# FUTURE OF GUAM

# ANYTHING YOU WISH AND WILL SUPPORT:::

# COMPREHENSIVE PLANNING PROGRAM SOCIAL THRUST ECONOMIC CONSIDERATION

PHYSICAL SUPPORT

# MASTER PLAN PROCESS

WHERE ARE WE GOING ?

1. PROBLEM IDENTIFICATION

5. CAPABILITIES

PLAN

2. GOALS

PLAN

3. OBJECTIVES

4. DEVELOPMENT STANDARDS

#### COMMUNITY GOALS

## General

Planners often talk a lot about goals, including community goals.

And they talk a lot about physical standards. Quite frankly, I'm

less and less sure what the former are and increasingly skeptical about most of the latter.

Goals are often expressed either in normative terms (such as better housing and job opportunities), or increasingly in government programs, or some would say they are expressed in the market place in terms of what people buy and in how much they are willing to pay.

I'm afraid that I would define community goals in fairly simplistic terms. When you put them all together, they mean, to me, the Good Life. The Good Life is whatever each person or family or group thinks it is, or should be.

Obviously, many of these goals are preceived differently by different people. The goals are becoming similar, if not the same, in terms of just what privacy, and comfort, and health, and all the rest are. And therein may lie the source of today's urban dichotomy. The realization of so many of the goals are increasingly preceived as impossible, if for no other reason than the goals of a chance is not these so many.

We are finding that density, by itself, and density standards
don't mean much. Certainly density doesn't mean too much in an urban
setting unless it is also related to such factors as the numbers of
dwelling units, people, land coverage, height, and facilities. All too

often density standards have been used as tools of exclusion rather than to achieve desired community goals.

Planners have long advocated mixed uses where this could be done reasonable and usually toward the end of achieving one kind of valid community goal or another. Very often, the separation concept, especially in its rigid sense, has been the result of public pressures, federal regulations, and insuring policies, or frankly, the planner's inability to show the mixed use concept graphically on a land-use map or to express it well in legal terms. Ultimately, any mix may be acceptable to a fearful public or to most planners.

But one is often surprised and usually chagrined at how accurately they portray widely and even cherished ideals. Indeed, when a push comes to a shove it appears that the goals that might be achieved by the standards, and the standards along. The single family house on a large lot, on a quiet tree-lined street, with a school and shopping center not too far away, or the equivalent of this picture and all that this implies for various kinds of areas in the community. The problem in terms of today's crises is, too often, not the goals but the inability of a large and frustrated part of our community to achieve those goals.

# Public Works

- A. More qualified registered engineers, architects and surveyors.
  - 1. Close scrutiny of application before personal interview.
  - 2. Better wages.
- B. Highway design.
  - Minimum standard of width of lanes, curb and gutters (if applicable), speed zones, etc.,

- C. Maintenance of roads, school classrooms and public buildings.
  - 1. Approved materials.
  - 2. Proper construction materials.
  - 3. Guarantee of materials.
  - 4. Approved and up to date equipment.
  - 5. Proper inspection.

#### D. Transportation

- 1. Quality and quantity.
  - a. Guarantee
- 2. Service (Minimum shop work)
  - a. Periodic Maintenance
  - b. Driver Training

# E. Garbage Collection

- 1. Proper and more trucks
- 2. Standard garbage containers (32 gals. max. with lid).
- 3. Qualified workers.
- 4. Incentive (Contract working hours)
- 5. Three workmen per truck.

# F. Laws and Regulations

- 1. Up to date
- 2. Applicable to Guam
- 3. Apply to all public, contractors, architects and engineers

#### G. Public Services

- 1. Communication
  - a. Written
  - b. Verbal

- (1) Informed employee
- (2) Assist beyond your boundary (public relations)
- H. Communication between departments
  - 1. Speedy messenger service
  - 2. No buck passing
- I. Government Laws and Regulations
  - 1. Harmony with connecting departments
    - a. Enforcing personnel should meet to discuss laws and regulations.
    - b. Legislate applicable laws.

# Transportation

The major problem confronting our communities is the lack of transient system to help transport people from one place to the other.

There is a great need of bus scheduling to meet the growing of our communities. Unstable of transient as of today's need does not contribute enough to alleviate the transportation problem.

Transportation contributes so much for the convenience of our every day needs, but the budget factor plays a great role thus confronting or creating more problems because of the lack of budget.

Our highway circulation has come a long way to be the major factor of our transportation system. According to traffic studies for the last ten years, the growing needs to improved highways is being hampered by the lack of highway funds, even if we are granted aid through the Federal Government there remains the local government contribution in question.

In suggestion, I would like to see that our local government would create, such department as Highway so that it can qualify for funds

through the Federal Highway Fund Act. We also in this community can suggest or otherwise through legislation we may set aside funds from sources such as gas taxes, vehicle registration licenses & inspections. The amount of money collected annually thru this source assures a better highway construction to come.

## Public Safety

- To assure maximum police and fire protection throughout the island.
- 2. To be comparable in efficiency to the better departments in cities of similar land area and population in the U. S.

:

- 3. To have all law enforcement personnel in the department attain at least an AA degree in police science.
- 4. To effectively minimize criminal activity by detecting and arresting violators of the law.
- 5. Expanding fire fighting facilities to provide fire protection in some of the remote parts of Guam as well as within the highly industrial areas of the island.
- Intensify fire prevention activities by conducting better training and carrying out more drills and inspections.
- 7. To immediately conduct investigation on all known offenses and forward findings and conclusions to appropriate authorities for disposition.
- 8. Provide miscellaneous public services to individuals and organizations within statutory limitations.
- To provide security and protective services to government facilities and instrumentalities.

#### Fire Division

- 1. Objective Protection of life and property.
- 2. Fire Protection
  - A. Apparatus distribution
- B. Water Supply Systems
  - C. Accessibility of dwellings and buildings
  - D. Fire walls
- E. Sprinkler systems
- F. First aid fire extinguisher
  - G. Civic training
    - 3. Fire Prevention
- A. Enforcement of fire laws
  - B. Communities understanding and respect
  - C. Security
  - 4. Fire Fighting
    - A. Training
    - a. Operation
    - b. Procedures
    - B. Confinement
  - C. Extinguishment

# Parks and Recreation

It is a fact that the demand for places of leisure time or recreation is a complex mixture. People differ in their needs and wants. The Island of Guam is scenic in nature ranging from beautiful beaches, mountains and the reminders of the Spanish influence during the early days. It is important that orderly planning is needed to preserve and

protect these assets for present and future use. Guam has many things to offer. A wide variety of outdoor recreation activities such as swimming, fishing, sightseeing, surfboarding, picnicking, active sports, hiking and boating can be accomplished.

A great percentage of Guam's total population is attributed to military personnel due to the intensification of military activity in the Pacific. Civilian population is estimated to be 70,000 by 1970. At the rate Guam is growing, by 1975 the population is estimated at more than 80,000 and by 1980, 95,000. Land structures on Guam show that 35% belong to the Federal Government, 23% to the local government and 41% accounted to private ownership.

The Planning Division of Department of Land Management prepared a land use plan for the island, on inventory of existing recreation areas and the potentials for future use. It was found that the demand on Guam for beach and swimming favors other recreation activities. Ypao beach is the only developed public beach on the island. It has an area of 30 acres and 1,200 linear feet of beach. Facilities provided are in good condition, although it does not give enough picnic facilities and landscaping. Additional sand is needed and some dredging and parking space should be accommodated. The Ypao park master plan developed by the Department of Land Management is adequate to serve about 30% of the civilian population. The plan for final development separates the functions of bathing, picnic and play area. Picnic sites are located, having access to various types of recreational activities. Sufficient amount of landscaping is also provided. In order to keep up with the demand, two other parks of the same size and facilities are

needed in the next five years with a third required in the future.

A recreation complex known as Central Park is being developed at present. This project will involve approximately 20 acres. Facilities envisioned include a swimming pool, courts, picnicking facilities and landscaping. Both active and passive recreations will be provided through this area. This will be one of Guam's major recreation areas.

Talofofo Bay Area project needs to be developed where surfing and swimming are very popular. An extension of the existing site and development of basic facilities should be undertaken. A water front specialist should be hired to undertake current study in order to provide maximum safety and pollution prevention.

The "Proposed War in the Pacific" by the National Park Service of the Department of the Interior should be encouraged and assisted with fullest extents.

The major aspect for recreation development hinges on economics.

Actions should be initiated to advise the continued financial support of monies from the Federal Government and the matching funds appropriated by the Legislature. It is expected that developments of outdoor recreation activities would be accomplished, possibly with the assistance of civic-minded organizations.

#### PLANNING FOR GUAM'S DEVELOPMENT

The Bureau of Planning of the Government of Guam was established by P.L. 12-200 on January 10, 1975, creating for the first time a comprehensive planning unit for the Territory, with a broad scope of authority and responsibility. The Act provides the Bureau will:

- A. Identify territorial goals and objectives;
- B. Propose long-range plans to reach these territorial goals and objectives;
- C. Coordinate the planning of all governmental and non-governmental activities with a dynamic comprehensive development plan; and
- D. Provide factual data, projections and analyses to assist policy makers in the selection of programs and the establishment of priorities.

The Bureau of Planning has a primary responsibility to create a comprehensive development plan, described in detail in the Act. To facilitate this, the resources of all Government of Guam departments and agencies have been made accessible to the Bureau of Planning through the enabling legislation.

On February 8, 1975 the Governor of Guam established by executive order a group of "twenty-five members broadly representative of the people of Guam to be known as the Goals for Guam Commission, to meet publicly or hold public hearings on:

- A. The effects produced by technological achievements on the economic, political, social and environmental goals of the society;
- B. The future of Guam;
- C. Possible administrative/legislative action for accomplishment of Guam's goals;
- D. Plans, programs and activities of individuals, associations, corporations and agencies concerned with the future of Guam.

The Commission's role is to develop statements of goals for Guam to be submitted to the Governor and Legislature, to be implemented as legislation or "enacted as statements of public policy to be used as guidelines for future planning within the Territory."

The Goals Commission thus will play a fundamental and significant role in the planning process on Guam. The Comprehensive Economic Development Plan, as well as smaller planning projects, will be developed in the broader framework of the social goals and objectives expounded by the Goals Commission.

The executive order names the Bureau of Planning as a supporting unit to the Goals Commission. It is through this supporting relationship that technical resources and assistance will be made available to the Goals Commission through the Technical Assistance Project.

The current administration recognizes that the proper economic development of Guam relies on the success of the planning process. In order to improve the living standard (Guam's per capita income is some 40% lower than the U. S. average), it is necessary first to undertake an analysis of the economy, including employment and investment factors which, in turn, requires the technical assistance this project will help provide. It is anticipated that implementation of the Comprehensive Economic Development Plan, made possible through this Technical Assistance grant,

#### GUAM'S ECONOMY

Guam's dynamic economy has experienced an average annual rate of increase of over 11 percent from 1968 to 1974. However, there has been a definite slackening in the rate of growth during the past year. Federal government expenditures (primarily military) account for approximately 40 percent of income generated on the island. Tourism is the most important income-generating force in the private sector and accounts for about 28 percent of income generation. Off-island investment generates about 22 percent of income. The remaining 10 percent of income generated by all other forces.

Total employment is about 40,000 with 57 percent in the private sector, 24 percent working for Government of Guam, and 19 percent working for federal agencies (mostly military). Contract construction dominates the private sector with about 18 percent of all employment on Guam. There has been a significant decline in construction activity and the number of construction firms has declined from about 100 a year ago to about 50 at present.

#### PROBLEM AREAS IN THE ECONOMY

#### CONSTRAINTS ON GUAM'S ECONOMY

High transport cost (partly due to the application of the Jones Act), monopolies and oligopolies in various areas, with few firms competing for a "captive" market, multiple-level applications of a locally imposed gross receipts tax on sales, and limitations imposed by the U. S. Government concerning imports from nearby areas are but a few of the constraints limiting the development of a "balanced" economy on Guam.

#### LABOR FORCE

Demographic analysis of Guam's labor force shows a 30% component of alien workers. The remaining 70% comprises U.S. citizens of which over 90% are hired locally and the remainder serve under contractual hire arrangements. It is generally accepted that the high proportion of alien workers serves to depress wage levels locally.

#### LOW PER-CAPITA INCOME

Comparisons of personal income statistics have shown that per-capita income on Guam is approximately half of the average per-capita income in the United States as a whole. In fact, the lowest ranked state shows a per capita income significantly higher than Guam's.

#### HOUSING

The rising cost of land, land improvements and construction on Guam discourage many low and moderate income families from home ownership. Climatically substandard housing create optimal breeding conditions for destructive termites which lead to thousands of dollars of damage annually. Complete villages are so infested that structures are no long maintainable, some having gone through an accelerated economic life of as low as five years.

#### IMPORTED INFLATION

Like other developing economies, Guam is very vulnerable to external factors which contribute to inflationary problems. Guam's geographical isolation and narrow economic base have resulted in importation of almost all goods required for economic development as well as for daily sustence. Consequently, increased in world prices of commodities are directly reflected in domestic prices on the Island.

# RISING COST OF LIVING

Between August, 1972 and May 1974, Guam's consumer price index on all items rose 24.8% vs. the US increase of 15.8%. Not only is cost of living on Guam one of the highest in the U.S., but is increasing at an accelerating rate.

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#### GUAM U.S.A.

Guam, a picturesque island, located in the Western Pacific as a gateway and crossroads to the Far East amd Micronesia, is the largest amd most populated island between Hawaii and the Philippines. It is approximately inity miles long, ranging from four to eight and one half miles in width with an area of about 209 square miles.

Once a sleepy island, it has evolved into a commercial, financial and strategic military base in the Western Pacific. In addition, Guam has come to be regarded as a tourist mecca, particularly among Japanese honeymooners. It now enjoys a thriving business in tourism, construction, and other auxiliary activities. As a U. S. territory, it is now one of the most rapidly developing economies in the world today.

#### HISTORY

The original inhabitants of Guam were Chamorros. Guam was first discovered by the West in 1521 and subsequently claimed by Spain in 1565. Following the Spanish-American War in 1898, the island became a U. S. possession and came under the administration of the U. S. Navy until the enactment of Organic Act of 1950 which placed the island under a civilian administration with a governor appointed by the President with the consent of the Senate. With the first election held in November 1970 for Governor and Lt. Governor, Guam now enjoys its own elected executive and legislative branches of government with full responsibility and autonomy for the improvement of welfare in the island.

#### GOVERNMENT

In January of 1975, the Honorable Ricardo J. Bordallo was inaugurated as Guam's second elected Governor. He is responsible for the execution of the laws of Guam and those of the United States which are applicable in Guam. The unicameral legislature consists of 21 Senators, each elected at large for a two-year term. The Legislature is responsible for the laws of Guam which pertain to the welfare of the Island, subject to the Organic Act of 1950 and to the Court of Guam.

#### PEOPLE

Once an isolated island, Guam now bears the features which characterize major cosmopolitan centers, largely due to its booming tourism. Yet the heritage of Guam has been preserved — the widely spoken Chamorro language, closely knit family ties, active religious devotion, and frequent family and village participation in fiestas, weddings, and wakes all play a major part in the lives of the Guamanian people. The Island of Guam, indeed, is a blending of many cultures, along with Western material well-being and traditional mores. This is what makes the island unique.

#### POPULATION

The 1970 census places Guam's population at 84,966. It has been anticipated to reach 100,000 by this year. Because of a high rate of in-and out-migration in the island, it is difficult to gauge accurately the population of today, but is generally believed to have already reached the projected number of 100,000 for 1975.

The preparation of specific segments of the Master Plan for Guam begins with an identifiable need at the highest level. Assignment of the planning project reflects the implementation function of a given agency. Following the initial preparation, an evaluation is made by a broad based committee representing the various agencies of the Government whose critique and recommendations become part of the document. Transmittal to the Territorial Planning Commission is made for a program of information dispersal followed by public hearings. A final draft is prepared by the TPC with recommendation that the plan be adopted by the Governor. Adoption carries mandatory compliance by governmental agencies of the executive branch. Submission to the Legislature is required for information purposes.

Improvements Program. In the case of the sewerage plan, preparation combined the expertise of the Department of Public Health and Social Services, Federal Mater Pellution Control Administration, Guam Mater Pellution Control Administration, Guam Mater Pellution Control Commission, Navy Public Morks Center, Third Air Division Engineering, and the Public Utility Agency of Guam. It is the latter that is effectively the implementing agency and the capital budget is prepared accordingly.

The Water Master Plan was prepared under the direction of the Public Utility Agency of Guam by a consulting firm. Input by associated agencies is similar to the wastewater plan. Both plans provide project

guidelines of priority and scheduling in the preparation of the capital program. Water quality standards for the territory have been
approved at the Federal level and provide the major emphasis of both
programs. Clearinghouse procedures for both Federal and locally funded
projects have been established as the responsibility of the Bureau of
Planning, Budget and Management.

# A. Criteria for Establishing Priorities

The goal of this program is the protection, conservation, development, distribution and efficient utilization of water resources.

Criteria to establish development priorities take several directions at various plan levels. The water resource itself receives the primary consideration as expressed in the following criteria:

- Consistency with environmental protection afforded by the comprehensive plan
- 2. Preservation of water resource
- 3. Reliability of existing sources of water to accommodate population growth

While encouragement is given to good development, the availability of water in an island environment provides an unrelenting restraint on a capability to sustain total development. Within this restraint a set of criteria has been established for water utilization.

- 4. Population demand and existing facility capability
- 5. Rate of community growth
- 6. Availibility of resources such as funds, technical manpower, etc.
- Extension of existing facilities until remote areas are needed to accommodate growth

# 8. Projects by Priority

14.(5-7)

The Haster Plan regionalizes development projects into three areas - Norhtern, Control and Southern Guam. Integration of the system is provided where possible to cross district lines when need arises. The following list indicates an overall priority but identifies region (N.C.S.) where facility is developed. Although the Haster Plan places projects within a fiscal year time frame, availability of resources and detailed analysis as conditions change may revise the schedule.

1.(5-9)	Land Acquisition of Ugum, La Sa Fua, Talofofo,
	Inarajan, Umatac watersheds (multiple years)
2.(5-1)	Ugum River source development (multiple years)
3.(5-4)	La Sa Fua source development
4.(N-5)	Northern District well development (multiple years)
5.(Misc.)	Replacement of existing systems (multiple years)
6.(N-10)	Northern District storage facilities (multiple years)
7.(C-3)	Central District storage facilities (multiple years)
8.(N-1)	Palfa Hill reservoir connection
9.(H-2)	Agafu Sumas - Yigo systems connection
10.(N-3)	Barrigada - Yigo systems connection
11.(H-4)	Andersen - Barrigada systems connection
12.(H-6)	Dedede - Yigo systems connection
13.(5-6)	Unates - Merizo distribution line

Mairzo - Imarajan distribution line

15.(5-5)	Halojles storage facility
16.(C-1)	Central District well development (multiple years)
17.(N-7)	Agefu Gumes - Yigo distribution line
18.(C-2)	Agana Springs redevelopment
19.(C-4)	Route 8 distribution line connecting Rts. 1 and 10
20. (5-8)	Santa Rita spring redevelopment
21.(3-10)	Agat/Santa Rita storage facility (2 years)
22.(5-11)	Agat/Senta Rita distribution extension
23. (N-8)	Route 3 distribution extension
24.(C-9)	Agana - Asan connecting line
25.(C-10)	Tumon Bay area distribution system
26.(N-9)	Dededo, Reute 1 connecting line
27.(C-7)	Canada loop distribution line
28.(C-14)	Himitz Hill storage facility
29.(6-15)	Mimitz reservoir connecting line
30. (N-12)	Y Sengsong distribution line
31.(C-8)	Dededo - Mangilao connecting line
32.(C-8)	Adelup - Route 7 - Agana connecting loop
33.(C-6)	Barrigada Reservoir - R 16 connection
34.(C-11)	Passan storage connection
35. (5-2)	Talofofo River source development
36.(C-13)	Yona connecting loop
37.(C-12)	Maina distribution line
38.(5-3)	Inarajan River source development
39.(H-11)	Janum Springs development

# C. Capital Improvements Program Coordination

The Capital Improvements Program, FY 73, as contained within the 1973 Program Memorandum (attached), is a reflection of the Water Master Plan. Flexibility of the plan has permitted an increase in needed water facility development beyond the Master Plan but expressed in the CIP. Increased costs of similar facilities will also show a difference between the Plan and the Capital program. A cost comparison for FY 1963 follows:

Master Plan

\$1,969,800

Capital Program

3,755,000

# SEVER SYSTEM ELEMENTS

# A. Criteria for Establishing Priorities

The "Integrated Westewater System Plan" is closely associated with the Water Plan in providing essential services to developed and developing areas as well as protecting the water supply from pollution. Priority criteria is established as follows:

- 1. Protection of ground water used as sources for drinking water
- 2. Rate of growth of the Community
- 3. Future land use plan
- 4. Existing severity of pollution
- 5. Anticipated pollution problems

# B. Projects by Priority

while a time frame is indicated for the individual projects, the plan is flexible to accommodate change or funding deficiencies caused by increased prices or lack of revenue. A listing of projects by priority of the entire system including those funded are as follows:

- 1. Agana treatment plant
- 2. Barrigada collection and interceptor
- 3. Mangilao collection and interceptor
- 4. Astumbo, Dedede collection and interceptor

- 5. Agafu Gumas, Yigo collection and interceptor
- 6. Astumbo, Dededo treatment plant and outfall
- 7. As Atdas, Yigo cellection and interceptor
- 8. Ylig, Yona collection and interceptor
- 9. Toto collection and interceptor
- 10. Merizo-Umatac collection, interceptor, treatment and outfall
- 11. Nimitz Hill collection and interceptor
- 12. Haina, Asan collection and interceptor
- 13. Inarajan collection, interceptor, treatment and outfall
- 14. Talofofo collection, interceptor, treatment and outfall
- 15. Cabras Island collection, treatment and outfall
- 16. Agana treatment plant
- 17. Tamuning collection
- 18. Agat-Santa Rita interceptor and treatment

# C. Capital Improvements Coordination

The capital program is a section of the Master Plan although minor changes in scheduling occur as development trends change or funding becomes available. The Ylig and Toto collection systems and interceptors have been placed in the FY 74 and 75 programs instead of 73 and 74.

Henry opportunities exist on Guam for citizens to participate at various levels in planning and implementing community development. Formal participation is accomplished with membership in the various commissions and councils within the framework of the government. Fermal hearings of the Territorial Planning Commission and agencies such as GHURA, Public Horks and Environmental Protection Agency concerning revisions to the Haster Plan and public hearings of the Legislature on all bills submitted give opportunities for individuals and groups to; share their views with public officials. While such participation is important, the majority of those involved are the active numbers of the business community and not necessarily representative of the population cross-section.

A continuous informal participation involves a better cross-section of the community. Subdivisions and zoning meetings of the Territorial Planning Commission reveal the desires and needs of the property commission express more than a simple request for a variance or zone change. Similar activities in other official areas provide an accumulation of citizen input utilized during all stages of plan preparation. A more intimate input is through the many informal gatherings of femilies and friends of government officials. The large family size on Guam and the frequency of social contact provides a continuous flow of qualitative data that effectively becomes an integral part of any plan.

While the informal methods of citizen participation appear effective at present, the changing characteristics of the population reoutres more sophisticated techniques in the future. Initial planning is accomplished by the implementing agency with preliminary reports submitted to a committee composed of the highest technical and professional representatives of the various governmental acencies. Civic organizations voluntarily review the reports and all recommendations are submitted to the Territorial Planning Commission. The TPC prepares releases to the news undie concerning the proposed revisions to the Master Plan as part of a public education and information program. The purpose of this information program is more than to let people know what is being planned; it helps to insure a response at required public hearings prior to preparation of the final report by the TPC for submission to the Soverner by whose action the report is adopted as part of the Master Plan.

Another important source of citizen participation is the village Commissioner. Although Guam is a single political jurisdiction without sub-levels of political entities, the territory is divided into minetoen election districts based upon the unincorporated villages of the island. Each district elects a Commissioner who has very limited legal authority but whose presence is a vital part of the socio-political structure of Guam. The Commissioner is an advocate of district development and a lieison between his constituents and the central government. Many Commissioners have advisory groups and action groups which are effective in promoting legislation and administrative activity benefiting their district. Much has been said about the role of the Commissioner but it

is generally assumed that his or her status will be more exacting with increased authority in the future. Planning reports are submitted to the Commissioners for review and recommendation and as such represent a close link with the needs and aspirations of the citizens.

The Joint Military - Government of Guam Coordinating Committee essentially provides the framework for coordination of community development and service efforts. Agreements are referred to this Committee for review and discussion with recommendations submitted to the highest authority of the respective members. Both the Navy and the Air Force have representation on this Committee. Following agreements in areas of joint use, the working agencies of each command including the civilian sector operate at the technical level and only refer problem areas or policy determinations to the Committee for resolution.

Cooperation with the Hilitary extends to plan preparation of the "Integrated Waste Water System" utilizing consultant activity of both the Navy and Air Force. At the project level OICC (Officer in Charge, Construction) provides inspection functions where Federal funds are utilized. Regular OICC meetings occur with many Guam agencies represented as well as Hilitary. The "Water Master Plan" was prepared by a consultant incorporating previous reports and including indirect Hilitary input.

At the operational level, agreements for joint use of facilities are formulated and approved at command level. Facilities completely utilized by the Military and completely within base areas have no relationship to civilian planning and development. Pollution standards are established for the Military and are similar to those of civilian areas. Environmental impact statements are currently required in all areas of Federal jurisdiction.



#### GOVERNMENT OF GUAM AGANA, GUAM 96910

July 26, 1974

Mark note

Memorandum

To:

Executive Director, Territorial Planning Commission

From:

Chief Planner

Subject: H. R. 10294 - To Establish Land Use Policy

Federal land use policy legislation has been the concern of many groups during the past decade. Subject bill, as amended in February of 1974, consists of four Titles, a brief description of each is stated below.

TITLE I: Assistance to States.

Findings of Congress includes an urgent need for land use planning "to promote the general welfare, to secure a wise and balanced allocation of resources, to advance social and economic well-being, and to provide for the protection and enhancement of the environment." Other findings identify large developments causing adverse impacts upon the environment in general and Federally assisted projects in particular. Existing State and local land use planning, it was found, often have reduced the amount of land available for housing and have reduced supply and competition in the housing market whereas "land use policy should encourage greater supply and competition in the housing market to lower the cost of shelter for people of all income levels." Assistance will be given to eligible States to assist in the development and administration of a comprehensive land use planning process, elements of which are identified in further sections of the Bill. Means of implementations are presented as is Federal action if a state does not become eligible.

# TITLE II: Indian Lands

A task force will be appointed, including tribal representation, to study applications on Indian lands and to submit recommendations and proposed legislation.

# TITLE III: Public Lands

Greater coordination between agencies of the Federal government utilizing public lands and policies developed for the many tracts is to proceed with participation of local officials.

# TITLE IV: Administration

A Board is to be established to review State policies presented to the Secretary of the Interior and make recommendations in relation to adoption as part of a national land use policy. Coordination is required with associated programs such as the Coastal Zone Management Act of 1972. Guam is included in the definition of a Coastal State.

As in the past, it is recommended that support be given for land use planning activities with emphasis on policy. If Bill H. R. 10294 is passed, we could become eligible if the TPC (Central Planning Agency) has primary authority and responsibility for the development and administration of a comprehensive land use planning process for the Territory of Guam. The activities indicated in the Bill are more physically oriented than we have expounded but our duty and function should be adequate.

at be given for son policy. If eligible if the TPC ary authority and respons atration of a comprehensive la le Territory of Guam. The activity and function should be adequate.

Let a more physically oriented than we have and function should be adequate.

HARRY A. SICKLER

# GOVERNMENT OF GUAM AGANA, GUAM

#### MEMORANDUM

TO: Director, Territorial Planning Commission

FROM: Barbara D. Webb, Consultant

SUBJECT: Summary Memorandum after conducting a detailed study while offering consulting services related to Long Range Environmental and Land Use Planning to include:

- A. Formulation of a future environmental policy for Guam.
  - (1) Review of local environmental problems
  - (2) Discussion of problems
  - (3) Recommendation of future environmental policies to be adopted
  - (4) Discussion of methods of implementation
- B. Preparation of local environmental impact legislation to include:
  - (1) Review and appeal procedures
  - (2) Criteria for application of act
  - (3) Scope and content of impact statements

In conducting research in preparation of formulating an environmental policy for Guam, several problem areas were discovered. Follow up research was conducted while drafting Environmental Impact Statement Legislation. Eight problem areas are identified in this memorandum. It is the feeling of this consultant, that attention should be paid to these problem areas before submittal of Environmental Impact Statement Legislation.

I. Engineered Base Map Series to establish a Data Base

A systematic sustained effort is needed to correlate all data into one comprehensive system. The past cannot be the foundation for the future. It must be superseded with something better. Guam has suffered through seven different coordinate systems. The past surveys and records, even up to this date, are in most situations so poor as to be completely unreliable. To try to build on such data is folly. A firm solid foundation must be established.

In order to accomplish this a single, compatible land parcel and point identifier system that would facilitate the collection, storage, manipulation, and retrieval of all land-related data information about ownership, use, zoning and other public or private land use restrictions, tax records, utilities, natural resources, resource pollution, resource production and extraction, ecology, demography, transportation and public health must be set up. Such a system would facilitate automatic data processing for high volumne use, and would also be appropriate for manual filing and retrieval.

These maps and accompanying data must be kept current under a full maintenance program. The central filing agency should be expanded to collect disseminate this data to appropriate agencies. This would enhance coordination among agencies and eliminate costly duplication. (See Memorandum, Proposals for a Guam Cadastre, from Chief of Cadastre, Billy G. Huckalby, To Director of Land Management, November 12, 1973; Land Use Survey Procedures, From Planner I, Territorial Planning Commission, To Planner IV. October 23, 1973.)

II. Government Code, Title XXXII, Section 31011, Administrative Procedures Building Code.

"(a)... shall within the next three years after August 15, 1952, conduct a survey of all buildings and structures in the territory of Guam. Following this, he shall establish and maintain a complete, current record on each and every building and structure surveyed. This record shall reflect the use, nature and physical condition..."

This information is a vital element in establishing base data. This twenty-two year old law has not been complied with.

III. Government Code, Title XIV, Section 13970, Survey of Government Land.

"All real property belonging to the Government of Guam for which certificates of title have not been issued, shall be surveyed and mapped for appropriate government use, and in order to accomplish the registration of such property."

The sum of \$250,000 was appropriated in 1967 to accomplish the directives of the above law.

It was estimated in 1967 that it would take five years to accomplish the survey and registration of Government of Guam property. No systematic program was set up. In 1973, it was estimated, once again that it would take five years to accomplish this survey and registration.

Some preliminary study was prepared, some work on Harmon Field was accomplished, and a priority was given to the survey of shoreline areas. The great majority of public land is not registered.

At the present time no money remains for the continuation of this program. A bill is presently before the legislature seeking a \$500,000 appropriation to complete the survey and registration of government land.

It is estimated that the Government of Guam has lost somewhere between 5 and 8% of land once thought to be public land in the past five years, however, no specific data is available.

Affirmative action must be taken immediately as the Government of Guam is presently in a defensive position when claims are brought against this property.

The public conceivably, could lose the majority if not all the land thought to belong to the government, if this land is not promptly registered. In addition, adequate planning is hampered without a thorough knowledge of what property belongs to the public and what belongs to the private sector.

# IV. Grading Permits

No requirements are necessary for obtaining a grading permit. Either grading permits should not be issued until after a building permit is approved or some requirements for obtaining a grading permit should be developed to ensure proper planning. This is necessary to prevent unnecessary erosion and sediment deposition and ensure that no significant change of existing topographic characteristics occurs.

# V. Building Permits

(a) A clear title to ensure that the individual claiming ownership to a particular parcel of property is the sole owner and that no encumbrances exist against the property is not a prerequisite to obtaining a building permit. A certificate displaying clear title should be required. This is an assurance that at some future date no one can claim that the house that was built on property presumed to belong to A, really belongs to B. If B establishes a valid claim, A can be evicted from the house.

(b) The present Building Law, Title XXXII, Section 13023 states that the requirement of a boundary line survey may be waived. This requirement is waived in many cases.

The recently proposed Building Code, presently before the legislature states that an accurate boundary line survey may be required. This should be changed to "shall be required" for several reasons. Until two or three years ago, metal stakes were used by surveyors in making boundary lines. These can be altered by various means. Cement monuments are now required to be erected to mark the property boundaries. These monuments are more dependable and permit a more accurate check to ensure that proposed plans comply with the zoning regulations.

(c) Either a list of authorized signatures or an official stamp for each agency should be developed to ensure that Building Permit Applications are adequately reviewed. At the present time, no specific person or persons are responsible for reviewing building permit applications. This sometimes results in an inadequate review of development plans by appropriate agencies.

# VI. Zoning Regulations

Existing zoning regulations are often inadequate. Some guidelines or performance standards are necessary to take into account the vast differences in the nature of the soil, in the slope and in the location of one parcel of land from another. Each parcel of land should be appraised on an individual basis in determining appropriate development plans.

# VII. Territorial Planning Commission (TPC)

(a) It may be beneficial to establish requirements for a varied composition of the TPC to ensure a well balanced review of all development plans. This criteria has already been established for the Subdivision Development and Review Committee.

A suggestion for the composition of the TPC may be to include a representative from labor, management, the construction industry, environmental interest group, real estate group, architectural, engineering, and planning professions.

(b) Some attendance requirements are also needed.

#### VIII. Environmental Policy

The Government of Guam should go on record, either through a resolution or through legislation, to establish the importance of environmental as well as social and economic considerations in all planning and development. This would assist in establishing the responsibility of each person to the preservation and enhancement of the environment.

It would be beneficial if the problem areas identified in this memorandum would be considered and developed before submitting the proposed Environmental Impact Statement Legislation. Only in this way can a solid foundation for future planning and development be established.

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#### ENVIRONMENTAL DESIGN

Visual impact of an area has caused considerable concern among community leaders and public agencies alike. Clean-up campaigns and anti-pollution programs dominate our activities toward protection of the environment. While containing necessary elements, such an approach is extremely short-sighted in responding to environmental quality requirements. The quality of the environment includes view protection, open space, beautification, conservation, preservation, and aesthetics as well as anti-pollution ariteria. An orderly arrangement of the environment combines quality and anti-pollution into one activity, environmental design.

In the past, elements of environmental quality have been considered luxuries and not proper for public regulation. Economic land development had placed emphasis upon accessibility, utilities and market location.

Amenities such as view, water frontage, or public open space have economic value and may justify additional expense in providing suitable access and services. View protection and other aesthetics are therefore legitimate concerns of the public regulatory appratus to preserve land values of the individual and the community.

Methods to preserve views, control densities, protect right-of-ways and similar techniques are normally single-purpose regulations. However, each method or technique usually contains a by-product of additional protection of the environment. Views protected from scenic routes may take the form of view corridors many of which conserve and protect specific flora and fauna or ecosystems. Building height restrictions limit densities, protect views and establish service requirements. Purchase of development rights and easements may extend to air rights and protect land values as well as controlling density and protect views. In many situations a deed covenant is superior to soning, especially if the municipality is part of the covenant agreement.

With an environmental design approach to physical development, all elements are interwoven to provide a predetermined community character. Community goals supported by policies must be established and standards adopted for implementation necessary to achieve the goals. Land capability base data is essential prior to establishing such goals. Capability, itself, must be measured in several contexts: unrenewable resource, renewable resource and the intensity of development that could be supported by a given unit of land.

Development limitations are usually a result of natural resources assessment and capability. The economies of importing non-organic materials such as coral rock, sand, water and cement are concerned with availability of raw material, cost of extraction and processing, long range effect of extraction on immediate locals and the region, and the reliability of the present source to continue. Organic material such as food and lumber are also concerned with availability of local resources, both human and natural, to produce sufficient quantities at fair market prices.

Development intensity is not only concerned with the density presmitted by physical and economic limitations, but also by environmental quality as determined by the resident's needs and desires. In this category we have view protection, ecologic systems continuity, open space requirements, preservation of unique cultural and physical features, and landscape design. Development standards must be prepared to include building heights, yard requirements, building coverage, open sapes, parking coverage, landscaping, floor area ratios, lot size, frontage and similar types. Conservation areas, view corridors and shoreline districts will help protect against unwanted development as well as preserving natural features and resources. Various standards

\*Source: Goodman, William I. and Freund, Eric C. eds, Principles and Practice of Urban Planuisz.

#### Basic Studies

These studies are preliminary to development of a land use plan. The studies provide basic data on land characteristics and activities of land in the delineated planning area.

- 1) physiographic land features
- 2) land use survey
- 3) vacant land survey
- 4) hydrology and flood plan study
- 5) structural and environmental study
- 6) cost-revenue study of land use.
- 7) aesthetic and historic features of delineated area
- 8) studies of public attitudes and preferences

9) transportation

Note: Traditional + Lumberg in terms of computersive planning rather

Appraisal of Land

Characteristics of land are noted to compare with some standards for land use categories. Slope, drainage, proximity to natural and man-made features, utilities, transportation will help determine land use when compared with the set standards (i.g. 5% slope maximum slope for industrial use).

# Analysis and Presentation of Data

The above studies are analyzed and statistical manipulations and summaries of data are recorded for future use. Various maps are used to show use, activity patterns and land characteristics.

# Future Space Requirements

Forecasting is done for each specific land use (i.e. industrial, commercial, wholesale, cronsportation, etc.) by various methods. Though

noted This tends to perpetuates what already exists unless go further. Should think in terms of 3 dimensional space.

the exact method for each land use differs the basic method for each includent

- a. assessment of current space characteristics of use;
- b. population, employment and economic forecasts and studies;
- c. estimates of the effects of future technology (especially transportation);
- d. develop density standards;
- e: apply density standards to forecasted units to obtain estimate of land for a specific use:
- f. make trial distributions of estimated land on area designated as appropriate for each land use category.

#### Allocation of Land

Several distributions of land are usually made and land use boundaries may be adjusted several times. These trial distributions will result in schemes which should be compared to established general goals of the comprehensive plan and specific goals of land use categories. The scheme selected should be the one which responds to the community cangols and the demands of:

- 1) the open space system
- 2) transportation
- 3) the organizational logic of activities, land use categories and transportation
- 4) available capital and the citizens' villingness to spend money
- 5) citizens' participation and identification with implementation program.

# Implementation of Land Usa Plan

.The land use plan is implemented by:

- A. Plans for servicing land with power, water, sewer, transportation etc.
- B. Zoning and subdivision regulations. -
- C. Housing and renewal regulations.
- D. Capital budgeting.