to waste. The following conclusions may be drawn for the general case:

- as the slope increases, interdependence of functions and spaces should increase. If this is accepted, it may be further concluded that density should increase.
- as the lateral or cross contour depth increases, the interdependence of functions increases.
- as the height of an occupied space increases in proportion to its lateral or cross-slope depth, the interdependence of spaces will diminish except in terms of view and exposure.



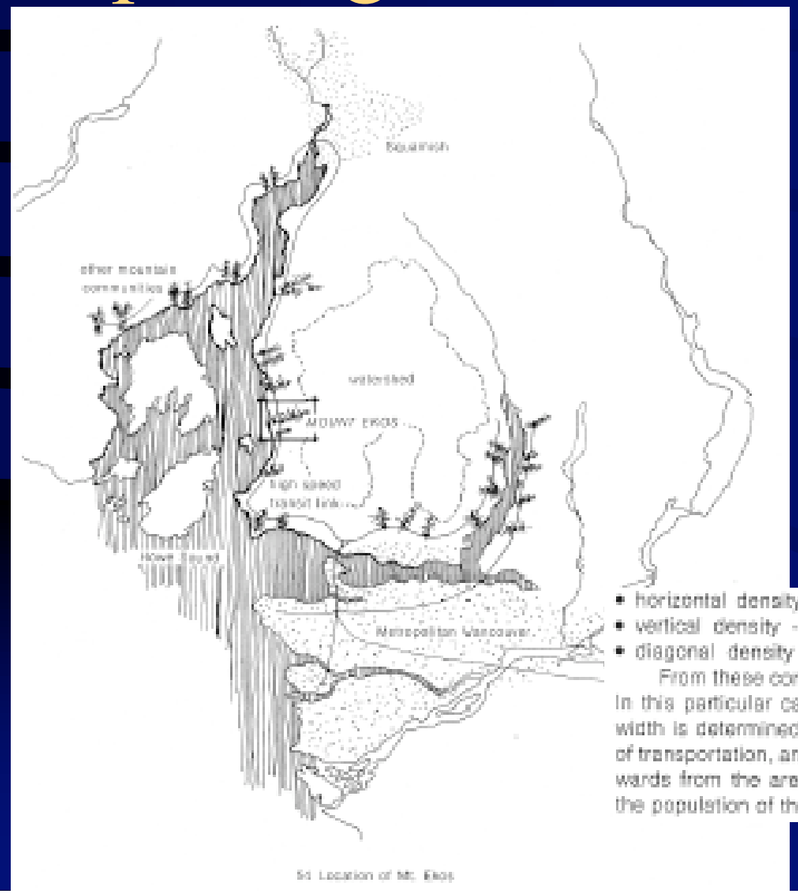
51 Slope and building 1

In some European hill towns, houses are set increasingly closer together as the slope gets steeper, until they reach a point where one household uses the roof of the other as an extension of its living space. Such efficient use of three-dimensional space and structure, developed through necessity, contrasts with the approach adopted in the early development of hillsides in California. In early California examples, flat platforms were erected, on which flatland houses, foreign to the site, were built, ignoring the space under and around the structure. Recently, however, more comprehensive investigation of the concept of living on slopes has directed California to more significant, interdependent forms such as the Sunset Mountain Park Development.

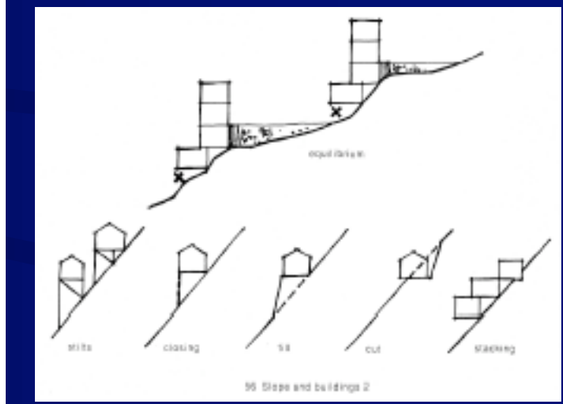


52 Environmental disaster - California

Spearing: North Shore Townsites



51 Location of Mt. Elias



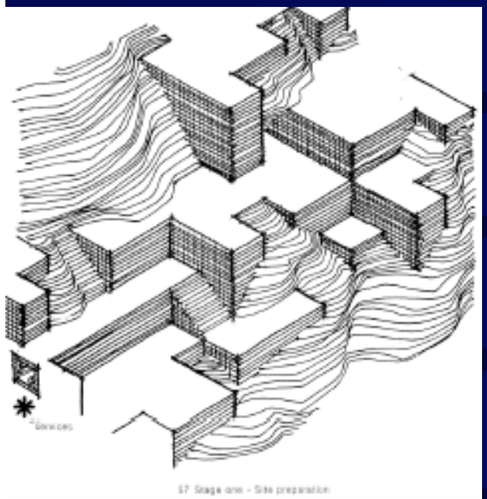
56 Slope and buildings 2

- horizontal density - - 60,000 persons/sq. mile
- vertical density - - - 80,000 persons/sq. mile
- diagonal density - - 45,000 persons/sq. mile

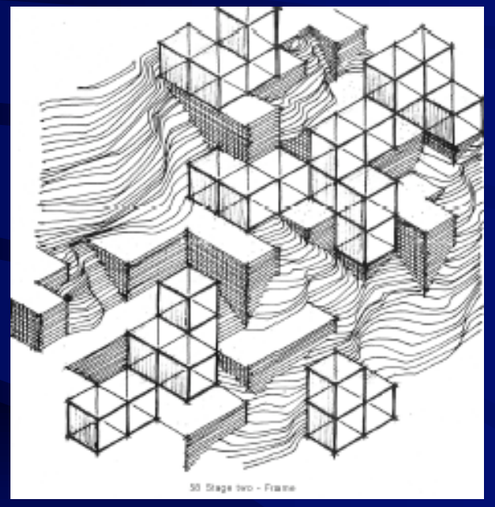
From these conclusions, the extent of the community could be estimated. In this particular case, the community traverses an altitude of 1,500 ft. The width is determined by tolerable walking distance to and from the main line of transportation, and two bordering, hazardous creek beds. By working backwards from the area and slope through the density, it was determined that the population of the community would be in the order of 33,000 persons.

Balfour & Spearing 2004

Hillsides: small footprint approach



57 Stage one - Site preparation



58 Stage two - Frame

59 Stage three - Panels

Hilltown: the big picture.

INSTITUTIONS OF MOUNT EKOS

The institutions of the community will resemble those of any other community of similar population. There would be a concentration of commercial activity adjacent to the inclined elevator as market exposure and accessibility are highest. The heaviest concentration of commercial activity would be at the exchange between local and regional transportation. Here it is visualized that a megastructure would be built to provide the flat area required for the major community and commercial institutions as well as the storage of automobiles.