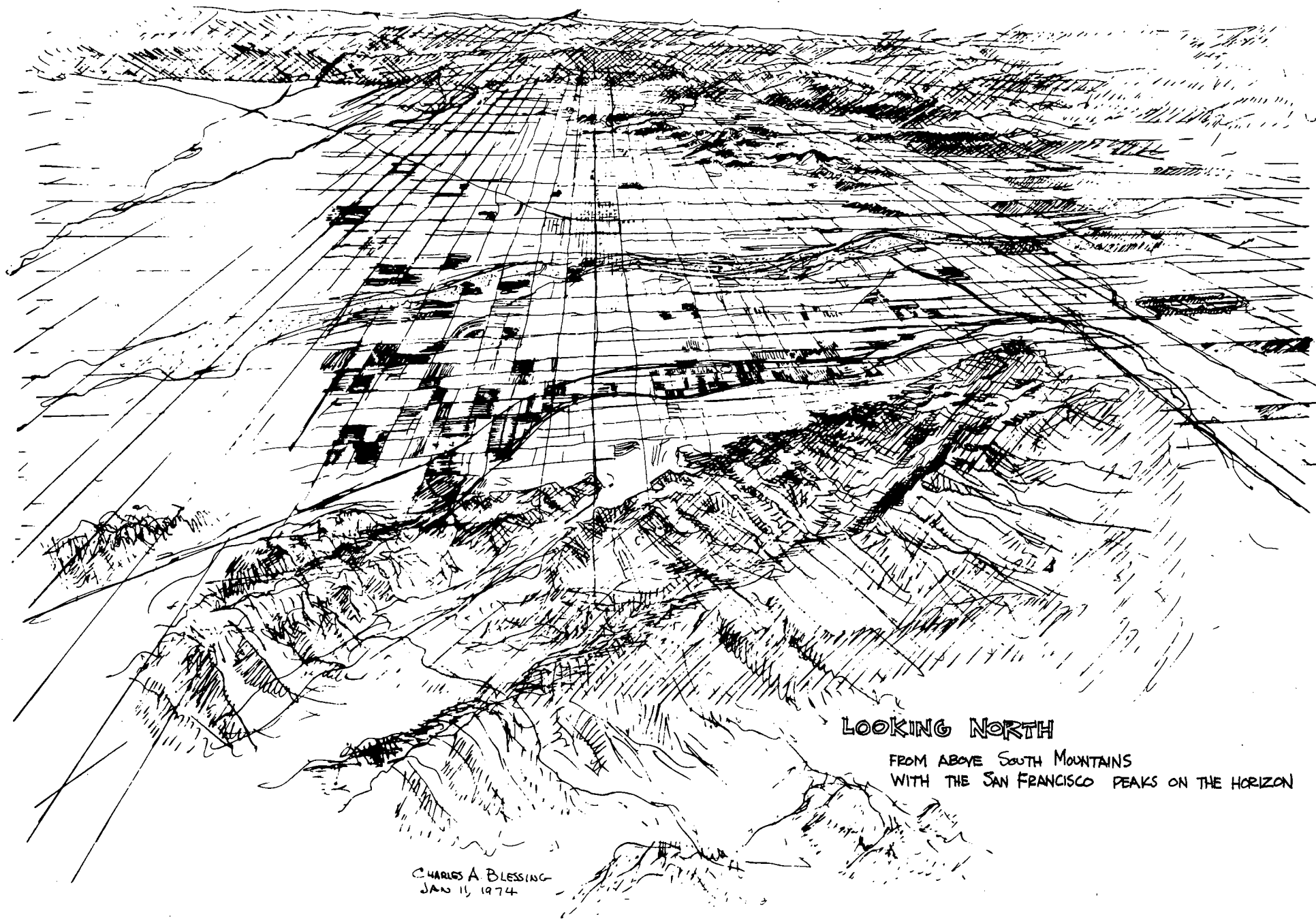




R/UDAT for Metropolitan Phoenix, January 18-21, 1974

Title on spine:

**What Are the Options that Appear to Exist with Respect to Mobility, Life-Style, and Urban Form in the Further Development of Metropolitan Phoenix?**



LOOKING NORTH

FROM ABOVE SOUTH MOUNTAINS  
WITH THE SAN FRANCISCO PEAKS ON THE HORIZON

CHARLES A. BLESSING  
JAN 11, 1974



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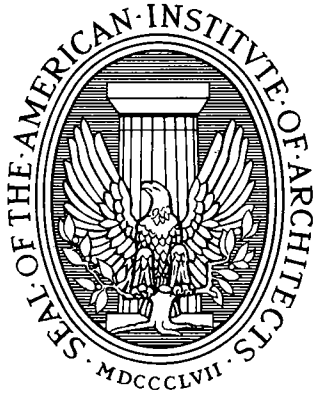
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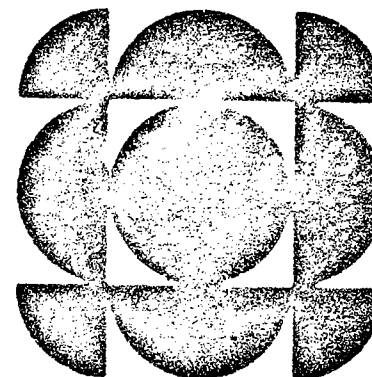
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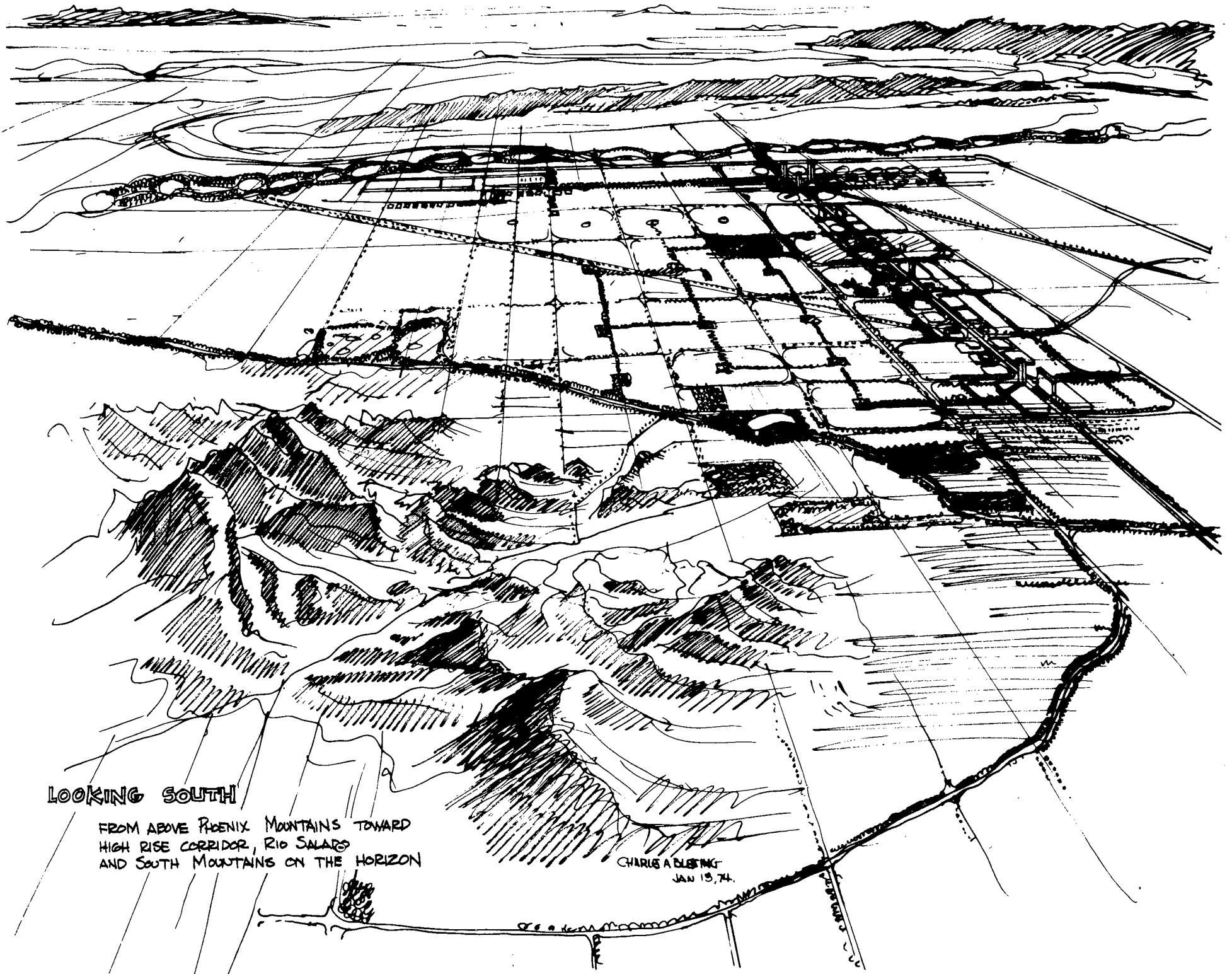
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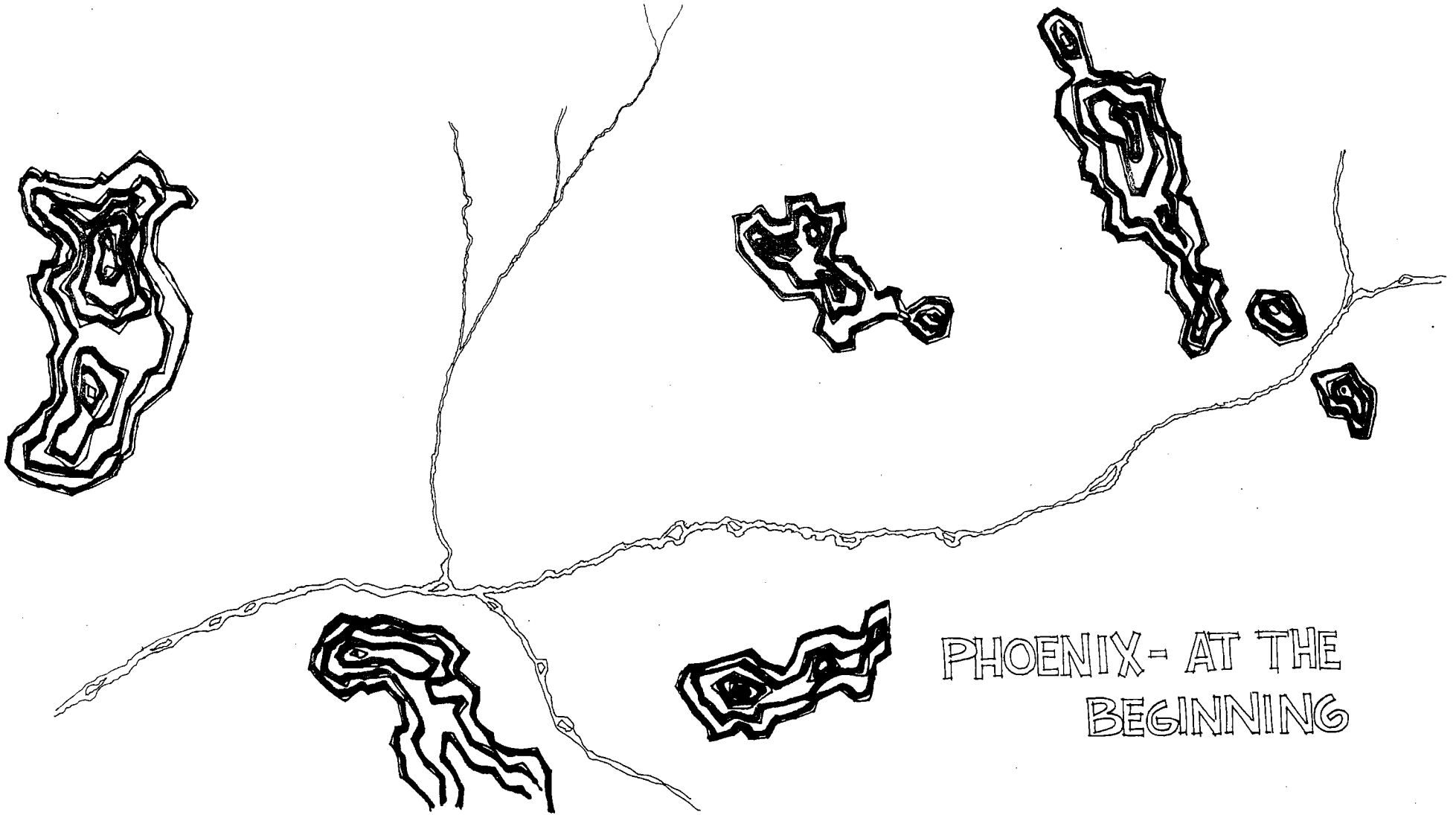


LOOKING SOUTH

FROM ABOVE PHOENIX MOUNTAINS TOWARD  
HIGH RISE CORRIDOR, RIO SALADO  
AND SOUTH MOUNTAINS ON THE HORIZON

CHARLES A. BUECK  
JAN 19, 74

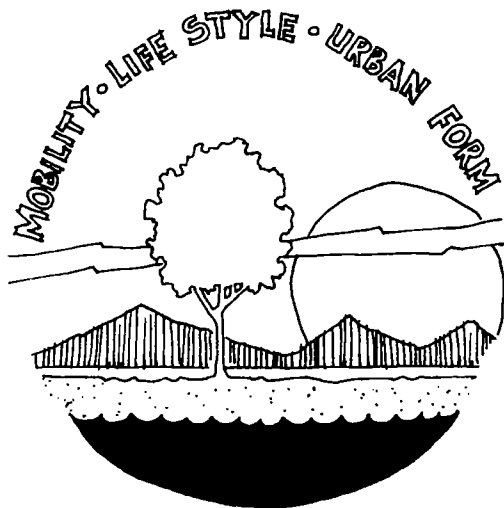




PHOENIX - AT THE  
BEGINNING

## THE RISING PHOENIX

The story starts in 1870. A beak appeared through the burning ashes on the sand along the Rio Salado between Camelback Mountain and South Mountain. It was dawn. The air was crisp. Morning stars shone. First faint bands of subdued colors appeared in the east. The head broke out. It shook spraying sand and splashing water from the nearby river to the desert. It bloomed. Shoulders appeared. Feathers sparkled. The sun appeared as a muffled ball of fire over the Superstitions. The body broke through. Wings flapped. It was 1915. Thus the Phoenix rose. It spread its wings and ascended, slowly at first, through 1925, 1935, 1945. Its wings set. It caught an updraft, 1955, 1965, 1975. Its shadow now stretched from Paradise Valley to beyond South Mountain - from the Superstitions to the White Tanks. But the shadow like a stationary cloud grew only in size. It never moved. Where was it to go? Bounded on all sides by mountains, down was to regress, up was to burn. The Phoenix cried in alarm. With the cry, that life it had nurtured responded. People came forth and with concerted effort fixed the Phoenix in the sky. A home was thus made. The shadow cast by the great bird was etched in the sand. The feathers parted. The winds abated. The sun shone through. And there was the monument; a city dressed in its own special vestments. A heart nurtured by the land and all that it grew.



R/UDAT -- meaning Regional/Urban Design Assistance Team -- is a national program of the American Institute of Architects. Under it, selected experts in various disciplines and from anywhere in the country visit a community at its request to study a problem of critical concern to it.

For an intensive 4-day visit such as this to be effective, it must be carefully organized and the Team members must do extensive "homework" with the wide variety of materials sent them in advance. They are chosen for their expertise rather than for any prior familiarity with the place to be visited. Therefore, through the cooperation of many persons and agencies they must quickly assimilate knowledge of the area as well as an understanding of the concerns and aspirations of its people. The Team members foreswear any professional commissions that might result from the visit -- each contributes his services as a personal commitment to the solving of urban problems.

The expenses of the Metro Phoenix visit were borne by the Maricopa Association of Governments, the Valley Forward Association with a grant from the Dayton Hudson Foundation, and the Central Arizona Chapter of the American Institute of Architects.

The visit described in this Report was the 23rd to be undertaken since the R/UDAT program was initiated in 1967. The question addressed was:

"What are the options that appear to exist with respect to mobility, life-style and urban form in the further development of metropolitan Phoenix?"

Numerous groups and individuals in the metro community participated in the study through their inputs of time and energy and/or their considered views of what ought to be. The sponsors of this R/UDAT -- and the American Institute of Architects -- are grateful for these contributions and for the services rendered by members of the Team. It is hoped that the Report will prove useful to the community as it continues to ponder the many decisions that will determine its future.

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Chairman, Metro Phoenix R/UDAT  
Chairman, National AIA R/UDAT  
Program

James W. Elmore, FAIA  
Coordinator  
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21 January 1974

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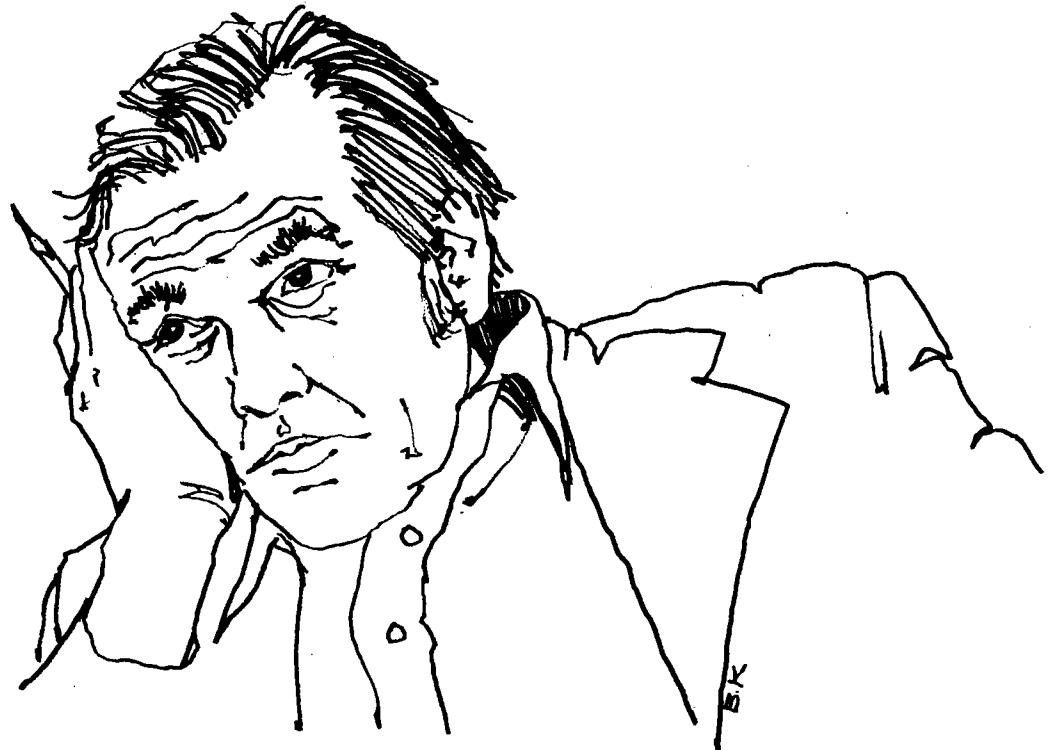
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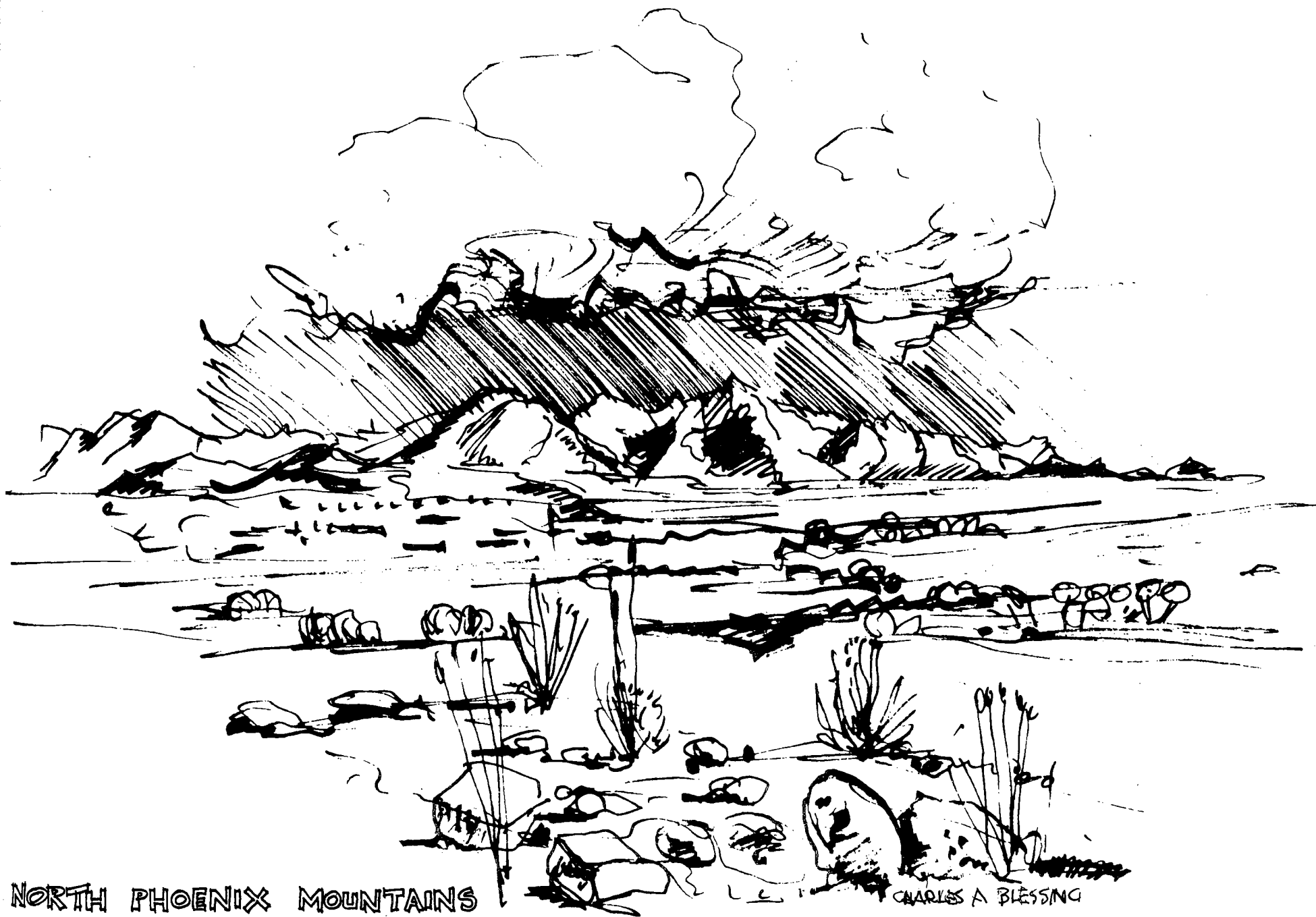


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U.S.C.  
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NORTH PHOENIX MOUNTAINS

VIEWED FROM CENTRAL PHOENIX BUSINESS DISTRICT

CHARLES A. BLESSING

## HISTORICAL DEVELOPMENT

Jack Swilling began construction of an irrigation canal in 1867 and Phoenix has been growing ever since. The Salt River flowed free. Mining was the major industry and each mine owned its own railroad. A conglomeration of these mine railroads was a major contribution to the formation of the Santa Fe Railroad. In 1915 the Roosevelt Dam was filled and the city form we recognize today began to emerge. In the 1930's and 1940's, Phoenix was a wealthy resort area with virtually no growth until World War II. In the 1950's the tourists began to arrive because of improved national transportation. Annexing began, and industry moved in. Growth became a problem and in the late forties the Phoenix Planning Commission was formed. Suburban towns formed plan-

ning commissions in the late sixties. MAG was formed in the late sixties. The current master plan was adopted in 1972 and it projects development of the Phoenix Planning Area "some twenty years into the future." The coordination of this plan with various other planning units is effected through the efforts of the Maricopa Association of Governments.

"What are the options that appear to exist with respect to mobility, life-style and urban form in the further development of metropolitan Phoenix?"

With this as a guide we wondered what were the priorities of the community. The response to our questionnaire indicated that the order of priority was transportation, local planning, regional planning and implementation in that order. Our efforts corresponded closely with these priorities. Particular thanks to the Maricopa Association of Governments and its representatives, the Valley Forward Association, and the Central Arizona Chapter of the American Institute of Architects. Thanks also to the Phoenix Environmental Quality

Commission, the Terran Project, Citizens for Mass Transit Against Freeways, Paradise Valley Planning Committee, Arizona State University, Deer Valley Planning Committee, U.S. Corps of Engineers, League of Women Voters, Tempe Environmental Improve Committee, Western Management Consultants, Office of Economic Planning and Development, State of Arizona, Salt River Project, U.S. Water Conservation Laboratory and several private individuals who helped with our questionnaire.

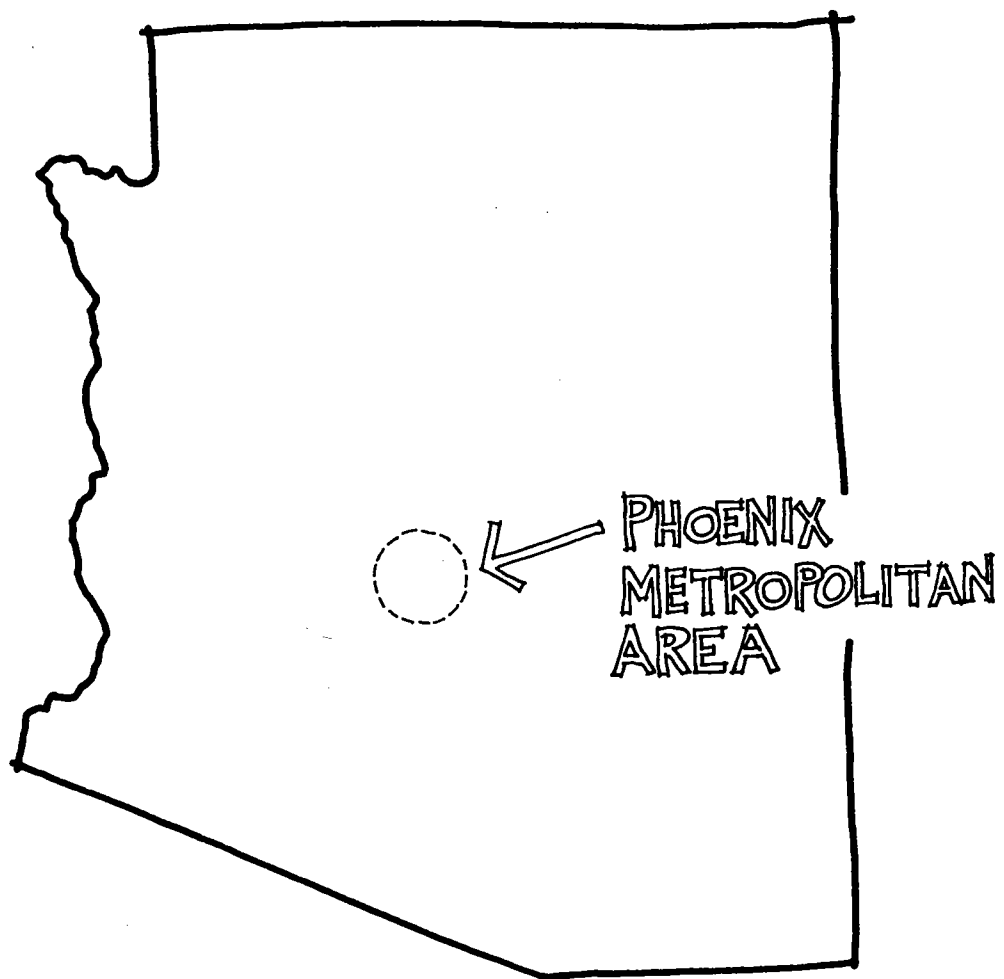


Method of Team Function -- The following sequence occurred.

1. Reconnaissance by team chairman to determine charge.
2. Selection of team members.
3. Collection and distribution of data prior to visit.

4. Team Visit.

- A. Preliminary informal discussion
- B. Dialogue with head community leaders
- C. Assimilation of data from local professionals
- D. Assimilation of data through reconnaissance
- E. Assimilation of data through public and private interviews
- F. Evaluation of data by team members
- G. Development of criteria for presentation
- H. Development of presentation to public
- I. Presentation to public (including report)
- J. Dialogue with public
- K. Follow-up to evaluate effect of visit



## II. A STRUCTURE FOR DESCRIBING ALTERNATIVES DEVELOPMENT SCENARIOS FOR BOTH THE REGION AND A SPECIFIC COMMUNITY

This report presents one possible physical and social plan for Maricopa County and the cities which it includes - Phoenix, Mesa, Tempe, and others. But the report goes further than presenting just one of many answers to the complex issues which face Maricopa County in planning for its future development. The report presents a structured model which can provide a way to identify important issues, to attack new problems as they arise, and to choose the best alternatives from different available options. We begin with a firm belief that planning for the future must be based on a

comprehensive understanding and analysis of the existing physical and social environment. Along with this understanding must go an analysis of the forces for change in the system. These forces of change can be channeled into one of many alternative directions. But the question still remains "How do we choose between options?" "How do we plan for the future so that we open more and more doors, create more and more opportunity, rather than developing a system which trips over itself and sets up barriers we must bump into just to carry out our day to day lives?" To choose a direction, we must be able to some degree to predict the future. This means more than setting ideal goals which often cannot all be met simultaneously. Rather we feel it essential that the consequences of one or

another alternative physical plan be determined on the basis of fundamental research on the plan's social, ecological and economic impact. These potential consequences must be balanced and weighed against one another so that trade-offs can be made between alternative benefits. Only by predicting the necessary trade-offs can we feel confident in our ability to glimpse into the future in terms of predicting what life will be like in Phoenix in the future. In and of themselves these trade-offs do not define what life is going to be like.

To understand the future quality of life and the opportunities for different life styles for various residents in Maricopa County, the entire research, planning and implementation process must be car-

ried out. Each part of the structure must be understood: the existing environment; trends of change; alternate channels available for physical planning; and the social, economic, ecologic trade-offs.

Existing environment can be seen in terms of its physical, social and institutional components. The physical environment includes natural considation -- air, water, earth, vegetation, mountains, valleys, lakes and larger eco-systems. It also includes the man-made environment -- housing, commercial and recreation areas, dams, freeways and streets.

Social environment can be seen in general as a way of life including our activities and behavior from day to day as we move between work, play, and home; our perception of the world around us -- the

way we see it; and our attitudes towards our environment and our life -- feelings we have about the way we live. Part of this social environment is also made up of our values; what is important to us and to what degree. Privacy or community? Our individual good or the good of the group? Freedom to do whatever we want or mutual control among people? There is another major aspect of social environment and that is trends for change, desires which change naturally as a result of getting older, moving into another stage of the life cycle, or desires which change on a population basis because new types of people are attracted to an area and move in. But then there is a force for change which is not always present but which is present to a striking degree in Maricopa

County. That force is the conflict which comes about by too many people wanting too much and being unwilling to compromise individual desires for the sake of the preservation of a larger structure which at another time with fewer people could be taken for granted. The final description of the existing environment is its institutional structure, its form of government, its mechanisms of control, its formal organization and its voluntary organization, its form of education, and primarily the institutions which serve the residents -- which provide transportation, energy, water and other necessities of life.

Alternative development plans can be proposed based on a thorough understanding of the existing situation. Yet the existing situation and its tendency to



change does not define tightly enough available options. To these components must be added one strong underlying premise. What this premise is will differ in different areas and under different conditions. Such a theme might in one case be density, in another case be attractiveness to tourists, or even the development of some major environmental object like a lake or a city center. In the case of Phoenix, the underlying focus appears to be the control and management of population growth. Population growth seems to be the major determinant of physical form and social life in Maricopa County. Based on different growth assumptions -- unlimited growth on the one hand and contained growth on the other -- alternate physical plans can be generated.

Physical Plans can be seen and described in many ways including the variety and physical forms which they provide, of the relationship of form to human scale objects, and the vertical and horizontal dimensions which go to make them up. Urban form includes at least recreation facilities, relationships with natural environment, the use of water and views, and of course transportation. In Phoenix and Maricopa County transportation must be seen as one component of physical planning yet equal in importance to the overall issue of urban form. For this reason we break out the transportation issue in describing proposed alternatives. The discussion of the transportation plan includes the range of transportation alternatives from improved arterial streets, to freeways and of

course to mass transit.

While growth management is a primary determinant of the options available through physical planning, it cannot be the criteria by which we measure the benefits and liabilities of alternative developments plans. To do that we must determine the affect different plans will have on social, economic, and ecologic criteria.

Specifically, social impact can be seen to include resident's abilities to move about, to shop, to recreate, to visit with friends, and other such behavioral factors. Also the way people perceive the world about them -- the way they interpret their surroundings. As being limitless or being limited? As being hostile or being friendly? As being

debilitating or being reinforcing? All these are also social trade-offs which must be made. Finally social trade-offs include the impace of different plans on peoples' attitudes. Are they happy, or unhappy? Do they like where they live? Are they proud of it? Or would they rather really be someplace else?

Economic impacts are even clearer than this. Among the many costs that rise and fall with different physical plans are the cost of resident's home, cost of transportation, cost of public utilities, and generally the cost of living in a particular place. Ecological costs often are more subtle and creep up on residents of a community. But they are equally forceful. These include quality of air, the level of the water table, the avail-

ability of natural resources, and the ability of native plants and animal life to regenerate themselves.

For carrying out environmental impact assessments of these three criteria, they can be seen distinct from one another. On the other hand in reality they are tightly interwoven and to be understood demand concerted, refined and yet sensitive parallel analysis. It is especially essential not to value one criteria because it is easy to quantify. For example, the cost of a house may be more quantifiable than the state of an ecological system, and this may be more quantifiable than a feeling of well-being among residents. Nevertheless these three variables may be equally important in measuring, assessing, and

making decisions about trade-offs that one is willing to make as a result of one or another plan.

"A physical plan," a great man once said, "is only as good as you can make it work." We subscribe to this and therefore realize the importance of restructuring the institutions which are necessary to make a plan work. Different physical organizations will demand different administrative and governmental organizations. Different plans will require different assignments of responsibility and authority. In assessing the feasibility of one or another plan, we must fully understand the changes in these administrative, governmental, and political institutions which will be required.

Finally we must address the question of

what is all this concern for planning really about. Why spend time? The residents of Phoenix like where they live. Many have chosen to come to Maricopa County because they like the quality of life which is offered here. When all the data is in on what exists, on change, on alternatives, on the trade-offs between social, economic, and ecological impacts and on institutional changes required to make these plans work -- when all this data is in -- we must step back. We must ask ourselves for each plan that is proposed and for each part of each plan what will be the benefits residents will receive and the costs which residents must pay in quality of life. We must ask how each plan meets the needs and desires of the residents of Maricopa County, and the communities within it.



NORTH PHOENIX MOUNTAINS

CHARLES A. BLESSING  
JAN 19, 74

### III. EXISTING ENVIRONMENT - PHYSICAL

#### Physical

The predominant physical characteristic of the region is characterized by a flat, alluvial plain cut by washes and relieved by surrounding, relatively low mountains and occasional extrusions. Phoenix lies at an elevation of 1,117 ft. It has an average annual maximum temperature of 84.70 degrees Fahrenheit and average minimum temperature of 55.82 degrees Fahrenheit. Its average annual rainfall is 7.46 inches. The temperature, rainfall, and elevation combine to make the environment one which is characteristic of lower Sonoran desert regions. The

vegetative cover found in these areas is also characteristic of desert regions, predominantly low shrubs, annuals and cacti. Along water courses and where the water table is close to the surface, water loving plants can abound. Trees, shrubs of various types with high water requirements are present. The mountainous areas in the Phoenix region are left pretty well in their natural state. The alluvial plain, however, has been extensively used for agriculture, thus the native vegetation has long been removed from that area and supplanted by row crops and citrus groves. As most desert systems the desert surrounding the Phoenix area

perturbs easily and is consequently considered a fragile system. The sustenance of human life and its attendant activities is dependent upon the presence of water in the system. The rainfall, as indicated earlier, is light throughout the year, thus the region must depend upon surface flow yielded from the surrounding water sheds as well as pump supply by tapping the ground water supply. Currently the water is being removed from the ground water at a rate faster than it is being replaced. As a consequence the ground water table has been depressed in some areas as much as 300 ft. Water supplies from

all sources, especially in the northern part of the Phoenix area are possibly becoming tenuous. Supplemental water is anticipated from the Central Arizona Project and the Colorado River, which may relieve in part some of the ground water depletion though if the population continues to grow this cannot be counted upon.

#### Social

Present way of life in Maricopa County if we can at all generalize so large an area and so great a population can be characterized as a western ethic suburbia. How is this characterized? First by the attitude that you can

live anywhere and work anywhere, by the opportunity to drive fifteen miles to work every day is everyone's right. One resident called this attitude mobility Phoenix style. Along with this attitude towards mobility goes an attitude of unlimited resources, unlimited land, unlimited distances, and unlimited growth. People perceive, it appears, their environment as wide-open spaces all spread out and a continuing growth at a very low density. As they drive to work or to the store, they see vacant land--apparently unused land--next to the highway, next to the store, almost everywhere. This perception only reinforces the attitude that land

really is something to be where it can be wasted. And what is the affect of these perceptions and attitudes on people's behavior? On one hand those that are fortunate enough do live where they feel like it and do travel a long distance to work or to play. On the other hand, fully one quarter of the population of Maricopa County are numbers of a minority group-- Mexican Americans, Indians, and Blacks. Many of these people do not have the resources, are basically too poor to take advantage of the distances, freeways, which allow people to go those distances whenever they feel like it. Behaviorally these attitudes and perceptions allow



people to live their lives without dealing daily with social problems. The problems of crime, poverty, and race relations are not every day a factor to be dealt with. But all of this is changing slowly on the regional scale, especially as more and more people move into the Phoenix area. Residents feel to a large degree that they are losing their grip on the simple wide-open spaces, on these supposedly unlimited resources, on the availability and opportunity to live anywhere they would like. In some cases, the changes that are taking place are very natural. Older residents move

into the Phoenix area and while they like the climate, they don't necessarily want to live isolated on a very large single family lot. They would like to see more conveniences, supportive services. Contact with others is less of a problem for them. In addition to new types of people moving in, people just change as they get older and change the types of things they like. But not all change comes about because of natural biological and social change. The large amount of change is forced upon a community by conflict between desires and resources between the desires of one group and the desires of another group. and by

the needs of one group versus the needs of another. What are some of the conflicts which appear to be about to change in Maricopa County? The main one is or seems to be a desire to live in the Western ethic suburbia and at the same time have a level of services equal to more urban areas. There is also a desire to maintain an historical tradition which conflicts with a desire to maximize present benefits and which eventually conflict with the desire to live in a future Phoenix area which is not replete with social problems. There is a desire among residents to control their own destiny and yet an unwillingness to

curtail the freedom of the developer to whatever he wants. There is a desire to avoid almost any contact with that community. All of these conflicts and many more constitute a highly visible set of pressures for change.

#### Institutional (Maricopa County)

Maricopa County is composed of eighteen incorporated cities and towns which have nearly ninety percent of the total population and a very large unincorporated area containing slightly more than ten percent. Of these cities and towns, fifteen are located in the "Valley of the Sun" which surrounds the Phoenix urbanized area.

Zoning is the responsibility of the various cities and all of the larger incorporated places have a zoning ordinance and zoning regulations. The county handles zoning in the unincorporated areas. Maricopa Association of Governments (MAG), a voluntary association of cities, towns, and the county, attempts to coordinate land use planning activities on a metropolitan area--wide basis. Water supply is controlled by the various city governments which obtain it from the Salt River Project and their own wells. In addition, there are over one hundred small private water companies which operate in the

unincorporated areas where municipal water is not available. These companies obtain their water exclusively by drilling wells in their local area of operation.

Liquid waste disposal in Phoenix, Tempe, Mesa, Scottsdale, and Glendale is handled by municipal sewer companies which cooperatively use the same waste treatment plants. However, in the unincorporated areas as well as some of the smaller cities and towns not covered by sewage systems, the use of septic tanks and cesspools is widespread. Highway planning is currently done by fourteen different jurisdictions and is

coordinated by MAG on a voluntary basis.

#### EXISTING ENVIRONMENT - COMMUNITY

##### Physical

The natural characteristics of the various communities identified in this study vary considerably. Such Communities as Scottsdale, Paradise Valley, South Phoenix, Tempe, and Mesa, have considerable physical relief whereas others such as Glendale, Deer Valley, are almost without any of that kind of relief. The climatic and vegetative characteristics of the communities are similar to those expressed for the region and vary to the extent only in which

the communities have washes or are close to mountainsides or lie in the flat alluvial plain. The water characteristics of the communities is also variable, with the predominance of well supplies occurring on the northern fringes of the area, the balance of the area being served by the Salt River Project.

##### Social

On a community level the values and way of life of different people is obviously much more varied than on the regional basis. Tempe, with its university center, the recreational crossroads of Scottsdale, Mesa with its historical routes, all have their

individual character. Other communities with less strong identity and image more often seen as an extension of metropolitan Phoenix while striving nevertheless for some identity. Paradise Valley, the specific community which we are looking at in terms of alternative planning, has a strong identity. In terms of a way of life and the values which go along with that way of life, the predominantly upper income residents reflect the western suburban ethic. One acre zoning or single family houses on large lots reflect the values for individual freedom and the freedom not to be encroached upon by

others which is basic to what we have been calling the western suburban ethic. The forces for change are not apparently overwhelming in Paradise Valley, although clearly one cannot live in Maricopa County without being aware of the tremendous population growth. There is a strong community organization which has strong administrative control over land use and regulates very effectively against any major physical changes. Probably along with type of community organization goes a strong sense of community, sense of identity and thus sense of belonging.

Institutional (Paradise Valley)

Paradise Valley Planning Area is a large area in the northeastern part of Phoenix. Although decisions involving land-use in Paradise Valley are made by the City of Phoenix, Paradise Valley has its own Citizens' Planning Committee which makes detailed studies of local problems and advises the Phoenix City Planning Commission. Normally, over ninety percent of these recommendations are approved. Paradise Valley is zoned almost exclusively in large residential lots, the great majority being one acre in size. It receives the usual municipal services from the City of Phoenix. Although its current population is estimated

to be in the neighborhood of 49 thousand, an eventual population of approximately 150 thousand is projected. The authors of this report feel that an area holding 100 to 200 thousand persons is the most feasible and desirable focus for community planning.



#### IV ALTERNATIVE DEVELOPMENT SCENARIOS

##### Unlimited Growth on the Existing Pattern

Without innovative planning, the population of the Phoenix Metropolitan Area can be expected to continue growing rapidly in the same sprawling manner that has become commonplace since World War II. A population of roughly 2.0 to 2.7 million is expected in 1990.

Throughout Maricopa county, population is virtually certain to expand at very low densities on undeveloped land and along the periphery of the already urbanized areas. In addition, given a situation of unconstrained growth, a large number of new subdivisions leaping over vacant areas can be expected. Finally, a corridor of high rise development is likely to come into

being along Central Avenue.

Paradise Valley, owing to its location relatively close to downtown Phoenix, the presence of good quality municipal services, and the availability of single family homes on large lots can expect a very rapid increase of population, possibly attaining the level of roughly 150 thousand by 1990. Unless substantial improvements in the highway system are made, the citizens of Paradise Valley are certain to suffer from severe traffic congestion as they try to work and shop in other parts of the region.

In order to offset the traffic congestion and increased travel time brought about by urban sprawl, a massive highway and freeway construction program



will be required. It will be necessary to build freeways that enable people to drive from the fringe of the urbanized area to the downtown corridor in a few minutes during off-peak hours. Naturally, during peak hours, average trip times are likely to be somewhat longer. In addition, many of the arterial streets and boulevards in the City of Phoenix will have to be widened. Six lane boulevards similar to those in Los Angeles will be necessary to carry the traffic.

Unless one or more freeways are extended into the Paradise Valley area, the traffic congestion and obstacles to movement will become intolerable. As a result, both the construction of freeways and widening of arterials in this

area appear to be inevitable. Naturally, increased noise and air pollution will result. Given the pattern of low density growth, public transportation of any kind appears to be infeasible with the single exception of systems operating along Central Avenue.

Given a continuation of present growth patterns we would expect to find on a regional level increasing conflict between a desire to maintain an out-of-date life style and pressures from very real modern social ills. The fear of losing one's grip on that abstract ideal way of life defined as the "Western Suburban Ethic" cannot help but increase in intensity. Residents may well attempt to make zoning regulations which do not accomodate to trends but

are intended to stop them in their tracks. In the light of such a panic, freedom of movement and freedom of choice on finding a place to live and work can easily become very constrained beyond the realities of the situation. The results of all of this on activities and behavior of people are that residents spend more of their resources and more of their time, carrying out normal tasks associated with work, recreation, and home life.

On a community scale, in a community like Paradise Valley, all the problems associated with a sense of losing a grip on a dream are intensified. Community organization becomes a major vehicle for defensive planning -- for keeping people out. Positive planning -- incorporating

trends into an optimistic plan for the future -- goes by the wayside. On the other hand, of course, it must be remembered that with all of the defensive planning that takes place, people maintain a semblance of the western suburban ethic. Residents do maintain houses on a very large single family lot -- at least for a while longer.

Unlimited growth on the existing pattern will bring about several important economic trade-offs. On the positive side, people will continue to be able to buy single family homes on large lots at moderate prices. In turn, private developers will continue making profits by developing vacant land without setting land aside for schools and parks, and paying for

infrastructure such as sewers, curbs, and sidewalks. The improved freeway and highway system will permit citizens to continue to have access to a wide variety of jobs, shopping, and entertainment opportunities throughout the Phoenix region. If people change employment, they will not normally be obliged to move in order to have decent access to the jobsite.

On the other hand, people will incur a number of increases in cost. Moving to the periphery entails a longer journey to work, and thereby increased transportation costs. This increase will be aggravated by the fuel shortage. The same might be said for shopping trips and recreational trips. Homeowners will be required to do without sewers, curbs,

and sidewalks for years. When they are finally installed, they will be put in at high cost and the homeowners will be obliged to pay. Likewise, the extending of public utility wires and pipes to outlying subdivisions increases the cost of these services and must be born by the population at large. Another cost is the increase in food prices and loss of economic base entailed by the withdrawal of land from agricultural production. Finally, air pollution emitted by motor vehicles both damages property and reduces human health and lifespan.

Unlimited growth on the existing pattern will have several harmful ecological impacts. The continued expansion of the urban population in a relatively homogenous manner tends to create an unstable system prone to crises. The

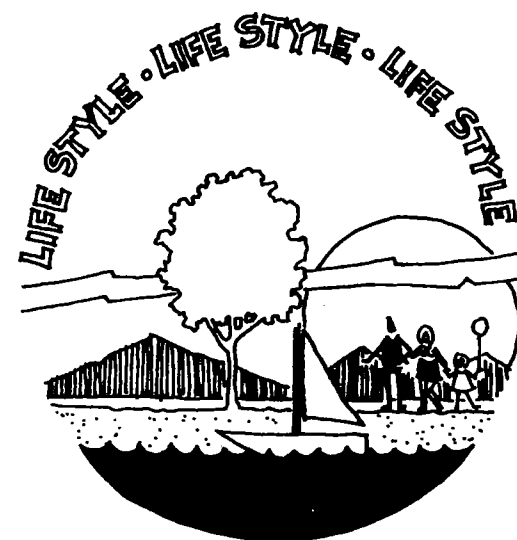
increased amount of motor vehicle travel in the region tends to increase air pollution that damages plants, animals, structures, and people. The drilling of additional wells will accelerate the already rapid depletion of ground water, and increased use of cesspools makes contamination more likely. In addition, a dispersed pattern of residences increases the use of energy. Finally, the continued absorption of land into urban use tends to deplete the natural ecosystem.

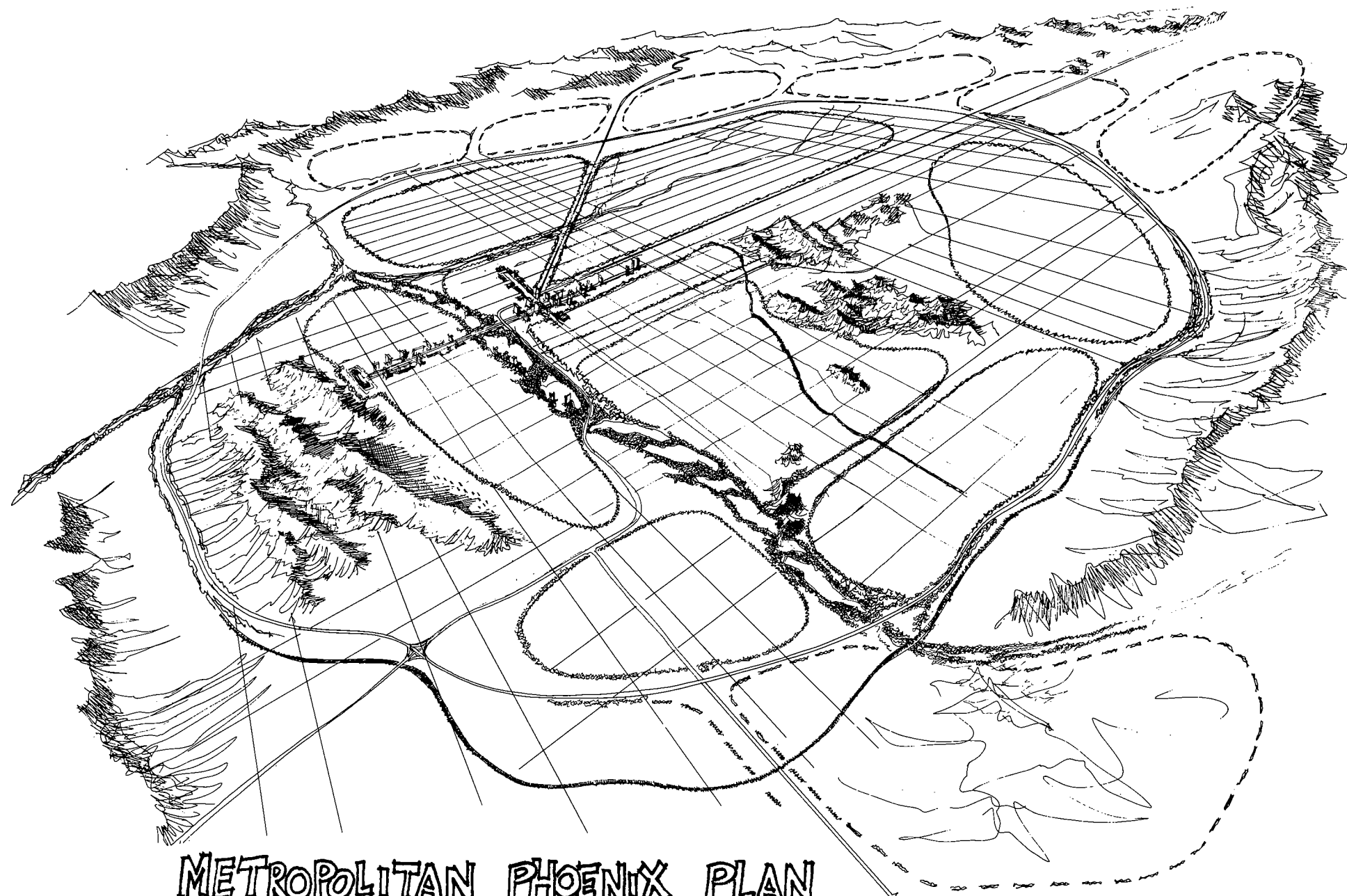
The unlimited growth scenario is not likely to bring about any rapid institutional changes until a crisis arises. For example, private water companies will probably continue to form and operate so long as sufficient groundwater is available. The cities will probably continue to annex adjacent county land as it

is developed and buy out private water companies as municipal water service is extended. Paradise Valley will probably continue under its present governmental arrangements.

The unlimited growth scenario tends to preserve the traditional Western life style, but at greatly increased costs. The fortunate individual who has good health and a good job continues to have the freedom to live wherever he wants, go whenever he wants to go, and do whatever he wants to do. However, the reverse of this freedom is continued isolation from the larger community, and a feeling of anonymity. In addition, the less fortunate young and old, as well as the poor and those in ill health, have no access to mobility and therefore do not enjoy the same freedom as the more fortunate.

The more affluent individual also suffers from a paradox. Even though he has a high degree of small-scale control over his house, yard, horse, and automobile, he loses control at the community level. In other words, he cannot prevent air pollution from blowing into his property or a rapid expansion of the welfare rolls as those who for one reason or another cannot adjust to the system give up and drop out.





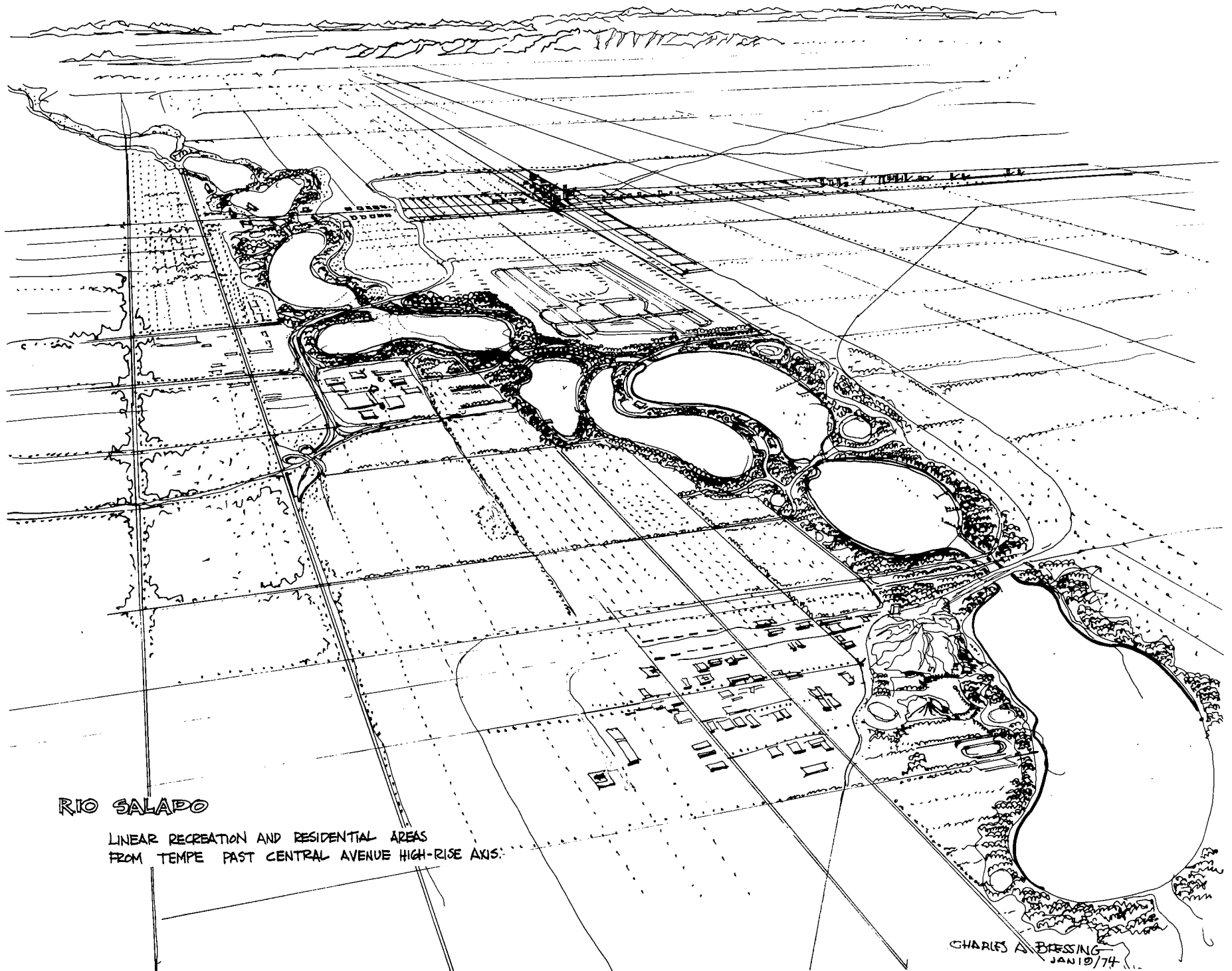
# METROPOLITAN PHOENIX PLAN

LOOKING NORTH-WEST AT THE PROPOSED PLAN



METROPOLITAN PHOENIX PLAN

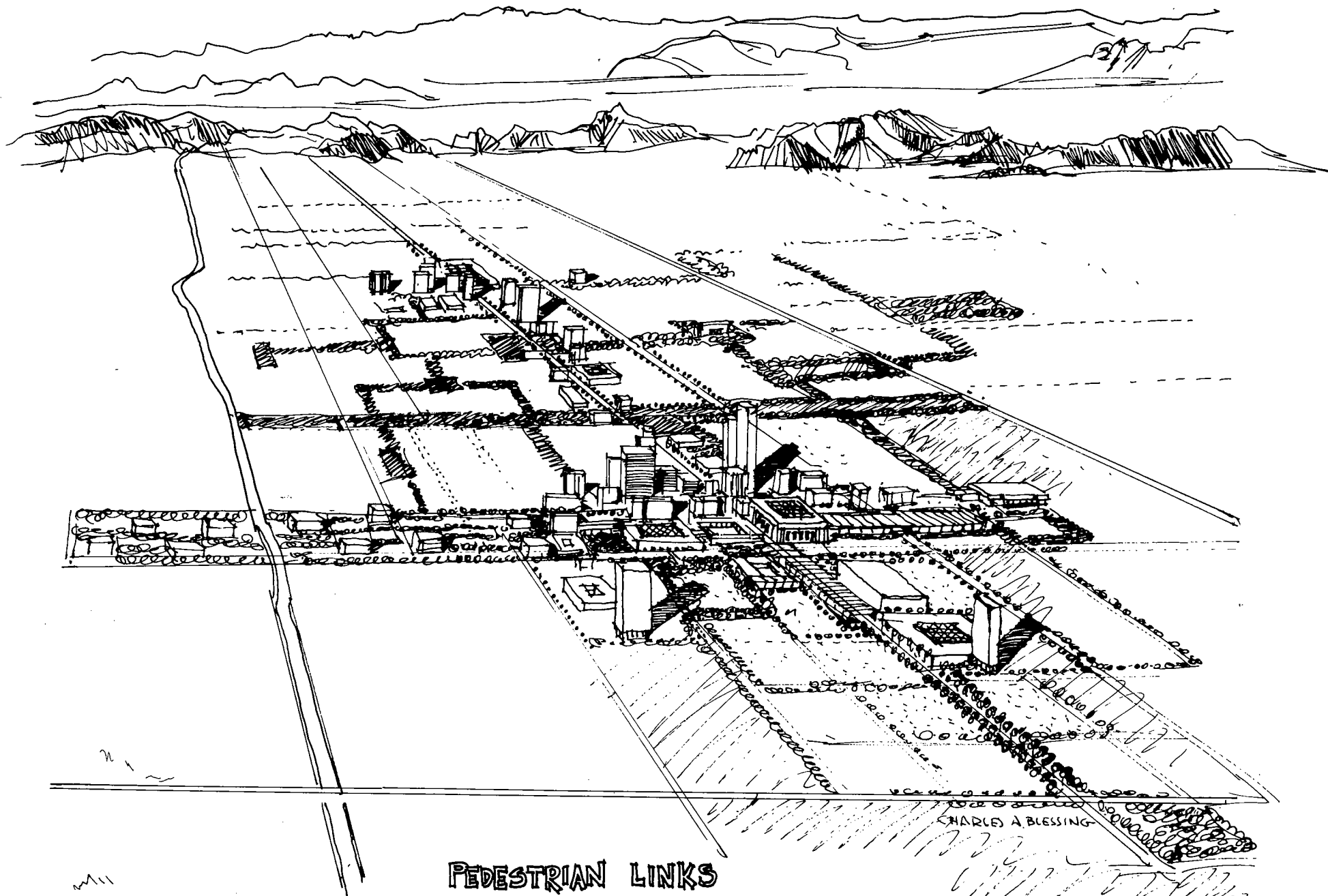




## RIO SALADO

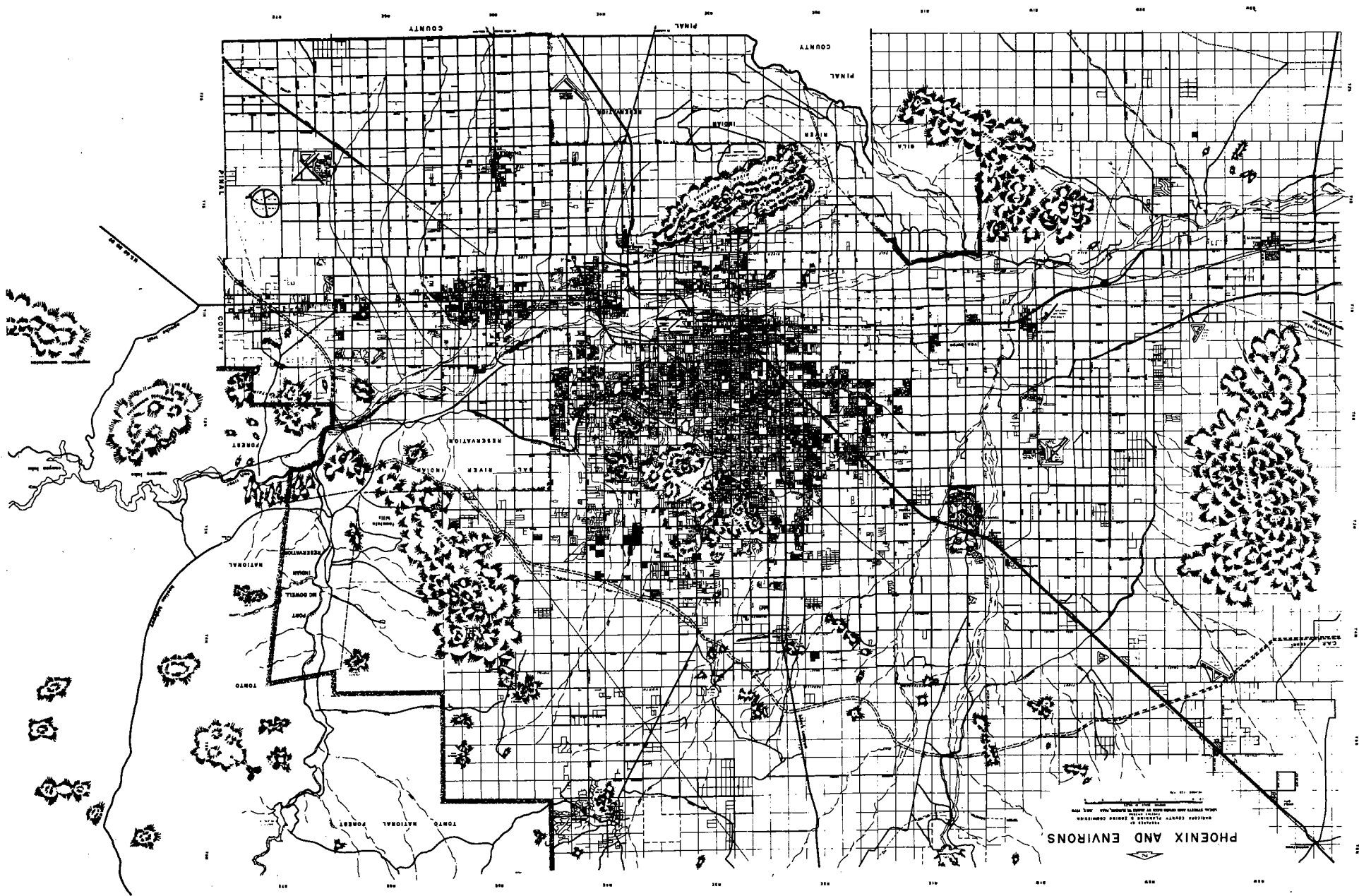
LINEAR RECREATION AND RESIDENTIAL AREAS  
FROM TEMPE PAST CENTRAL AVENUE HIGH-RISE AXIS:

CHARLES A. BRESSING  
JAN 10/74



## PEDESTRIAN LINKS

GREEN SPACE PEDESTRIAN LINKS TO SERVE  
THE CENTRAL AVENUE HIGH-RISE AXIS AND  
CONNECTING ADJOINING NEIGHBORHOODS



### The Contained Growth Scenario

The underlying premises for the contained growth scenario are based on continued population growth in the Phoenix area. This scenario could apply to a total population of 2 million or more people. We define contained growth as meaning that population increases will be allowed but within a well established set of boundaries, based on limiting sociological, economic and ecological considerations. For example, pump wells on the northern fringes of the Phoenix metropolitan area as indicated earlier could be a tenuous source of supply. The economics or the cost of getting water to those areas from other sources could constitute a limiting factor and thus establish a boundary. Similarly physiographic or form considerations can

also provide sound rationale for such boundaries. The physical plan for the contained growth scenario is presented in the accompanying illustration. The urban form which is assumed in the scenario is considered at two levels -- the regional level encompassing all of the metro region and the community level encompassing such communities as Scottsdale, Paradise Valley, Tempe, etc.

The regional level is based upon the containment belt which is both green and transportation oriented. The dominant urban feature is the Central Corridor. Open spaces in the form of regional parks are provided, the predominant feature of these in addition to the belt being the Salt River Development. The plan provides for a diversity of opportunities for Phoenix residents. Everything from low

density, single-acre units to high density, high-rise is provided. A second form is also illustrated in this scenario. This includes provision for extensions beyond the green belt area. The second dominant feature of the urban form is the development of community based structures within the constraints of real or man-made boundaries constituting discreet units within which community planning and development can occur. The community unit illustrated is Paradise Valley with a diversity of low-density, high-density areas, commercial, industrial areas and parks taking advantage of natural features such as the wash.

Transportation within the contained area has as its dominant feature a rapid transit system serving the central corridor and the airport. Provisions for

future services are provided in the plan and are contingent upon population growth. The second feature of the metropolitan-wide transportation system is the belt parkway, which in addition to providing recreation mobility provides linkage for the outlying communities. The third feature of the transportation system is continuation of the I-10 Freeway along the Salt River connecting with I-80 and providing the high-speed link to the outside. The transportation system at the community level utilizes the existing arterial system which serves the community internally as well as provides transportation links between communities. Other features relating to mobility are included in the various intra-community plans which feature the utilization of natural features such as washes or man-made fea-

tures such as canals, bicycle and bridle paths.

On a regional basis, people will be less spread out. Whereas they may spend as much time carrying out tasks, these tasks will probably be carried out in closer proximity to one another. There will be a greater perception of diversity, and a greater acceptance of differences among groups. There would be a greater awareness of the fact that Phoenix and Maricopa County were becoming an urban or nearly urban setting.

On a community level, Paradise Valley if it were developed on a non-single family lot orientation would make a dramatic change socially. There would be a necessary acceptance of people living nearby who have different small-scale

activity patterns but who do not have different life goals. This means that there may be more activity on the front lawns of neighbors than in the back yard and people may see more of each other rather than less.

Local administration and local community decision making would eventually tend to reflect these differences among people. Community meetings might well become forms for discussion and resolution of differences rather than a place to gather together to reaffirm similarities. Nevertheless there would be much greater opportunity for establishing community identity through stronger local community representation, stronger boundaries delineating Paradise Valley from other places, and by the stronger identities that nearby communities would potentially develop.

Although contained growth will bring many economic benefits, one important cost will increase. People will no longer be able to buy houses on large lots at a modest price. Large lots will become increasingly scarce and will rise in price. However, this price rise will be held down to some extent by people moving into town houses, condominiums, and high rise. On the other hand, developers will be required to put in all urban infrastructure, so buyers will be able to have it from the beginning at low cost. Transportation costs will be reduced because people will tend to live closer to where they work. In addition, the availability of good public transportation between the various community centers and from certain centers to the Central Avenue corridor would bring about

very considerable reductions in transportation costs. The typical middle class family could again exist with one automobile, as was the case before World War II.

Contained growth would keep public utility costs low by minimizing the length of wires and pipes necessary to serve the population. In addition, agricultural land could be kept in production, and farm prices kept low. Agriculture continues to form a healthy part of the region's economic base.

Finally, reductions in miles traveled reduce air pollution. Thereby, damage to both property and persons is reduced and the average life expectancy is lengthened.

Ecological or environmental tradeoffs within the scenario of the contained

area are the result of increasing density. These include a loss of desert features, either faunal or floral, within the bounds of the city, except in the regional parks. Increasing density of people, particularly along the strip area, could result in diminished air quality in that locality.

Institutional changes necessary to accommodate the contained growth principle include the development of additional regional control. It is imperative that central planning authority must be strong. The contained scenario provides opportunity for substantial diversity in density, activities and perceptions with all the attendant variations necessary to service those characteristics. Thus it does become extremely important that central control predominate. The control must

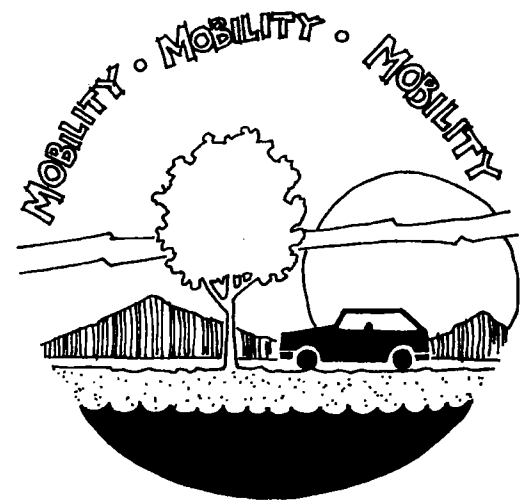
not only have the power to plan, but must be in the position to influence the implementation of the plan, much as an architect would supervise the construction of his building. In the contained scenario an additional function becomes necessary and that is the coordination of community planning activities. These activities are community directed and participated in by the community. They do serve as a basic input to the regional planning design and have strong influences within the community concerning the plan and implementation of that plan. Thus a hierarchical system is necessary starting with the community but under regional controls.

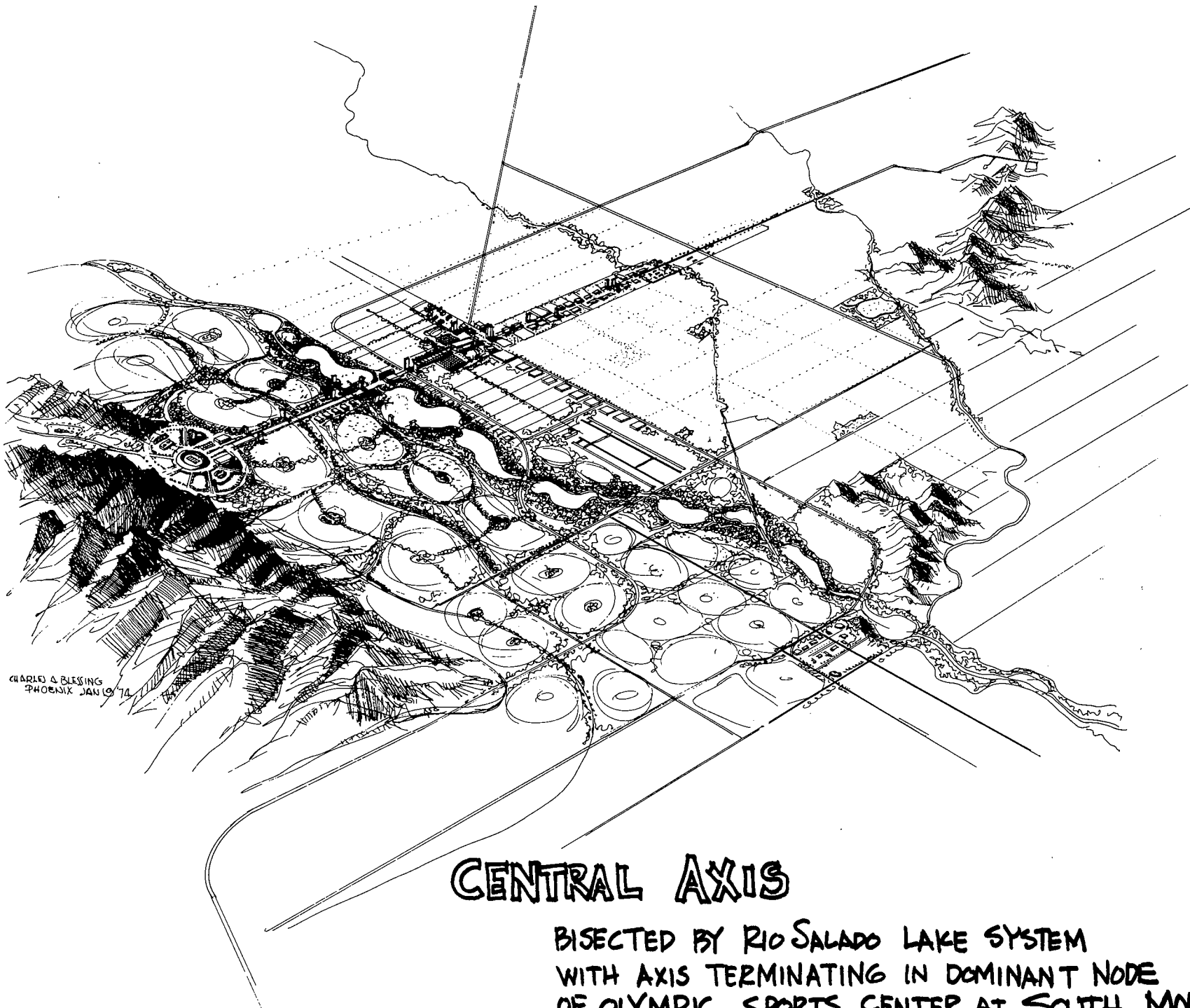
The contained growth scenario provides for several elements of life styles which are not as evident in the unlimited growth



scenario. On the regional basis it provides for a diversity of mixes of opportunity, that is to say, it provides for the individual to select from a mix of life styles. Thus the individual wishing to live the western ethic has that opportunity available to him as does the individual who wishes to select the urban life style. Communities within the regionally contained area in addition impose some limitation on the western ethic life style. A community perception becomes necessary which enforces community responsibility and requires the individual to consciously share the public responsibility. The individual does gain a greater feeling for the responsiveness of institutions. Thus the life style characterized by the contained scenario could perhaps be best

characterized as a nascent urban form of life style or perhaps an urban village life style.

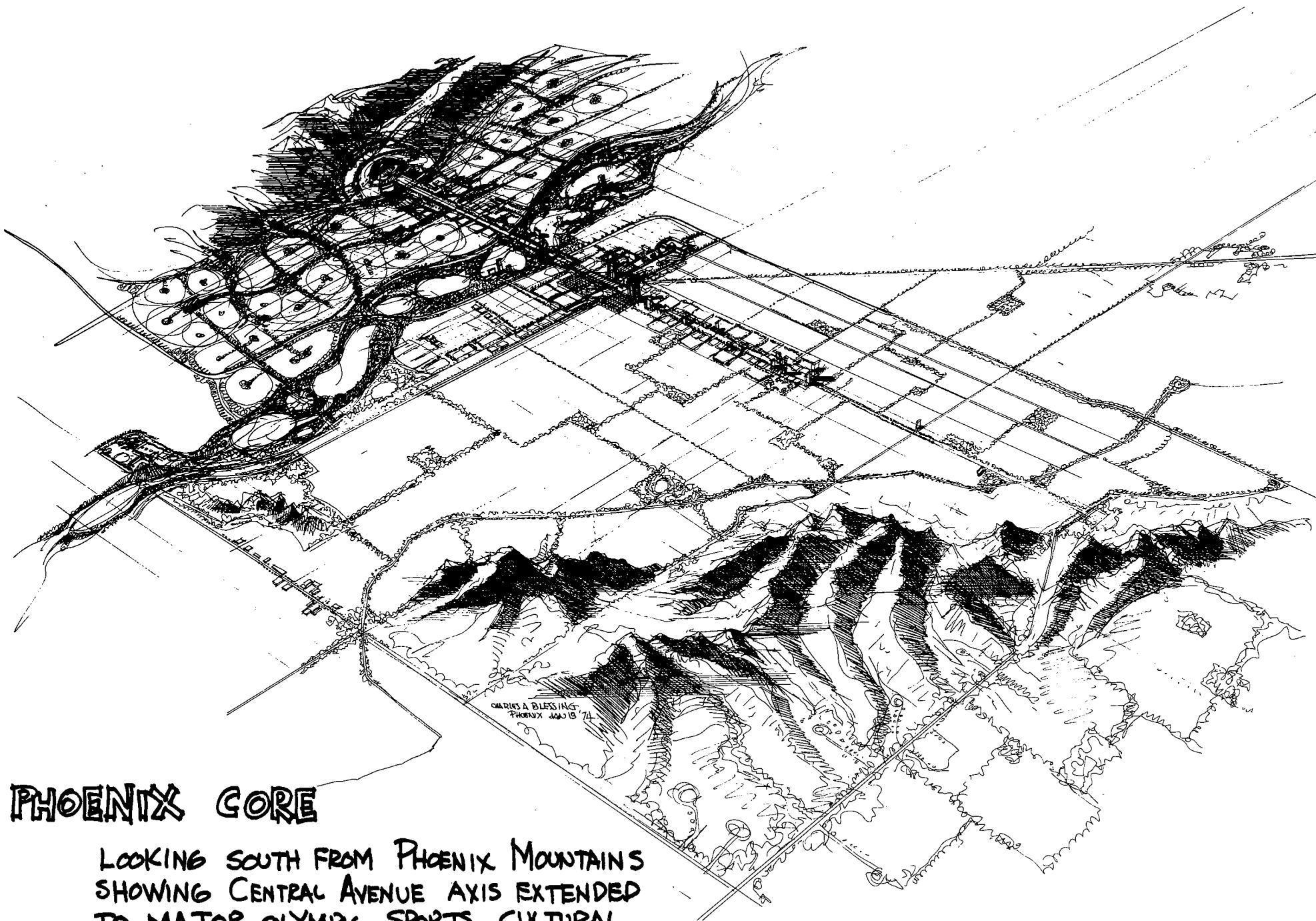




CHARLES & BLESSING  
PHOENIX JAN 1974

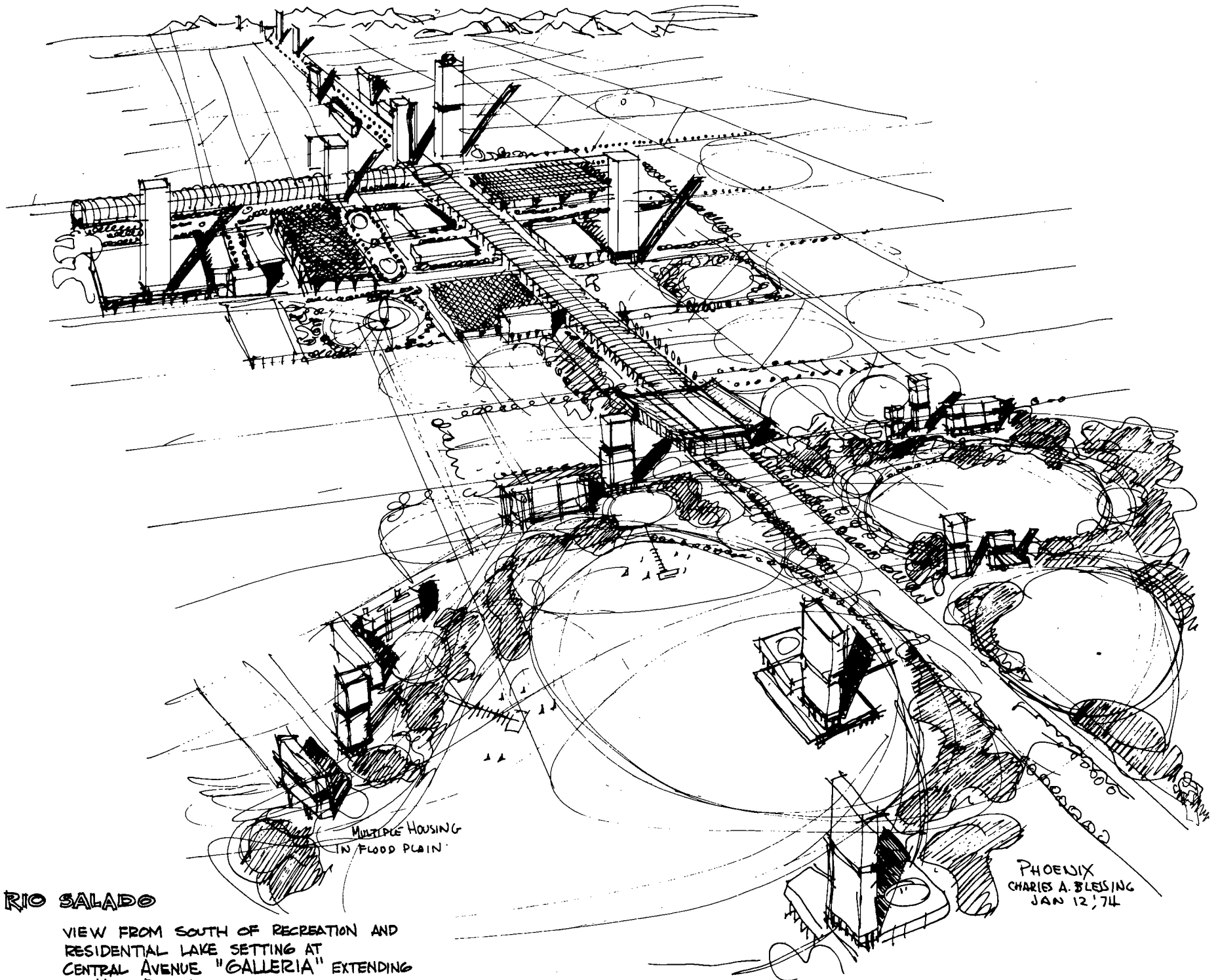
## CENTRAL AXIS

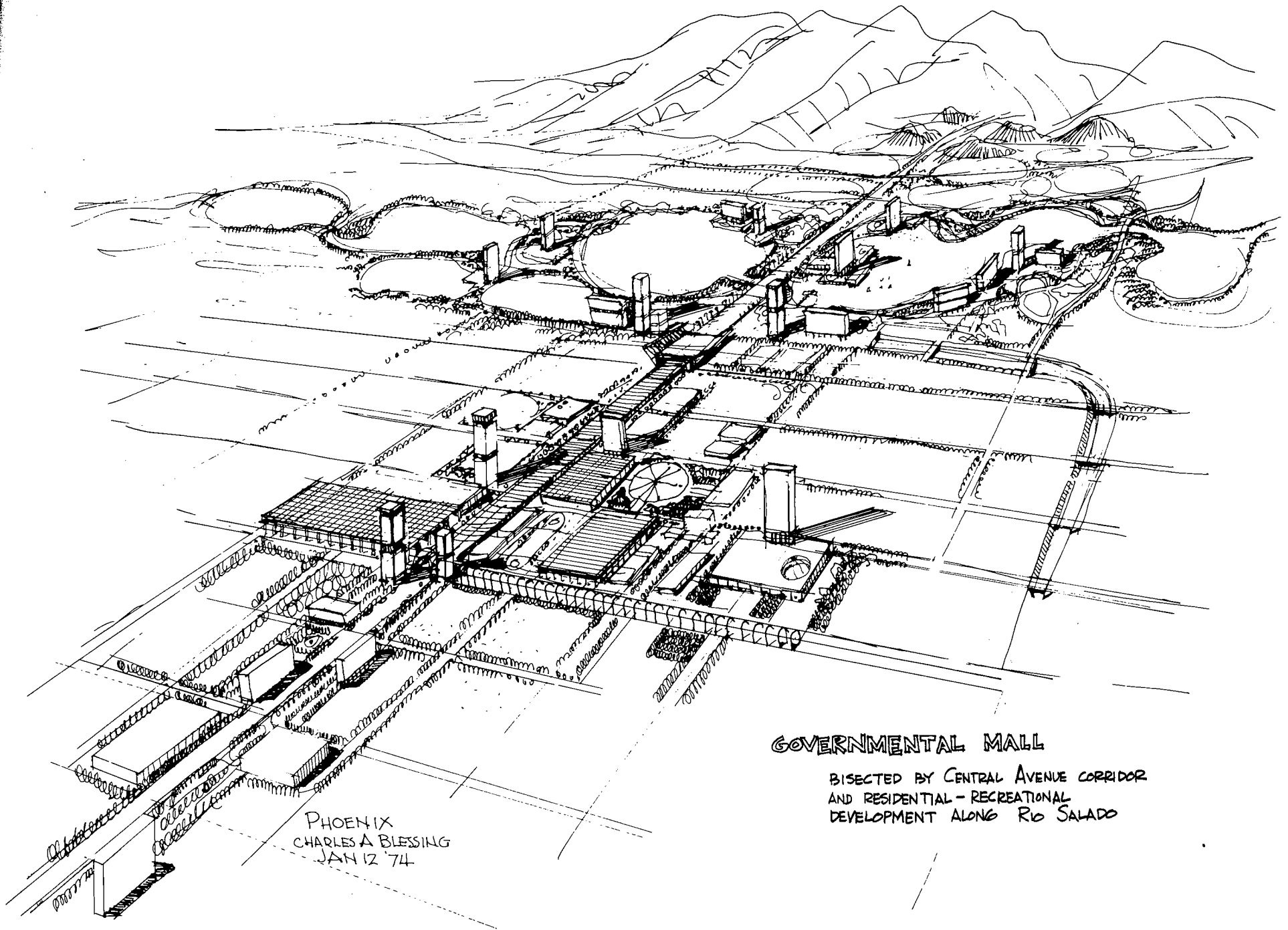
BISECTED BY RIO SALADO LAKE SYSTEM  
WITH AXIS TERMINATING IN DOMINANT NODE  
OF OLYMPIC SPORTS CENTER AT SOUTH MOUNTAIN



## PHOENIX CORE

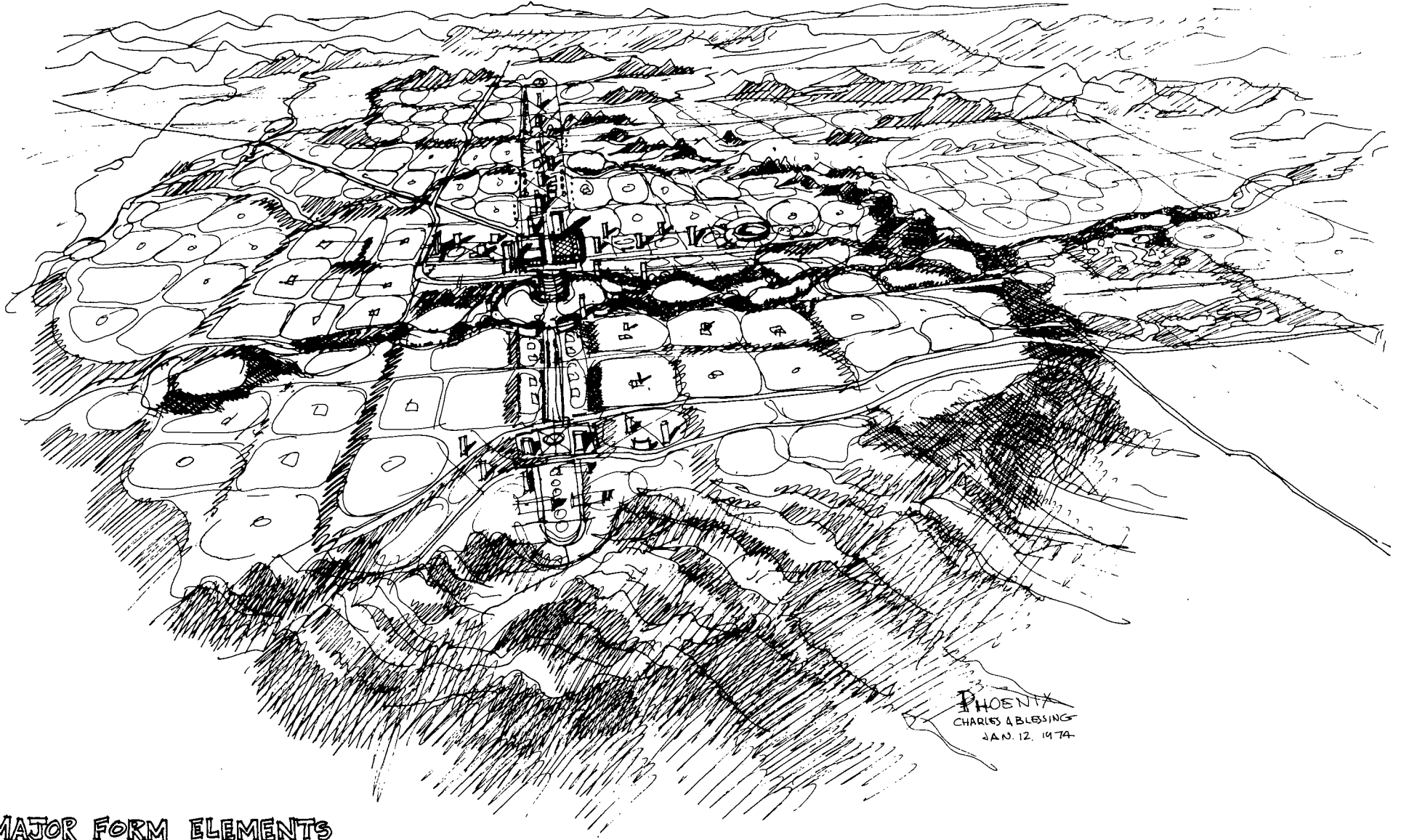
LOOKING SOUTH FROM PHOENIX MOUNTAINS  
SHOWING CENTRAL AVENUE AXIS EXTENDED  
TO MAJOR OLYMPIC SPORTS, CULTURAL,  
AND COMMUNITY COLLEGE CENTER





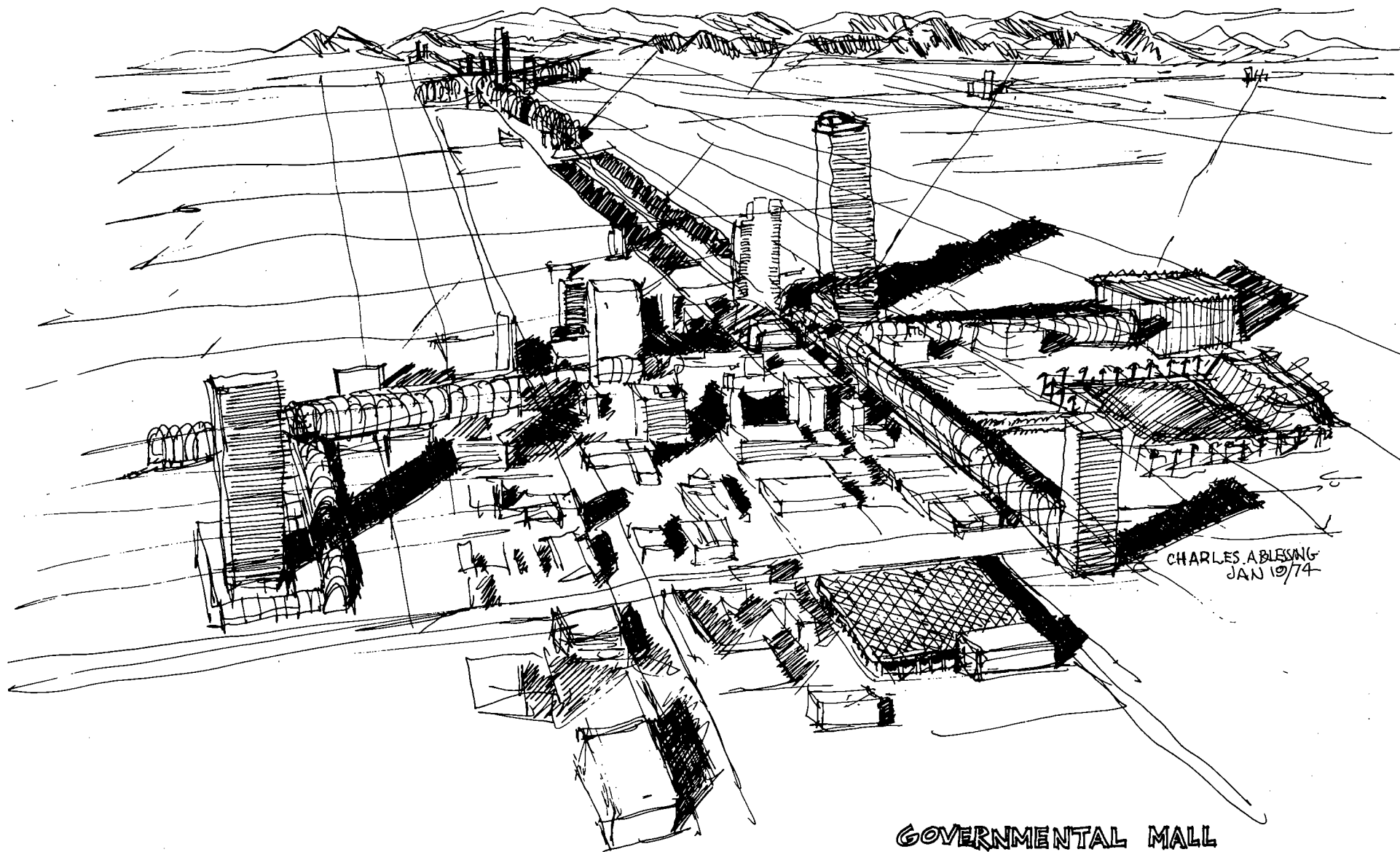
## GOVERNMENTAL MALL

BISECTED BY CENTRAL AVENUE CORRIDOR  
AND RESIDENTIAL - RECREATIONAL  
DEVELOPMENT ALONG RIO SALADO



## MAJOR FORM ELEMENTS

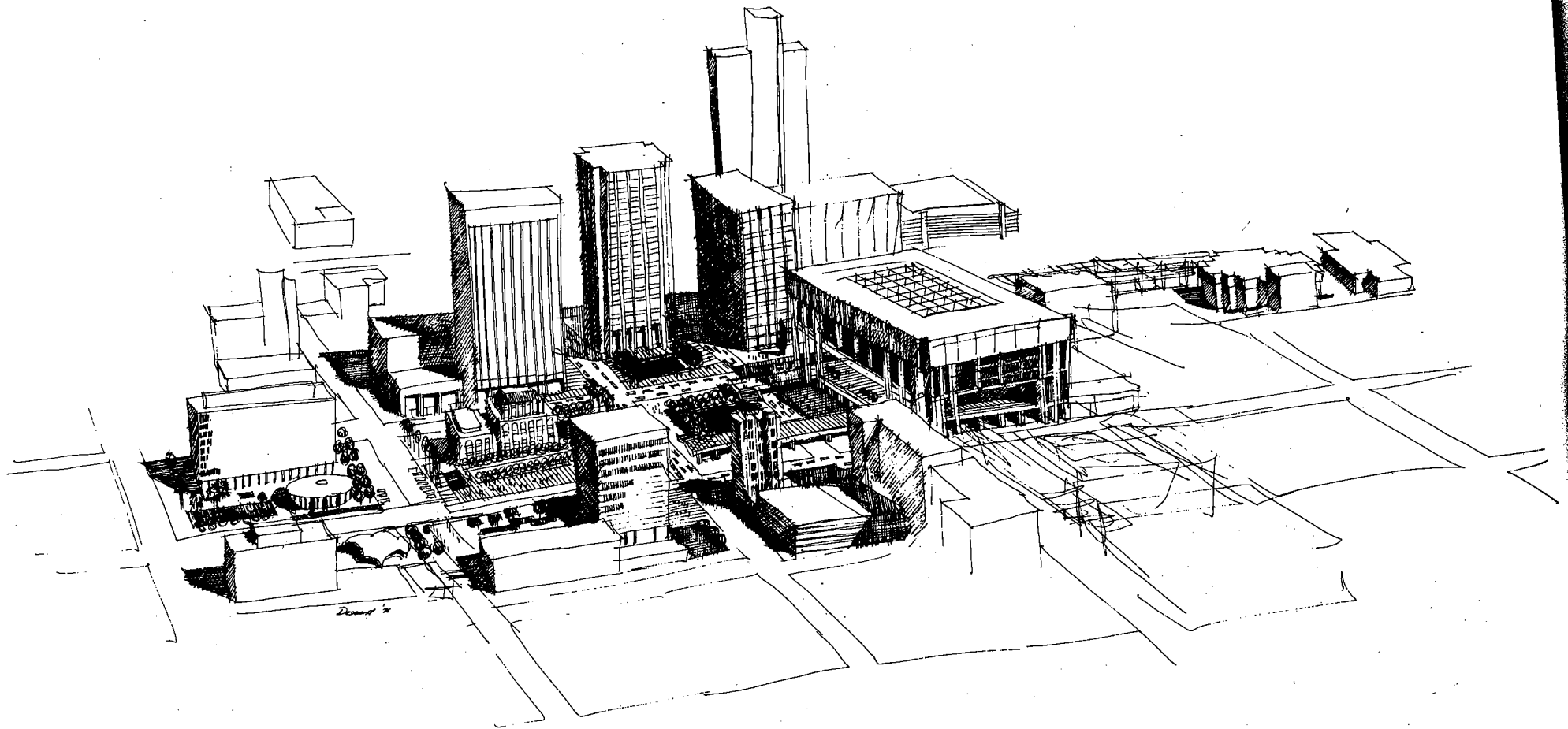
LOOKING NORTH ALONG HIGH-RISE AXIS FROM  
SOUTH MOUNTAIN TERMINATION TO CAMELBACK ROAD TERMINATION  
AXIS IS BISECTED BY LINEAR RIO SALADO WATER RECREATION  
AND LINEAR GOVERNMENTAL MALL  
MAJOR OPEN SPACES ARE ARRANGED IN CIRCUMFERENTIAL PARK



## GOVERNMENTAL MALL

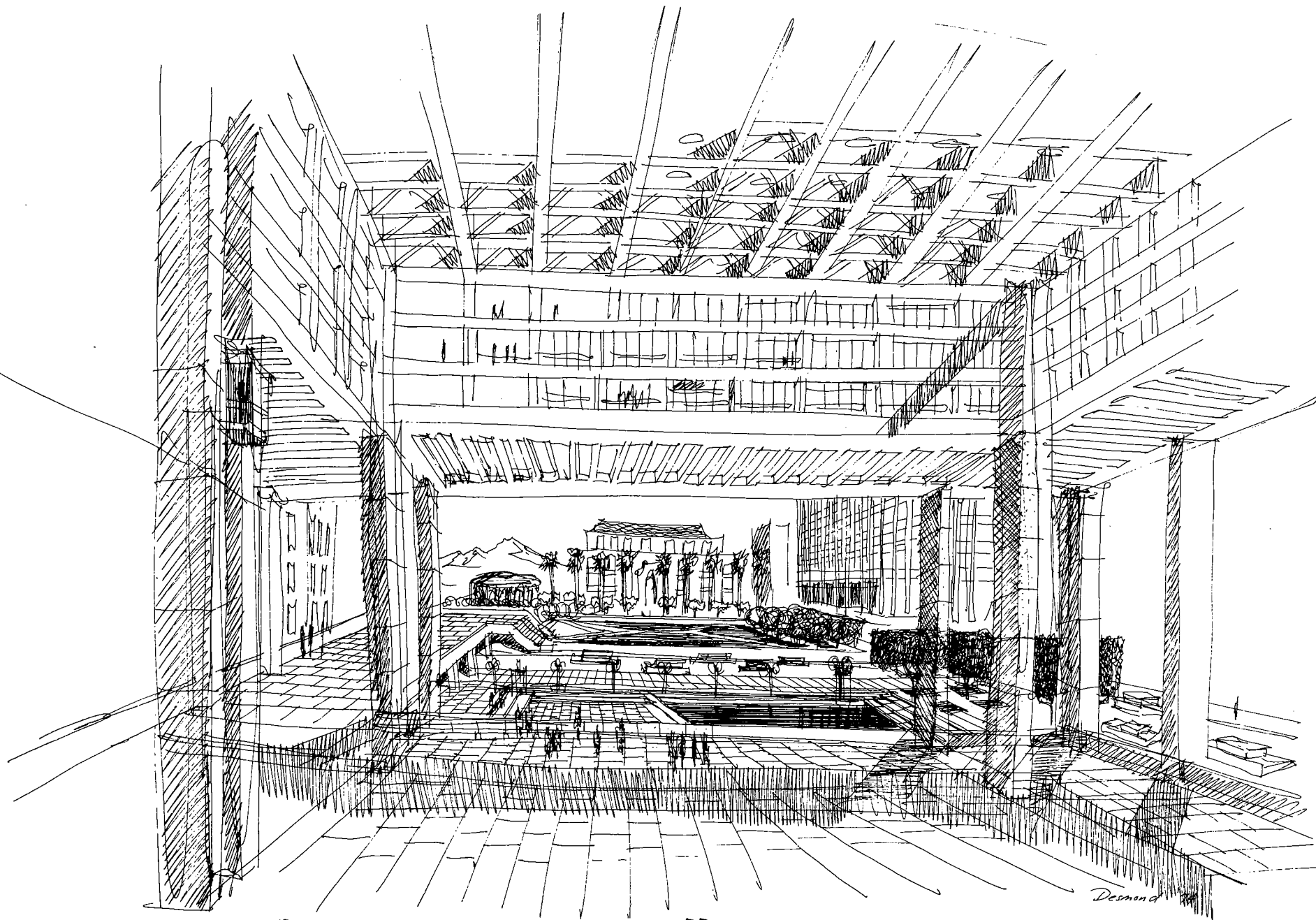
PRELIMINARY CONCEPT OF LINKED  
PEDESTRIAN MOBILITY INCLUDING SKYWAYS





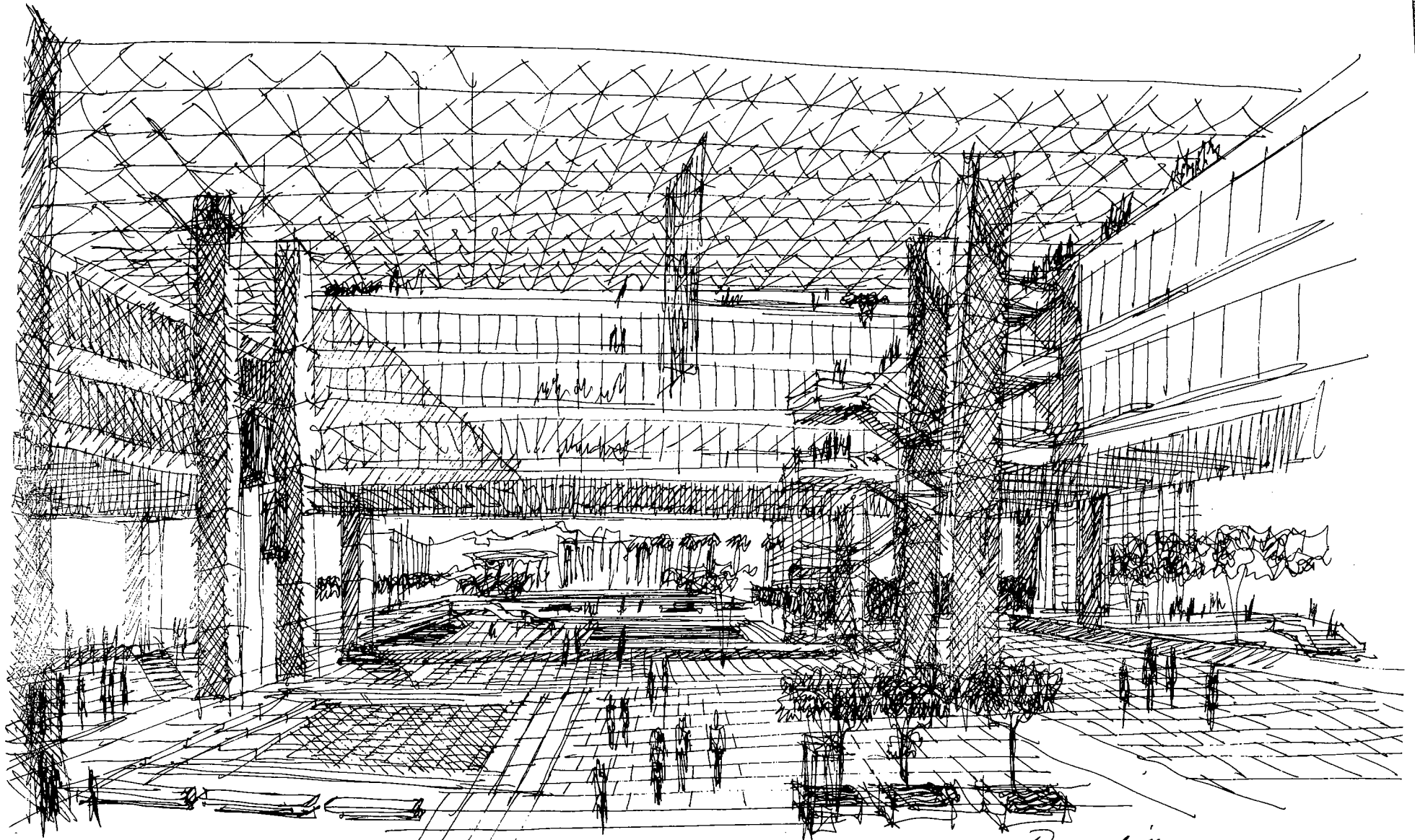
## CENTRAL PHOENIX

VIEW OF DOWNTOWN WITH PEDESTRIAN ORIENTED "CENTRAL PLACE"  
SERVING AS CONNECTION FOR VARIOUS DOWNTOWN AREAS.



## III "CENTRAL PLACE" III

SCHEMATIC CONCEPT OF FOCUS & UNIFIER



*Desmond '74*

## PEDESTRIAN ENVIRONMENT

STUDY IN SCALE AND ENVIRONMENT WITH  
SPACE FRAME AND SUN SCREEN

## V PLANNING STRUCTURE AND PROCESS

The structure and process for developing the most appropriate plan for the Phoenix Metropolitan area must be based on a comprehensive feedback system between local citizens, professional advisory staff, and the Maricopa Association of governments. Changes in attitudes, values and personal goals of local residents must be determined from both on-going long scale social and behavioral survey research; and from on-going community participation in decision making through local meetings and representation integrally linked with the political system. The resources exist in

the Phoenix area to begin such a feedback system immediately. Among those is the Arizona State University Survey Research Center under the direction of Dr. Axelrod which has begun to establish the mechanisms for such a "social indicator" analysis. The ASU Research and Information Exchange Center in the Vice President's office is also beginning to establish a format for storing and comparing such information.

In the evaluation of alternative conceptions and plans, the professional staff should evaluate alternatives in terms of the

criteria based on citizens' needs and selected by the citizens. The evaluation should be presented in such a way that the citizens and the political leaders can weigh these findings in light of local values. The decision should reflect the opinions and attitudes of the citizen and political leaders and not the professionals.

The structure for community involvement in decision making must be based on existing organization. Within the city of Phoenix, it would appear that the "Area Planning Committees" should be used to undertake such studies. In Glendale, Mesa, Scottsdale and

Tempe, the usual planning machinery could be employed. Other sections of the Metropolitan could be covered by "special planning committees" set up by the County so that the whole Metropolitan area is involved. This may require twenty to thirty such organizations.

These organizations should use the various citizen groups within their specific area and should establish the appropriate links with the political structure. They should concentrate on three main areas:

1. Development concept of the area of which they are

responsible.

2. Coordinate regional elements like transit systems, and freeways into the development concept for the area.
3. Establish improvements to be built within the immediate future (next ten years).

Regionally, special committees should be set up to take into consideration the areas in which these systems are to be built. They should employ the citizens from the appropriate "Area Planning Committees" and involve essential political leaders.

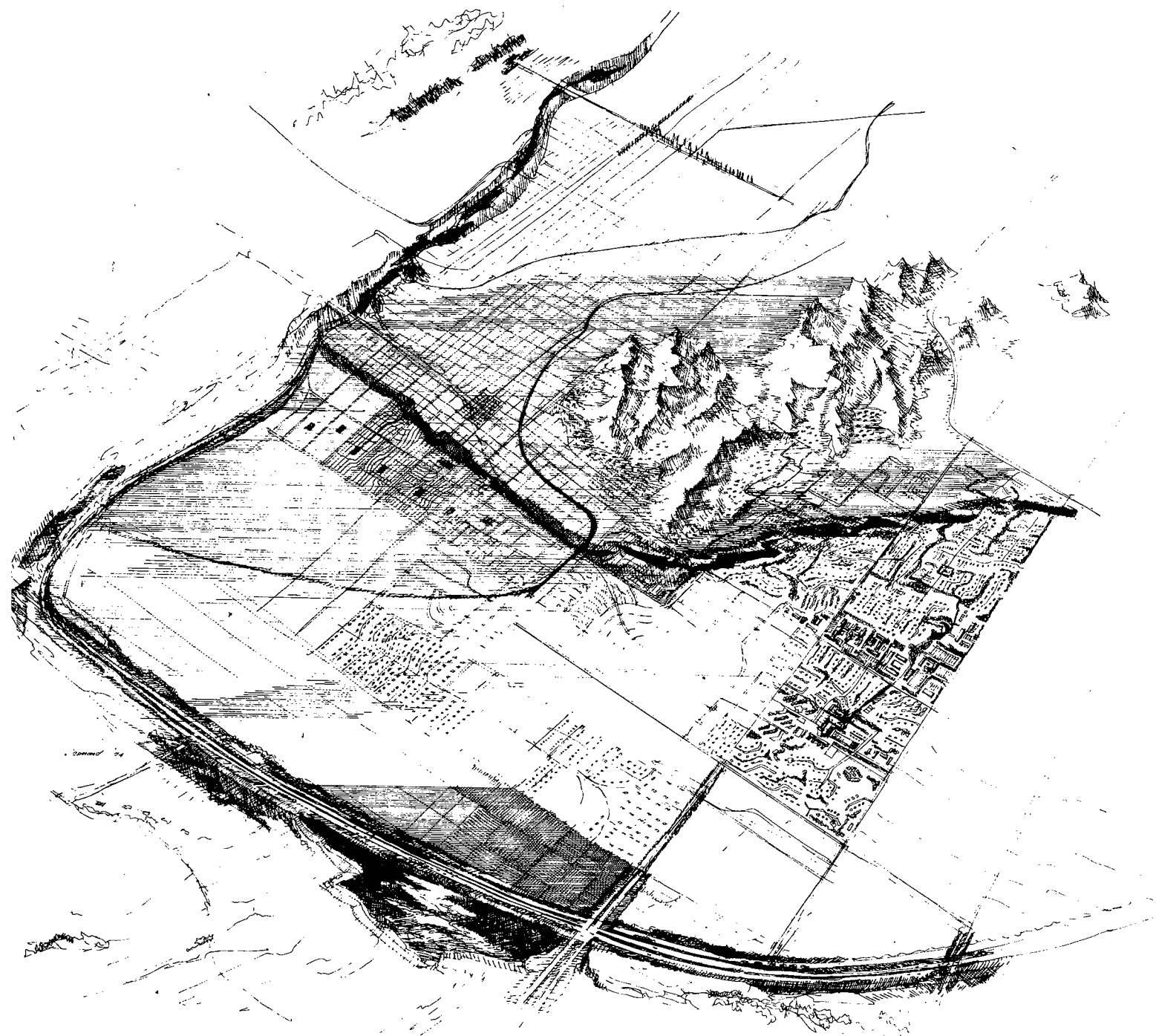
In these undertakings, the committees should start with a development of the issues and problems that are related to the areas or to the particular system they are planning. They should develop ideas of how these problems might be resolved. These ideas would then be refined by the staffs and presented to the committees for their reaction. In light of the reactions of the committees, the plans should be modified until there seems to be general acceptance at the citizen's and political level.

The Planning Director for the Maricopa Association of Governments should help in setting up this local area planning program. He should see that they have the appropriate citizen and political input and that they have adequate staff to carry out the work involved. He should exchange ideas and concepts that are developed by the various local area planning programs. He should see that all the program gets underway in the very near future and are completed within a five-year time span.

In implementing the plans that are developed through the process, it is quite clear that additional powers

will have to be given the Maricopa Association of Governments. If growth is to be prohibited from certain areas, then the Association should have the power to prevent the extension of water and sewer systems to such an area. They should also have the power to restrict an individual or companies from drilling wells or developing special water systems. This will probably call for special state legislation, but such powers are essential to effective control over Metropolitan growth.

Within such a strong structure professionals can assist citizens and political leaders to understand the



## PARADISE VALLEY

LOOKING SOUTH-WEST FROM ABOVE  
 McDOWELL MOUNTAINS - CONTRASTING  
 CURRENT RESIDENTIAL PATTERNS W/  
 THOSE OF THE GARDEN CITY; WALKWAYS  
 & GREEN FINGERS RELATED TO THE HOUSES  
 RELATIONSHIP TO CURRENT NEIGHBORHOODS  
 IS STRENGTHENED THRU PEDESTRIAN &  
 BIKE SWATHS. ACHIEVING AN INNER  
 ORIENTATION AS OPPOSED TO STREET  
 ORIENTATION. MAJOR FREEWAY IS ON  
 PERIMETER ACTING AS AN ENCLOSURE  
 NOT A DIVIDER OF THE COMMUNITY





Desmond '74

# HIGH DENSITY

"ROW-HOUSE" SCHEMATIC  
ILLUSTRATES METHODS OF INCREASING  
DENSITY YET RETAINING PRIVATE  
AND PUBLIC OUTDOOR SPACE



INDIAN BEND WASH.

Paul F. Baker 74.

social and economic cost of various problems. This must be done in a clear and understandable manner. Undoubtedly this will require greater budget than has been used in the past for such research and community efforts. Twenty or twenty-five percent of the budget of planning efforts should be related to gathering information from citizens and to involving citizens in the political process.

VI A FINAL REMARK

We have endeavored to investigate some problems and clarify some alternatives. In our brief visit, we hope that our efforts will help Phoenix make the right decisions for the future. Our thanks to everyone who made our visit most pleasant.

*John De Beuchamp*  
*Charles A. Blessing*  
*John Zeisel*  
*John H. Niederson*  
*Yank M. M. M.*

A.I.A.  
REGIONAL /  
URBAN DESIGN  
ASSISTANCE TEAM  
METROPOLITAN  
PHOENIX AREA  
JANUARY 18-21  
1974



## THE R/UDAT TEAM

