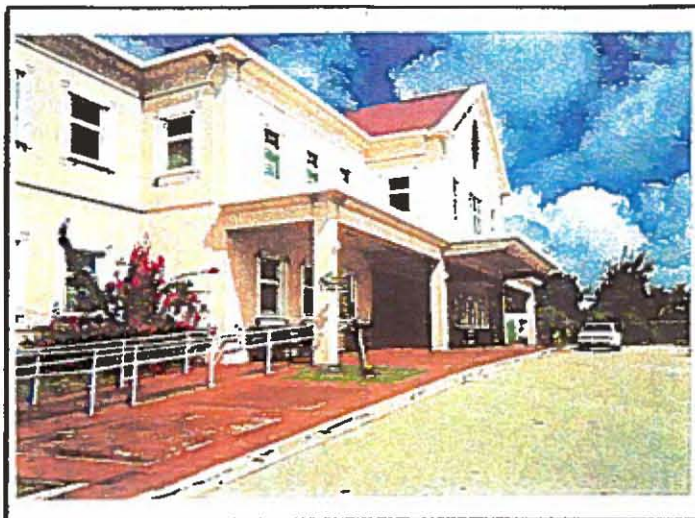
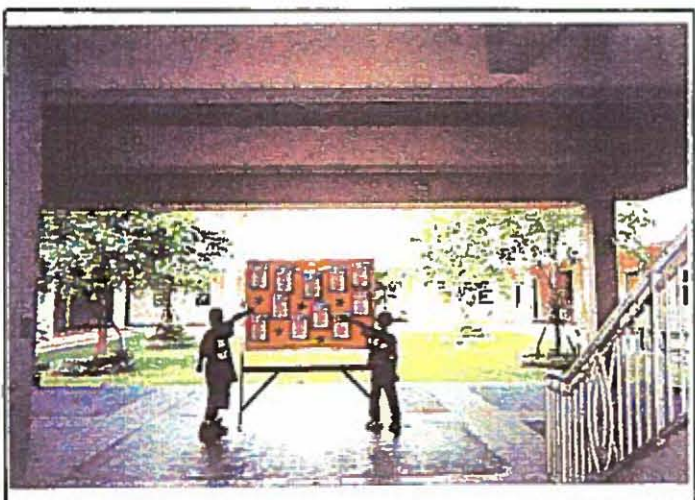




DEPARTMENT OF EDUCATION



TEN-YEAR CAPITAL FACILITIES PLAN

2000-2010



DEPARTMENT OF EDUCATION

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Rosie R. Tainatongo
Director of Education

May 23, 2000

To: Chairman, Guam Planning Council

From: Director of Education

Subject: Transmittal of DOE Ten-Year Facilities Plan

Hafa Adai members of the Guam Planning Council. Thank you for giving our department the opportunity to present to you the DOE Ten-Year Facilities Plan. This plan addresses the existing conditions in Guam's schools, and provides a framework for the repair and renovation of our overcrowded, old and worn out schools. This plan also spells out standards for new schools, their design features, and how to maximize space and cost effectiveness, to meet current and future enrollment.

Our plan received input from our principals, teachers, parents, and community members. We also researched other standards like those in Hawaii schools, and tailored our designs based on input provided by our stakeholders, and our local conditions.

Our plan should be updated as needed to address the changing educational needs of the island. With the input received from our fellow government agencies, about infrastructure requirements, and existing lands that are reserved for new schools, we will continue to address the issues and concerns which will help shape this document into a solid foundation for our schools.

It is our goal, to have this Facilities Plan, along with our Comprehensive Education Improvement Plan, or CEIP, included as part of the island's comprehensive master plan and the Governor's Vision 2005 initiative. With your feedback and guidance, we will work diligently to address any of your concerns, and to improve the plan so that we may all take ownership as a community.

If you require more information, please contact Dr. Nerissa Bretania-Shafer, Administrator of our Research Planning and Evaluation Division, at telephone 475-0512-4. Dangkolo Na Si Yu'os Ma'ase.


ROSIE R. TAINATONGO

attachments - 3

COMMONWEALTH NOW!



**Department of Education
Ten-Year Facilities Plan**



Facilities Plan Summary

In 1993, as part of Public Law 22-42, the 22nd Guam Legislature directed the Department of Education to address the need for a comprehensive facilities master plan to "provide for the proper planning, development and implementation for the construction, renovation and maintenance of educational buildings and facilities." The study initially began in 1994, under the leadership of Mrs. Rosie R. Tainatongo, Associate Superintendent, Administrative Services. Due to DOE staffing concerns, in March 1998, the team of Earth Tech Inc., and Belt Collins Ltd., were selected to assist in the effort. The result is a Ten-Year Capital Facilities Plan, which provides information required to determine the best way to meet the facility needs of the Department of Education over the next ten years.

During the year-long effort, the consultants researched the standards for public schools from school districts such as Hawaii. They also conducted extensive site visits to document existing conditions in Guam's schools. They engaged all stakeholders, in a series of interviews and workshops, in order to learn from our people how our schools should be constructed, and the types of designs which address our local conditions.

The plan contains a comprehensive profile of school facilities, which includes information on capacities, design, age and condition to include on-site assessments, and a database. The site assessment revealed that fourteen (14) existing facilities have deteriorated due to the lack of a long-term maintenance plan. The combination of aging school buildings and extended periods of a lack of capital and sufficient preventive maintenance budget have resulted in the deterioration of school infrastructure.

An assessment to determine the demand of existing facilities over the next ten (10) years using enrollment projection data was also developed for this study. Based on the enrollment projections and legislated enrollment capacity guidelines, the demand for school facilities will exceed the supply within the ten-year period of this plan. DOE will need a total of 23 new schools – 12 elementary, 6 middle, and 5 high schools to meet the long-term need for the department.

Conceptual plans for elementary, middle, and high schools were developed to ensure that future schools in Guam meet DOE policies and educational goals. The plans are conceptual in nature, and can be adapted for specific sites and school facility programs as needed. The model layouts indicate the desired type of facilities and the functional relationship between program areas.

Lastly, the plan looks at the reserved school property set-aside by Public Law 22-18. There are a total of eight (8) parcels identified, along with an assessment that discusses location and site conditions of these properties.

**Department of Education
Ten-Year Facilities Plan**



Government Agency Summary

Department of Land Management

The department determined that of the eight parcels reserved for schools, only three, Lot 462 in Asan, Lot 10122-18 in Dededo, and Lot Marbo Base Command B-4 in Yigo are feasible for schools, while the other five are not suitable for development.

At this time, due to personnel constraints, they are unable to identify other lands available to replace the five parcels. The department suggests that DOE continue to coordinate efforts to identify replacement parcels. They further suggest that a provision be included in the legislation to approve the plan, which will permit the use of DOE's reserved school properties regardless of the zoning designation.

Guam Waterworks Authority

The department identified that there may be a need to conduct a thorough feasibility study on each individual lot to provide a more precise cost analysis for infrastructure requirements. They provided a straight-line analysis for infrastructure requirements in a preliminary table-top analysis that does not take actual field conditions into account.

Guam Power Authority

GPA asks to be part of the design phase of any proposed school designs. They identified the need to identify future power requirements for each school that will have its electrical system upgraded to accommodate additional loads. They further suggest that a sensitivity analysis using variance about the forecasted enrollments be included to better determine event triggers for the timing of projects, and to gauge the impacts of over or under forecast enrollments.

The power authority further recommended that energy efficient equipment, such as air conditioning, lighting, refrigeration, water heating systems and office equipment be used to reduce power demand and save energy. Air conditioning and lighting systems should meet or exceed GPA's minimum efficiency standards under the Guam Energy Sense program.

Chamorro Land Trust Commission, Bureau of Planning, Department of Public Works, Mayor's Council, Department of Parks & Recreation, Department of Public Health & Social Services

No Response.

**Department of Education
Ten-Year Facilities Plan**



Public Hearing Summary

May 10, 2000, 2:00 p.m., RP&E Conference Room

The Department of Education conducted a public hearing on May 10, 2000, to receive input on the DOE Ten-Year Facilities Plan. The notice for public hearing appeared in the classified section of the Pacific Daily News on the April 30, 2000, and May 9, 2000. The announcement of the public hearing was also reported on the Saturday, May 6, 2000, of the KUAM Island News telecast. The department also faxed the announcement to each Mayor's Office for posting in their bulletin boards. There was one inquiry from a private citizen to review the plan prior to the scheduled public hearing.

Mr. Al Duenas questioned whether the department met the requirement for public hearings with the availability of copies for review of the plan. He suggested that copies of the plan should have been made at the public libraries and the Mayor's Offices. According to Mr. Ike Santos, Chief Planner of the Guam Planning Council, the department did meet its obligations posting the notice, and through the availability of a copy for review at the Department of Education.

The public hearing began at 2:00 p.m. as scheduled. The hearing was facilitated by Dr. Nerissa Bretania-Shafer, Administrator, Research Planning & Evaluation. The panel of DOE representatives included Dr. Shafer, Norma Tabayoyong, Principal M.A. Ulloa Elementary School, Art De Oro, Program Coordinator IV, Vince Martinez, Department of Defense, and Mr. Joe Benavente, CIP Administrator.

A presentation/overview of the plan was provided to those in attendance. Seven individuals attended the public hearing. The sign-in sheet is included as an attachment.

Mr. Joseph Claveria, J.P. Torres Elementary School PTO President, asked about areas identified in the plan reserved for new schools. He asked why the parcels identified did not address where schools are required, mainly in the north. The explanation that agencies such as Department of Land Management and Chamorro Land Trust Commission are working with DOE to conduct an assessment of the properties, and identify lands which can be exchanged or replaced in the inventory.

Mr. John Bautista, Vice President of Agueda Johnston Middle School PTO, raised the question whether or not future school designs included provisions for use of schools as disaster shelters. He asked whether infrastructure included the addition of a water tank or well, and back-up generator are included in the plan. Ms. Tabayoyong responded that new schools like Astumbo and Machanaonao have back-up generators included. However, new designs do not show a water tank/well or back-up generators included in the plan.

Mr. John Bautista also suggested that JFK could be torn down and used as tourism site in order to sell the property and then move the campus to another location that is more

conducive for a school. Further discussion added that the property could be leased, and income from this property could be used to build a new school.

Mr. Jesse Lujan raised the question whether it was practical for the Southern High campus to be used as a high school. Mr. Lujan suggested that the school could be used as the campus for Guam Community College. The facility would be much better served for use as a college rather than a high school, based on the existing conditions of the school, and reaction to impracticality of a high school campus, and the lack of security and adequate funding to properly maintain and use the facility. It is not conducive to learning at this point, with its current use as a high school.

Mr. Bautista asked if the C.L. Taitano Elementary School re-construction incorporates the standards suggested for new school designs? The response is that it does not because of existing site conditions and the lack of land space. The school cannot meet the standards addressed in the plans. The plan will address future schools that will be built, given land availability.

The hearing ended at 3:30 p.m.

2:00 p.m.

[illegible]

Bibliography

Books and Reports Workform:

Author Affiliation:

Title of Report: *Department of Education: Ten-Year Capital Facilities Plan*

Author(s): *Earth Tech, Inc. and Belt Collins Ltd.*

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Inventory Year: *2011*

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Abstract: *The purpose of this document is to provide the Department of Education, the Governor of Guam and the Guam Legislature, the information required to determine the best way to meet the facility needs of DOE over the next ten years. The plan has been developed to improve the physical environment of more than 32,000 students who attend Guam's public schools. The plan also provides the road map outlining what the department should do to rebuilding existing schools and to secure the funding necessary to build new schools.*

Call Number:

Index Term:

**Department of Education
Ten-Year Capital Facilities Plan
2000 - 2010**



**HONORABLE CARL T.C. GUTIERREZ
GOVERNOR OF GUAM**

**ROSIE R. TAINATONGO
DIRECTOR OF EDUCATION**

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Prepared for the
Department of Education
Project No. DOE RFP-002-97

INTRODUCTION
FOR THE
TEN YEAR CAPITAL FACILITIES PLAN

JUNE, 1999



A tyco INTERNATIONAL LTD. COMPANY

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INTRODUCTION

The Guam Department of Education (DOE), like many other school districts in the US, is growing rapidly. DOE is responsible for making available public education to all the children of Guam. In School Year 1998 - 99 over **32,000** pupils (Grades K-12) attended Guam's public schools. There are **37** schools: **25 elementary schools, 7 middle and 4 high schools** (See Exhibit 1.1). By the year 2010, the number is expected to grow to over 45,000. There are six elementary schools, 2 middle schools and 1 high school located in northern Guam. In central Guam, there are ten elementary schools, three middle schools and 2 high schools. Southern Guam is home to eight elementary, two middle schools, and one high school.

In 1998, the Department of Education Director initiated the development of a Ten-Year Capital Facilities Plan. A Request for Proposal was solicited, and DOE selected the team of Earth Tech Inc. and Belt Collins Ltd. to assist them in that effort. The Ten-Year Capital Facilities Plan is the culmination of a year long effort to perform a comprehensive facilities master plan.

Included in the Ten-Year Capital Facilities Plan are the following chapters:

1. Inventory and Assessment of Existing Schools
2. Ten Year Enrollment Projection
3. Conceptual Site Plans and Facility Standards
4. Capital Improvement Plan
5. A Review of DOE Reserved School Properties

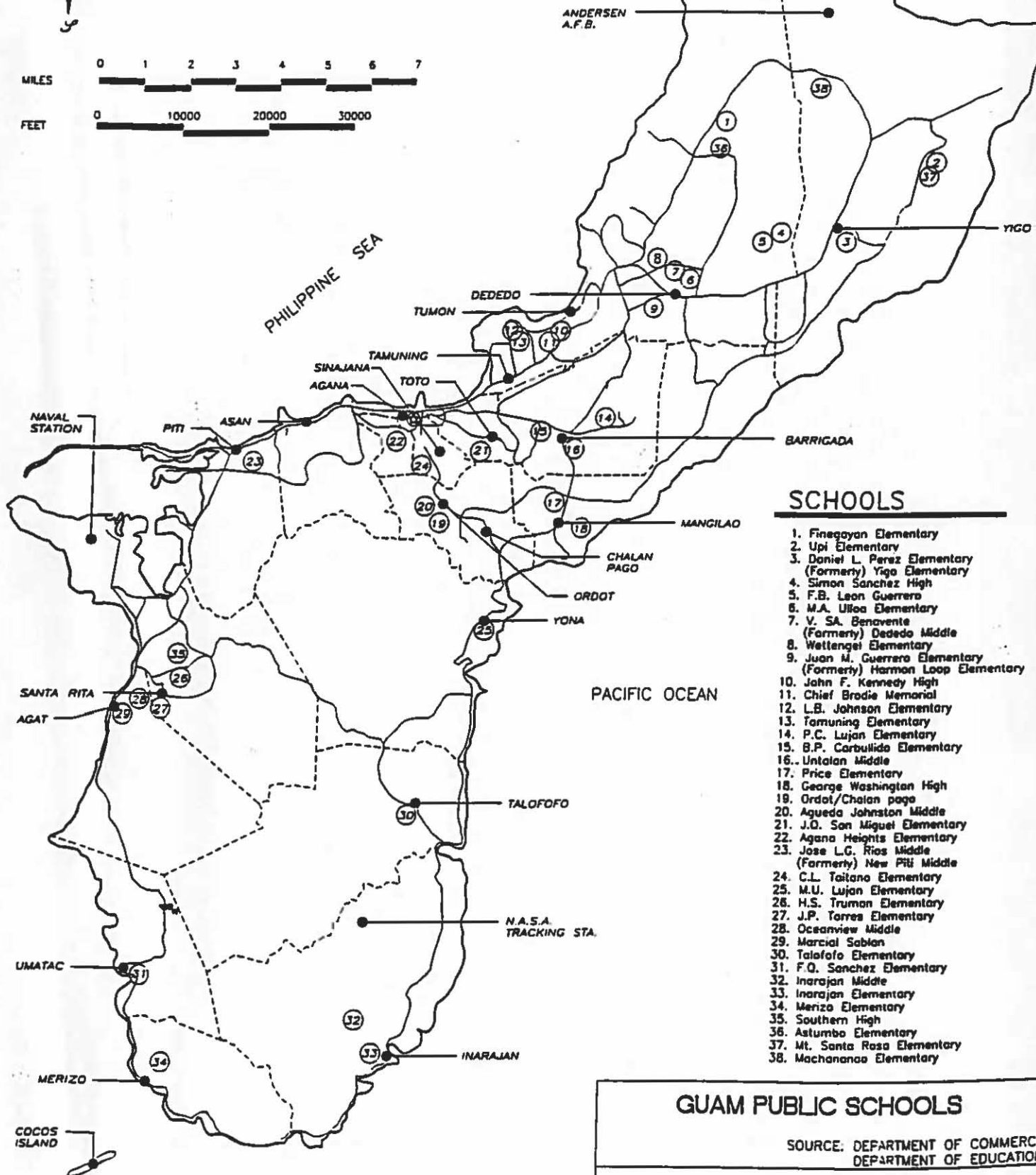
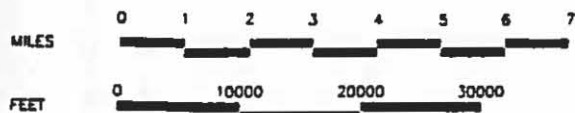
This study began in March 1998 during a transition period for the Department. Public Law 24-142 - the Education Reform Act, will change the operation of the existing DOE from one school district to four school districts. The four districts were to be called **Lagu (North), Kattan (East), Haya (West), and Luchan (South)**. DOE will serve as the state educational agency. The law established the parameters of how DOE and each of the school districts will operate. Five percent of the total budget will be used for capital improvement projects including the building of new schools, repairs, rehabilitation of facilities, and the construction of new facilities within existing schools. Three new schools were to be built by the year 2000. The law will also provide for a transition period of one year to be effective February 1999. DOE was to develop a transition plan to implement the four districts and to include attendance areas for each district.

In early January of 1999, the DOE Interim Board of Education filed a suit against the Legislature claiming that under the new law, parents of thousands of public school children would be denied the right to vote in the district where their children attend school. The Superior Court of Guam ruled in favor of the board and said that law was unconstitutional. The ruling instructed DOE to continue to operate as a single district organization serving the entire school system.

In March, 1999, the Guam Legislature passed the Budget Bill Act giving full responsibility to the Governor of Guam for the education of Guam's students. The Interim Board of Education, the Director and Deputy Director were removed from office. Rosie R. Tainatongo was appointed Director of Education by the Governor in December 1999 and has since provided leadership in the review and update of DOE's 10 year Facilities Plan.



G U A M



SCHOOLS

1. Finegayan Elementary
2. Upi Elementary
3. Daniel L. Perez Elementary (Formerly) Yigo Elementary
4. Simon Sanchez High
5. F.B. Leon Guerrero
6. M.A. Ulioa Elementary
7. V. SA. Benavente (Formerly) Dededo Middle
8. Welltengi Elementary
9. Juan M. Guerrero Elementary (Formerly) Harmon Loop Elementary
10. John F. Kennedy High
11. Chief Brodie Memorial
12. L.B. Johnson Elementary
13. Tamuning Elementary
14. P.C. Lujan Elementary
15. B.P. Carbulido Elementary
16. Untalan Middle
17. Price Elementary
18. George Washington High
19. Ordot/Chalan pago
20. Agueda Johnston Middle
21. J.O. San Miguel Elementary
22. Agaña Heights Elementary
23. Jose L.G. Rios Middle (Formerly) New Piti Middle
24. C.L. Taitano Elementary
25. M.U. Lujan Elementary
26. H.S. Truman Elementary
27. J.P. Torres Elementary
28. Oceanview Middle
29. Marcial Sablan
30. Talofoto Elementary
31. F.O. Sanchez Elementary
32. Inarajan Middle
33. Inarajan Elementary
34. Merizo Elementary
35. Southern High
36. Astumbo Elementary
37. Mt. Santa Rosa Elementary
38. Machananao Elementary

GUAM PUBLIC SCHOOLS

SOURCE: DEPARTMENT OF COMMERCE
DEPARTMENT OF EDUCATION

Ten Year Capital Facilities Plan

EARTH TECH



EXHIBIT 1
PROJECT NO. 25381.01

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Conceptual Site Plans and Facility Standards

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Capital Improvement Plan

Chapter 5:

A Review of DOE Reserved School Properties

ACKNOWLEDGEMENT

Earth Tech, Inc. would like to extend our sincere appreciation to the DOE CIP staff and to all members of the study committee and contributors for their time, effort and dedication to providing information and ideas during the preparation of this report.

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EXECUTIVE SUMMARY

This document is the Ten-Year Capital Facilities Plan for the Department of Education. Its purpose is to provide the Department of Education, the Governor of Guam and the Guam Legislature, the information required to determine the best way to meet the facility needs of the Department of Education over the next ten years. The plan has been developed to improve the physical environment of the more than 32,000 students who attend Guam's public schools. Secondly, the plan is created to provide the road map outlining what the department should do to rebuild existing schools and to secure the funding necessary to build new schools.

The report reviews the school district's physical inventory to assess current and future capital requirements. A comprehensive profile of existing school facilities which includes information on capacities, design, age and condition was obtained from various sources including on-site assessments. A database was developed describing the condition of the existing school facilities.

An assessment to determine the demand on existing facilities over the next 10 years using enrollment projection data was developed for this study. Based on the enrollment projections and legislated enrollment capacity guidelines, the demand for school facilities will exceed the supply within the 10-year planning horizon. DOE will need a total of 23 new schools – 12 elementary, 6 middle schools and 5 high schools - to meet the long-term demand for the projected ten-year period.

The ongoing maintenance for each school is not funded appropriately. Our site assessment revealed that 14 existing facilities have deteriorated due to the lack of a long-term maintenance program. The combination of aging school buildings and extended periods of capital and operating budget underfunding have resulted in the deterioration of school infrastructure. The 14 schools surveyed are in need of substantial capital work and modernization.

There are 9 schools that are over 40 years old. These schools will require major modernization work and retrofit. By the end of the ten-year planning period, another 14 schools will be over 40 years old. (School districts in the U.S. use a target school life of 40 years.) Correcting structural inadequacies; building code violations; ADA compliance are all matters which must be addressed to improve the physical condition of existing facilities. Modernization of major components including roofs, plumbing, retrofit of electrical and communication system upgrades and/or replacement are also identified. Cable lines, phone lines and electrical wiring upgrades are needed to support those new instructional methods which rely heavily upon modern technology. Improvements to support facilities i.e. cafeterias, athletic fields, gymnasiums, and auditoriums improvements are necessary. The urgency of repair and renovation work needed to bring

the existing facilities up to standard was a major consideration in the prioritization and scheduling of projects within the first 5 years of the planning period.

Guam's schools have large enrollments and are overcrowded. In SY 1986-87, the total DOE enrollment was 24,991 students. By SY 1997-98 there were 32,593 students – a net increase of 7,602 students. This growth was primarily accommodated within the existing schools through the building of additional classrooms. All existing schools have been expanded to accommodate the growth experienced during the last two decades. Almost all schools have doubled their capacity by adding temporary and “fast track” classrooms. Classrooms were built in the schoolyards where space was available. In some cases, libraries, cafeterias, and other available rooms were used to house students for classroom instruction. Overcrowding in the common areas: bathrooms, library, cafeteria and play areas are the norm.

The newer buildings have physical defects. The construction of the “fast track” and temporary classrooms employ inferior building materials which decay more quickly than the materials used in the older buildings. As a result, a number of classrooms and buildings are showing signs of significant wear and tear.

Conceptual plans for elementary, intermediate and high schools were developed to ensure that future schools in Guam meet DOE policies and educational goals. The plans are conceptual in nature, and can be adapted for specific sites and school facility programs as needed. The model layouts indicate the desired type of facilities and the functional relationship between program areas.

In conclusion, proposed CIP projects will cost over \$500 million for the renovation of existing schools, and the building of new schools, over the planning period. In light of the current economic downturn, identifying a dedicated source of funding(s) to support the plan will require DOE officials and policy-makers to come up with creative solutions that may include a number of options. The financial plan section outlines potential funding opportunities to be explored.



Prepared for the
Department of Education
Project No. DOE RFP-002-97

**INVENTORY AND ASSESSMENT
OF EXISTING SCHOOLS
FOR THE
TEN YEAR CAPITAL FACILITIES PLAN**

JUNE, 1999



A tyco INTERNATIONAL LTD. COMPANY

790 South Marine Drive, Suite 2 Tamuning, Guam 96911

Inventory and Assessment of School Facilities

This section of the report provides the detailed condition of fifteen schools. The DOE CIP office selected 15 schools, however, Jose L.G. Rios (New Piti) Middle School was destroyed by Typhoon Paka. Plans are underway to reconstruct and renovate Jose L.G. Rios Middle and a status report is provided. In general, this report is a representative sample of the conditions of Guam's public schools. A four-member team inspected the schools during May, 1998.

The report is organized into three sections: elementary, middle and high school and contains the following information:

- Location of the school, number of buildings and structures, classrooms permanent and temporary.
- Description of the physical condition of the buildings and auxillary units, school grounds, access/parking, infrastructure, and on-going renovation and repairs if any.
- Determine the existing school capacity.
- Identify the Americans with Disabilities Act (ADA) compliance requirements and structural requirements.
- Identify and prioritize capital improvement projects.
- A vicinity map, and site plan are provided for each school location and surrounding uses. Photographs of the exterior building for each school are also provided.

ELEMENTARY SCHOOLS

**MARIA A. ULLOA ELEMENTARY
AGANA HEIGHTS ELEMENTARY
C.L. TAITANO ELEMENTARY
J.P. TORRES ELEMENTARY
PRICE ELEMENTARY
TALOFOFO ELEMENTARY
MARCIAL SABLAN ELEMENTARY
MERIZO ELEMENTARY**

MARIA A. ULLOA ELEMENTARY SCHOOL

Background

Built in 1965, Maria A. Ulloa Elementary School serves the people of Dededo. The school is located on Lot No. 10114-New-4, Dededo, a 10.3 acre lot with a building total floor area of 56,636 square ft. In SY 1997/98 school enrollment was approximately 1,073 students. Maria Ulloa is one of two elementary schools serving Dededo Village, the other being Wettengel Elementary. Dededo is Guam's largest village and is home to 31,728 persons according to the 1990 Census. The total number of housing units was 7,538. For the past two decades, the elementary school has been expanded to accommodate the population growth experienced in the northern district areas where 47 percent of Guam's population reside today. From 1980 through 1988, the average student enrollment was 500 students. In the '90s, the student enrollment has more than doubled in size.

Maria A. Ulloa is located about 1,500 feet north of the Y-Sengsong Road and Marine Drive intersection. Three housing subdivisions surround the school (Kaiser, Old Dededo village, and the staff housing for the Guam Housing Urban Renewal). A small and yet undeveloped strip of land lies between the school and more houses to the west. Benavente (Dededo) Middle School is to the northwest. Catalina Lane, a small access road, has been extended to connect the two schools and to improve circulation during the morning rush hour and after school. Figure 1.1 shows the relationship between the school and the surrounding community. The layout of school facilities is shown in Figure 1.2.

The school is situated within walking distance to several large residential areas. The attendance area further extends to the outskirt areas of Dededo: Mogfog, Macheche, East Kaiser, and Ypaopao Estates.

Physical Condition

Permanent Structures

The campus is formed by several independent concrete structures spread through out the campus. The office and cafeteria face the front entrance of the parking lot. All the buildings are one-story buildings except for Buildings G and J which are two-story structures. . The buildings are not connected except for the two story structure which have covered walkways that extends out to the back of the building and ends abruptly. There is a total of 63 classrooms; forty-seven (47) are permanent rooms. All permanent structures including the administrative offices and the cafeteria are in good condition.

The buildings appeared to be clean and well maintained. At the front of the school, students are greeted by painted colorful murals on walls. The school facility appears to be generally clean and neatly cared for. However, it was obvious that buildings including the administrative offices and the cafeteria lacked an on-going preventive maintenance program. The school appeared worn out and old. We found cracks in the roofs, water leaks and the majority of the rooms lacked insulation. Wooden and glass louvers were missing or were broken. In general, the classrooms air-conditioning systems were working. The intercom system was also working but needs to be upgraded. The school lacks a security and fire alarm system.

The cafeteria was originally design to accommodate 500 students. With over 1,000 students, the cafeteria is too small to accommodate all the students at one time. There are several lunch periods and there is no air-conditioning. Cafeteria equipment used to prepare food is obsolete or not working. Additional restrooms and storage space are needed to support the students. Peeling paint is evident in some areas. Overall, the school needs a new coat of paint.

The school is hooked up to the public water and sewer system. Plumbing problems persist in several of the bathroom facilities.

Temporary Structures

There are sixteen (16) temporary rooms (25% of total classrooms) currently in use at the school and are located as extensions of the permanent structures. Two (2) of the temporary rooms are butler style and the remaining rooms are the freestanding wooden classroom structures.

The temporary room used for head start at the front of the school was recorded as being in fair-good condition. T-1, adjacent to the head start room, was found to be in fair condition. Rooms T-9, T-10, and T-11 at the rear of the school, were in fair condition and appear to have been impacted substantially by Typhoon Paka. Rooms T-7 and T-8 are butler style rooms and in good condition. Rooms T4, T6A and T6B show deterioration and are in fair condition. The exterior of rooms T-5, T-12, T-13 and T-14 are also substantially worn out and were recorded as being in fair-poor condition. Finally, T-2 and T-3, at the rear of the computer lab were recorded to be in fair condition. Water leaks into many of the temporary rooms. Electrical and maintenance problems are predominant for all the temporary classrooms.

Sporting/Recreational Facilities

The majority of the school's playground equipment is located in the main play area along the west perimeter of the school. Swings, monkey bars, a basketball court and other playground equipment were observed in the large play area. The equipment is in poor and/or obsolete condition. This playground is located in a rough surface area comprised of either gravel or rocks that is unsafe for the children. Topsoil and landscaping will help improve the condition of the playground.

A second play area is located on the opposite side of the school along the east perimeter bordering Y-Sengsong Street. Smaller scale play equipment such as swings, slides and other equipment were present which indicates that the area is set aside for the younger students. A chain link fence separates the area from the road nearby. The perimeter fence will need to be replaced.

School Grounds

In general, the school grounds were well maintained and clean. In some locations, landscaping was present. For example, there is a nice planter located in the corridor between the cafeteria and administrative offices. In other cases, large open areas stretched across the school grounds without any landscape. A chain-linked fence encloses the primary playground. The area is without landscape or trees. The grass has died out in most areas after many months of little or no rainfall. The secondary play area has several trees and appears to be very popular with the children as the ground areas beneath them are heavily worn.

Open areas in the interior of the school offer outstanding potential for landscaping. Some of those areas include the buffer at the front of the school where the flag is located between G and H buildings; behind the administrative complex; and, in particular, in the court yard which also contains a stage.

Access/Parking

There are sixty-one (61) standard and five (5) handicap stalls in the parking area at the front of the school. An additional parking area was created along the eastern front of the school to relieve congestion from the existing parking area. The parking lot also has a separate entrance and exit to facilitate traffic flow. Buses operate along the curb in the same lot. Palm trees line the raised median. Additional access was created some years after the school was built, which extended Catalina Lane towards Dededo Middle School and Santa Monica Avenue. This provides two exits from the school onto two different collectors within the village and helps to relieve congestion at the Y-Sengsong Road access. Handicapped parking stalls will need to be added.

Existing School Capacity

Public Law 24-73 sets capacity levels for all new elementary schools at five hundred and fifty students. This does not apply to existing schools, however smaller schools provide greater personal attention to its students and parents, resulting in better performance of its students. There is a trend throughout the United States to establish smaller schools. The Department of Education and the local community prefer small schools especially for elementary students and

would like to see new schools built and the existing schools restructured in order to reduce the number of students to meet the ideal size.

For over a decade, the school has continued to adapt to a growing student population by adding temporary classrooms to existing buildings. The school was originally built for a student population of 500-600 students. The school now serves 1,000+ students.

The campus has the desirable acreage for an elementary school if the school is properly designed. The current layout is spread out and unorganized. It does not take into consideration circulation, pedestrian walkways, shared facilities and common areas. In designing these facilities, it is important that any future expansion and/or renovation efforts should be designed to improve the circulation, and connection of the buildings. A DOE official indicated that there was also additional land outside of the current fence line along the west perimeter, that is part of the school property and is still undeveloped.

American Disability Act (ADA)

A study to determine what improvements were required to meet the ADA requirements was completed by Duenas and Associates in 1994. Duenas & Associates found that there were significant areas of non-compliance at M.A. Ulloa Elementary. These deficiencies include: accessible route –exterior and interior, parking, curb ramps, ramps, handrails, elevators, doors, toilet rooms, signage, seating and tables and information counters and a main office reception counter. Budget cost estimated for the prescribed corrective actions totaled \$974,200.

Structural Evaluation

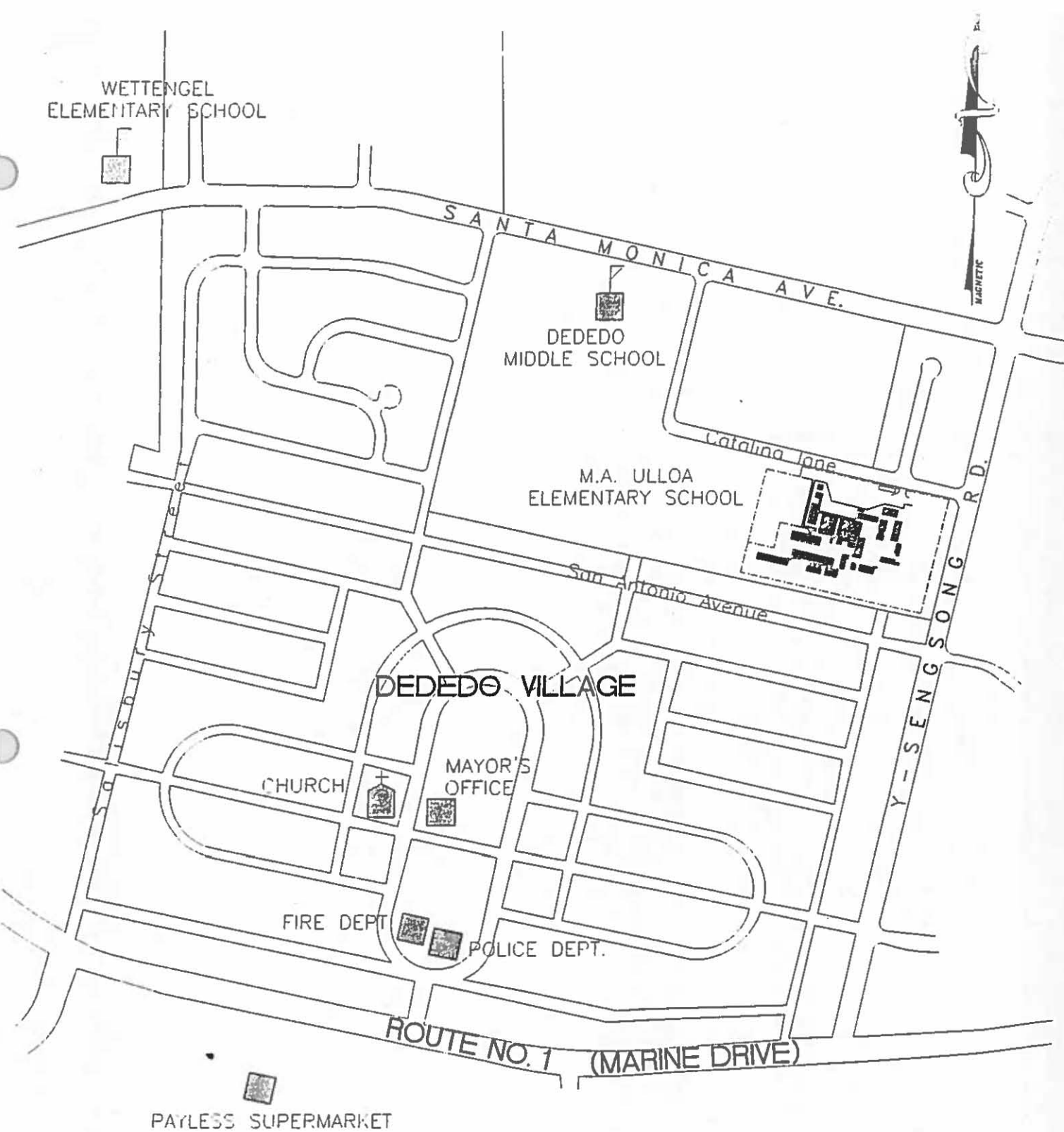
EMPSCO Engineering performed a detailed seismic analysis and evaluation to determine the structural adequacy of M.A. Ulloa in May 1994. They examined the school's classroom building, administration building, the cafeteria, library building, and several reinforced concrete one-story classroom facilities. The buildings evaluated were found to be adequate in their seismic resistance, and judged to be structurally safe and considered seismically adequate. EMPSCO also recommended that a periodic inspection and maintenance procedure for corrective repairs be implemented as part of the structural rehabilitation program.

Capital Improvement Project Priority Schedule

DOE's CIP prepared a list of improvements and cost estimates for each school which will address the short-term maintenance needs of that particular school. During the site assessment, we identified additional capital improvements projects and include:

- expansion of dining facility.
- construction of new bathrooms
- area for storage space and supplies in the administration and custodial
- upgrade of electrical and telephone lines.

The CIP list includes the replacement of temporary classrooms with \$300,000 earmarked for improvements. Temporary classrooms should be replaced by a permanent structure. In the past, DOE has spent millions of dollars in the repair and replacement of temporary structures. The short-term cost of addressing the needs for additional classrooms was the impetus of building these temporaries. However, given the amount of money invested and the maintenance requirements (or the lack of maintenance) of these structures is not effective in the long run. We recommend that DOE formulate a policy and implement a program to replace the temporary classrooms at each school.



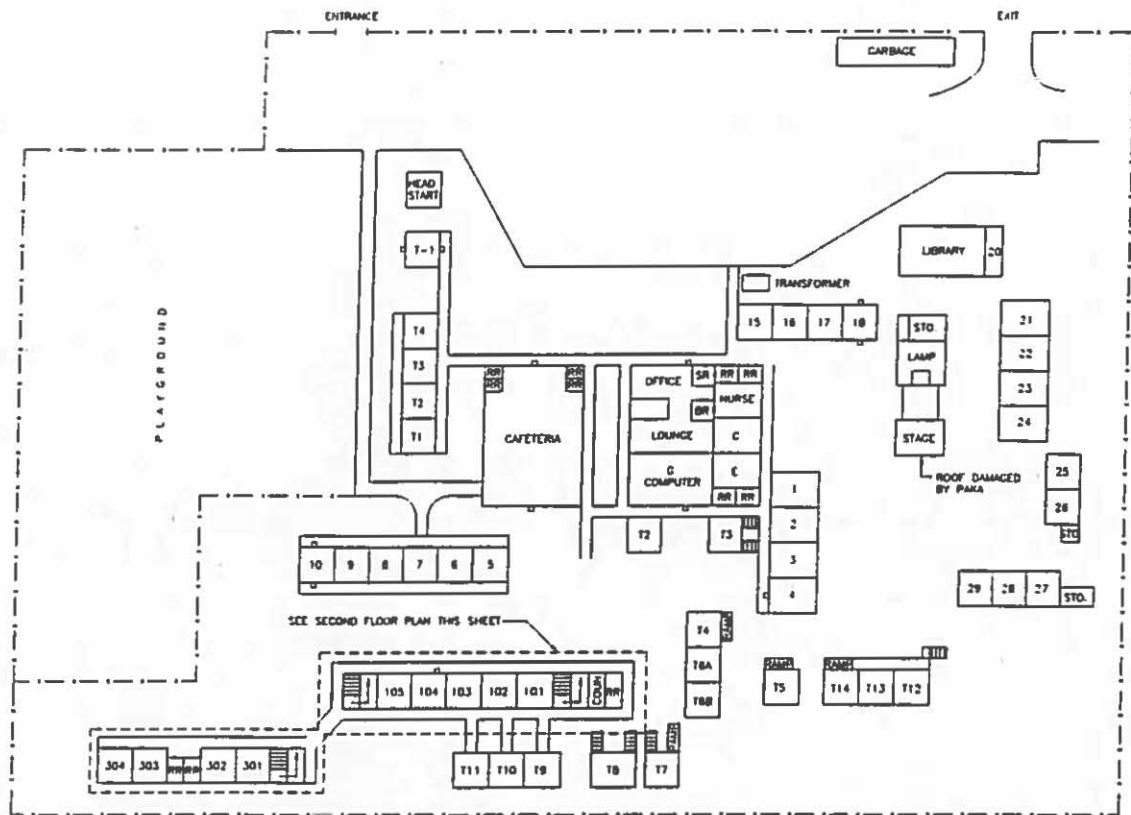
GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

M.A. ULLOA ELEMENTARY SCHOOL VICINITY MAP

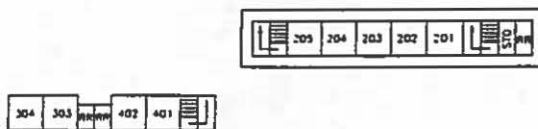
PROJECT NO. 5351



SITE PLAN - FIRST FLOOR

M. A. ULLOA ELEMENTARY SCHOOL

NO SCALE



SITE PLAN - SECOND FLOOR

M. A. ULLOA ELEMENTARY SCHOOL

NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

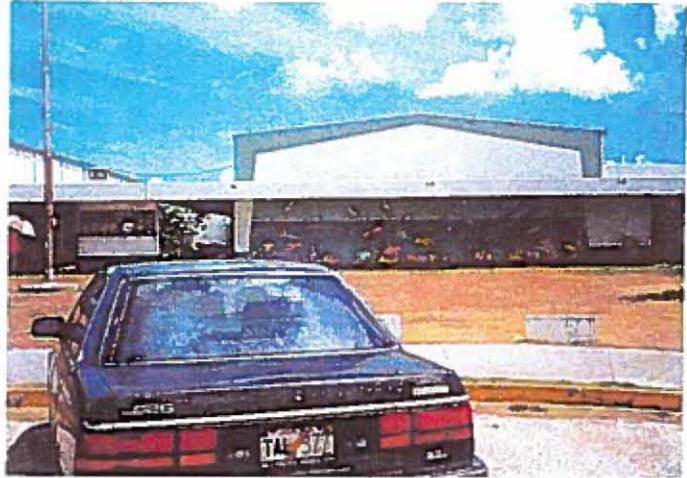
TEN YEAR CAPITAL FACILITIES PLAN

M.A. ULLOA ELEMENTARY SCHOOL SITE PLAN

ET PROJECT NO. 1528101



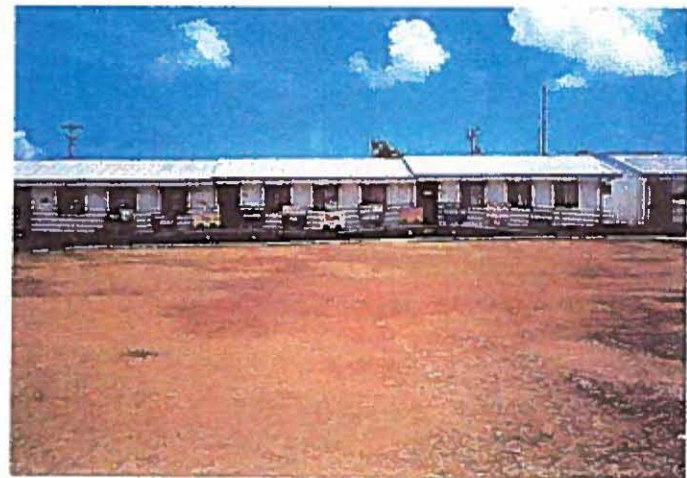
1. School Entrance



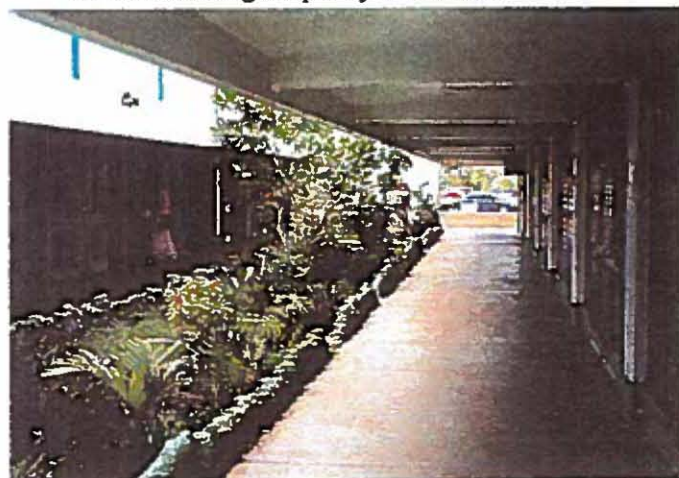
2. Colorful murals greet students



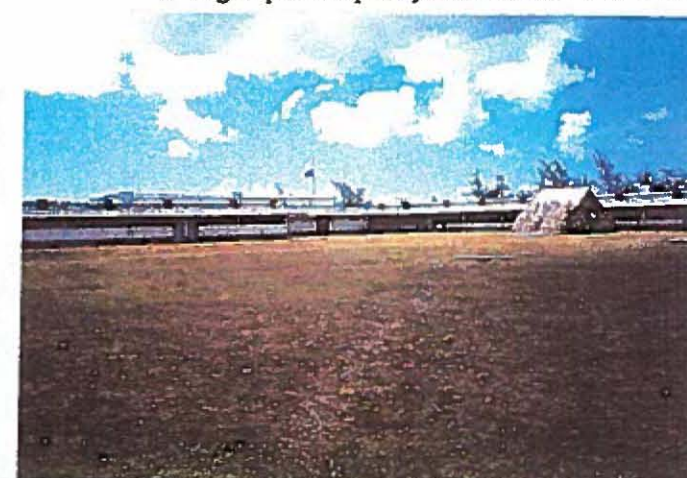
3. Free standing temporary classrooms



4. A group of temporary classrooms T-9 to T-11



5. Landscaped hallway



6. Open field playground



7. Play area and perimeter fence



8. Play equipment

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Maria A. Ulloa Elementary	Dededo	1	4	Lagu

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	4				X	X	X					300,000.00
ADA COMPLIANCE	1	X	X	X	X							974,200.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	1	X										150,000.00
STRUCTURAL REPAIRS												
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (Cafeteria) (2)Replacement of A/C Ducts (3)Installation of Exhaust System	1											150,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	2 3 3 2 3	X	X X X X	X X X	X			X				60,000.00 300,000.00 100,000.00 160,000.00 75,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	3 1			X	X X	X	X					250,000.00 90,000.00
ELECTRICAL SYSTEM UPGRADE (1)Administration Office	1	X										
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$2,609,200.00

AGANA HEIGHTS ELEMENTARY

Background

During school year 1997/98, Agana Heights Elementary served a total enrollment of 527 students from the surrounding neighborhood communities. The school was built in 1958 on Lot Nos. 12-2 through 9 and No. 15 for a total of 9 acres. The Agana Heights mayor's office, a baseball field, an outdoor basketball/volleyball court and a gymnasium are community facilities located to the east of the school. North of the school is an open grass area. Single family homes are spread out in all directions around the school. The front of the school has direct access to Joseph Cruz Avenue via Ton Kiko St. Chalan Makahna runs along the southern border of the school. Figure 2.1 is a vicinity map showing the relationship between the elementary school and the surrounding residential area.

There are approximately thirty-one (31) rooms used for instructional purposes. Over the years, temporary and permanent rooms were added. Some of the original rooms were divided into two classrooms. Figure 2.2 is a site plan depicting the school facilities.

Like most of Guam's public schools, student enrollment has grown through the years. During school year 1980 through 1988 the average student enrollment was around 175 students. Today, student enrollment has more than tripled.

Physical Condition

Permanent Structures

Wings A, B, and C are permanent facilities containing a total of fifteen (15) rooms built of concrete masonry unit (CMU). These rooms were generally in good condition with only a few isolated problem areas related to cracking and chipping of plaster, peeling paint and algae growth. Some of the buildings have leaks on roof joints and corrosion on exposed reinforcement bars. The school lacked a fire alarm system.

Rooms 15 through 19 (Wing D) are irregular shaped structures used for kindergarten. They are located on a hilltop at the south side of the campus and are constructed of CMU. The rooms are in fair-good condition but external paint is peeling. Rooms 20 through 23 are newer CMU classroom additions built on the slope between the kindergarten rooms on the hilltop and Wing B. These classrooms look new and appear to be maintained well. Wing C houses the library, kitchen, cafeteria, teacher's lounge, storage and restrooms. This wing was built along with the rest of the original structures and is in fair-good condition.

At the entrance of the school, school officials have expressed concern regarding the potential for flooding during rainy season. The school is located in a low area and water from the surrounding streets flow into the parking lot. A drainage system exists but may be overwhelmed during a rainstorm. Improvements and periodic cleaning of the storm drain in the parking lot would help off set, if not eliminate, the flooding problem.

Another area of concern raised by school officials is a broken GWA waterline found on the west side of the playground facility between Wing A and B. This has been an on-going problem and GWA has been contacted for some time but has yet to repair the problems. Hundreds of gallons of water are lost every day. The area around the leaking waterline has become wet and slippery. Since this is a playground, this poses a threat to the safety of the children playing in the playground.

The school is served by the public water and sewer system. The school is enclosed with a security fence.

Temporary Structures

Like other schools, Agana Heights Elementary has its share of temporary rooms. A total of six (6) temporary rooms are present. They are all constructed of wood with tin roofing. Rooms T-4, T-5, and T-6 are in the best condition. Rooms T-1 and T-2 are in fair-good condition while room T-3 still showed evidence of damage from Super Typhoon Paka. T-3 has roof damage and a tarp is used to prevent rain from entering the room.

Sporting/Recreational Facilities

Playground facilities at the school can be found between Wings A and B. Additional play facilities are located outside the kindergarten rooms. There are swings, slides and other equipment typically present at elementary schools around the island. A community gymnasium, baseball park, and outdoor basketball/volleyball court are located within walking distance of the school grounds.

School Grounds

The school has several very large shade trees at different locations around the campus, which survived Typhoon Paka. These large trees add significantly to the visual appeal of the school and provide important shade to children during outdoor activities. There are many shrubs and other plants around the grounds enhancing the overall appearance of the school.

Access/Parking

There are thirty-two (32) regular parking stalls and three (3) handicap stalls at the front of the school. There is an unimproved parking area across from the school entrance. Access to the school can be achieved through Ton Kiko St. from either Chalan Makahna to the south or Joseph Cruz Avenue to the northwest. Both streets are interior village single lane roads in either direction with unimproved shoulders. School officials control the traffic flow in the morning and afternoon by setting a one way drop/pick up flow. The area gets heavily congested during the morning and afternoon periods.

Existing School Capacity

Originally the school was designed to meet a student population of 200. Through the years, more classrooms were added to accommodate the increased enrollment. The current school enrollment is ideal for an elementary school. Any future expansion for this school is hindered because of the lack of space to expand at the school site. The school is an important facility and is used extensively by the Agana Heights community. The most recent permanent room expansion (rooms 20, 21, 22, 23) was completed between two existing sets of rooms along a slope.

ADA Compliance

The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed the assessments in 1994 and found that there were significant areas of non-compliance at Agana Heights Elementary. These deficiencies include: accessible route –exterior and interior, parking, ramps, doors, toilet rooms, sinks, shower stalls, signage, seating and tables. Budget cost estimated for the prescribed corrective actions totaled \$416,660. Ramps with handrails have been installed throughout the school to meet ADA requirements.

Structural Evaluation

The three buildings evaluated by the Winzler & Kelly Consulting Engineers concluded that Agana Heights Elementary school was in non-compliance and deficient in terms of the structural requirements of the 1991 Uniform Building Code. (Many provisions have been added to the Code since this school was designed; non-compliant conditions are to be expected.) Evaluated deficiencies range from non-compliant details to inadequate member strength. Damage from the August 8, 1993 earthquake was minimal, limited to minor cracks and spalls.

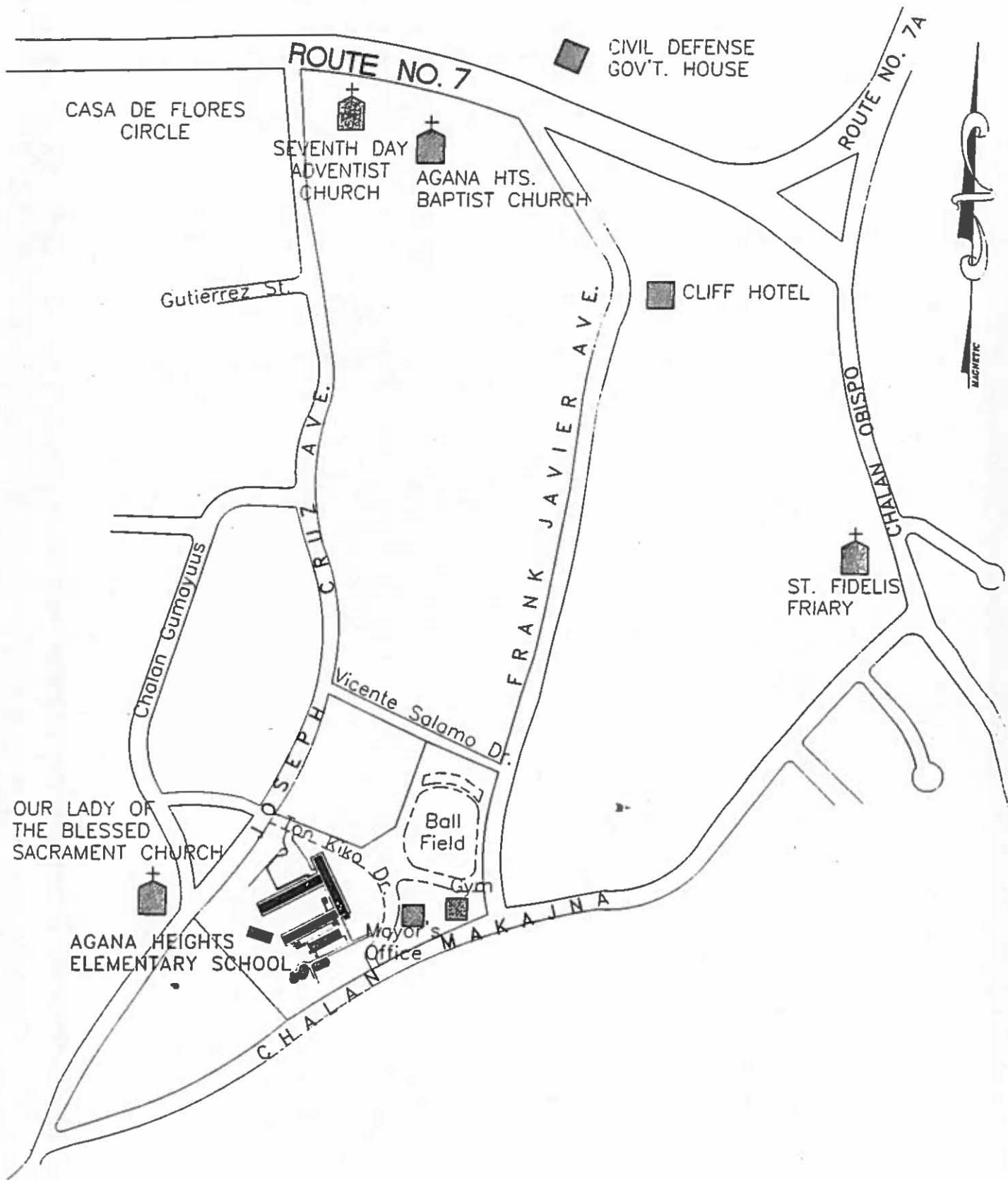
The work to upgrade the structure to 1991 UBC standards is feasible. It consists of replacing and/or providing additional support for overstressed members and adding shear walls to the lateral force resisting system. The work is relatively simple, moderately intrusive and does not alter the form and function of the basic structural system. Preliminary construction cost estimate to rehabilitate this facility to be in substantial conformance for structural requirements of the 1991 UBC is approximately \$630,000.

Capital Improvement Projects

DOE's CIP prepared a list of improvements for this school which will address the short-term maintenance needs of this school. Other maintenance problems identified during the visit include:

- A leaky waterline located in the playground.
- Develop a traffic control plan.

The CIP list includes the replacement of temporary classrooms with \$250,000 earmarked for improvements. Temporary classrooms should be replaced by a permanent structure. DOE will need to establish a policy that will result in replacing all temporary classrooms in the future.

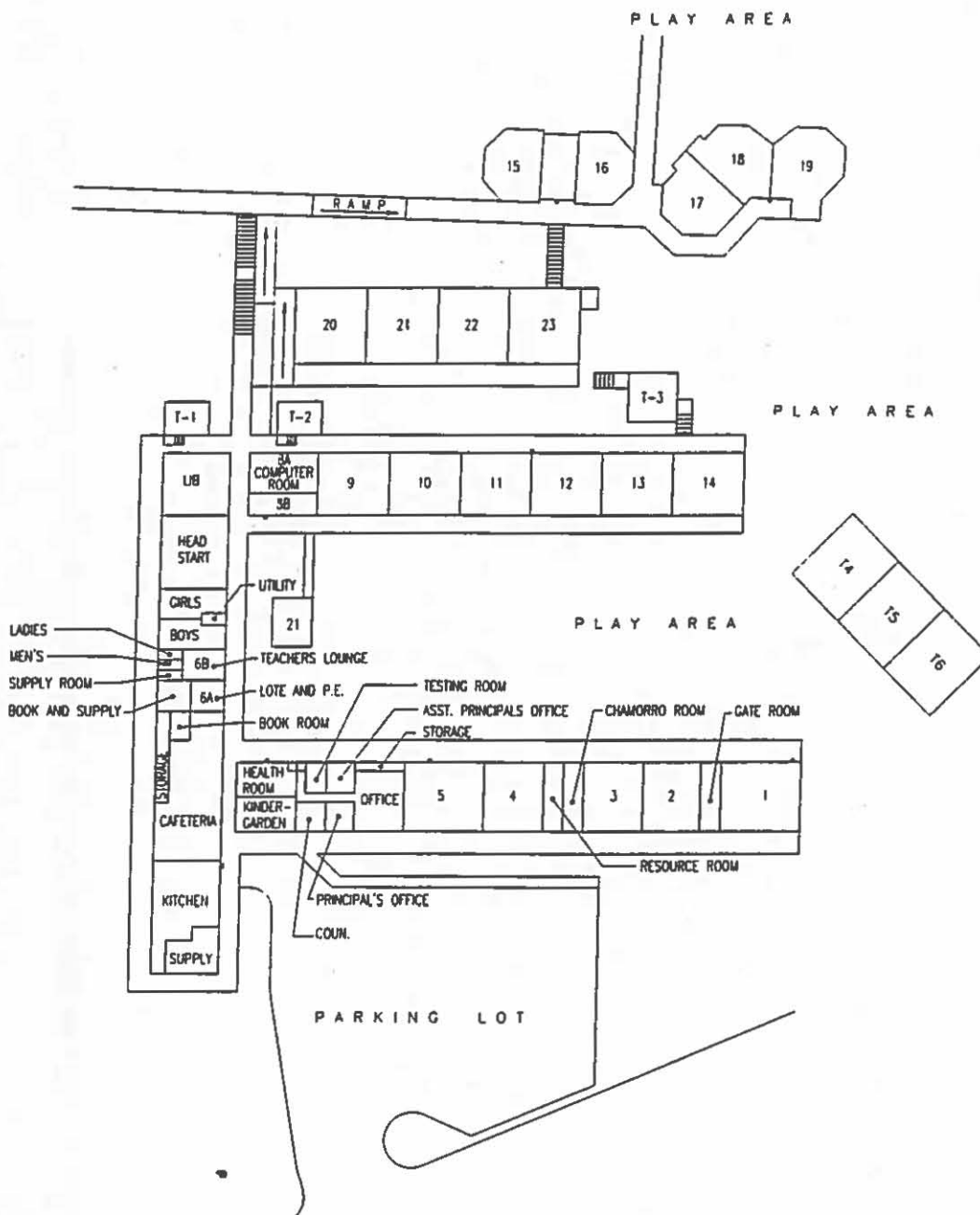


GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

AGANA HEIGHTS ELEMENTARY SCHOOL VICINITY MAP



SITE FLOOR PLAN

AGANA HEIGHTS ELEMENTARY SCHOOL NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

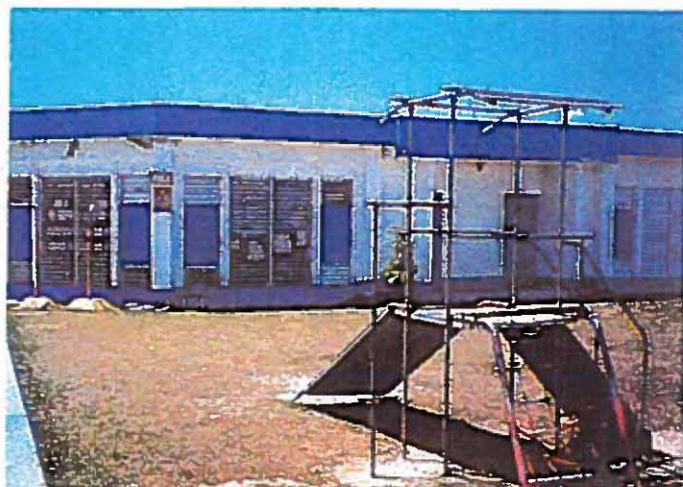
TEN YEAR CAPITAL FACILITIES PLAN

AGANA HEIGHTS ELEMENTARY SCHOOL SITE PLAN

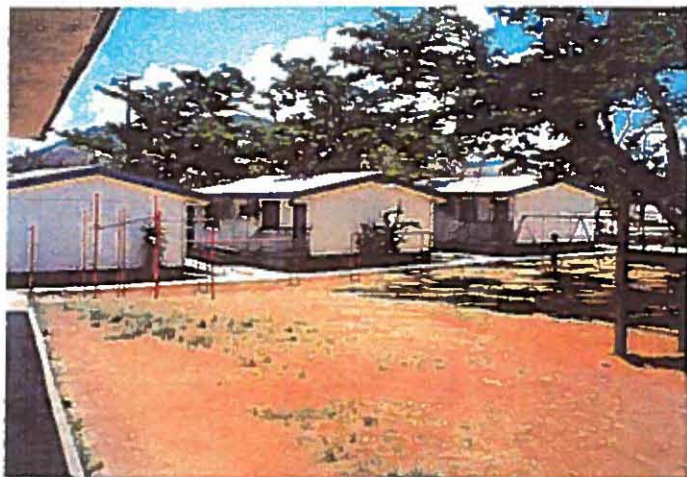
ET PROJECT NO. 100-1001



1. Cracks, chipping off roof and paint peeling on permanent structure



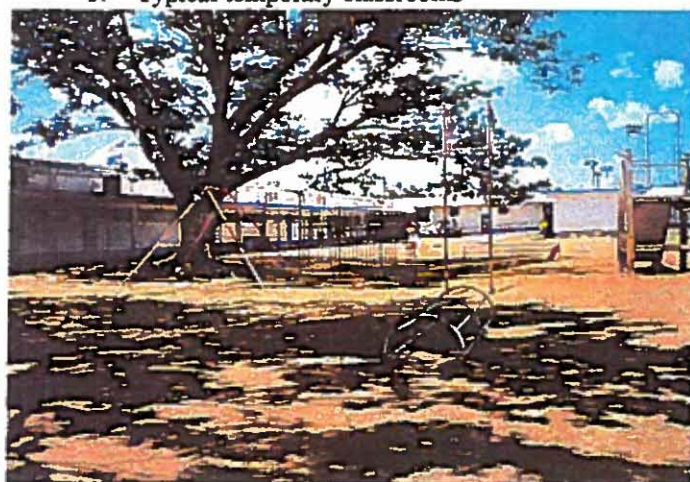
2. Cracks and paint peeling problems



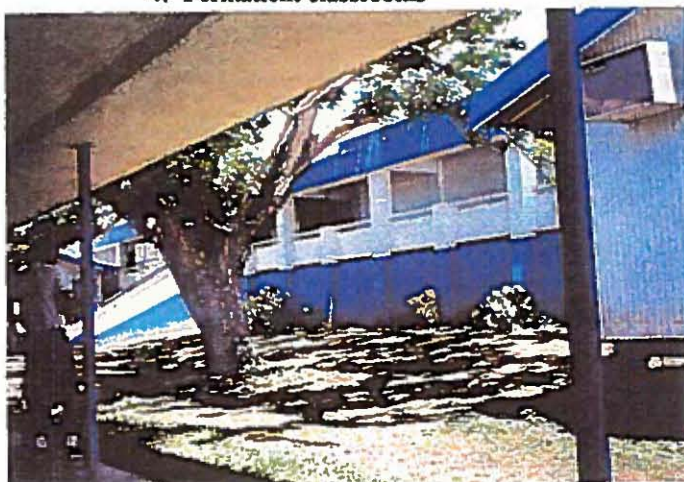
3. Typical temporary classrooms



4. Permanent classrooms



5. Play area and equipment



6. Covered walkway of main building



7. Landscape



8. Shrubs along walkway

[illegible]

C.L. TAITANO ELEMENTARY

Update as of May 2000: The re-construction of C. L. Taitano was initiated in March 2000. Completion date of the re-construction project has yet to be determined by the Department of Public Works.

Background

C. L. Taitano Elementary School was built in 1958 in the interior of the village of Sinajana. The school is oriented towards the north with Bienvenida Street serving as the primary access. Avenida Herman De Leon borders the school to the south and provides an additional entrance and exit for those students who walk to school. St. Jude Thaddeus, a Catholic Church, and a fire station are located adjacent to the school towards the northeast. Bishop Baumgartner School, private elementary and middle school is located nearby. Figure 3.1 is a vicinity map showing the location of the school.

The school occupies Lot No. 3 Block 12 with a total of 6 acres. There are a total of forty-eight (48) rooms available for a total enrollment of 774 students. In the 1980's school enrollment averaged some 275 students. Through the years, C.L. Taitano was expanded to meet the growth in population. Most of the students attending the school live in the surrounding neighborhood of Sinajana, Agana, Anigua, Maina, Asan, Nimitz Hill and Piti. Figure 3.2 is the site plan for the school.

Physical Condition

Permanent Structures

The permanent structures present at the school can be divided into three categories, the original two story complex; Buildings A, B, and C, the newer CMU additions and the pre-cast fast track classrooms.

The original complex (A Building) comprises thirty-one (31) rooms, administrative offices, a cafeteria, library, bathrooms, and miscellaneous storage rooms. The structure was constructed of CMU in 1958. The condition of the facility was assessed as in poor condition. Significant work has been done in the past to repair cracks and spalling throughout the original structure. School officials showed field personnel chunks of concrete which in some cases have fallen from overhead areas. These samples indicated that the corrosion, or rusting, of embedded reinforcing bars was responsible for the bond failure. Student and faculty safety is a serious concern. School officials have consulted with DPW to assess the structural condition of the building. Additional storage space where supplies are kept in Building A is needed.

The CMU addition (C Building) is a collection of six (6) classrooms south of the original complex. The rooms appeared to have been built recently and were in good condition. Additional restroom facilities are needed to serve the student population. Rooms 38-40 are located in southern or lower portion of the campus. These rooms are constructed of CMU and were found to be in good condition. However, Room 38 has a serious roof leak. Rooms 44 and 45 are fast track rooms located along the southern perimeter of the school. These rooms are in good condition and do not have the problems found in other schools that have this type of fast track buildings.

The school layout is typical of most of the schools found throughout the island. The administration and cafeteria are located at the front of the school and classrooms are located in a L shape configuration. Building A is a two story structure.

Temporary Structures

Both wood, and metal (Butler type) temporaries are found on campus. Rooms 41 through 43 are constructed of wood and are in good condition. Room 29, a Butler type building was found to be in good condition. Typhoon Paka completely destroyed a temporary room used as a headstart classroom, at the lower end of the campus. Since then, a new Head Start classroom has been constructed.

Sporting/Recreational Facilities

The school's main playground facilities are located in the courtyard area defined by Buildings A and B. Play facilities such as swings, slides and other equipment were observed to be in use during the site assessment. A scaled down basketball court was also available for the children. The stage needs repair and the administration is working with the parent teacher organization to fund the project. The play facilities were in good condition. The kindergarten classes have their own playground area outside of their classrooms. New play equipment is needed for this playground.

School Grounds

The school featured nice landscaping in some areas while in other areas landscaping was completely absent. Most of the nice shrubs and palm trees were found along the front of the main building at the schools entrance. More landscaping exists along the hallway of Building B. Very little in the way of landscaping was found anywhere else. The lawn and other grass areas appeared to be maintained regularly.

Access/Parking

Access to the school can be achieved through a network of village streets. Bienvenida Street is restricted to one-way operations in the morning and afternoon to improve circulation to and from the front of the school. There are no internal roads for circulation of buses so the loading and unloading of students is conducted at street level, within the public right-of-way.

Parking is very limited at the school. There are only eighteen (18) regular stalls in the faculty parking lot at the front of the school with only one handicap stall. Additional parking is available at the east side of the school below the fire station but there are no surface improvements. School officials indicated that consideration was being given to property between the fire station and the school as a potential site for the expansion of parking facilities. Efforts to resolve the access and parking requirements of the school will alleviate the congestion and provide safety to all the students.

Existing School Capacity

The existing student population exceeds the ideal size of 550 students for elementary schools. Classrooms have been added to accommodate the population growth and that is quite evident by the school layout and the building type. Classrooms are being used to house two classes in each.

The original structure (Building A) has deteriorated and school officials have raised concern for the safety of their children. It may be more cost effective to replace the building rather than to continuously repair it. The existing school layout provides an opportunity to develop the school using the **Ten-Year Facility Design Concepts** for an elementary school. If the site has 18 acres, the school has the potential to improve its existing facility because it has additional acreage and open space. A master plan should be developed before any construction plans are drawn.

ADA Compliance

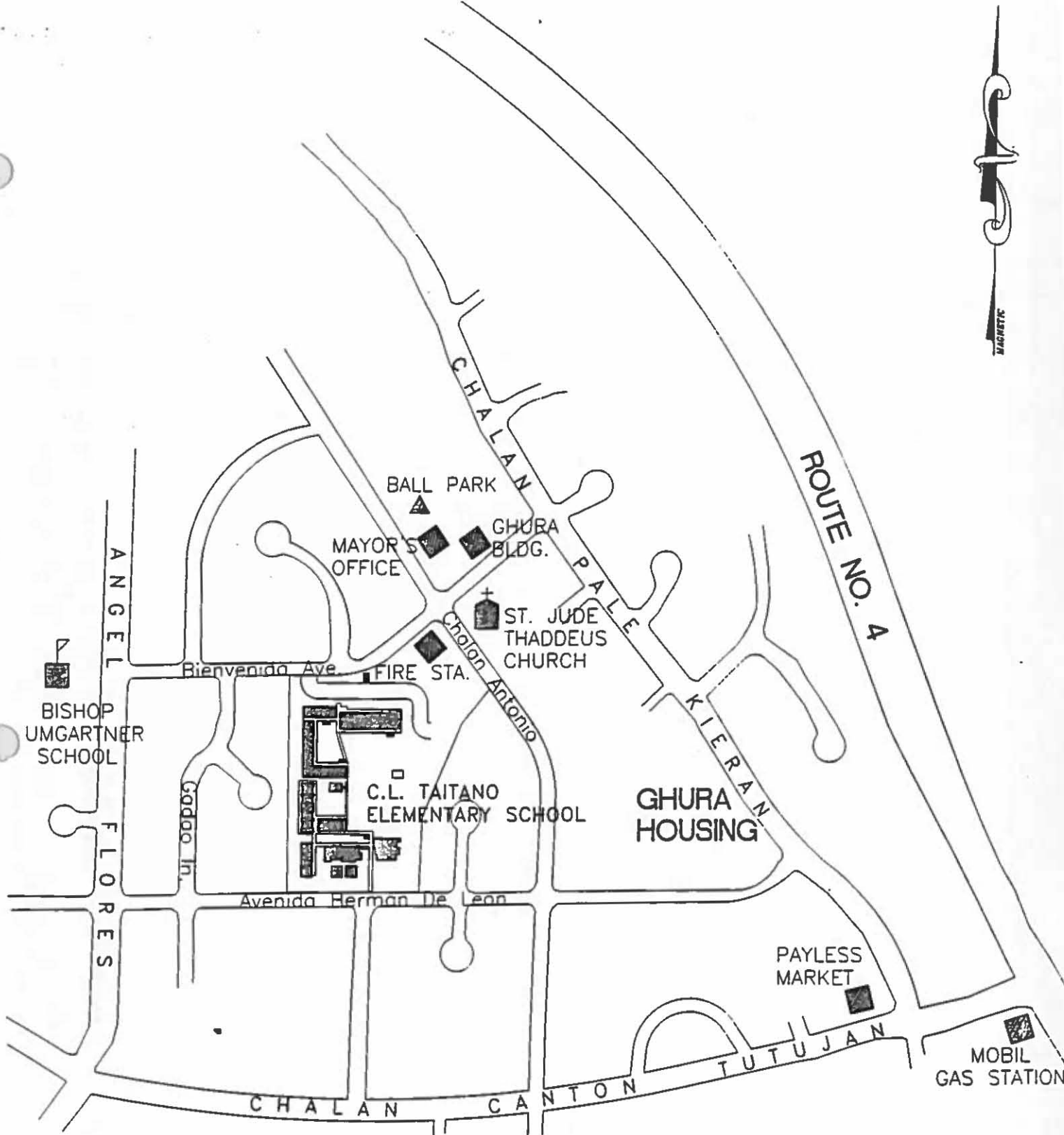
The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed detailed assessments in 1994 and found that there were significant areas of non-compliance at C. L. Taitano Elementary. These deficiencies include: accessible route—exterior and interior, parking, ramps, handrails, elevators, doors, toilet rooms, sinks, alarms, signage, information counters and a main office reception counter. Budget cost estimated for the prescribed corrective actions totaled \$754,550.

Structural Evaluation

According to school officials, the Department of Public Works conducted a 1993 structural assessment of the schools but have yet to provide the results. The results should be made available. If not complete, then Building "A" should be re-evaluated to determine whether this building is structurally sound. School officials are concerned with the spalling and cracks found throughout the building.

Capital Improvement Plans

A capital improvement project priority list was prepared by DOE and is included. We verified the list with the school officials and one additional request to add a restroom facility in Building C has been added. Determining the structural condition of Building A must be given top priority and effort to repair or replace the building should be pursued.



GUAM PUBLIC SCHOOLS SYSTEM

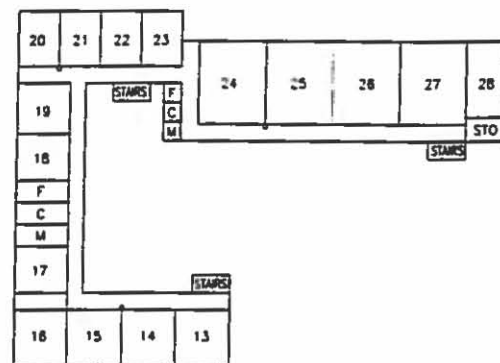
SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

C.L. TAITANO ELEMENTARY SCHOOL VICINITY MAP

ET PROJECT NO. 25391.01

FIGURE 3.1

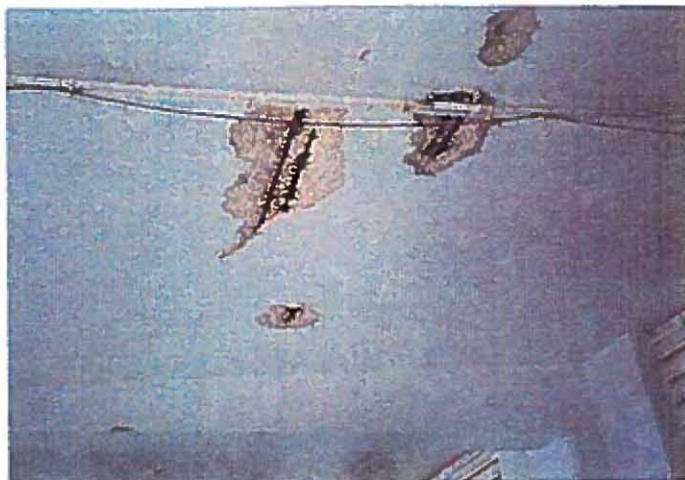


NO SCALE

NO SCALE



1. Chunks of falling concrete



2. Cracks in ceiling



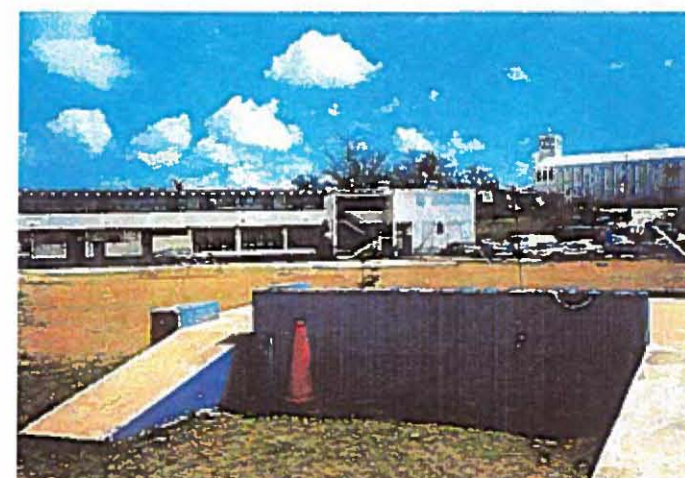
3. Exposed reinforce bars and algae growth.



4. A classroom destroyed by Typhoon Paka.



5. Playground with basketball court



6. Open courtyard and stage



7. View of 2nd floor and hallway



8. Landscaped entrance

DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY

School Name	Location	Type	Region	Proposed School District
C. L. Taitano Elementary School	Sinajana	1	3	Kattan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE	1	X	X	X	X							754,550.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	2 3 1			X								150,000.00 100,000.00 60,000.00
STRUCTURAL REPAIRS (1) Needs Assessment of Building A	1 1	X X										
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System					X	X						250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	3 2 2 4 2 2 3		X X X X X X				X				X	60,000.00 250,000.00 200,000.00 60,000.00 200,000.00 160,000.00 90,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	2 2 1			X X								75,000.00 75,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
ADDITIONAL REQUEST (1) Restrooms for Building C	1	X										
TOTAL												\$2,504,550.00

J.P. TORRES ELEMENTARY

Background

J.P. Torres Elementary was constructed in 1956. The school is located in the village of Santa Rita, and served a total of 189 Kindergarten and first grade students in 1997-98. The campus occupies Lot No. 470-R2 on the upper slopes of the village overlooking Agat village. The school sits on a 9.2 acres. Figure 4.1 is a vicinity map showing the location of the school and 4.2 is the site plan.

Chalan Pale Duenas serves as the main access to the school property. The Santa Rita mayor's office is situated below the school to the northwest. To the south is a community baseball park and southeast of the school is a hillside with a Guam Waterworks Authority water storage tank. The remainder of the surrounding area is comprised of single family residential development.

There are 19 classrooms (out of 25) available for student instruction at J. P Torres Elementary. The school is arranged with four wings or buildings meeting at a common point. There is a collection of temporary rooms on the north side of the school.

Physical Condition

Permanent Structures

The original classrooms built at the school were constructed using CMU for walls and wood framing and corrugated metal roofing overhead. The site visit revealed numerous problems with these facilities including rotted wood beams, completely rusted gutters, persistent roof leaks, water damaged paint and floor coverings.

According to the school's principal, the permanent rooms in Building B (rooms 1-7) were substantially impacted by Typhoon Paka. Although some roof repairs have been done, seven rooms are not being used because of persistent leaks. (Note: During school year 1998-99, six of the seven classrooms are being used. Classroom furniture is being stored in the unused room. The library in the same wing sustained damage to some of its windows. These rooms were judged to be in poor condition with much of the problems related to roofing and water damage.

Building A (administrative and cafeteria), Buildings C (rooms 8 through 13) and D (rooms 14 through 24) are permanent structures. Overall, they seemed to have fared a little better during the last typhoon. These structures had some of the same problems as Building B but not to the same degree. They were found to be in the range between fair and good condition. The most pressing issues were found at the central tie-in area for all the four buildings. Again, water damage to overhead framing and other wood features was noticeable. Two (2) fast track rooms are situated at the end of Building D. These rooms appear to be in fair-good condition. The exterior of buildings are discolored and lower portions of walls are covered with algae.

Temporary Structures

There are four (4) temporary rooms arranged in pairs at the east side of the school. These rooms (18 through 21) are constructed of wood with tin roofing. They are in good condition.

Sporting/Recreational Facilities

The playground is located between Buildings B and C. The area is equipped with a variety of play facilities: swings, slides, monkey bars, etc. and is kept clean and well maintained. Another play area exists near the temporary rooms.

School Grounds

Landscaping was present in many locations around the school. Plants were placed along most walkways and buildings. A small area nestled at the center of the school, where all of the buildings come together, is landscaped. A few large

ironwood trees were present in the playground area. J.P. Torres as a school has a successful foundation of landscaping which could be built upon in the coming years.

Access/Parking

There are seventeen (17)-parking stalls located in the main parking lot in front of the school. The parking lot in front of the administration building is not being used per instructions by the Fire Department. Cars were also seen parking on an unimproved lot behind the administration building. Two (2) handicapped spaces have been set aside in the main lot as well.

Existing Design Capacity

Over the last decade, student population has remained below 200 students. This school serves only two grades; kindergarten and first grade. The school lacks the acreage necessary for any future expansion due to physical constraints to the lot.

ADA Compliance

The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed detailed assessments in 1994 and found that there were significant areas of non-compliance at J. P. Torres Elementary. These deficiencies include: accessible route –exterior and interior, parking, curb ramps, ramps, handrails, stairs, doors, toilet rooms, sinks, alarms, signage, food service, and library stacks. Budget cost estimated for the prescribed corrective actions totaled \$197,180.

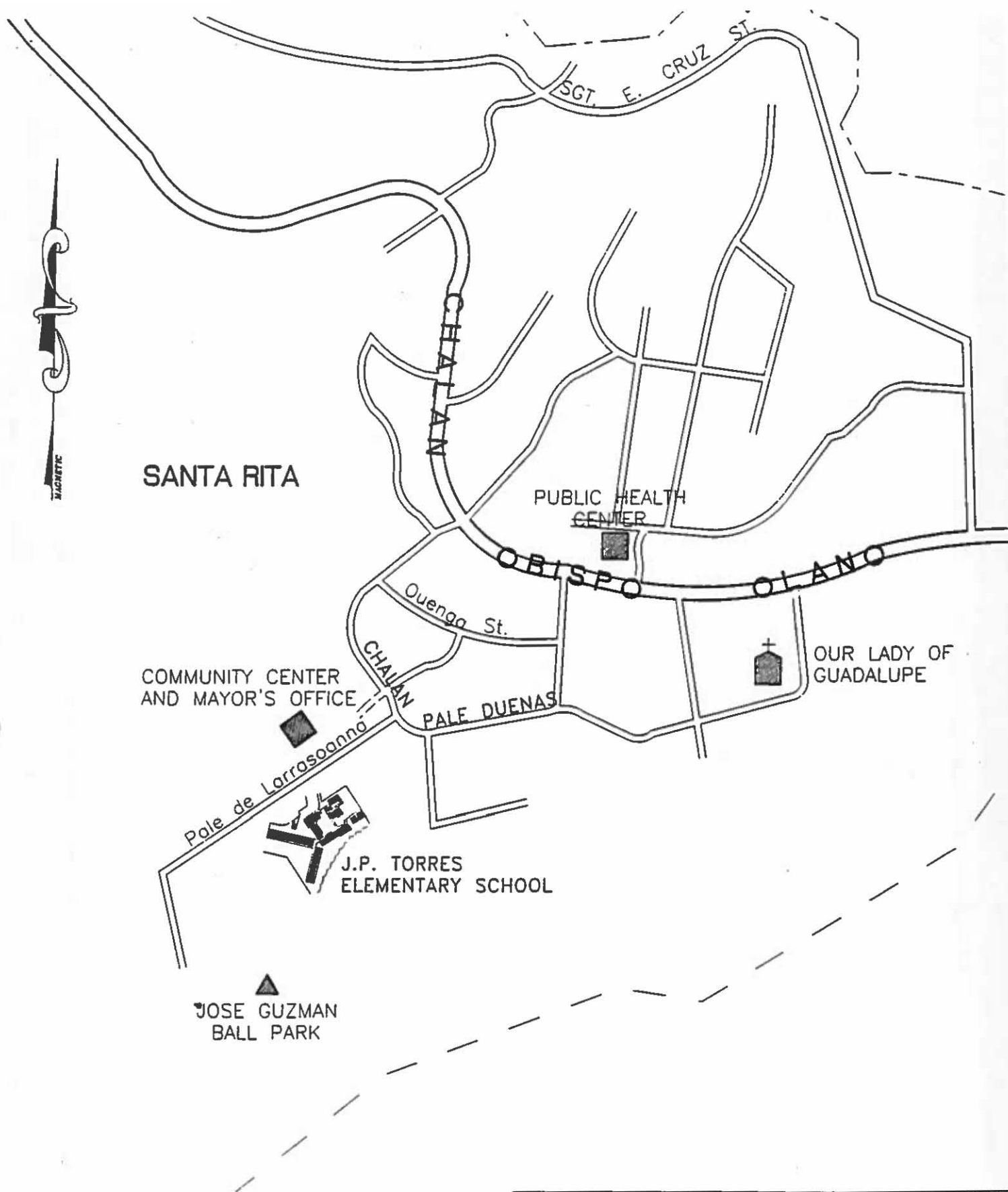
Structural Evaluation

According to Winzler & Kelley Consulting Engineers, J. P. Torres Elementary is severely deficient to some degree in terms of structural requirements of the 1991 UBC. Evaluated deficiencies include insufficient factors of safety for global stability, inadequate member strength and non-compliant details. Major structural deficiencies in the primary structural frame were identified.

The work to upgrade the facility to 1991 UBC standards is extensive and will require the closing of portions of the school during construction. A complete new roof structure is required and a substantial amount of additional weight must be added to the structural system to adequately resist wind loads. Preliminary construction cost estimate to rehabilitate this facility to be in substantial conformance with the structural requirements of the 1991 UBC is approximately \$1,050,000.

Capital Improvement Projects

A capital improvement project priority list was prepared by DOE and is included. A total of \$ 4.8 million of improvements have been identified for this school. The school has major structural deficiencies that will require large amount of investment dollars. The construction of a retaining wall is also needed to protect the school. Several classrooms are not being used due to leaks, and typhoon related damages. This school has a large price tag of repairs. At this time, we recommend that DOE review its option to close this school and to build a new elementary school to serve K – 5 before it allocates any more money to this school.



GUAM PUBLIC SCHOOLS SYSTEM

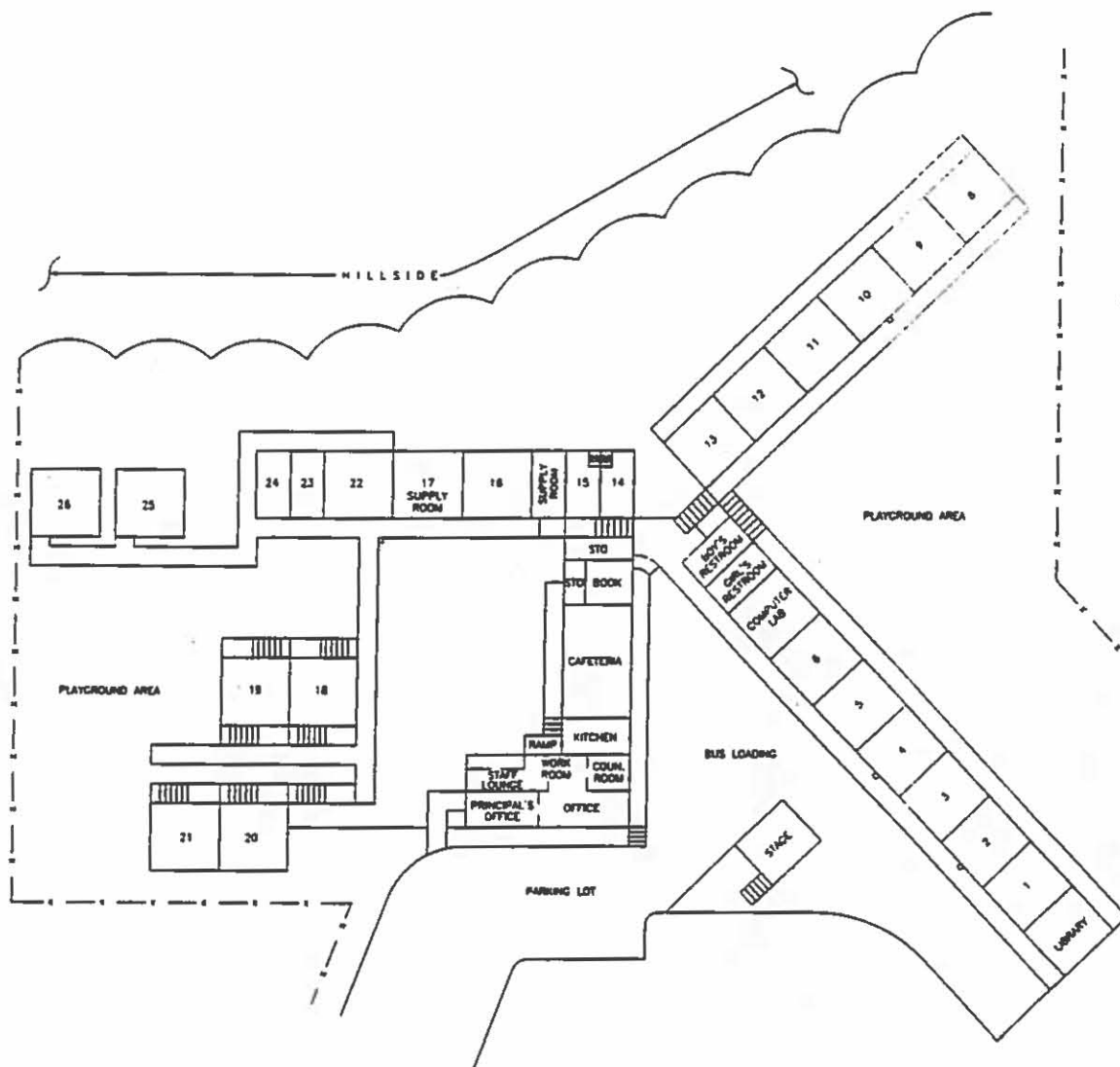
SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

J.P. TORRES ELEMENTARY SCHOOL VICINITY MAP

ET PROJECT NO. 25381.01

FIGURE 4.1



SITE PLAN

J.P. TORRES ELEMENTARY SCHOOL NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

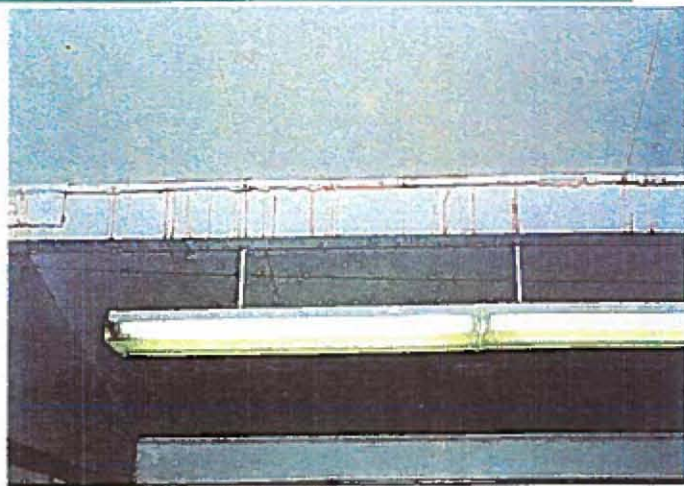
J.P. TORRES ELEMENTARY SCHOOL SITE PLAN

FT PROJECT NO. 25381.01

FIGURE 4.2



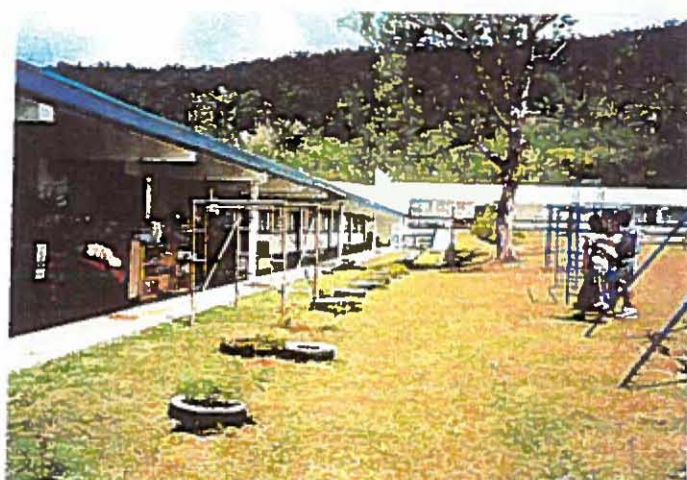
1. Rotted wooded beam



2. Leaks found in ceiling and lighting fixture



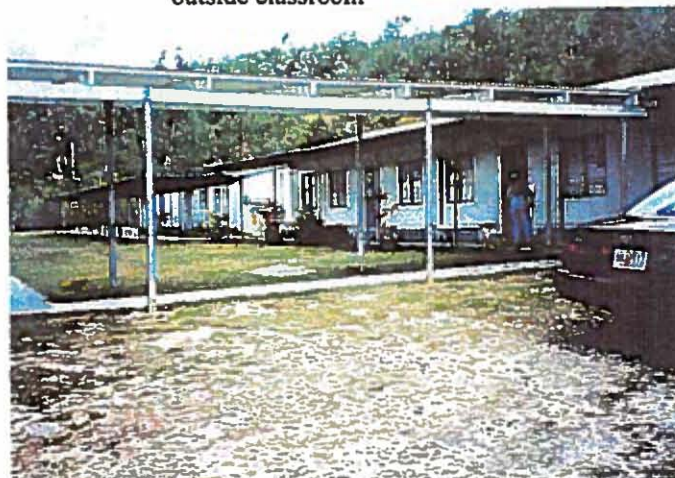
3. Rotted wood beam and expose wires



4. Classroom furniture and supplies stored outside classroom



5. Exterior walls covered with algae



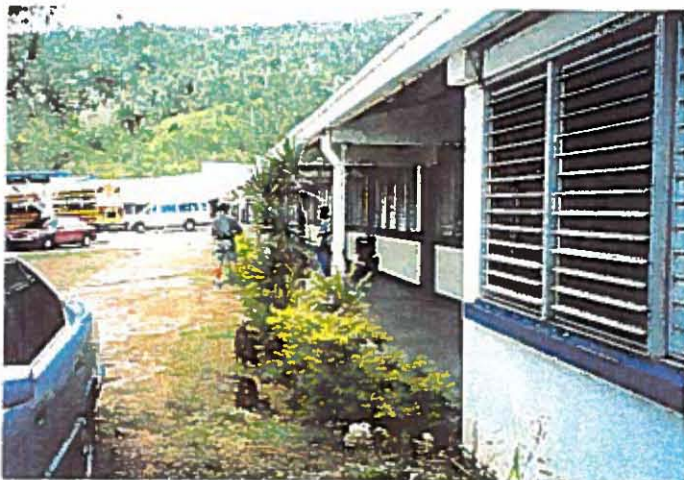
6. Covered walkways to temporary classrooms



7. Playground with play equipment



8. Landscaped area



9. Exterior view of school ground



10. Temporary classrooms

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
J. P. Torres Elementary	Agat	1	1	Heya

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	3			X								200,000.00
ADA COMPLIANCE	1	X	X	X	X							197,180.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	4				X							75,000.00
STRUCTURAL REPAIRS (1) Construction of Retaining Wall (2) Repairs on School	3	X		X								2,000,000.00 1,050,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System	3				X	X						250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	2 1 2 3	X	X X				X				X	50,000.00 350,000.00 200,000.00 150,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	2 1			X								100,000.00 40,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain	2		X									150,000.00
TOTAL												\$4,812,180.00

CAPTAIN H.B. PRICE ELEMENTARY SCHOOL

Background

Price Elementary is located at the intersection of Route 15 and Route 10 in Mangilao. The Mangilao mayor's office and the Department of Agriculture border the school on two sides. Across Route 10 there is a police koban and a community play lot and baseball field. The school is oriented north-south and has direct access to Dairy Road. Figure 5.1 is a vicinity map showing the location of the school.

The school was constructed in 1958 and featured CMU as the primary building material. The school is situated on Lot Nos. 2288-1-2 and 1109-R4 with a total area of 8 acres. Like most central schools, Price Elementary experienced overcrowding beginning in the 1980s. A mixture of permanent type CMU structures and temporary rooms was installed to keep up with its student enrollment. Today there are a total of thirty (30) permanent rooms and another twenty-five (25) temporary rooms. Typhoon Paka was responsible for destroying one temporary room. Figure 5.2 is an updated site plan showing the school layout.

A total of 983 attended Price Elementary during the 1997-98 school year. The school has seen its population tripled since 1980. At that time, Price Elementary had an average student enrollment of 300 students.

Physical Condition

Permanent Structures

Wings A, B, and C feature the same design and are all interconnected. These buildings which comprise of nine rooms, the cafeteria, and administrative offices, and are built of CMU. They also appear to be the oldest buildings on the campus. Some of the rooms did not have tiles. These structures were recorded as being in fair-good condition with no major problems noticeable.

Additional permanent rooms are found in E and F Wings. These structures were in good condition and appeared to be well maintained. However, F wing has a recurring problem of termite infestation. CMU was used for these rooms as well. E wing has a second floor. The school is hooked up to the public water and sewer system. A security fence surrounds the school property.

Temporary Structures

Temporary rooms are found in two formats. The first is the typical wood frame and tin roof room. Temporary rooms T-1 through T-3 and T-4 through T-7 are of this type and are arranged in two rows with common walls. These rooms were in fair condition. Temporary rooms T-9 through T-15 and T-16 are wood structures and appear to be newer and in good condition. The second type of temporary room is a butler style room with corrugated metal siding and roof. T-8 is an example of a butler style room and is located with the other temporaries along the west perimeter of the school. It is in good condition.

Sporting/Recreational Facilities

Price Elementary has play facilities nestled in a courtyard between D Wing and F Wing and behind E Wing. The play facilities available include swings, slides, monkey bars etc. The playground could use some landscape and grass to avoid the rocky ground common in most playgrounds.

School Grounds

The school was found to be in a clean and orderly condition. A few large trees were lost to Typhoon Paka. The remaining trees and ornamental plants and shrubs were recovering nicely. Although there were a few indications of efforts to landscape the grounds, there remain significant opportunities to beautify and improve the appearance of the school through landscaping.

Some areas around the school had plants and other small trees in the corridor between A Wing and the temporary rooms and the courtyard behind E Wing. Other areas without landscaping include the temporary rooms (T-9 through T-15), at the back of the school.

Access/Parking

Forty-four (44)-parking stalls are provided at the front of the school. There are four (4) handicap stalls. A bus loading area can be accessed through the main parking lot and is reserved for bus operations. During the morning and after school hours, traffic congestion exists along the entrance of the school and along the main road. School staff is concerned about students who walk to and from school and fear the crossing of a major roadway is not safe for elementary students.

Existing School Capacity

According to the school principal, the school has reached its design capacity and can not accommodate any new students. Classrooms have been added to meet the growth and are located away from the main building where the support facilities are located. Bathrooms are located in the main building. During the rainy season, students must make their way to the bathrooms and are often caught in the rain. Covered walkways are needed. Classrooms with toilet facilities are preferred for kindergarten and first graders. Most of the temporary classrooms are small and classrooms are crowded. One administrator described the classroom situation as being claustrophobic. The school is using every classroom to accommodate all the students. However, additional classrooms, storage areas, a resource room and a teacher's lounge are needed to improve the school environment. The cafeteria is small and lunch is staggered to accommodate all students. The existing facility has been expanded without much attention to site layout and utilization.

There is no room for expansion at this campus under the existing site layout. If the temporary rooms at the back of the school are removed, we recommend that the area be designated for additional playground space. Some open spaces exist at the northeast corner of the school grounds.

ADA Compliance

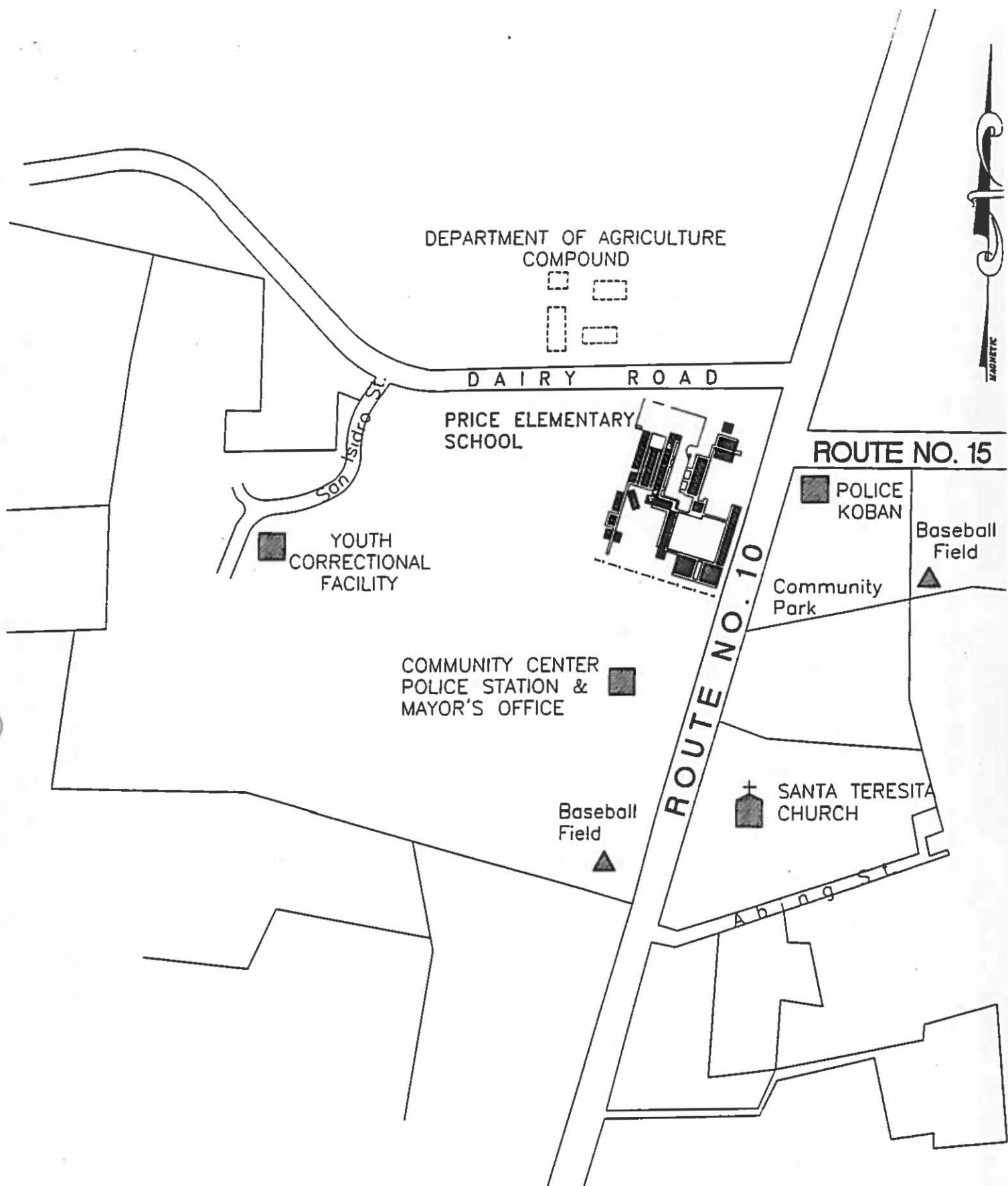
The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed detailed assessments in 1994 and found that there were significant areas of non-compliance at Price Elementary. These deficiencies include: accessible route –exterior and interior, parking, curb ramps, ramps, handrails, elevators, doors, toilet rooms, alarms, signage, food service counter, and library card catalogs. Budget cost estimated for the prescribed corrective actions totaled \$383,095.

Structural Report

None to report.

Capital Improvement Projects

A capital improvement project priority list was prepared by DOE and is included. Almost half of the classrooms at Price Elementary are temporary classrooms. As discussed earlier, DOE should develop a policy addressing the replacement of temporary classrooms. A total of \$ 700,000 has been earmarked to repair and or replace temporary classrooms. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with a permanent structure. DOE should develop permanent structures at this school. A master plan should be developed for this school prior to any construction activities.



GUAM PUBLIC SCHOOLS SYSTEM

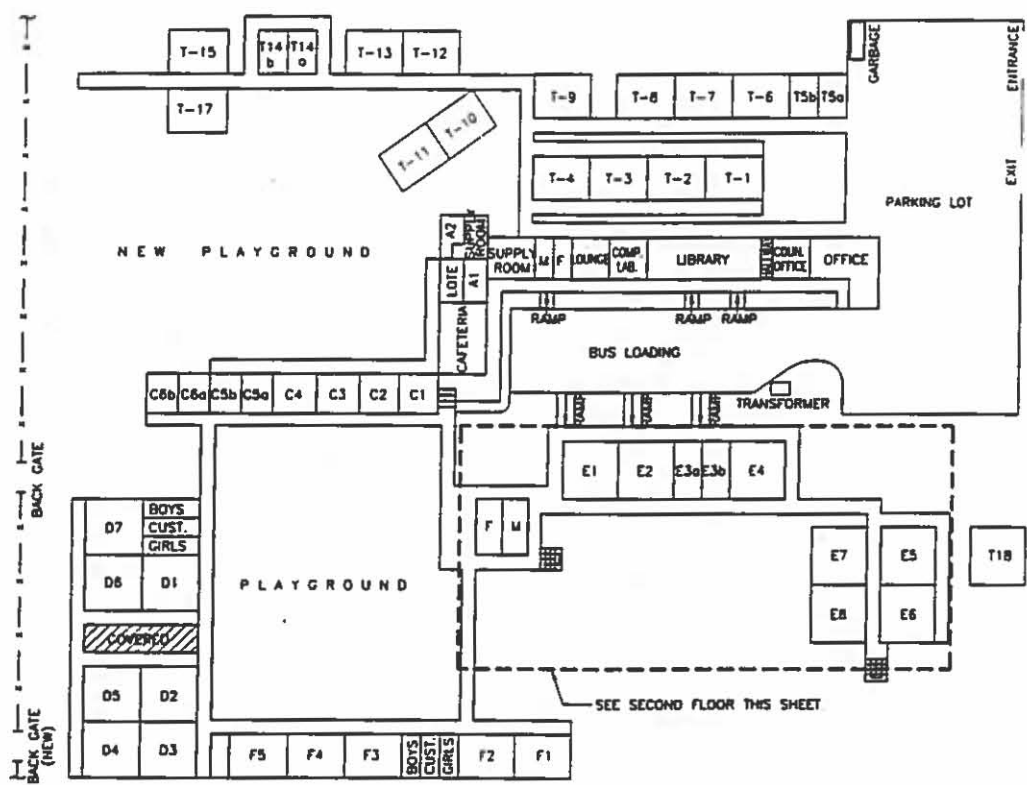
SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

PRICE ELEMENTARY SCHOOL VICINITY MAP

ET PROJECT NO. 25381.01

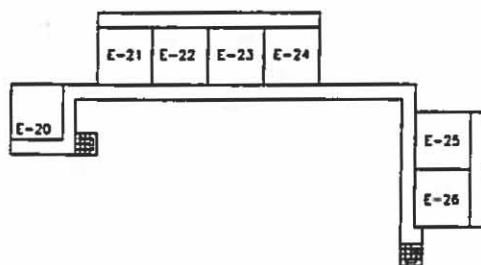
FIGURE 5.1



SITE PLAN - FIRST FLOOR

PRICE ELEMENTARY SCHOOL

NO SCALE



SITE PLAN - SECOND FLOOR

PRICE ELEMENTARY SCHOOL

NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

PRICE ELEMENTARY SCHOOL SITE PLAN

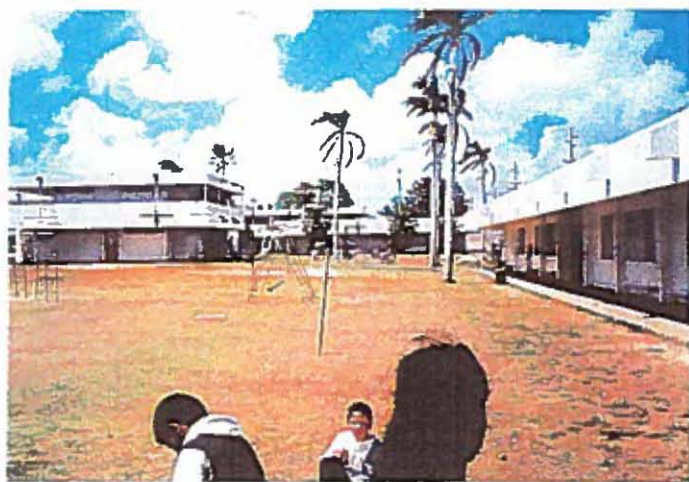
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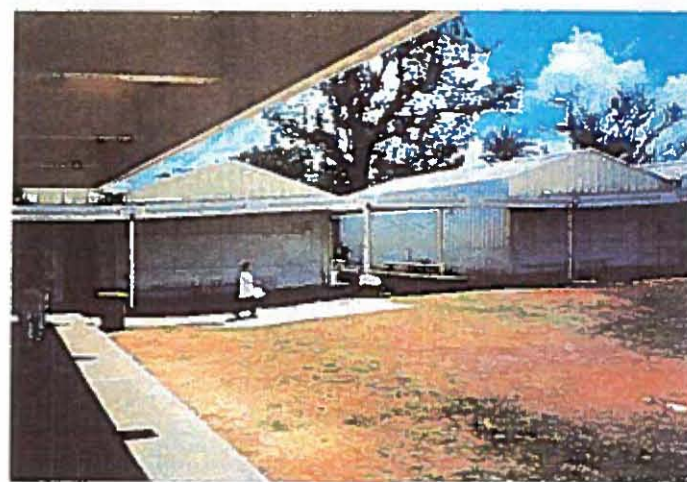
1. Classroom and open yard



2. Temporary classrooms



3. Open play area between permanent classrooms



4. Butler style classrooms



5. A permanent wing corridor adjacent to temporary classrooms

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
H. B. Price Elementary School	Mangilao	3	3	Kattan

[illegible]

TALOFOFO ELEMENTARY SCHOOL

Background

Talofofo Elementary School is situated east of Talofofo Village and north of Jose P. Cruz Street. The community baseball field, gymnasium and volleyball/tennis courts are clustered in the same area. The school was built in 1965 and occupies a portion of Lot No. 402 with a total area of 9.2 acres. In 1997-98 enrollment stands was approximately 381. The school's population has doubled since the '80s where the average size was 125 students per year. New residential development is occurring east of the school along the cliff line overlooking Ipan, Talofofo. Figure 6.1 is a vicinity map shows where the school is located.

Like most other schools on island, Talofofo Elementary has expanded through the installation of temporary rooms. There are a total of thirty (30) classrooms at the school. Twelve (12) of these rooms are temporary rooms. Eighteen (18) rooms are built of CMU or are pre-cast type rooms. A site plan, depicting how the facilities are laid out, is included as Figure 6.2.

Physical Condition

Permanent Structures

The permanent room structures are organized into two wings and are referred to as Buildings A and C. The administrative offices and the library and cafeteria are integrated with the permanent rooms forming a C-shaped complex with a courtyard. These rooms (8 through 18) and other permanent structures are in good condition with isolated cases of peeling paint being the most noticeable problem. The structures appear well maintained.

Fast track classrooms (PF-1 through PF-4) were found to be in good condition. Paint once again was an issue in different areas throughout school.

Temporary Structures

Wooden rooms were the only type of temporary rooms found at the school. Rooms T-B, T-E, and T-F were observed to be in good condition. T-C, T-D and T-G were in fair-good condition. On the northwest corner of the campus, there are a cluster of six (6) temporary rooms and two (2) book rooms found to be in good condition.

Sporting/Recreational Facilities

Play areas are located in the courtyard between Buildings A and C and in the open area in front of the school at the southeast corner of the lot. More play facilities were located behind building C.

School Grounds

Generally, the school grounds were recorded as being clean. Landscaping was noticed in many areas. Young trees and shrubs were seen around some of the newer temporary rooms along the east side of the school. A nice planted area was observed along the corridor leading from the cafeteria to the wooden temporary rooms and the fast track classrooms. The front of the school has several palm trees with painted trunks, a Norfolk pine tree, and other shrubs.

Access/Parking

Jose P. Cruz Street provides access to the school. This street turns into Route 4A at its intersection with San Miguel Street. There are two gated access points allowing for good vehicular flow. Single family residential homes and open areas surround the school and traffic is not considered to be a problem.

Parking stalls are located at the front of the school within the fenced compound. There are thirty (30) standard parking stalls and three (3) handicapped stalls. A concrete canopy extends over the front of the school providing a covered receiving area. A few extra stalls are located outside the cafeteria for cafeteria personnel and for the delivery of goods and materials.

Existing School Capacity

Through the years, Talofoto Elementary has added 12 temporary classrooms to accommodate its student enrollment. The projected population growth for this area will require more classrooms. The school should be looking at ways to accommodate the projected growth. The school enrollment is less than the legislated design enrollment. However, future expansion of this school is dependent on how quickly the school can be hooked up to the public sewer system. The area northeast of the school is used for the septic tank and leaching field and play area which are potential areas for expansion.

ADA Compliance

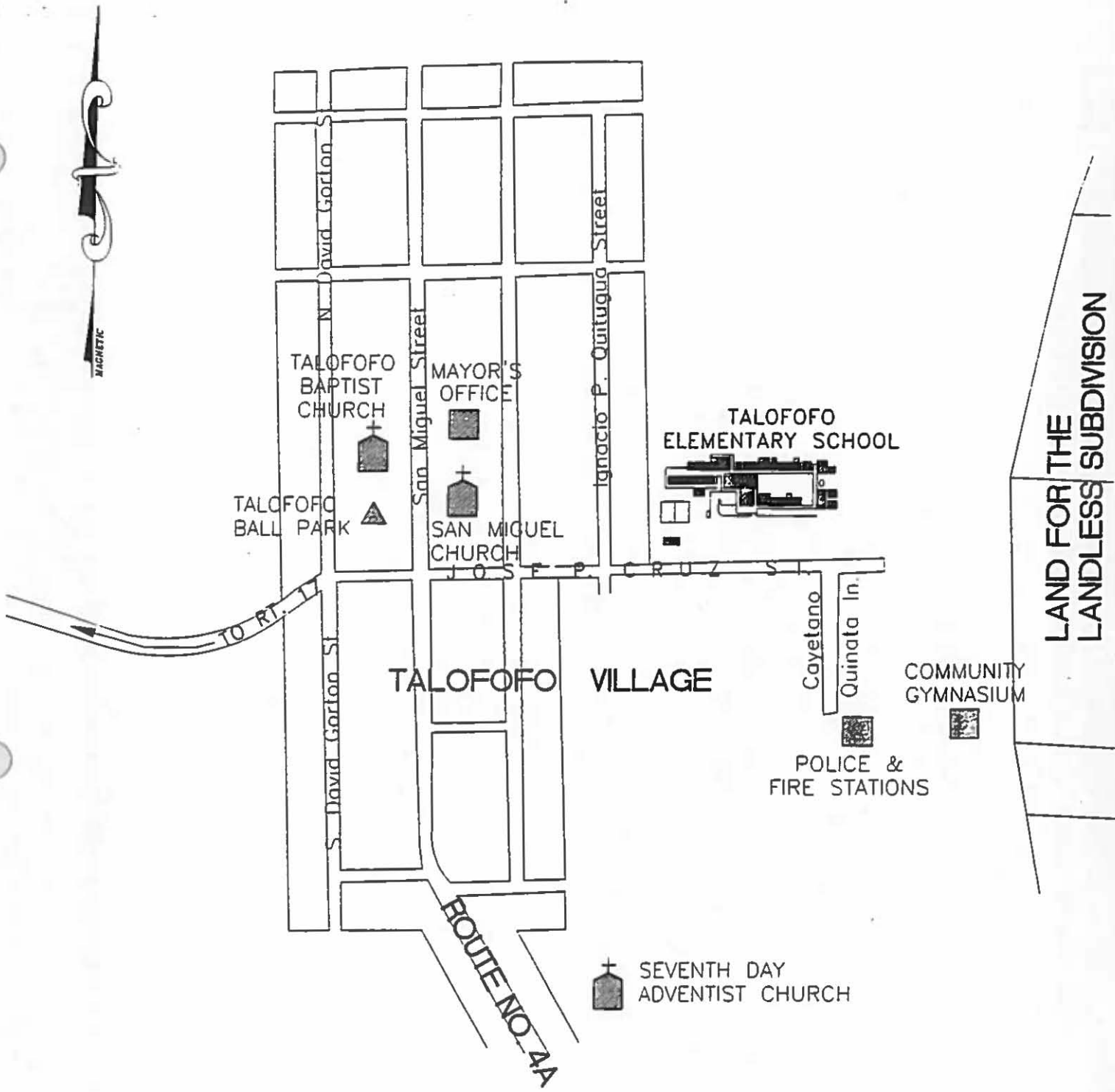
The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed detailed assessments in 1994 and found that there were significant areas of non-compliance at the Talofoto Elementary. These deficiencies include: accessible route —exterior and interior, parking, ramps, handrails, stairs, doors, toilet rooms, alarms, signage, cafeteria stage, seating and tables. Budget cost estimated for the prescribed corrective actions totaled \$169,300.

Structural Analysis

The Winzler & Kelly Consulting Engineers July, 1994 Report revealed that Talofoto Elementary School structures are deficient to a minor degree in terms of structural requirements of the 1991 Uniform Building Code. Many provisions have been added to the Code since the school was designed; non-compliant conditions are to be expected. The calculated stresses in the structural elements are low. The items of non-compliance are minor in nature and have no significant effect on the integrity of the structure. A complete analysis of the covered walkways is recommended. They appear to pose a hazard during a seismic event.

Capital Improvement Projects

A capital improvement project priority list was prepared by DOE and is included. Talofoto Elementary has a high percentage of temporary classrooms. Cost estimates in the amount of \$350,000 has been slated for repairs during the next five years. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. The projected population growth for this area will require additional classrooms to accommodate the growth. This school has currently an enrollment total below the legislated design enrollment. DOE has an opportunity to take a proactive step in developing this school to meet the future needs of its student population. DOE should decide to develop permanent structures at this school. A master plan should be developed for this school prior to any construction activities.



GUAM PUBLIC SCHOOLS SYSTEM

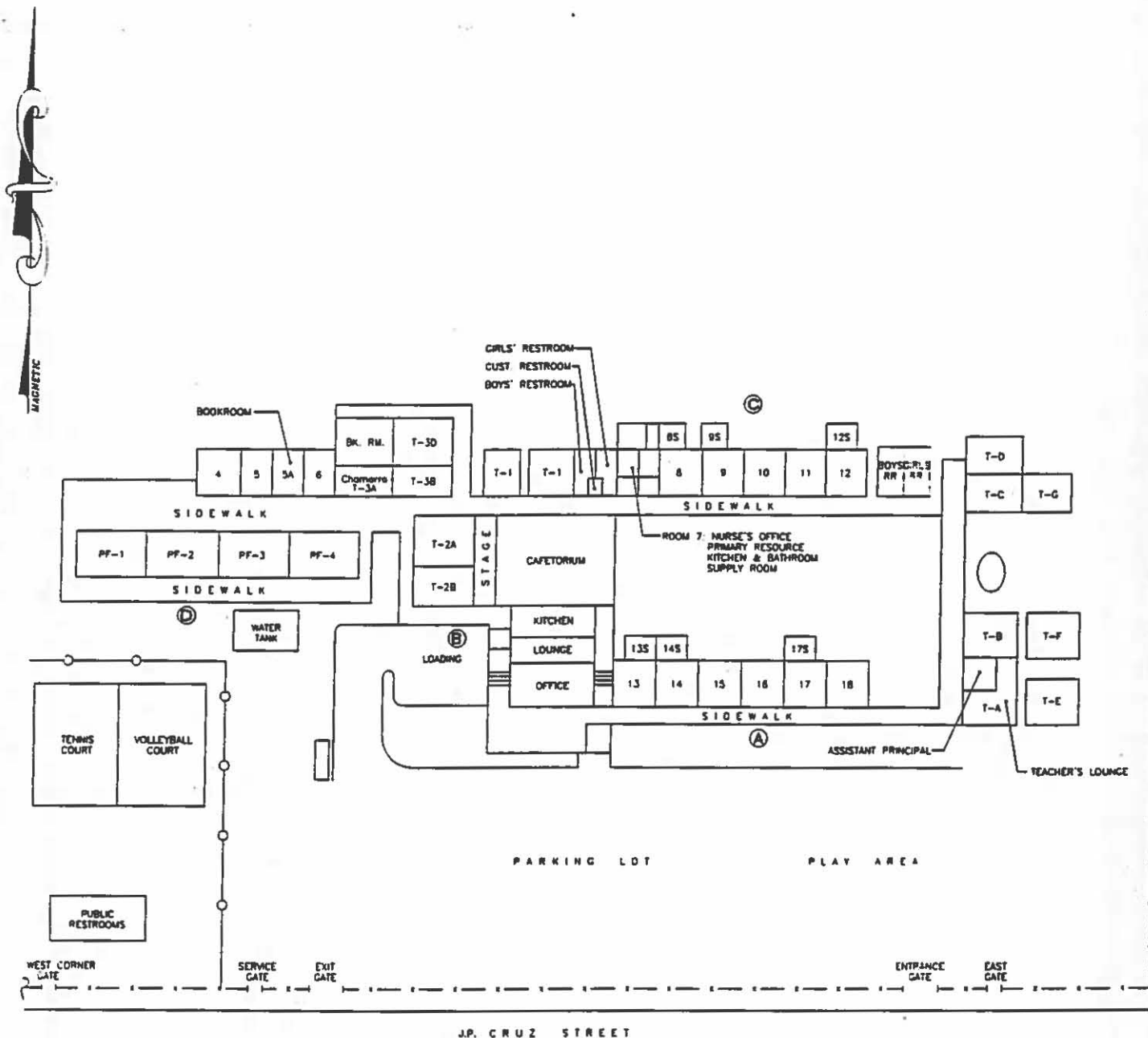
SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT CONING MAI

TEN YEAR CAPITAL FACILITIES PLAN

TALOFOFO ELEMENTARY SCHOOL VICINITY MAP

ET PROJECT NO. 00001.01

FIGURE 6.1



SITE FLOOR PLAN

TALOFOFO ELEMENTARY SCHOOL: NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

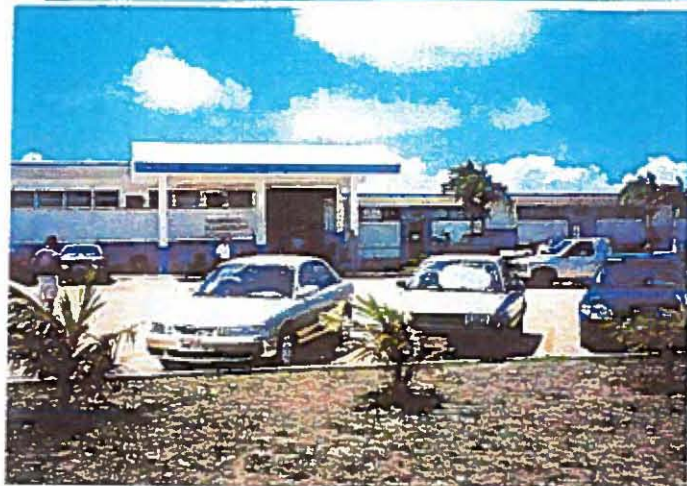
SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING

TEN YEAR CAPITAL FACILITIES PLAN

TALOFOFO ELEMENTARY SCHOOL SITE PLAN

ET PROJECT 110. 25351

FIGURE 6.2



1. Entrance and parking lot



2. Side view of entrance



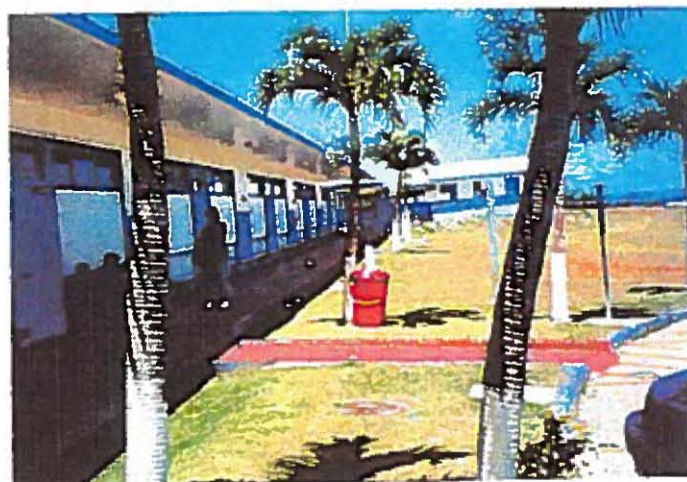
3. Covered walkway and classroom



4. Hallway inside the building



5. Landscaped walkway and ramp



6. Exterior view of main building

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Talofoto Elementary School	Talofoto	1	1	Haya

[illegible]

MARCIAL A. SABLAN ELEMENTARY SCHOOL

Background

Marcial A. Sablan Elementary School is located in Agat. The school was constructed in 1972 and was originally named Agat Elementary until school year 1997/98. The school facilities occupy Block No. 13 for a total of 15 acres. Enrollment for the 1997/98 school year was 757 students.

The school is oriented north-south with Follard Street providing access directly to Route 2. The school's primary entrance faces north towards Follard Street, the Agat Community Church and single family homes. The Catholic cemetery and Bangi Point are located across from the school on the ocean side of Route 2. The village public library, Mt. Carmel School (a Catholic School), and the Public Health Center are located up slope and to the east of the school. Between the school and the main highway there are tennis courts and a community baseball field. Single family residential development extends to the south of the school. Figure 7.1 is a vicinity map depicting the school location.

Physical Condition

Permanent Structures

Most of the permanent structures at M.A. Sablan are built of CMU. There are a total of twenty-four (24) rooms constructed of CMU. These facilities are maintained exceptionally well. In general, the campus does not have the paint problems observed at other schools. Damage from the typhoon is limited to a few light fixtures and the overhead portion of some of the walkways. Flooding was reported to be a problem at the back of the two-story CMU wing (rooms 19-35). A low area exists on the south side of the school adjacent to the entrance of the cafeteria. Improvements to the storm drain will prevent flooding.

School officials indicated that several drainage problems exist on campus. The raised walkway leading to the cafeteria restricts storm water flows and causes flooding to the east. A field inlet was located but may not be adequate in capacity. Two pipe culverts were observed nearby as well. The other area of flooding was reported to be at the rear of the two-story permanent room structure. A small field inlet was found containing traces of paint and other trash. The inlet probably does not function properly.

The CMU room structures are irregularly shaped and differ from the conventional linear design found at most schools. There are an additional four (4) fast track classrooms constructed of pre-cast concrete panels. These rooms were found to be in good condition. The campus is connected to the public water and sewer system.

Temporary Structures

There are nineteen (19) Butler style temporary rooms, and seven (7) wood and tin temporaries for a total of twenty-six (26) rooms. Almost fifty percent (50%) of the classrooms are considered temporary rooms.

The Butler style rooms are in poor condition, leaks were reported as being a problem in some of the rooms. The condition of the wooden classrooms range from poor to good. The Butler classrooms are small, less than 600 sq. ft., many have leaks, plywood over the windows, and the air conditioning requires much maintenance. Additionally, because the classrooms sit at ground level, they are prone to flooding during heavy rains. The gutter and canopy system around these rooms are in need of repair. For educational purposes, these classrooms are unsatisfactory because of their poor conditions. School officials indicated that work to repair typhoon damage was recently completed on these rooms. Figure 7.2 is an updated floor plan showing the layout of the school facilities. These classrooms are much smaller as compared to the permanent classrooms. Several teachers complained that the classrooms are small and lack storage space to be used by the students and teachers.

Sporting/Recreational Facilities

Play areas are present in many of the open areas around the school. Swing sets, monkey bars, slides and an assortment of other playground equipment are located throughout the school's southern perimeter near the cafeteria and permanent

rooms. Large trees provide a canopy of shade for children at play. The community baseball field is also used for school activities. A power pole and secondary lines are located very close to the play area. School officials would like to see that pole relocated because it is too close to where the children are playing.

School Grounds

The school personnel have made major contribution to the visual appearance of the school through landscaping. Ground cover frames most walkways, flowering and ornamental shrubs are strategically located throughout the interior of the school. Palms with whitewashed bases and large shade trees are also present. The interior grounds are kept clean and are well maintained.

The area around the tennis court adjacent to the baseball field falls short of meeting the landscape standard set within the school. Trash dumpsters are visible and the area serves as over flow parking. The community facilities are not well maintained and detract from the visual character of what are otherwise exceptionally well-maintained school grounds.

Access/Parking

There are nineteen (19)-parking stalls at the front of the school. More parking exists at the public library where there are ten (10) stalls available and a single handicap stall. Cars were observed parking near the fast track rooms in the vicinity of the baseball field and tennis court. This area is not a formal parking facility. A center turning lane is not available on Route No. 2. This tends to cause some difficulty for motorists attempting to turn left onto Follard Street during morning and after school rush hours.

School officials would like to extend its existing parking lot to the adjacent lot near the baseball field. Access to the front of the school will help improve the bus and school traffic circulation during morning and afternoon hours.

Existing School Capacity

The school has had to increase the number of classrooms utilizing temporary classrooms to accommodate the growth. The school is located in a lowland area where there is the potential for flooding during heavy rains. No additional land is available for expansion of the school due the construction of the community gym located on the east side of the school. Opportunities to expand the campus are limited due to the existing layout.

ADA Compliance

The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed the assessments in 1994 and found that there were significant areas of non-compliance at M.A. Sablan Elementary. These deficiencies include: accessible route –exterior and interior, parking, curb ramps, doors, toilet rooms, alarms, signage, and library aisles. Budget cost estimated for the prescribed corrective actions totaled \$449,150.

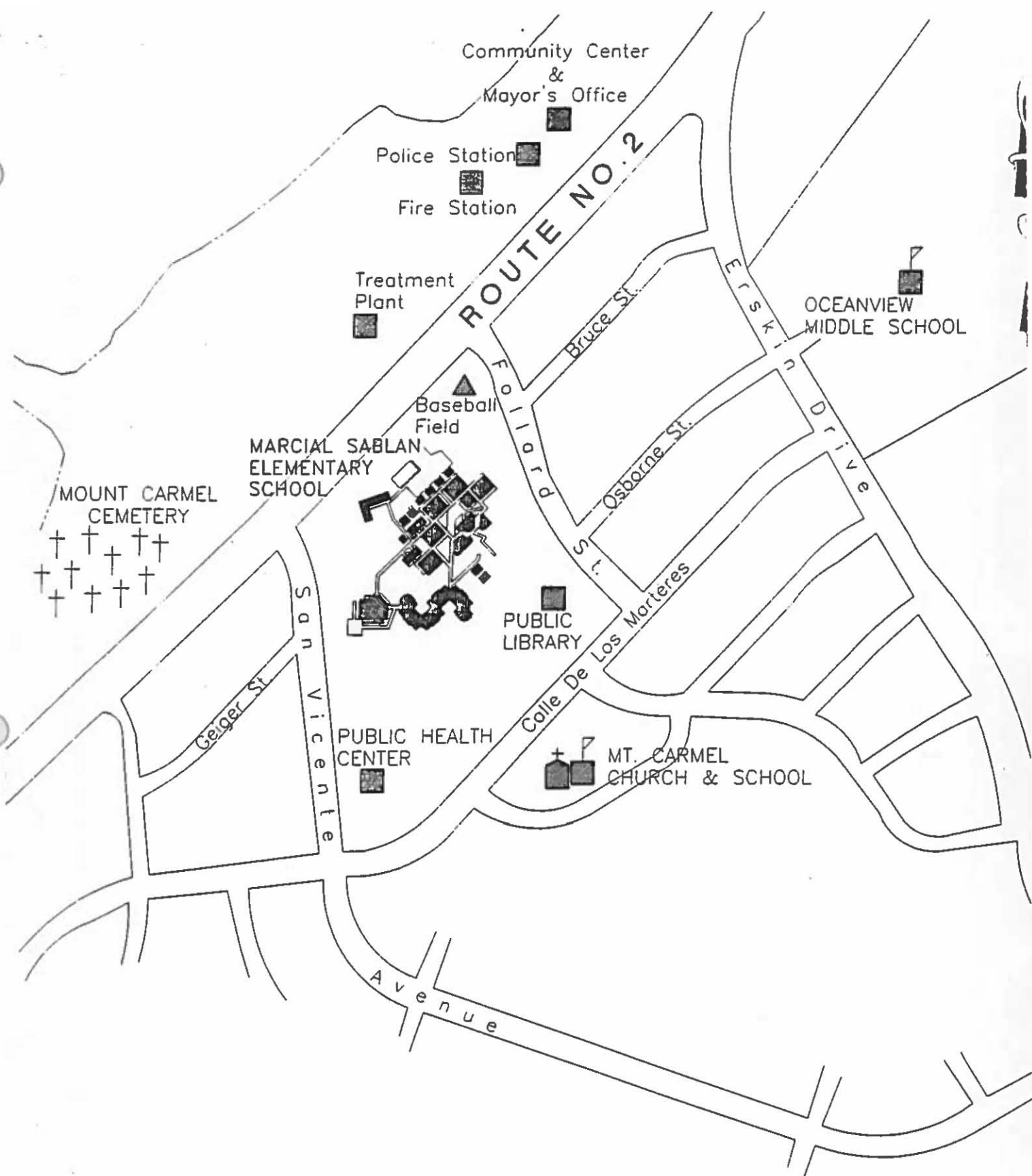
Structural Evaluation

According to Winzler & Kelly Consulting Engineers, the school buildings are deficient to some degree in terms of the structural requirements of the 1991 Uniform Building Code. Evaluated deficiencies range from non-compliant details to inadequate member strength.

Almost all the buildings suffered minor damage from the August 1993 earthquake. Major damage occurred to the concrete canopy between the two-story classroom building and the multipurpose building. The concrete columns supporting this canopy were severely damaged. The canopy was subsequently removed. Cracks in the ceiling beams and in the masonry shear walls of the office/library/computer room were found. The two-story classroom structure suffered cracks in the second floor and the roof slab and cracks in the masonry shear walls. The steel Butler buildings suffered cracks in the short masonry walls between the concrete pedestal supporting the steel frames and cracks in the floor slab. The estimated cost to repair and upgrade the school to substantial compliance with the structural requirements of the 1991 UBC is \$417,000.

Capital Improvement Projects

A capital improvement project priority list was prepared by DOE and is included. Marcial Sablan Elementary has as many temporary classrooms as permanent classrooms. The majority of the temporary rooms are in need of roof repair, and are inadequate in size. A proposed budget of \$300,000 has been slated for repairs during the next five years. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. DOE should decide to develop permanent structures at this school. A master plan should be developed for this school prior to any construction activities.



GUAM PUBLIC SCHOOLS SYSTEM

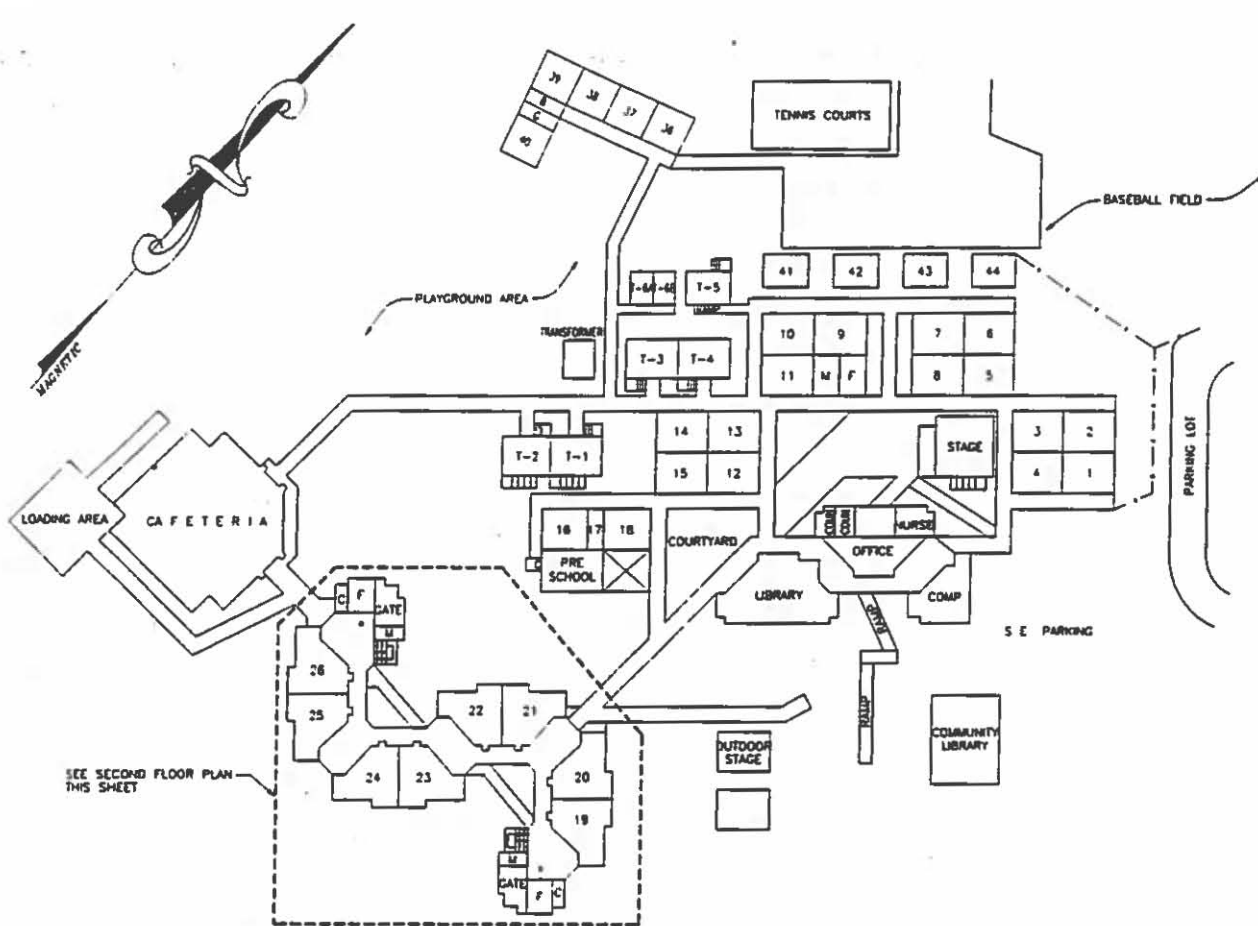
SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

MARCIAL SABLAN ELEMENTARY SCHOOL VICINITY MAP

ST. PROJECT NO. 15381.01

FIGURE 7.1



SITE PLAN - FIRST FLOOR

MARCIAL SABLÁN ELEMENTARY SCHOOL

NO SCALE



SITE PLAN - SECOND FLOOR

MARCIAL SABLÁN ELEMENTARY SCHOOL

NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING 1AA

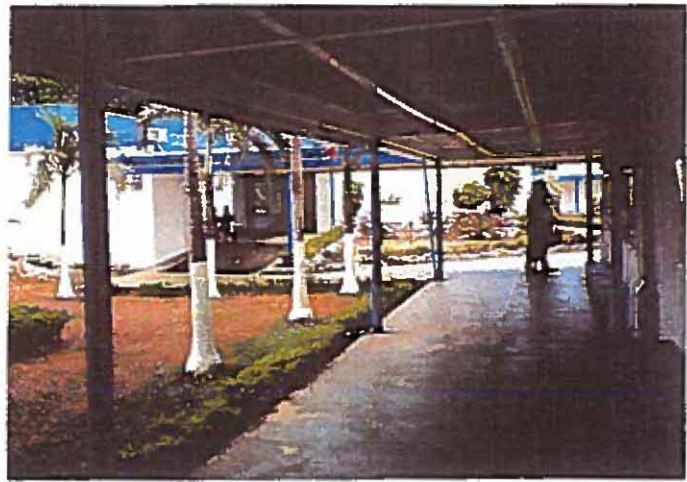
TEN YEAR CAPITAL FACILITIES PLAN

MARCIAL SABLÁN ELEMENTARY SCHOOL SITE PLAN

ET PROJECT NO. 5381.01



1. Interior damage to overhead walkways



2. Covered walkways of butler building



3. Playground and equipment



4. Nicely landscaped area

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Marcial Sablan Elementary School	Agat	1	1	Haya

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	1	X										300,000.00
ADA COMPLIANCE	1	X	X	X	X							448,150.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS	1		X	X								417,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System	2			X								250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	2 1 2	X	X		X		X			X		60,000.00 250,000.00 150,000.00 300,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	3			X	X							180,000.00
ELECTRICAL SYSTEM UPGRADE	1	X										180,000.00
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain	2		X									175,000.00
TOTAL												\$2,711,150.00

MERIZO ELEMENTARY SCHOOL

Background

Merizo Elementary School is located in Pigua on a hilltop overlooking the Cocos Lagoon. The school occupies Lot No. 505-R11, a 264,689 square meter parcel across from the community center, mayor's office and public library. Access to the school is provided through J.A. Cruz Avenue and connects with Route No. 2 at the bottom of the hill.

The school is oriented toward the southeast. A community baseball field and a water tank border the school to the north. Further in the distance, there is construction and site grading for the new Land for the Landless housing subdivision. To the south of the school exists a small residential subdivision. An antenna field and an undeveloped property lie to the west. Figure 8.1 is a vicinity map depicting the relationship between the school and the surrounding area.

Merizo Elementary was built in 1966 and serves the surrounding southern villages. During the 1997/8 school year, the school went into double session to accommodate students from Umatac who were displaced by Typhoon Paka. The 1997-98 enrollment at Merizo Elementary was 334 but was increased by an additional 114 students from F.Q. Sanchez after the Typhoon. There are a total of twenty-five (25) classrooms at the school. A site plan for the school is provided as Figure 8.2. The school's design is similar to other schools on island; flat roof lines, heavy fascias with a simple building design. It is connected to the public water and sewer system.

Physical Condition

Permanent Structures

There are thirteen (13) permanent rooms at the school generally observed to be in good condition. The rooms are made of CMU and have many of the minor problems found at other schools. A unique issue that was noticed at this school was the dry rot of door jambs and the subsequent separation of the jambs from the surrounding masonry. School representatives indicated that there was a problem with roof leaks in isolated locations around the school. Additionally, storm water has leaked into rooms F-6 and F-7 as a result of poor drainage. Overall, paint did not appear to be a problem at the school.

An additional five (5) permanent structures of a unique design are located on a small plateau on the west side of the school. These structures have brick walls capped by a pitched roof comprised of butler style corrugated metal sheets. These rooms have good exteriors although leaks have been reported. There is one fast track room on site and is in good condition. The fast track classroom has had roof leaks in the past. The cafeteria appeared to be in good condition. The library and main office building were reported to have had leaks. According to a school representative, the electrical room has a leaky roof and this condition exposes the electrical equipment to moisture.

The corridor between the main office and the cafeteria becomes flooded during heavy rains. The small area of grass is not capable of discharging storm water during heavy downpours.

Temporary Structures

Seven (7) temporary rooms can be found at Merizo Elementary. Four (4) of these rooms are attached to a permanent wing (D Wing). These rooms are in fair-good condition and are constructed of wood with tin roofs. Many of the sheets of tin are rusted and in need of replacement. The other two (2) rooms are free standing wooden structures and are the same as those found at other schools. Generally, these temporary rooms are in good condition.

Sporting/Recreational Facilities

A small playground is situated between C and D wings. Slides, swings and other playground equipment are present. A basketball court is located in the front of the school. Open areas around the school are used for play activities as well.

School Grounds

The school appeared to be well maintained and generally clean. Wings C and D have most of the schools landscaping with shrubs planted along walkways. A healthy stand of ironwood trees separates the parking lot from the main road. There are many opportunities to add to the landscaping already found at the school that would dramatically improve the visual quality of the school site as a whole.

Access/Parking

There are a total of twenty-seven (27) parking stalls in the front of the school. An additional four (4) handicapped stalls are found.

Existing School Capacity

The school is a small community school but has had to add temporary classrooms to meet student enrollment. Anticipating new residents upon completion of the Land for the Landless subdivision, it will become necessary to add instructional space to the school to accommodate new students.

ADA Compliance

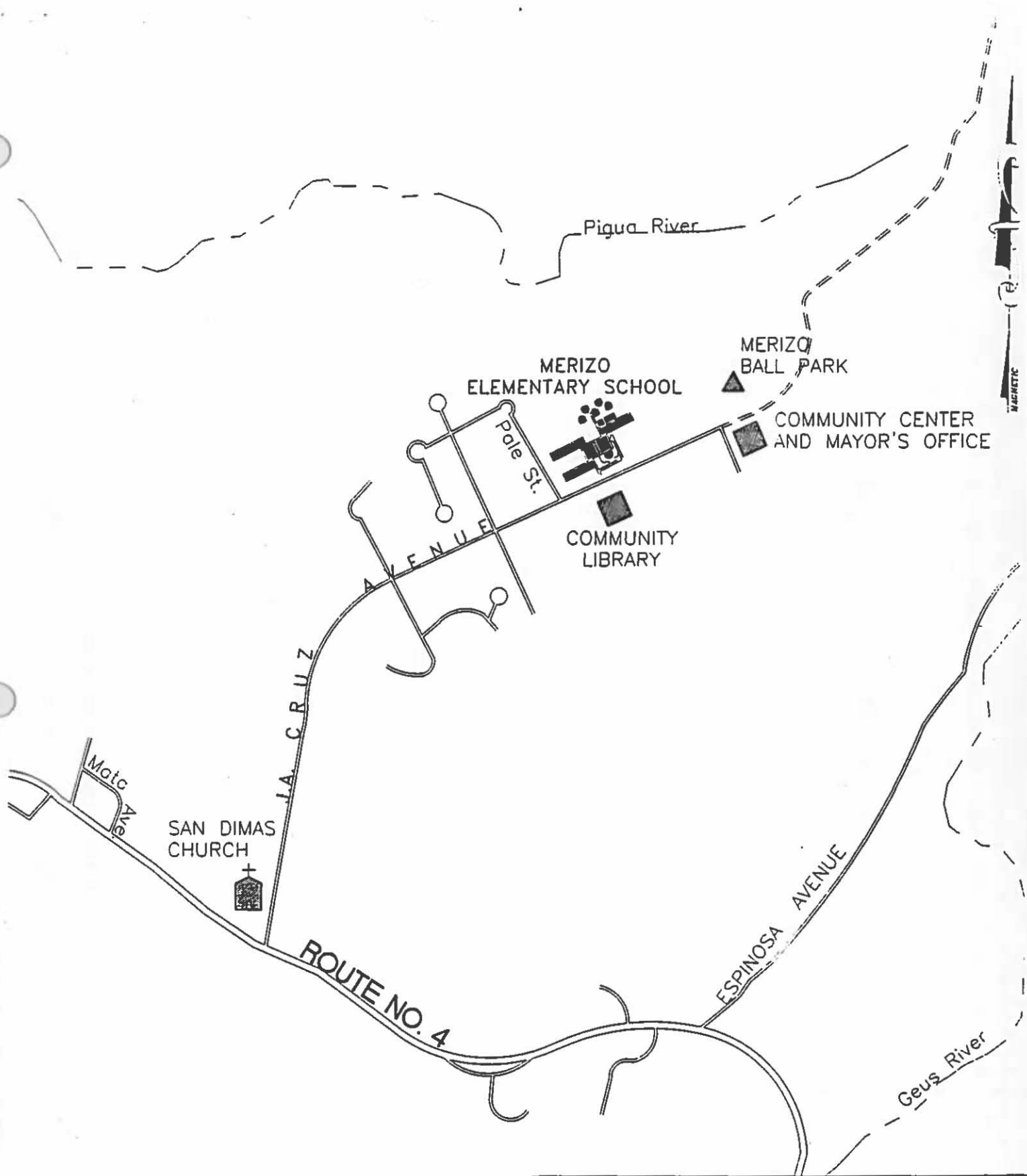
The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed detailed assessments in 1994 and found that there were significant areas of non compliance at Merizo Elementary. These deficiencies include: accessible route –exterior and interior, parking, ramps, handrails, stairs, doors, toilet rooms, alarms, signage, assembly areas, and library stacks. Budget cost estimated for the prescribed corrective actions totaled \$289,000.

Structural Evaluation

Merizo Elementary is deficient to some degree in terms of structural requirements of the 1991 UBC. Evaluated deficiencies range from non-compliant materials and details to inadequate member strength. Some of the classroom buildings sustained minor structural damage from the August 1993 earthquake. Most of the damage consisted of hairline cracking in concrete beams and columns. Preliminary construction cost estimate to repair and upgrade facility to substantial compliance with the structural requirements of the 1991 UBC totals \$542,600.

Capital Improvement Projects

A capital improvement project priority list was prepared by DOE and is included. Merizo Elementary has a high percentage of temporary classrooms. Cost estimates in the amount of \$250,000 have been slated for temporary classroom repairs during the next five years. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. The projected population growth for this area will require additional classrooms to accommodate the growth. This school has currently an enrollment total below the legislated design enrollment. DOE has an opportunity to take a proactive step in developing this school to meet the future needs of its student population. DOE should decide to develop permanent structures at this school. A master plan should be developed for this school prior to any construction activities.



GUAM PUBLIC SCHOOLS SYSTEM

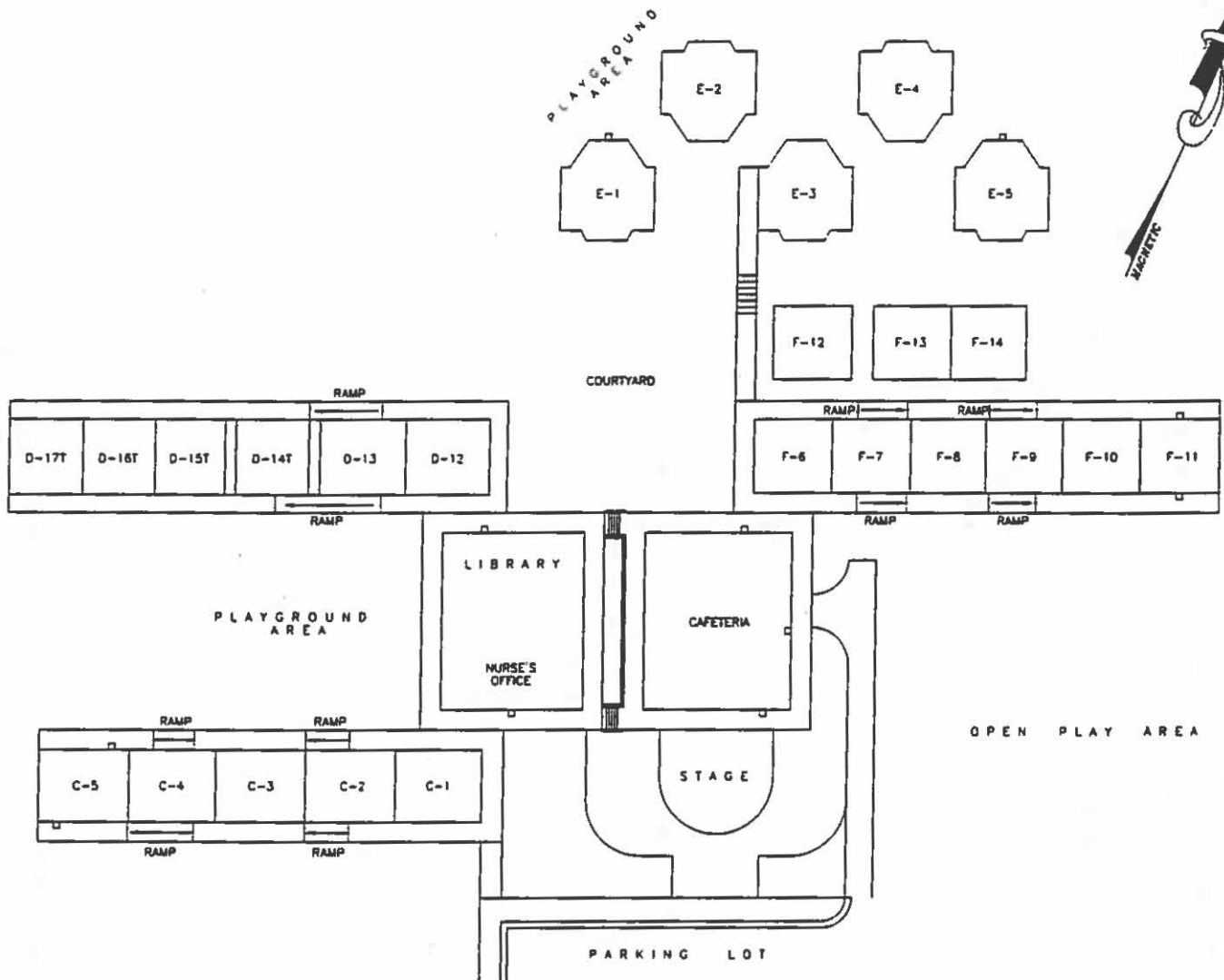
SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

MERIZO ELEMENTARY SCHOOL VICINITY MAP

ET PROJECT NO. 25381-01

FIGURE 8.1



SITE PLAN

MERIZO ELEMENTARY SCHOOL: NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MA

TEN YEAR CAPITAL FACILITIES PLAN

MERIZO ELEMENTARY SCHOOL SITE PLAN

ET PROJECT NO. 15351.01



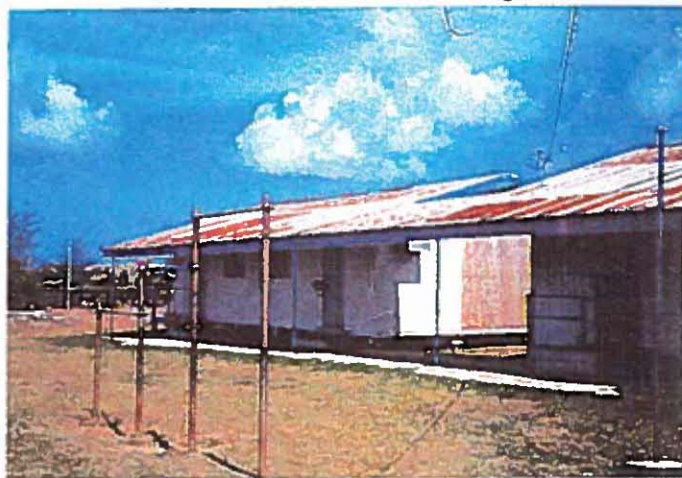
1. Covered walk to entrance of school



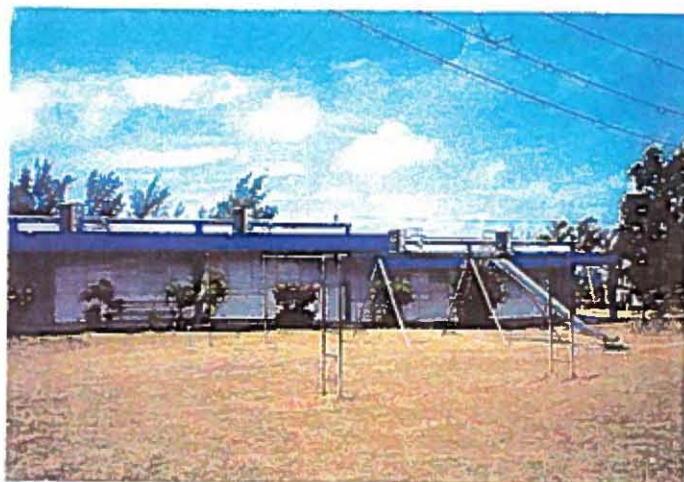
2. Exterior view of main building



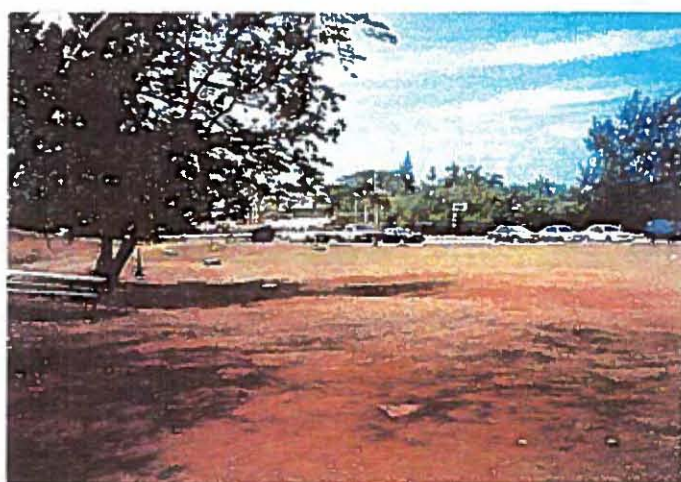
3. Bricked wall with pitch room classroom



4. Free standing wooded temporary classrooms with rusted tin



5. Playground



6. Play area



7. Exterior view of main building



8. Covered hallways and rear view of school building

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Merizo Elementary School	Merizo	1	1	Haya

[illegible]

MIDDLE SCHOOLS

VICENTE S. A. BENAVENTE MIDDLE SCHOOL

L.P UNTALAN MIDDLE SCHOOL

AGUEDA JOHNSTON MIDDLE SCHOOL

OCEANVIEW MIDDLE SCHOOL

JOSE L. G. RIOS MIDDLE SCHOOL

VICENTE S. A. BENAVENTE MIDDLE SCHOOL

Background

V. S.A. Benavente (Dededo) Middle School is located within Dededo Village on the corner of Santa Monica Avenue and Consolacion Street. The campus occupies Lot No. 10114-New-1, a rectangular shaped parcel encompassing a total of 17 acres. The school is oriented north-south and generally slopes from north to southwest. The 1997/98 school year enrollment was 1,453 making it the largest single session middle school on the island. Classroom size is controlled by the Board-Union contract: 28 students per teacher for general education classes, 12 students per teacher for Special Education and LOTE and GATE at 15 students per teacher. Figure 9.1 is a vicinity map showing the location of the school and its relationship to the surrounding community.

V. S.A. Benavente (Dededo) Middle School was constructed in 1964 of a mixture of pre-cast concrete panels and CMU. The school consists of four (4) independent concrete structures. Some of the additions made to the school over the years have included the expansion of the cafeteria and library, installation of temporary classroom structures and interconnected covered walkways and a new two-story wing constructed of CMU. New dining facilities were constructed in 1994. There are a total of seventy-one (71) permanent rooms and twenty-six (26) temporary rooms on campus. The school is connected to the public water and sewer system. Figure 9.2 is an updated site plan depicting the location and layout of school facilities.

The temporary rooms on campus can be classified into two distinct types: Butler-type structures, and wood and tin structures. The Butler structures incorporate a stem wall that runs the perimeter of the structure and measures approximately two feet high.

Physical Condition

Permanent Structures

Generally the permanent structures within the school were found to be in fair condition. Observed deficiencies typically fall into one of three categories; those which are a result of prolonged use, overcrowding, limited maintenance; and, those problems related to earthquakes and the recent Super Typhoon Paka.

V. S.A. Benavente (Dededo) Middle School has had to accommodate double sessions in the past. In recent years, upgrades were conducted to expand the cafeteria, library and erect temporary classrooms in order to keep pace with the growth in the surrounding community. The permanent structures show the wear and tear commonly seen in facilities that are required to handle loads significantly in excess of design capacity.

Peeling and stained paint, damaged windows, and water-damaged tiles were found in different places throughout the campus. It is unclear if these problems are a result of the typhoon, earthquakes, age and maintenance shortfalls or some combination of all three.

The new building annex situated along the western part of the school floods when it rains, especially the open hallways. This problem occurs due to inadequate slope of the adjacent ground, which should be sloping away from the building and the lack of weep holes along a concrete wall that separates the hallway ground. These weep holes drain excess water away from the hallway to the adjacent ground. The electrical lights at the computer room do not work and condensation occurs whenever the air conditioning system is turned off. The 'B' building shows cracks and leaks on the structural members, notably the ceiling. The cracks and leaks expose the reinforcing bars to rust. School officials have complained about rat infestation in the drop ceiling. The school does not have a working fire and security system.

Fast track classrooms, are the free standing pre-cast concrete structures located at the southeast corner of the campus. These rooms represent some of the latest expansion efforts and are only a few years old. A school official expressed some concern over the erosion of foundation material by rain coming from the roofs. Water seeps into the building from

the outside. The problem is caused from inadequate sloping of the adjacent ground. Walls and foundation joints lack joint sealant to provide tight construction and the finished building floor is not elevated from adjacent grounds. The joints between walls and roof, doors and windows lack proper sealant and therefore leaks when it rains.

Temporary Structures

Like many other schools on island, a majority of the temporary rooms were reported to have problems with leaking roofs. This has resulted in water damage to floors, paint peeling and problems with electrical circuits. Gutters, light fixtures and external paneling were some of the elements damaged during the recent typhoon. In all, the temporary structures are in fair condition. Some rooms are in poorer condition than others. The varying conditions can, in part, be attributed to differences in age and construction materials.

The canopies supported by steel structural members along the Butler buildings suffer leaks and rust on the structural members. School officials are concerned that the metal framing of the canopies pose a potential unsafe environment because students tend to hang on the metal furrings. In addition to the roof leaks, the vents on the outside roof ceiling are not secure allowing birds to make it their home.

Sporting/Recreational Facilities

V. S.A. Benavente (Dededo) Middle School has a gymnasium. The gym is located at the rear of the school and is in fair condition. The building is in need of a paint and repair of its equipment. The basketball score board is not working and the window louvers need to be replaced. Behind the gym at the south side of the campus there are open areas used for physical education activities and a baseball field. A volleyball court area was present outside the cafeteria area. Design for a track and field area is completed. However, no funds have been identified.

A school representative indicated that much of the storm water generated on campus was channeled to a low spot at the southwest corner of the open field. When the site assessment was conducted, the open fields appeared to be suffering from the drought with patches of bare ground.

School Grounds

Very little landscaping was present at V. S.A. Benavente (Dededo) Middle School. Some shrubs and trees were observed throughout the campus and there were a few small shrubs lining the corridors outside the "A"- series temporary buildings at the front of the school. Several large trees located in the buffer zone in front of the school did survive the typhoon and appear to be recovering well.

Access/Parking

Santa Monica Avenue provides direct access to Dededo Middle School and Wettengel Elementary nearby. This road also serves as one of the village's primary collectors, directing the traffic flow between village streets and on to Marine Drive. A center turning lane on Santa Monica Avenue established in recent years, has promoted improved traffic flow particularly during morning rush hours. However, traffic congestion will continue because of the school's sheer size and location and its proximity to other public facilities and major population centers.

A total of one hundred and twenty three (123) standard parking stalls and five (5) handicap stalls are found on campus. These stalls are located in a main parking lot at the front of the school and in a smaller lot off to the side of the Administration Building. Shade offered by trees in a buffer area at the front of the school attracted several cars even though there was ample parking available during the site assessment.

Existing School Capacity

This middle school has been expanded to meet Guam's largest village population. The size of the school exceeds the legislated requirement for middle schools slated for 700 students. Within the next five years, several large housing subdivision including the Lada Estate (400 units), and the Chamorro Land Trust (2000+ units) properties are expected to increase student enrollment for the area.

V. S.A. Benavente (Dededo) Middle School has a large campus area sufficient to accommodate expansion of support facilities for the *existing* student population. Any future expansion should consider keeping the facilities within close proximity to each other in order to preserve the open recreation areas at the rear of the school.

Traffic congestion is noticeable especially with the on-going construction of residential subdivision of the Lada Estate. School administrators are concerned with the high traffic volume and speeding along Santa Monica during school hours. Traffic controls as well as crosswalks are needed to ensure the safety of the students who have to cross the main road.

There is no school capital improvement program in place and thus there is no preventive maintenance for the facilities. The wear and tear on the school facilities is further compounded due to a large student population attending the school. Graffiti is also a major problem. The staff is scheduled around a 24-hour watch to reduce vandalism and graffiti.

ADA Compliance

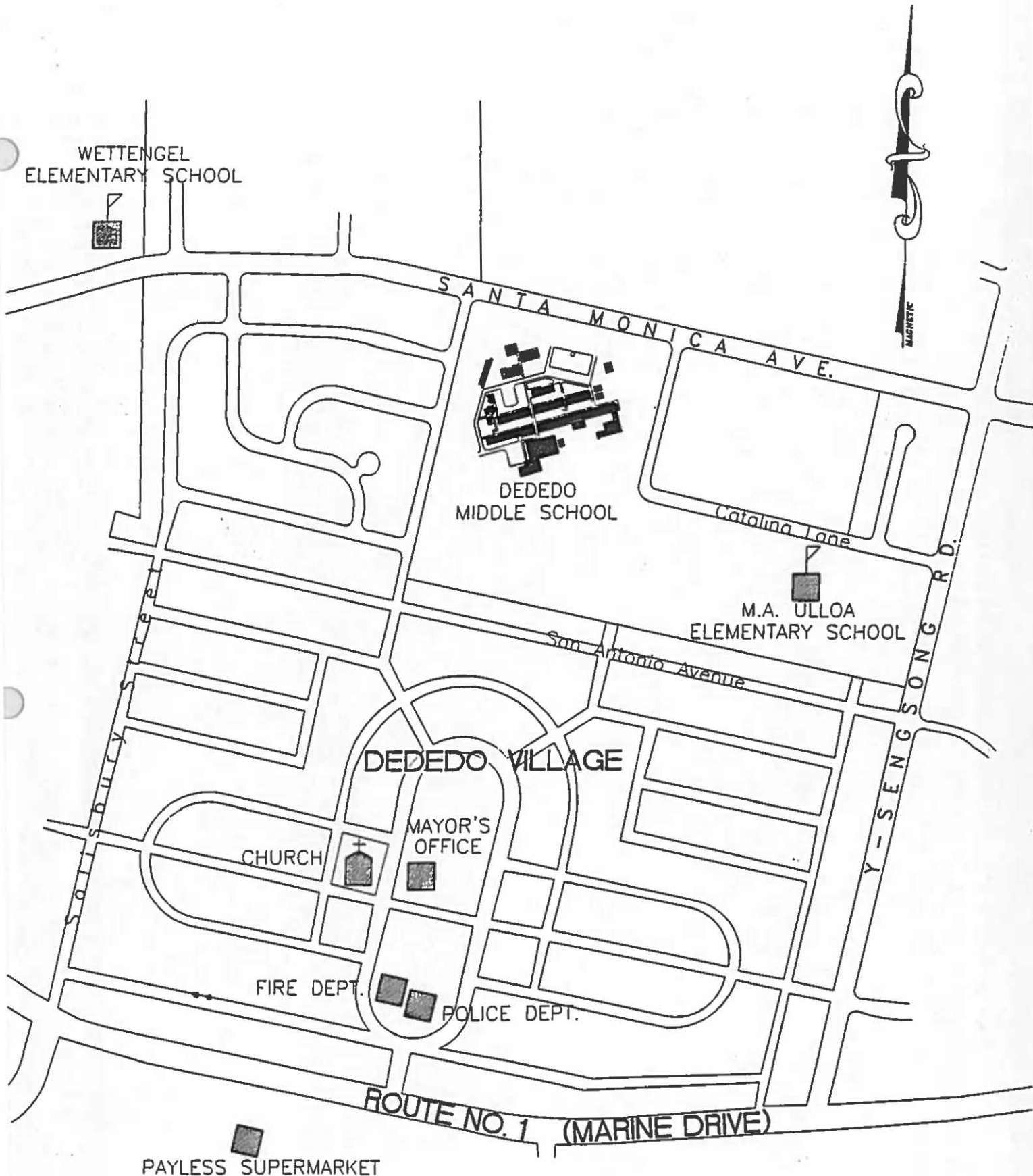
The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed the assessments in 1994 and found that there were significant areas of non compliance at Dededo Middle. These deficiencies include: accessible route —exterior and interior, parking, curb ramps, ramps, handrails, elevators, stairs, doors, toilet rooms, alarms, signage, and library stacks aisles. Budget cost estimated for the prescribed corrective actions totaled \$427,685. In recent years, ramps and handrails have been installed to comply with American with Disabilities Act (ADA) requirements.

Structural Analysis

The April 1994 Structural Analysis conducted by EMPSCO Engineering found that primary structure system is adequately defined and considered adequate in terms of seismic performance. There were no unusual plan irregularities in the configuration of the building which will result in the seismic vulnerability of the structure during an earthquake. The cast in place (C.I.P.) concrete diaphragms were judged to be seismically adequate. The vertical lateral load resisting elements are seismically adequate. Test results obtained from core tests showed a consistent and satisfactory conformance with the requirements in the original design assumptions. Analytical evaluations indicate the ability of all critical elements of the structure to support all present and anticipated loads based on current code requirements. Building foundations were found to be considerably stable. It is further recommended that concrete repairs for cracks and spalls be implemented as part of the structural rehabilitation program. Preliminary construction cost estimate for repairs is \$27,000.

Capital Improvement Projects

Over \$3.3 million in capital improvement projects, including the rehabilitation of temporary buildings, identified by DOE are listed. Over 25 per cent of the classrooms are temporary rooms. The temporary rooms need new roofs, and are inadequate in size. A proposed budget of \$480,000 has been slated for replacement of the temporary buildings during the next five years. In addition, \$450,000 is budgeted for the replacement of the Butler buildings. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. DOE should develop permanent structures at this school. A master plan that includes the proposed CIP improvements and layout that organizes the overall facilities, and improves interior and exterior circulation should be developed.



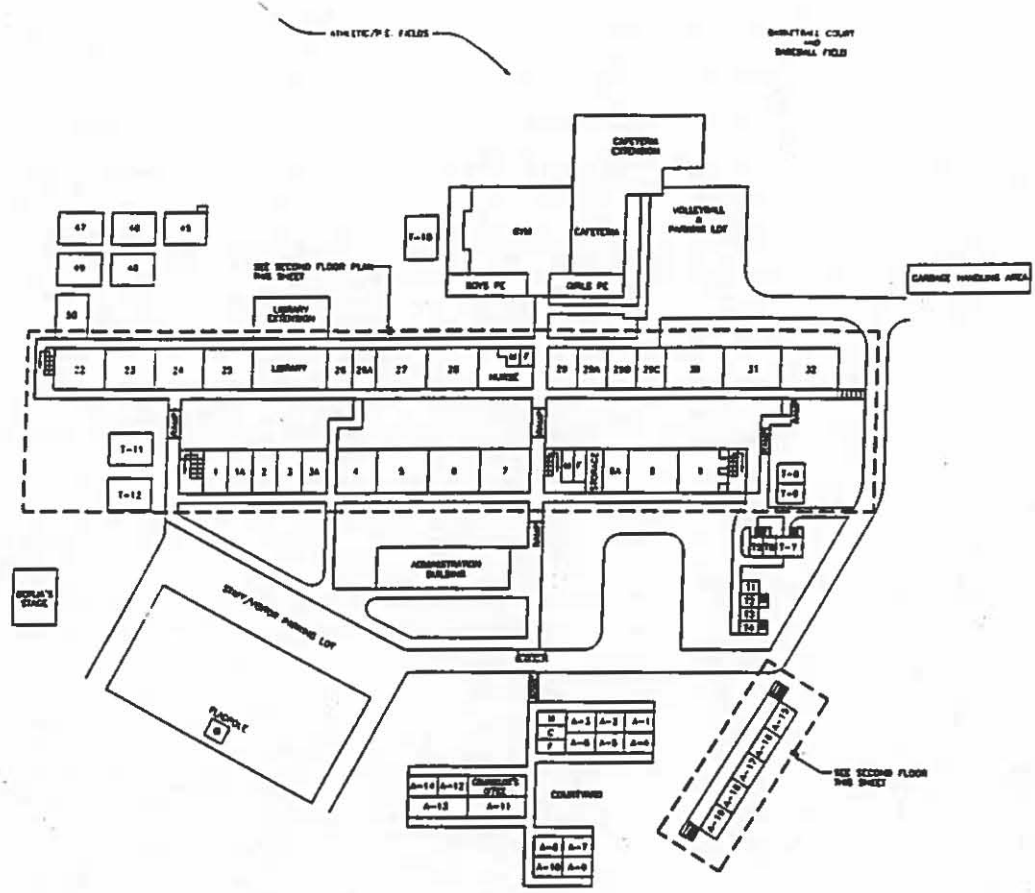
GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

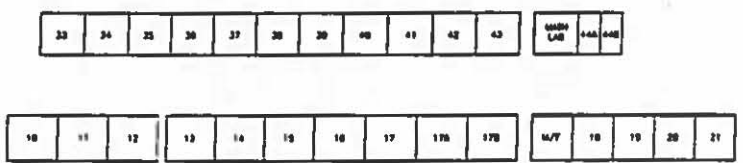
TEN YEAR CAPITAL FACILITIES PLAN

DEDEDO MIDDLE SCHOOL VICINITY MAP

ET PROJECT NO. 25381.01



SITE PLAN - FIRST FLOOR
DEDEDO MIDDLE SCHOOL NO SCALE



SITE PLAN - SECOND FLOOR
DEDEDO MIDDLE SCHOOL NO SCALE

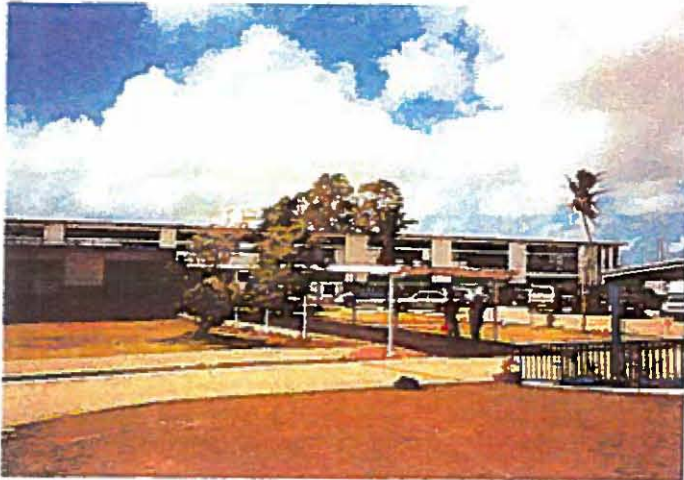
GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

**DEDEDO MIDDLE SCHOOL
SITE PLAN**

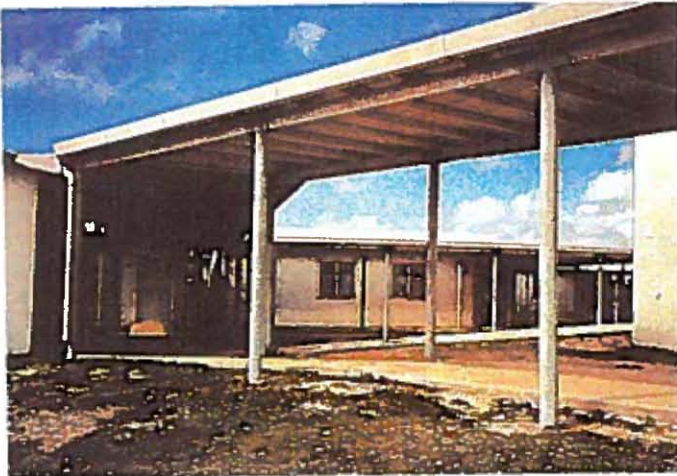
ET PROJECT NO. 25381-01



1. Covered walkway and exterior view of building



2. New building annex



3. Interconnected covered walkways



4. Temporary classrooms



5. Sideview of main building



6. Peeling paint and algae covered building



7. Interior hallways



8. Exterior view of buildings



9. Open area field



10. Outdoor P.E. activities



11. View of parking lot



12. School parking area

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Vicente S.A. Benavente Middle School	Dededo	2	2	Lagu

[illegible]

L. P. UNTALAN MIDDLE SCHOOL

Background

L. P. Untalan Middle School is located in the village of Barrigada 1,500 feet south of the Routes 10,16, and 8 intersection. The school was constructed in 1958 and occupies Lot No. 5387 with a total of 11 acres. Total school enrollment for the 1997-98 school year was recorded as being 1,098 students. There are sixty-four (64) classrooms used for instruction.

The school has grown significantly in the past as evidenced by the thirteen (13) temporary rooms and ten (10) fast track classrooms in existence. It is the third largest middle school behind Dededo and F.B. Leon Guererro. Single family homes exist on the north and east side of the school and Wendy's Restaurant is to the south. Route 10 runs along the west perimeter of the school. Figure 10.1 is a vicinity map showing the school location and the surrounding area. Figure 10.2 is an updated site plan.

The school is not connected to the public sewer system. Design has been completed to connect to the sewer system, however has yet to be funded.

Physical Condition

Permanent Structures

There are forty-one (41) permanent rooms constructed of CMU. Of this amount, thirty-four (34) rooms were built as part of the original campus and were generally found to be in fair-good condition. Isolated cases of leaks between the roof and wall joints in some of the rooms were the most serious problems reported. Paint was seen peeling in some of the areas where it leaks. Other building problems include plaster cracks and algae growth on the exterior of the structures

Seven (7) rooms, 33 through 35 and, 37 through 40, are relatively new CMU additions and are similar in format to additions found at other schools. School representatives report some problems with leaks in the roof. The exterior of the buildings was found to be in good condition.

Ten (10) fast track classrooms span the rear of the campus and include rooms 41 through 50. According to school officials, there are leaks along the foundations. This condition persists for two reasons - storm water falling from the roofs is not properly channeled but instead is caught between the sidewalk and the walls and the rooms are not elevated to allow drainage away from the structures. The exterior rooms were found to be in fair-good condition. Minor cracks on the wall were observed. The cafeteria equipment used for food preparation is either broken or obsolete.

Cracks are found on the exteriors of most fast tracks around the island. These cracks are a result of school personnel forcing nails into the exterior to hold up plywood and other material to guard against window failure during typhoons. Although this practice has a limited impact on the overall integrity of the structure, they leave a very negative visual impression.

Temporary Structures

Another thirteen (13) rooms at Untalan Middle are constructed as temporaries. There are ten (10) wood and tin temporary rooms spread out across the campus. These rooms typically are not durable as compared to the butler style rooms. The condition of these rooms ranged from poor to fair. One room T-8 has been condemned due in part to damage sustained from Typhoon Paka, and therefore was not included in the inventory. There are two (2) butler style rooms (T-2 and T-3) at the northeast portion of the school. These rooms were found to be in good condition. The temporary classrooms are small compared to the permanent rooms. As discussed above, leaks are also predominant in several of the temporary rooms. The buildings have been affected by the humidity and wet condition impacting the electrical outlets and the overall appearance of the room.

Sporting/Recreational Facilities

Untalan Middle School has an indoor gymnasium made of butler style corrugated sheet metal over steel framing (See Exhibit 10.3). The Boy's and Girl's locker rooms are constructed of CMU. The gym sustained some damage from the typhoon and leaks from the roof. During the site assessment, the gym was in full use. The village community uses the gym for organized sports activities and for social events.

Outside the gym, opposite the locker rooms is a volley ball court. At the back of the school is an open field with soccer goals and some portable bleachers as well as a baseball backstop. No lighting is present at these outside facilities. Exhibit 10.4 shows the fields and the volleyball court.

Trash facilities are located at the entrance to the gym. An open storage staging area exists beside the entrance to the gym where old furniture, metal debris and other materials are stored. School officials are trying to remove the material but have no where to move it to. Efforts to relocate the trash facility to an area in the rear of the building would be ideal. However, there is no access in the rear for vehicles to pick up the trash.

School Grounds

The recent typhoon and the present drought have had a serious impact on landscaping at all schools. Several large flame trees at the school had to be heavily pruned or removed all together. Still, some trees remain in different locations around the school. Most of the trees at the front of the school are recovering well. Isolated examples of landscaping were observed throughout the school. Overall the school appeared adequately maintained. There is significant potential for landscaping improvement at this campus.

Access/Parking

Access to the school is directly off of Route 10. Two gates are present which allow flow through the main parking and pull-up area. There is a center turning lane on Route 10. During morning rush hours the area is quite congested as motorists head to Agana and Tiyan to work while school busses and parents drop kids off at the school entrance. A signalized pedestrian crosswalk is located in front of the school for the safety of those children who live in the surrounding residential area.

There are a total of sixty-nine (69) parking stalls available at the front of the school. Four (4) handicapped parking stalls are provided. Some temporary parking is located at the cafeteria and gym area for employees. A long term parking solution would be preferred and could be located in the rear of the building along with the trash facilities.

Existing School Capacity

With the addition of temporary classrooms, the current layout of Untalan Middle School limits the amount of land available for expansion. The school is so heavily populated that school officials have designed certain areas along the cafeteria and hallways for students to walk one direction to avoid congestion and to insure that students get to class on time. Only a few undeveloped areas remain. Any effort to expand the school with permanent multi- room structures would mean the loss of space currently being used for recreational and sporting facilities.

According to school representatives the campus still uses a septic and leaching field system.

ADA Compliance

The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed the assessments in 1994 and found that there were significant areas of non-compliance at Untalan Middle. These deficiencies include: accessible route –exterior and interior, parking, ramps, handrails, stairs, doors, toilet rooms, alarms, and signage. Budget cost estimated for the prescribed corrective actions totaled \$346,940.

Structural Analysis

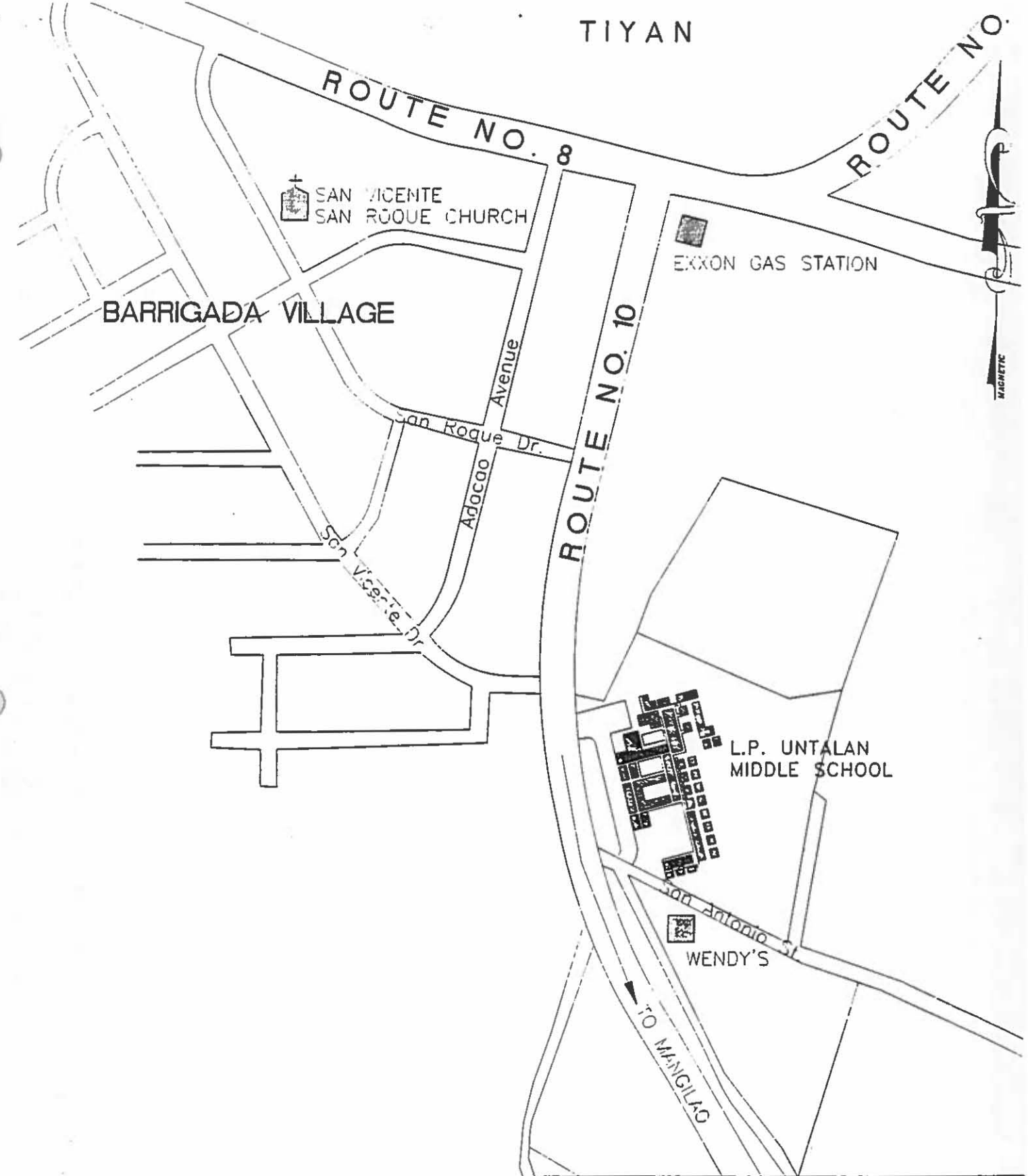
According to the structural analysis performed by GK2 Inc. Consulting Engineer, L. P. Untalan Middle School's original complex is not capable of resisting the 1991 UBC prescribed loads. Two CMU walls in the kitchen exceed the allowable shear stress under Zone 4 1991 UBC seismic loading. GK2 Inc. recommends the replacement of these CMU walls with reinforced concrete walls extending the full height of the structure.

Buildings B, C, D, E, and F do not meet the 1991 UBC provisions for the seismic loading in Zone 4. To meet the seismic requirements, concrete walls should be provided in the longitudinal directions on both sides of the buildings.

Cracks in the concrete roof slabs of the building of the original complex are not of primary structural concerns but will accelerate the deterioration of the structure. Repairing the cracks by epoxy injection and applying an elastomeric roofing on the slab to prevent leaking and to impede further corrosion of the slab reinforcement is recommended. Wood and tin structures should be replaced with more permanent type of construction such as concrete, masonry or steel. Preliminary construction cost estimate for the upgrade work amounts to \$425,000.

Capital Improvement Projects

Over \$3.5 million in capital improvement projects, including the replacement of temporary buildings and the construction of a track and field identified by DOE are listed. There are 23 temporary classrooms. The temporary rooms need new roofs, and are inadequate in size. A cost estimate in the amount of \$400,000 has been identified for replacement of the temporary buildings during the next five years. Additional cost estimates of \$300,000 for the roof repair and termite treatment have been identified. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. DOE should develop permanent structures at this school. Other improvements requested by school officials include an employee parking lot and trash area. These items can be incorporated without much cost in the design for track and field.



GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING M

TEN YEAR CAPITAL FACILITIES PLAN

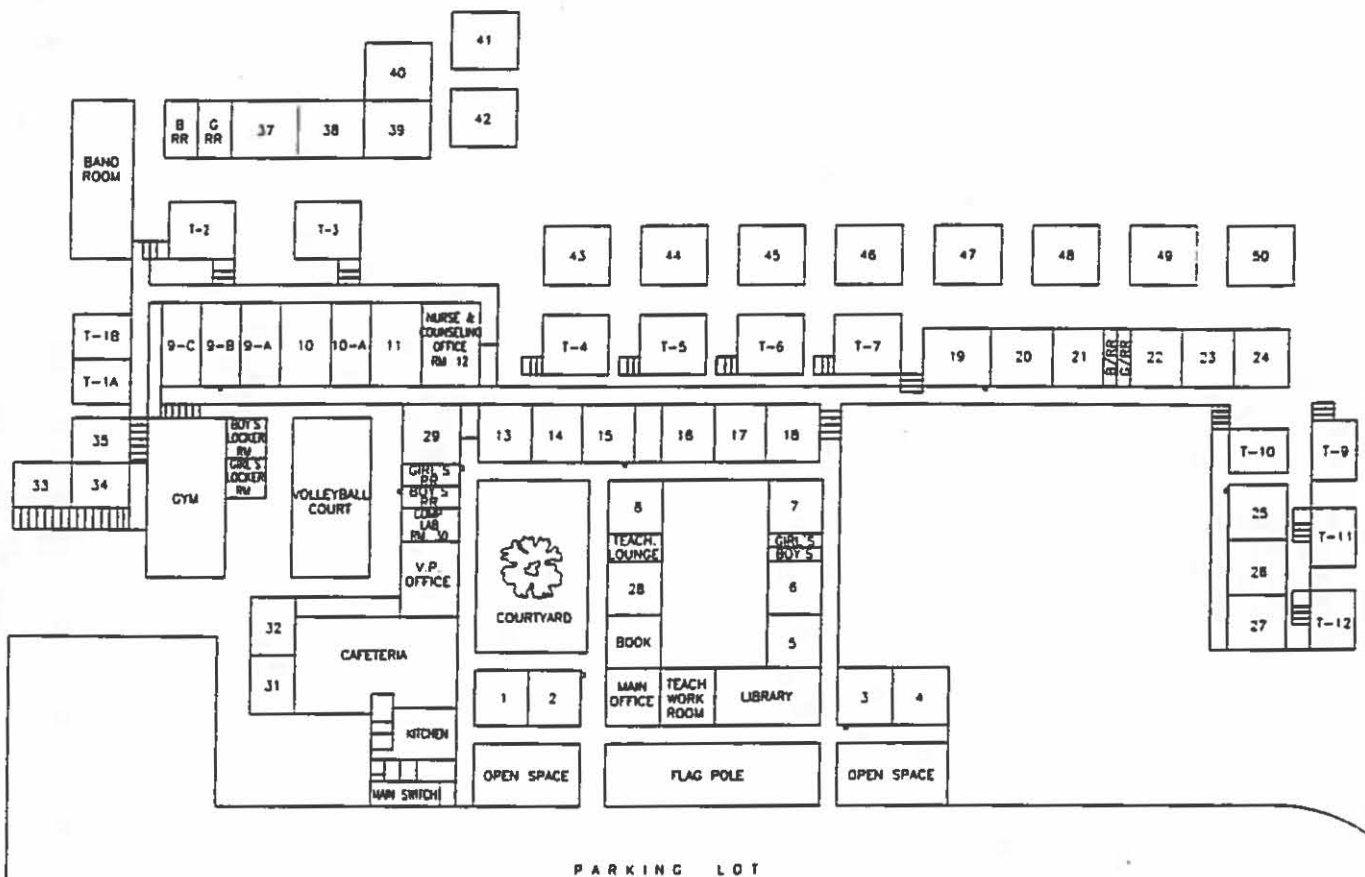
L.P. UNTALAN MIDDLE SCHOOL VICINITY MAP

ST. PROJECT NO. 25321-01

FIGURE 10.1

EARTH TECH





SITE FLOOR PLAN

L. P. UNTALAN MIDDLE SCHOOL: NO SCALE

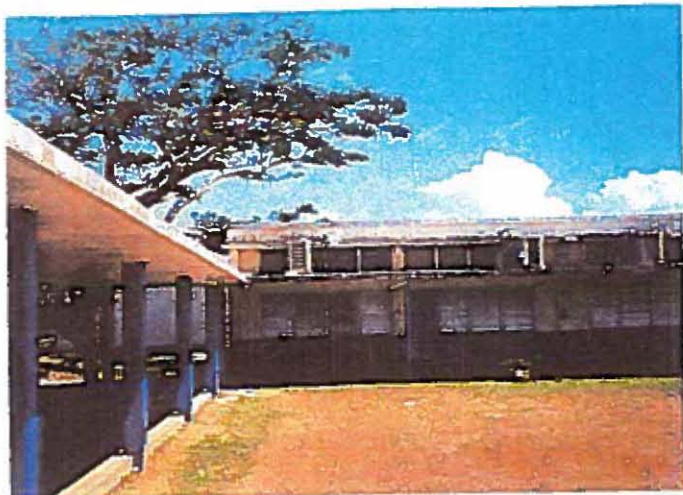
GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MA

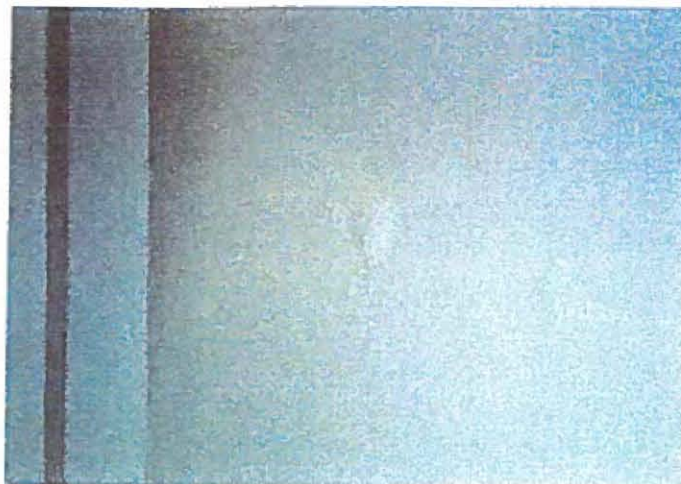
TEN YEAR CAPITAL FACILITIES PLAN

LP. UNTALAN MIDDLE SCHOOL SITE PLAN

ST. REFLECT NO. 15091-01



1. View of classroom building in need of new paint



2. Paint peeling and water leaks



3. Plaster cracks



4. Exterior view of classrooms



5. Exterior view of Butler style gym



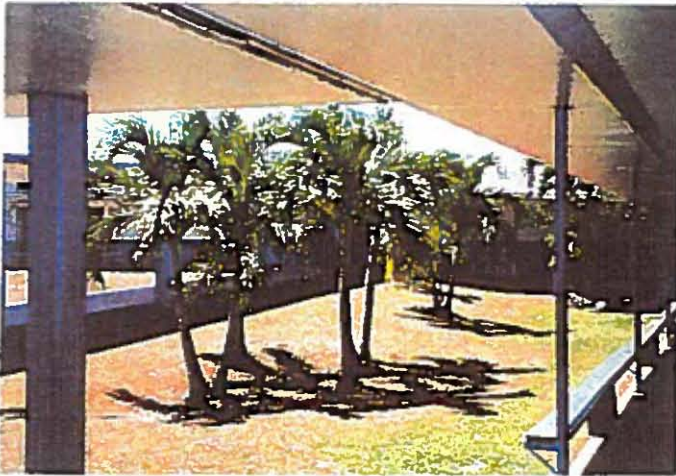
6. Trash container and storage container in front of gym



7. Open field with dilapidated bleachers



8. Open volleyball court



9. School courtyard with seating



10. Entrance to school

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
L. P. Untalan Middle School	Barrigada	2	3	Kattan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	4				X	X						400,000.00
ADA COMPLIANCE												346,940.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	2 3			X	X							800,000.00 150,000.00
STRUCTURAL REPAIRS	1	X	X									425,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System	2		X	X								250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	3 3 4 4 3		X	X			X				X	50,000.00 250,000.00 150,000.00 200,000.00 250,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	4				X	X	X					150,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain	1	X										140,000.00
TOTAL												\$3,561,940.00

AGUEDA JOHNSTON MIDDLE SCHOOL

Background

Agueda Johnston Middle School was built in 1966. The school occupies Lot No. 3395-R2 with a total of 20 acres. Double session was held during 1997/98 school year with students from Piti Middle School attending classes during the afternoon. Super Typhoon Paka destroyed Piti Middle School. A combined enrollment meant that the school temporarily served more than 1,400 students. The school had a double session schedule. There were a total of 938 Agueda Middle School students enrolled at the school during the 1997-1998 academic year. Double session continues into 1999.

The school is located at 192 Dero Road in Ordot behind San Juan De Bautista Church. The Ordot-Chalan Pago Mayor's office is at the front of the school and Ordot Dental Clinic is to the east. Dero Drive provides a link between the school and Route 4 where the intersection is signalized. The area does experience some traffic as it serves the Ordot Dump and the new Leo Palace Resort access road. Figure 11.1 depicts the location of the school relative to the surrounding community. An updated site plan is provided in Figure 11.2.

Physical Condition

Permanent Structures

The original structures at Agueda Johnston Middle school were constructed from a standard set of plans that were also used at Dededo Middle School. The primary building material was CMU. Buildings A, B (two-story), and C comprise the original campus with a total of forty-one (41) classrooms and an administrative office. Like other schools, some classrooms at Agueda have been divided in half to house the growth in student population.

Generally, these structures were assessed to be in fair condition. The rooms and other facilities in Buildings A, B and C show the wear and deterioration common of facilities that have endured typhoons, increases in enrollment, and double sessions. Broken windows and louvers, water damage and peeling paint were some of the problems recorded during the site assessment. The school is in need of a preventive maintenance program to improve the overall appearance and upkeep of the facility.

The quad building at the rear of the school is a two story CMU structure constructed to expand the school from its original capacity. A total of sixteen (16) rooms are located in this structure. A walk-through inspection revealed the facility to be in good condition.

There are five (5) fast track (A1, A2, A3, A4 and A5) type classrooms constructed of pre-cast concrete. This row of rooms is located in the front of the school and is interconnected with the main campus by a covered walkway. These rooms are in fair-good condition.

The cafeteria and gymnasium are also permanent structures. The gym is in poor condition with the wrought iron grilling needing to be placed over all with louvers to prevent intrusion and provide protection to spectators during games. Glass damaged during Typhoon Paka needs replacement. The wall between the cafeteria storage room and the gym should be replaced with hollow blocks. Worn out gym floor were found during the site inspection. The cafeteria has undergone substantial expansion and was found to be in good condition.

Temporary Structures

There are ten (10) temporary rooms on the campus. These rooms are constructed of wood. A group of six (6) rooms along the west side of the school, opposite the soccer field, were found to be in poor condition. These rooms appear to have seen substantial use and do show the effects of past typhoons. More temporary rooms are located on the other side of the school. Room T-2 was assessed to be in fair condition. Three (3) temporary rooms are located in front of T-1 facing the faculty parking lot. According to a school representative, the rooms are in need of electrical improvements and new air-conditioning units. These structures are new and in good condition.

The Jose L.G. Rios (Piti) Middle School Office is housed at a temporary structure at the front of the school. Some typhoon damage to the roof of the building was noted during the site visit. The condition for this structure was recorded as fair.

Sporting/Recreational Facilities

The middle school has a soccer field, and gymnasium. The gym is located at the back of the school and was found to be in fair condition. The soccer field is located at the west extreme of the campus on a raised plateau. Behind the gym is an open play area.

Access/Parking

The main faculty parking lot is in front of the school and directly behind the Mayor's office. There are ninety-one (91) regular and four (4) handicapped parking stalls. Cars were observed in a newly paved lot at the northwest corner of the school. Approximately forty (40) cars were found along one side of the lot and three handicap stalls were delineated. It appears that this lot is used primarily for bus loading and unloading. A small lot for approximately twenty-five (25) vehicles is located next to the cafeteria at the back of the school.

Existing School Capacity

The current capacity of the school is already beyond the legislated design enrollment. Any future expansion should be to improve the existing campus facility. An undeveloped area exists at the rear of the school behind the gym and cafeteria.

ADA Compliance

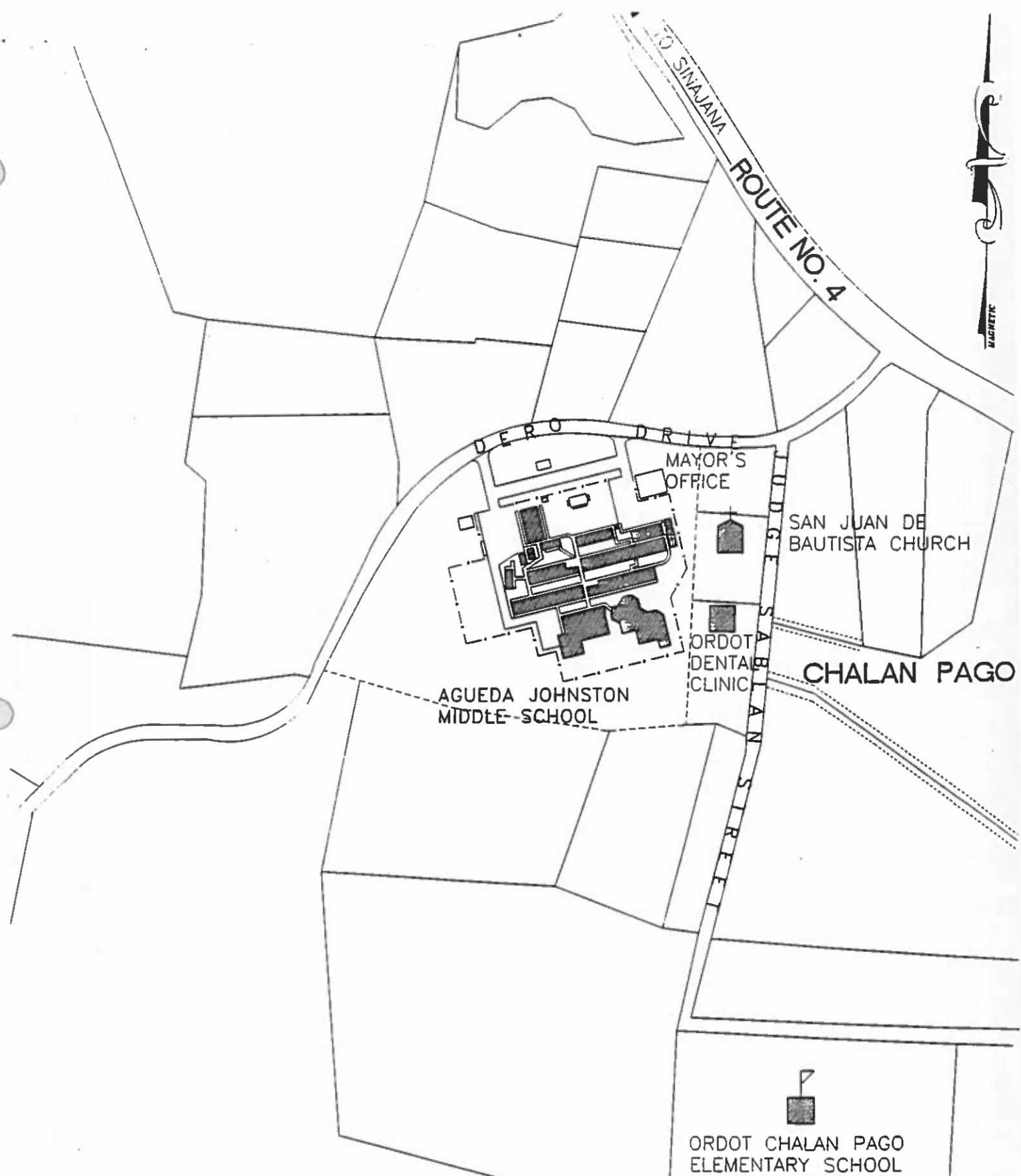
The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed the assessments in 1994 and found that there were significant areas of non-compliance at Agueda Johnston Middle. These deficiencies include: accessible route –exterior and interior, parking, curb ramps, ramps, elevators, stairs, doors, toilet rooms, alarms, and signage. Some improvements have been addressed specifically curb ramps and ramps have been constructed. Budget cost estimated for the prescribed corrective actions totaled \$435,190.

Structural Report

No report available.

Capital Improvement Projects

Over \$2.8 million in capital improvement projects have been identified for Agueda Middle. Construction of a track and field, renovation of the gym, locker rooms and restrooms are the top ticket items. Other CIP improvements include the addition of a nurse's room with a restroom and private rest area. As suggested earlier, a preventive maintenance program should be developed and implemented to provide the necessary upkeep and to improve the overall condition of the school. This is important especially because the school is under double sessions. Handrails need to be replaced throughout the school facility. The school needs major renovation work to include walls. Tiles need to be totally replaced in the B and C Wings. Drainage systems are needed to prevent stagnant water accumulating around the buildings. SPED classrooms are too small for the Resource Room teachers. T-2 through T-4 need major renovation. The rooms are in poor condition.



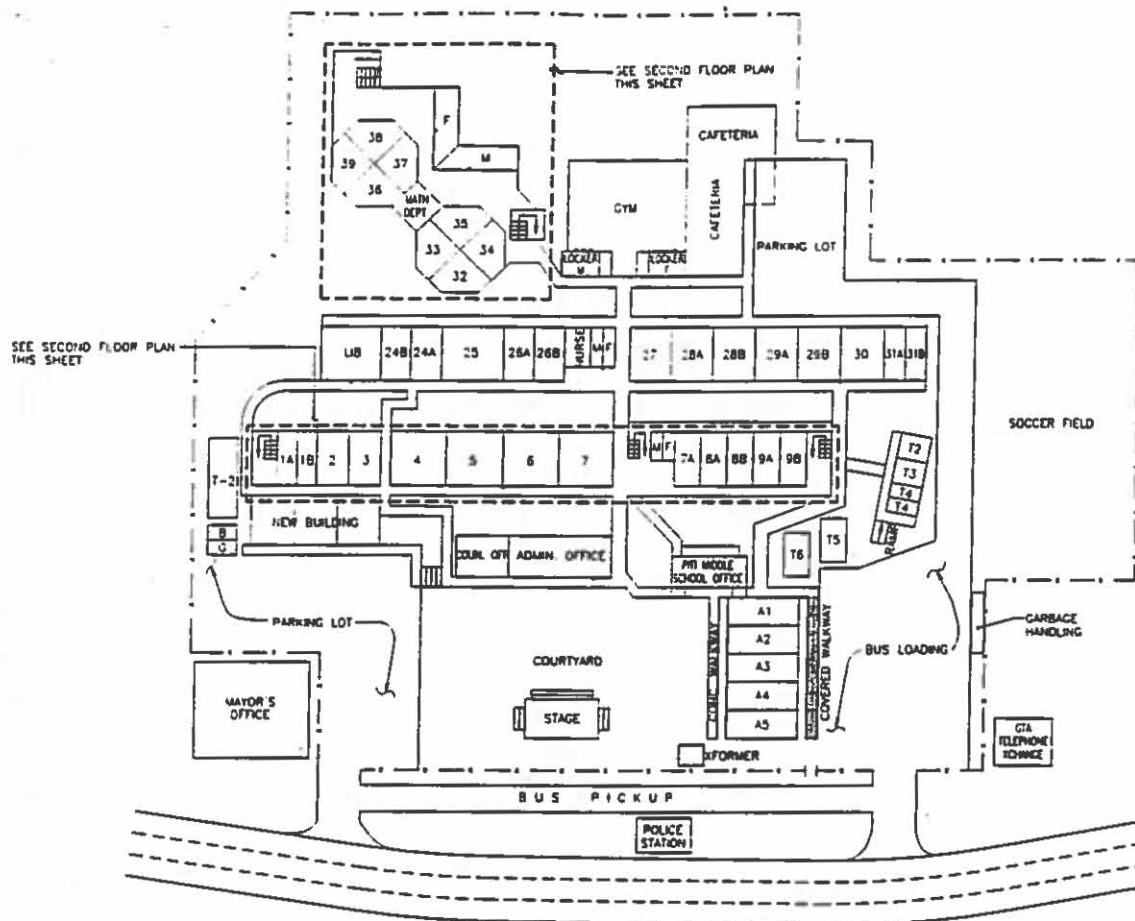
GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MA

TEN YEAR CAPITAL FACILITIES PLAN

AGUEDA JOHNSTON MIDDLE SCHOOL VICINITY MAP

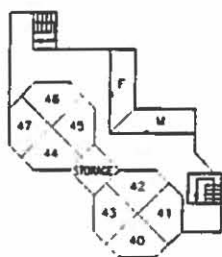
ET PROJECT NO. 20131.01



SITE PLAN - FIRST FLOOR

AGUEDA JOHNSTON MIDDLE SCHOOL

NO SCALE



SITE PLAN - SECOND FLOOR

AGUEDA JOHNSTON MIDDLE SCHOOL

NO SCALE

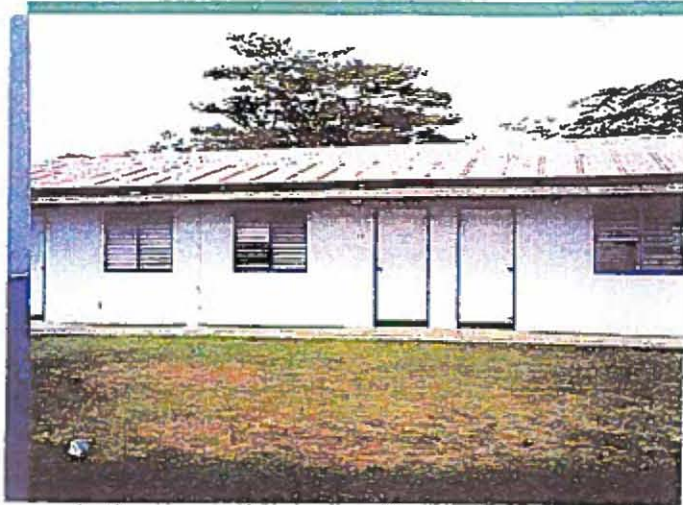
GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING 14

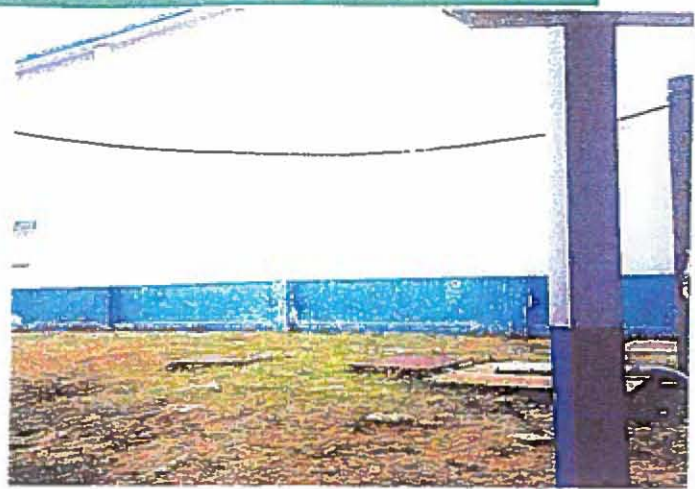
TEN YEAR CAPITAL FACILITIES PLAN

AGUEDA JOHNSTON MIDDLE SCHOOL SITE PLAN

ET PROJECT NO. 25381-01



1. Temporary classrooms with rusted roof and walls



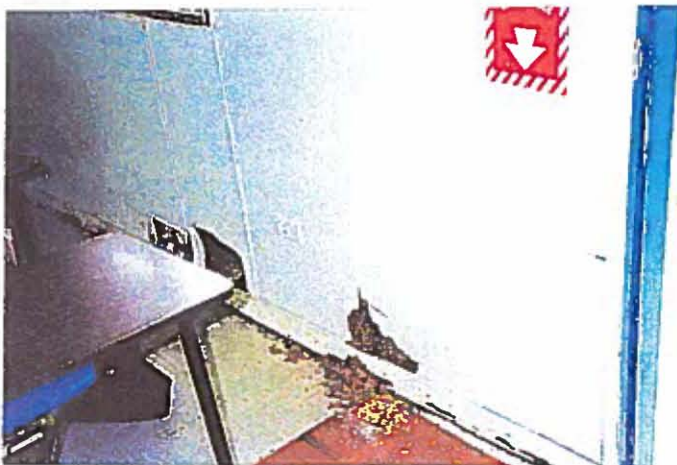
2. Cracks are found in the walls of main building



3. Broken louvers and windows flank the main building



4. Drainage problem caused by inadequate storm drain



5. Termites infested classroom walls



6. Broken louvers and gym bleachers in need of repair

School Name	Location	Type	Region	Proposed School District
Agueda I Johnston Middle School	Ordof/Sinalana	2	3	Kattan

Inventory and Assessment Report

OCEANVIEW MIDDLE SCHOOL

Background

Oceanview Middle School is located in the village of Agat and is served by 184 Erskin Drive access to the school from Route 2. The campus is situated on Lot No. 442 with a total area of 27 acres. The school property straddles the boundary between Old Agat and New Agat. The property overlooks Agat Bay and slopes east to west toward the ocean. Residential areas are on the west and south sides of the school while the neighboring properties to the north and east is largely undeveloped. Figure 12.1 is a vicinity map depicting the location of the school.

Oceanview Middle School was constructed in 1959 using CMU as the primary building material. In order to meet the growth in enrollment and expand the number of classrooms, various temporary room configurations were installed. Some of the temporary rooms were added as an entire integrated wings while others are stand-alone classrooms. Figure 12.2 is an updated site plan for the school.

Enrollment for the 1997-98 school year stands at 677 middle school students. In 1997, the school was converted from a high school into a middle school. High school students are now attending the newly completed Southern High School. As a middle school, the school has excess capacity since enrollment has dropped from 947 (when it was a high school) to 677 students in 1997.

Physical Condition

Permanent Structures

There are a total of sixty-one (61) permanent rooms on campus. Oceanview Middle School is in serious need of a fresh coat of paint as large areas are peeling throughout the school. The condition of the paint gives the school a very poor appearance. Typhoon Paka was probably responsible for much of the damage to the exterior of the campus. Exterior damage to walls, light fixtures, windows and lamp posts were some examples of typhoon damage.

The campus has been expanded in the past, in part, through the development of stand alone pre-cast concrete rooms. Eleven (11) pre-cast concrete rooms (H-800 through H-810), often referred to as fast track buildings were assembled in the front of the school away from the main facilities. These rooms were found to be in fair-good condition. Problems with peeling paint and periodic flooding due to a lack of storm water channels were the most pressing concerns reported by school officials. These classrooms do not have restroom facilities to support the students while in the area. Students need to go to the main building to use the restrooms. There are no covered walkways to connect these classrooms to the main building. When it rains, students are caught in the rain. School officials have also identified this area as safe haven for students skipping classes because it is away from the main campus and from supervision. Other permanent structures including administrative offices, cafeteria, kitchen and lounge were in fair - good condition with the need for new paint as being the most obvious problem. School officials report that storm water flows from the upper parking lot flow directly into the fast track temporary rooms at the front of the school. During heavy rains, the walkways to the rooms are flooded with water. A simple asphalt berm or grate and culvert system would solve the flooding problem.

Fourteen (14) of the permanent rooms are integrated into two wings and are constructed of wood with corrugated sheet metal roofing. They sit on a concrete slab and are not elevated. The rooms share common walls and are not portable. While they are constructed of wood, they were intended to remain at the school permanently. These rooms were observed to be in fair - good condition, again roof leaks are a recurring problem throughout the school building.

A serious termite infestation has consumed several classrooms in Wing "A" building especially the restroom areas and A-102. Walls are falling apart and several rooms are not being used and have been closed to the public. The extent of the damage needs to be determined as the assessment team and DOE staff only conducted a visual inspection to the areas.

Temporary Structures

Five (5) unused modular type rooms in poor condition are situated next to the cafeteria. These buildings have sustained typhoon damage and are badly worn down as a result of prolonged use. These structures have a negative visual impact on the campus as a whole, and will require major repair and renovation or replacement. The only other free standing temporary room on campus, A-20, is constructed of plywood and tin and is in fair condition. It is located beside the teacher's lounge.

Sporting/Recreational Facilities

The school gymnasium is in good condition. However, bleachers and windows are in need of repair or replacement. A football/soccer field is on the northwestern perimeter of the school at a lower elevation than the main campus. A volleyball court and tennis court is located between the football field and the gymnasium and is in fair condition.

School Grounds

Landscaping at the Oceanview campus is limited. There are several very nice shade trees between Wings B, C and D. There are also the remnants of fallen trees at other locations around the school. New plantings were established along the schools interior paved access leading from Erskin Drive to the Main Office/Administrative area at the front of the school. The remnants of a stage used for graduation ceremonies and other school activities, could be seen at the front of the school

Access/Parking

There are seventy-nine (79) regular parking stalls and three (3) handicapped stalls. Vehicles are parked in other areas on campus, for example, alongside the gym, cafeteria and behind the classrooms. Additional parking areas need to be defined in order to control the parking problems.

Erskin Drive is a residential collector with a single lane in each direction. The intersection of Route 2 and Erskin Drive is awkward for motorists who are unfamiliar with the layout. The school has a single entrance, bus and vehicular access to and from the school is well defined and works fairly well. However, there is concern by school officials that the gates do not provide the security requirements of the school because of the increasing vandalism that has occurred. Recommendations have been made to move the gate towards the school entrance and keep the area clear of shrubs surrounding the perimeter fence to improve visibility.

Existing School Capacity

As a high school, Oceanview had to be expanded with temporary classrooms added to accommodate its high school students. Now as a middle school, several of the classrooms that are in poor condition and are not being used can be demolished. For example the temporary classrooms near the cafeteria should be removed. The school layout is currently spread out and needs to be better organized.

ADA Compliance

The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed the assessments in 1994 and found that there were significant areas of non-compliance at Oceanview. These deficiencies include: accessible route –exterior and interior, parking, ramps, curb ramps, stairs, doors, toilet rooms, alarms, signage, seating, tables and library check-out area. Budget cost estimated for the prescribed corrective actions totaled \$363,415.

Structural Evaluation

Ten permanent building structures and several outdoor covered walkways were found deficient to some degree in meeting the structural requirements of the 1991 Uniform Building Code (UBC). Evaluated deficiencies range from non-compliant details to inadequate member strength and incomplete load paths. Of greatest concern are the light weight walkways and classroom Building C and D, which were subject to sever typhoon damage, and the heavy covered walkways which may constitute falling or egress hazards during earthquakes.

Some structures sustained damage from the August, 1993 earthquake. Principal damage includes cracking and spalling in concrete beams and columns and cracking of masonry wall piers. Most have been patched or sealed and repainted. Preliminary construction cost estimate to repair and upgrade this facility to substantial compliance with the structural requirements of the 1991 UBC is \$690,760.

Capital Improvement Projects

Over \$3.8 million in capital improvement projects have been identified for Oceanview Middle. Construction of a track and field, renovation of the gym, locker rooms and restrooms are the top ticket items. Over \$1 million has been earmarked for the renovation of the main building and replacement of temporary classrooms. As discussed in the report, DOE should replace the temporary buildings with a permanent structure. Oceanview Middle School has since been converted to a middle school and now has excess capacity. Planning efforts should focus on how to improve the facility and determine which temporary buildings should be removed. In addition, "A" building has serious termite infestation and an assessment is needed to determine the structural viability of that building. School officials have also identified the need to replace the covered canopies. An on-going preventive maintenance program is also required to improve the physical appearance and upkeep of the facility.

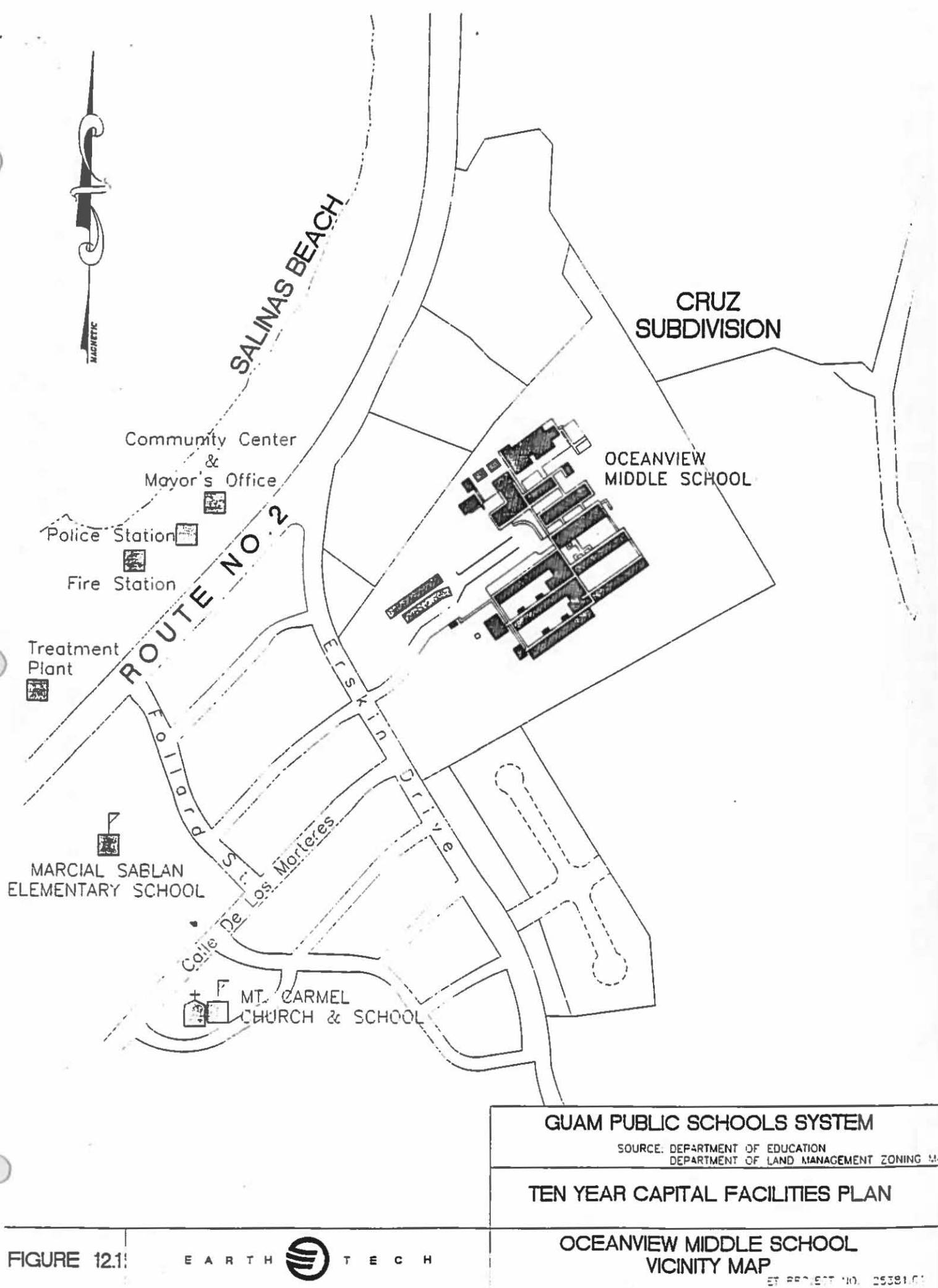
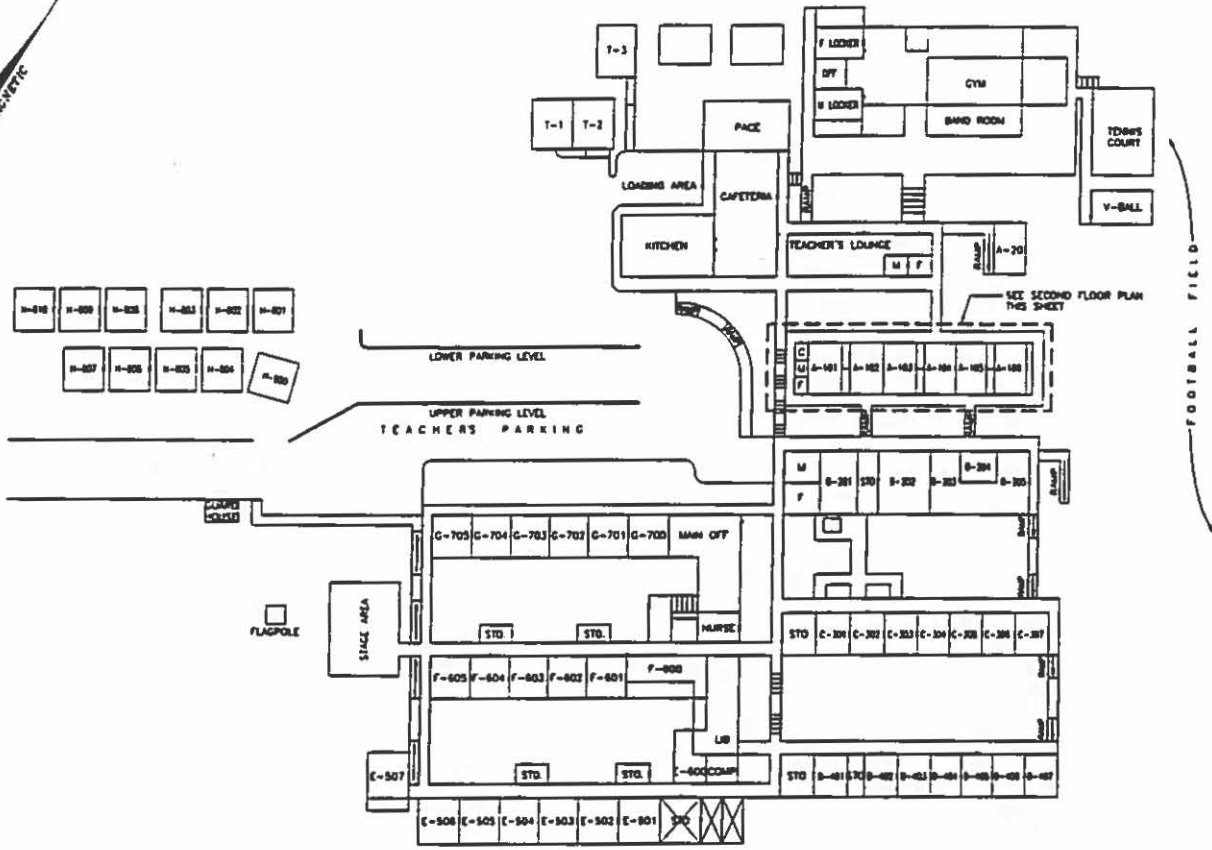
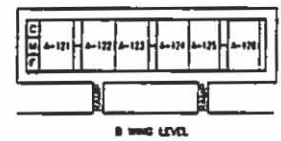


FIGURE 12.1



SITE PLAN - FIRST FLOOR
OCEANVIEW MIDDLE SCHOOL NO SCALE



SITE PLAN - SECOND FLOOR
OCEANVIEW MIDDLE SCHOOL NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

**OCEANVIEW MIDDLE SCHOOL
SITE PLAN**

ET PROJECT NO. 25381.01

FIGURE 12.2



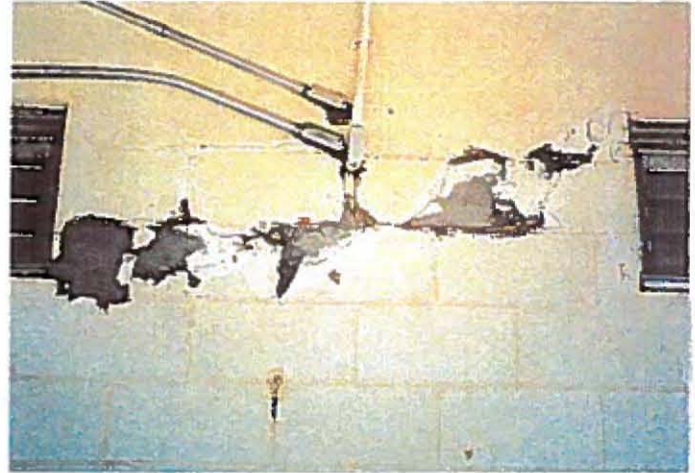
1. Entrance to the administrative building in need of new paint



2. Unused temporary classroom termite infested



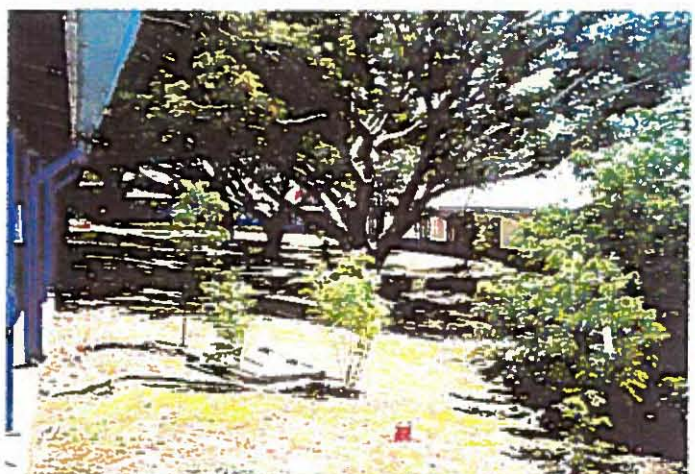
3. Courtyard with recovering trees from typhoon



4. Crack wall with paint peeling off



5. Landscape between wings



6. Large trees provide shade in courtyard

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Oceanview Middle School	Agat	2	1	Haya

[illegible]

JOSE RIOS L. G. MIDDLE SCHOOL

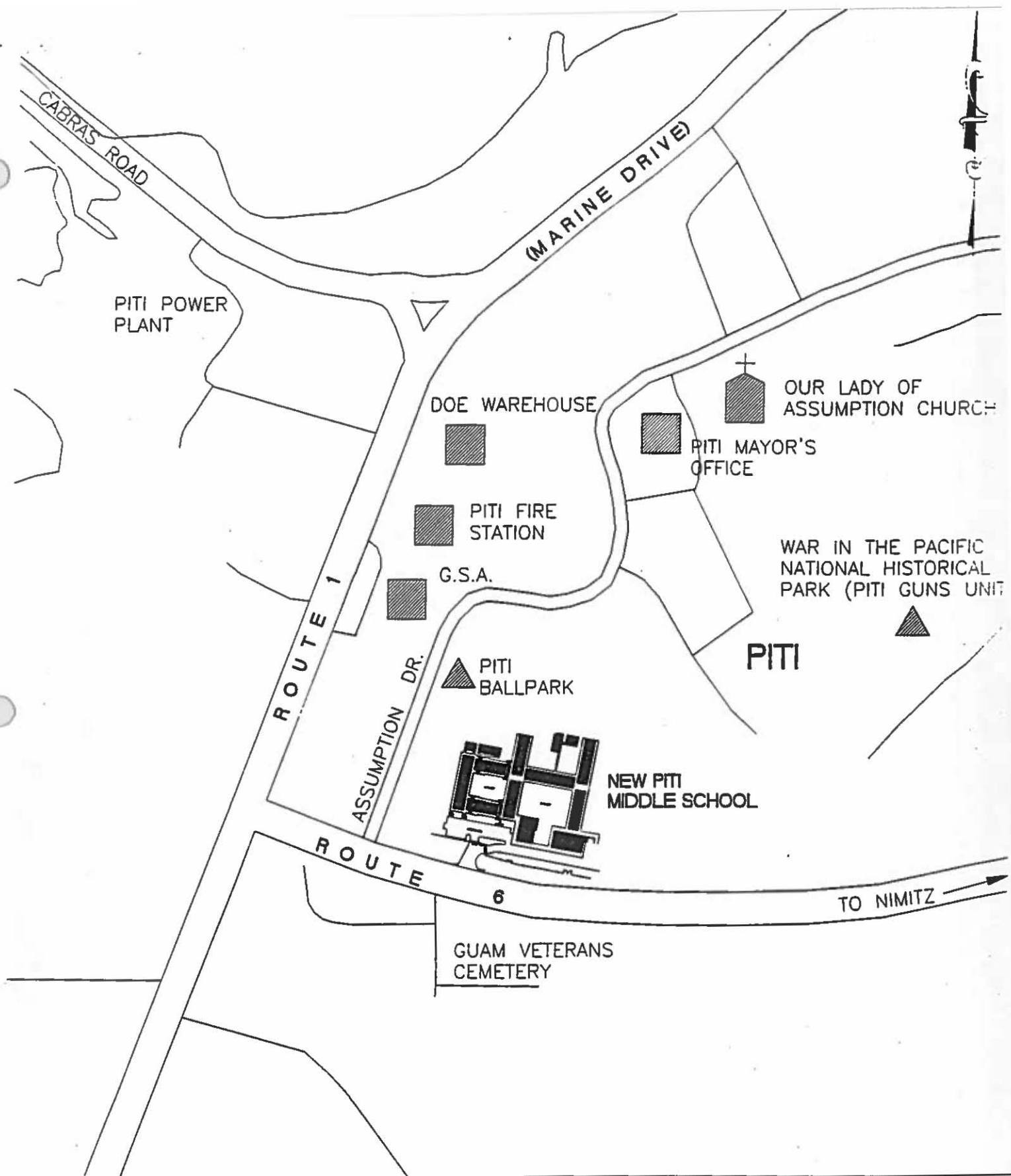
Update: The re-construction of Jose Rios L. G. Middle School was completed in April 2000.

Background

Jose L.G. Rios (Piti) Middle School is located in Piti off Route 1 and Spruce Drive, Nimitz Hill. It is directly across from the U.S. Veteran's Cemetery. The school was originally built in 1959 with a total floor area of 33,283 square ft. The school serves the surrounding villages of Piti, Asan, Maina, Agana and Agana Heights. Access to the front of the school is from Spruce Drive. Enrollment figures for school year 1997-98 was 876 students.

In 1997, the school was destroyed by Super Typhoon Paka. Plans have been developed by the Department of Public Works to construct the school back to its original layout. We have reviewed the construction documents and provide a general layout of the proposed school. The school is a one story with three wings connected by a center wing. The administration office and the cafeteria are located in front of the school. There are a total of 34 regular size classrooms and two (2) laboratory size rooms. Courtyards are located between the wings. The existing gymnasium and administrative offices remain in the same location. The school is expected to reopen in the fall.

The construction costs for the school is \$2.7 million. The Federal Emergency Management Act (FEMA) will fund 90 per cent of the cost.



GUAM PUBLIC SCHOOLS SYSTEM

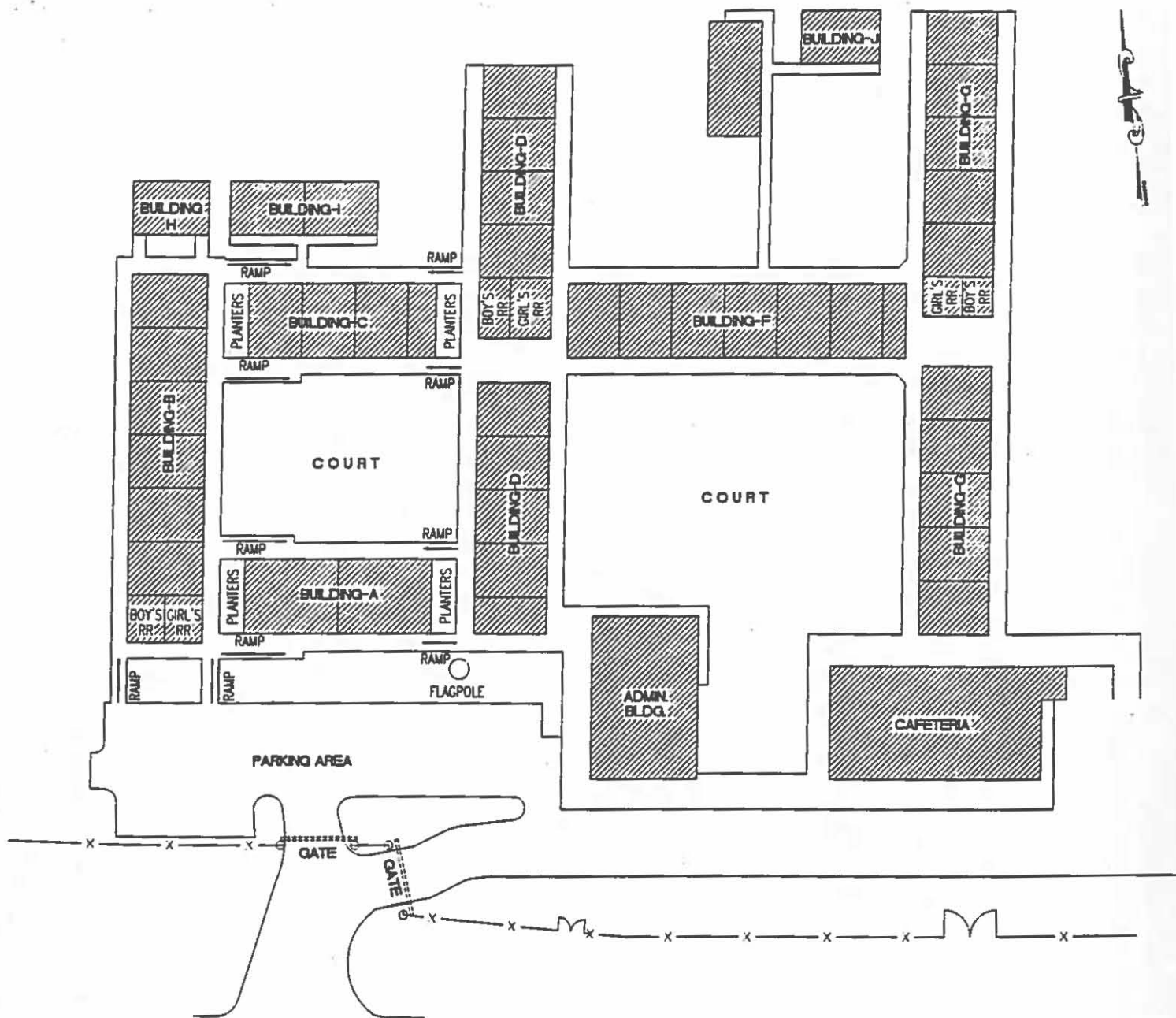
SOURCE: DEPARTMENT OF EDUCATION
EMPSO ENGINEERING SERVICES

TEN YEAR CAPITAL FACILITIES PLAN

NEW PITI MIDDLE SCHOOL VICINITY MAP

ET PROJECT NO. 25321.01

FIGURE 15.1



SITE PLAN

NEW PITI MIDDLE SCHOOL

NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
EMPSO ENGINEERING SERVICES

TEN YEAR CAPITAL FACILITIES PLAN





1. School destroyed by Typhoon Paka



2. Removal of Paka-related debris



3. Entrance to school building

HIGH SCHOOLS

JOHN F. KENNEDY HIGH SCHOOL
SIMON A. SANCHEZ HIGH SCHOOL

JOHN F. KENNEDY HIGH SCHOOL

Background

The John F. Kennedy High (JFK) campus is located at the corner of Marine Drive and Tumon Loop Road in Tamuning overlooking Tumon Bay. The school is oriented east-west. Chief Brodie Memorial School borders JFK along its southern perimeter and Marine Drive runs along the east. The school occupies Lot Nos. 5139-R3, encompassing a total 32 acres. Figure 13.1 is a vicinity map which shows the location of the school. The existing topography is sloped from north to south while the athletic field to the west is on a plateau above the rest of the campus. Figure 13.2 & 13.3 are site plans generally depicting how the school facilities are laid out within the campus boundaries.

JFK was constructed in 1959 using a combination of CMU and slabs on metal framing. Expansion of the facilities has primarily been accomplished through the addition of a new two-story CMU building on the lower campus level to the south. This building is linked to the main campus via a covered walkway. There are a total of one hundred and four (104) permanent classrooms on campus. Enrollment for the school year 1997/98 was 2,534 making it the largest school on the island.

Temporary classrooms have been added over the years although not at the density found in most other schools. The four (4) temporary rooms on site are all constructed of wood with corrugated tin roofing. The campus is connected to the public water and sewer system.

Physical Condition

Permanent Structures

The original campus complex at the high school is about 40 years old and has clearly sustained substantial wear and tear. Generally, the condition of the exterior of the complex ranges between poor and fair depending on the particular wing in question. Steel beams supporting the 2nd floor balcony and the roof top are rusting throughout the building. Exposure to salt spray from Tumon Bay may be the primary reason for this deterioration. The corrosion has serious implications since the balcony doubles as overhead protection for first floor hall corridor. Between periods, the balconies are under heavy loads as students walk to their respective classes. The corrosion and rusting has created leaks into the building which impacts the conditions of the classrooms.

The new two story wing on the lower portion of the campus appears to be in good condition with the exception of exterior paint. This structure was completed in 1991 and includes twenty (20) classrooms along with storage and bathroom facilities. The covered walkway that links both the new wing and the main campus is in good condition.

The cafeteria, which is used as a study hall for students, is in poor condition. The cafeteria equipment used to prepare food is either malfunctioning or obsolete. Plumbing fixtures and pipes need to be replaced. Floor drains were clogged. Despite these poor conditions, the staff continues to keep the place clean and sanitary. The area is plagued with electrical problems and many of the light fixtures were not working. During the site assessment, we found the cafeteria poorly lit despite several groups of students trying to study.

The industrial building located on the western part of the school was partially destroyed by Typhoon Paka. Repair to the building has not taken place and students have to attend classes in a substandard building.

It is difficult to determine what effect the typhoon had on the exterior paint throughout the campus. Paint was found to be peeling and covered with algae at many locations, on both the original buildings and the new structures as well. Some typhoon debris was present at different locations around the campus.

Temporary Structures

The four (4) temporary structures on campus are in good condition. A corrugated tin roofed storage room at the rear of the boy's locker room did lose it's roof to Super Typhoon Paka and was not yet repaired as of the time of the assessment. The stage in the main courtyard has not been repaired since the typhoon.

Sporting/Recreational Facilities

JFK has a football/soccer field, a softball field, a track, gymnasium, outdoor basketball court, remnants of four tennis courts and an open space used for P.E. The outdoor track and field have lighting facilities, bleachers and a press box. A classroom facility and locker room is part of the bleacher complex. Unfortunately, due to the storm the classrooms received damages and have yet to be repaired. The locker rooms were in poor condition. The outdoor stadium lighting was damaged during the last typhoon. The track and field has been plagued with water seeping through the field due to poor drainage. According to school officials, this has been a problem since it was first constructed and has since caused the track to deteriorate. The four tennis courts may have been in disrepair before Super Typhoon Paka's visit in December, 1997.

The gymnasium is in poor condition. The exhaust system has not worked for years and the gym was hot and stuffy. Locker rooms and restroom facilities were found to be in poor and unsanitary condition. The gate to the gym is often closed to prevent students from skipping classes and hiding out in the gym, closing off access during instruction. There are problems with the lighting fixtures and electrical outlets.

School Grounds

Landscaping was present in the main courtyard and included a pleasant mix of mature local trees and shrubs. Elsewhere, limited landscaping was located on the campus. The front of the school is comprised of a large expanse of asphalt pavement parking and cyclone fencing separating the buildings from the parking lots and the parking lots from Marine Drive. Landscaping the entrance will help diffuse the asphalt pavement.

The garbage handling area is located just to the left of the main entrance to the school and is visible to visitors and passing motorists. The courtyard in front of the new building has a few trees and shrubs but could certainly use more to improve visual appeal and to help reduce noise and other distractions coming from Marine Drive.

Access/Parking

Access to JFK is directly from Marine Drive a seven (7) lane roadway. There is a center turning lane present and facilitates movement into and out of the school. No signalization is present at the main entrance. A traffic light and crosswalk are located on Marine Drive and Tumon Bay Road. During morning rush hours traffic is severe and conflicts occur as vehicles attempt to make left hand turns into the school. Marine Drive is the island's busiest roadway and the school is located in a highly urbanized area.

Interior parking areas and access lanes offer adequate circulation. A total of one hundred fifty-six (156) standard parking stalls and twelve (12) handicapped stalls are present at the east and south edges of the main facility. Other areas in the campus serve as informal parking areas. The rear access to the gymnasium is filled with pot- holes. This access road provides access to the gym and cafeteria. Efforts to improve this area and provide parking will improve access and local circulation.

Existing School Capacity

Based on the legislated enrollment, this school exceeds the requirement by almost double the number. The physical appearance of the school shows sign of aging and deterioration. The campus is located in one of Guam's premiere real estate areas being in close proximity to the Tumon resort areas. The total acreage of this school provides ample room for a high school facility. However, the current layout does not provide for an efficient use of the property.

ADA Compliance

The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed an assessments in 1994 and found that there were significant areas of non compliance at JFK. These deficiencies include: accessible route – exterior and interior, parking, curb ramps, ramps, stairs, elevators, doors, toilet rooms, sinks, assembly areas, alarms, signage, seating and tables. Budget cost estimated for the prescribed corrective actions totaled \$760,445.

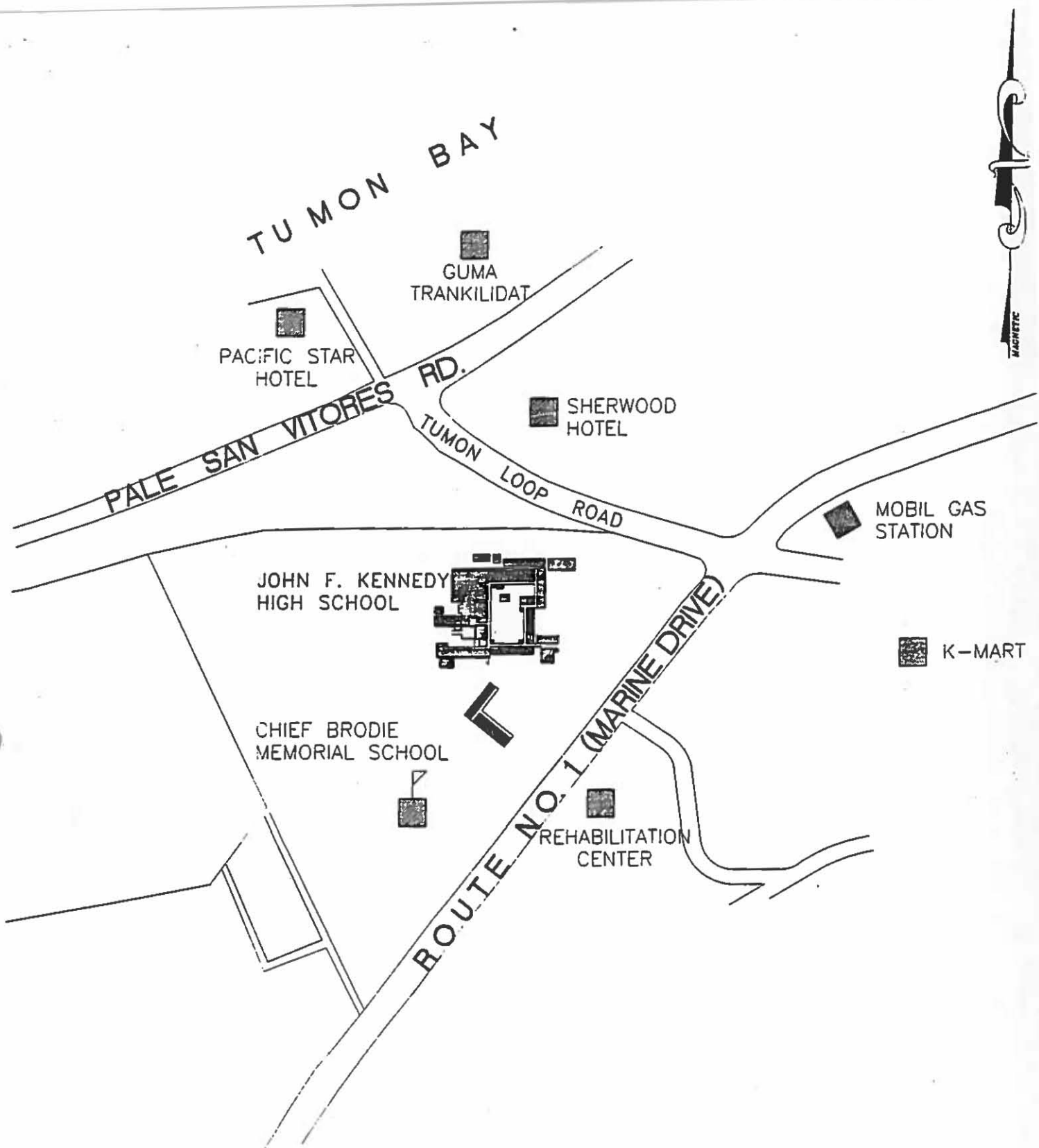
New ramps and railing installations indicate that compliance with ADA requirements is being pursued.

Structural Analysis

None to report.

Capital Improvement Projects

Over \$6.8 million in capital improvement projects have been identified for J.F. Kennedy High. Over \$3.5 million has been estimated to renovate the main building. Another \$250,000 will be used to replace temporary classrooms. ADA compliance requirements list over \$760,000 for improvements. DOE should weigh the cost of these CIP improvements versus building a new school. The cost for renovation is a large investment vis a vis the age of the building and its current condition. The value of this property should also be considered. A cost benefit analysis will provide valuable information to DOE and to the policy makers in determining the best course of action to take.



GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING 11A

TEN YEAR CAPITAL FACILITIES PLAN

JOHN F. KENNEDY HIGH SCHOOL VICINITY MAP

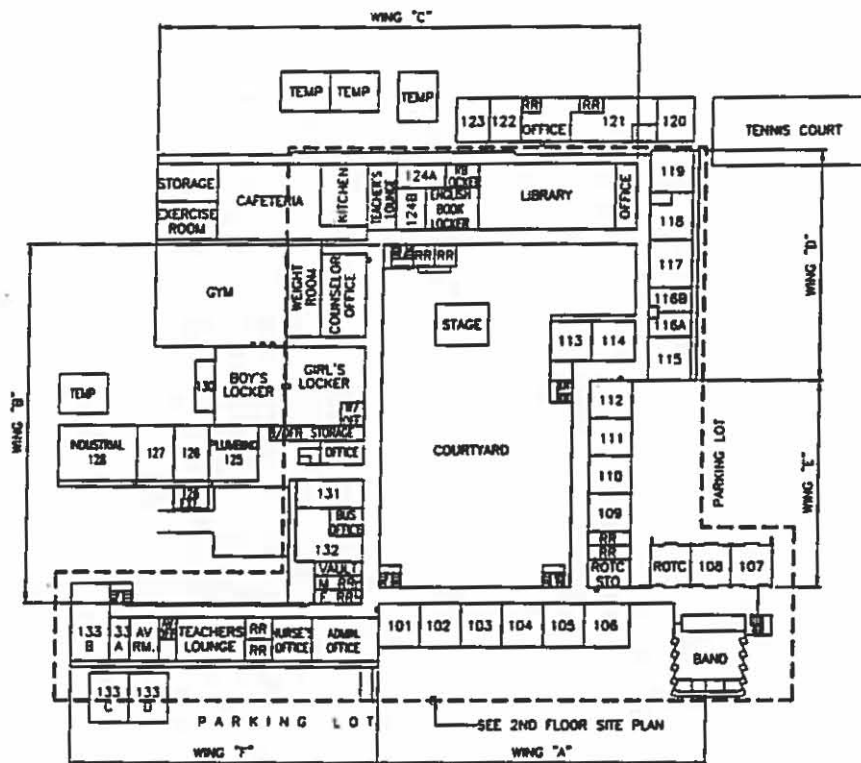
ST. PROJECT NO. 25381.01

FIGURE 13.1

EARTH



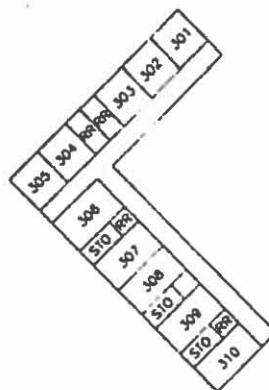
TECH



SITE PLAN - FIRST FLOOR

JOHN F. KENNEDY HIGH SCHOOL

NO SCALE



FIRST FLOOR - NEW BUILDING

JOHN F. KENNEDY HIGH SCHOOL

NO SCALE

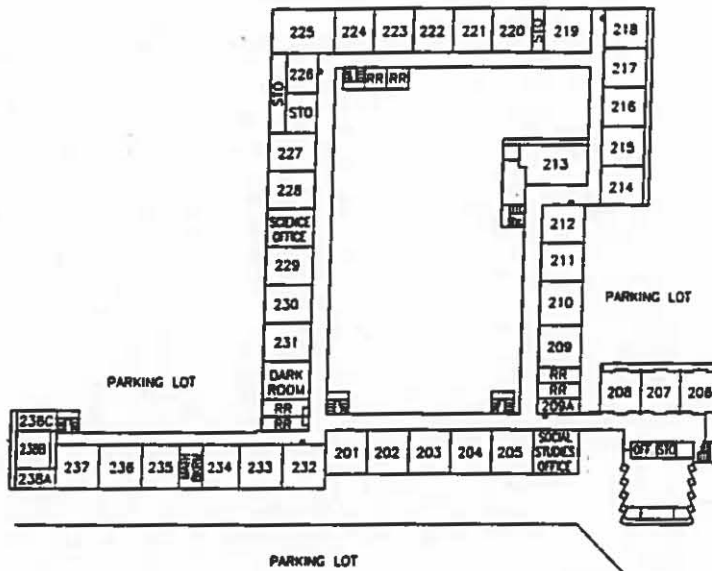
GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING M

TEN YEAR CAPITAL FACILITIES PLAN

JOHN F. KENNEDY HIGH SCHOOL SITE PLAN - FIRST FLOOR

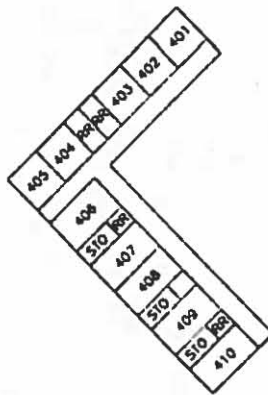
ET PROJECT NO. 25381.01



SITE PLAN - SECOND FLOOR

JOHN F. KENNEDY HIGH SCHOOL

NO SCALE



SECOND FLOOR - NEW BUILDING

JOHN F. KENNEDY HIGH SCHOOL

NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

JOHN F. KENNEDY HIGH SCHOOL SITE PLAN - SECOND FLOOR

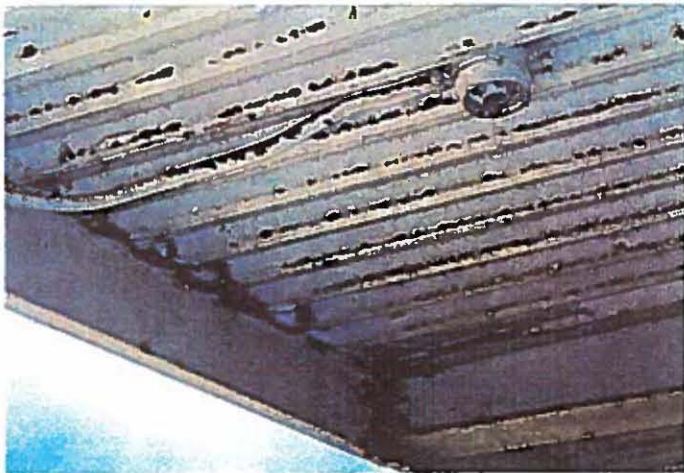
ET PROJECT NO. 18381.01



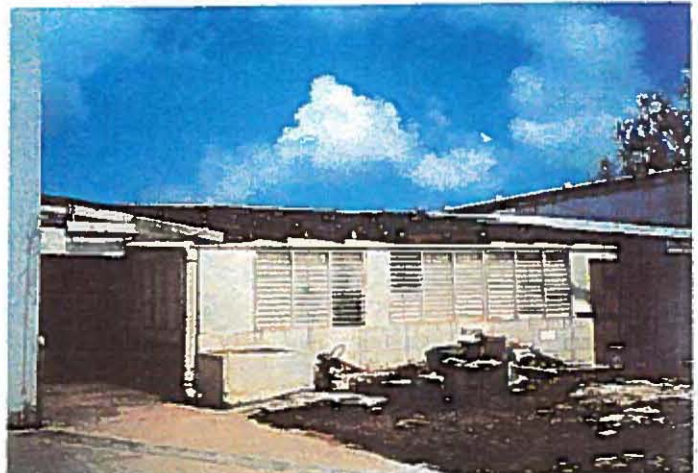
1. Entrance to the school building



2. Corrosion of balcony in main building



3. Corroded roof walkway



4. Typhoon-destroyed classroom



5. Open parking area to new building



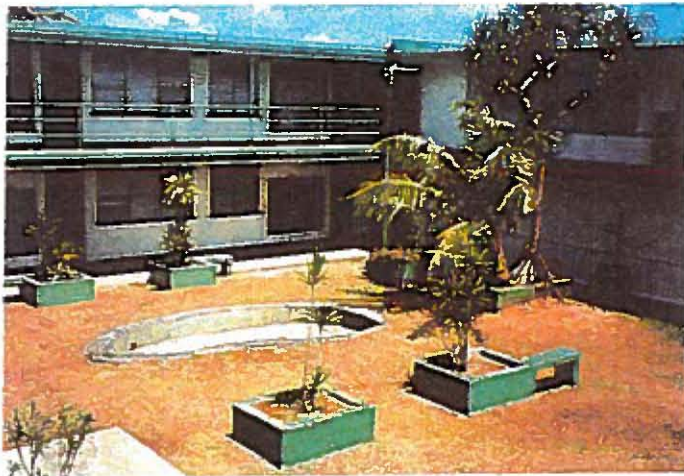
6. Building in need of paint



7. Track and field and bleachers



8. Rear view of gym and dilapidated industrial building



9. Main building courtyard



10. Courtyard with demolished stage



11. Concrete table with seats need new paint coat



12. View of parking lot at main entrance

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
John F. Kennedy High School	Tamuning	3	2	Luchan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING	2		X	X	X							3,000,000.00
REPLACEMENT OF TEMP CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	3						X					250,000.00
ADA COMPLIANCE	1	X	X	X	X							760,445.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	1 2 4	X	X	X								250,000.00 150,000.00 250,000.00
STRUCTURAL REPAIRS												
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System	3 2		X	X	X							350,000.00 250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	4 3 3 4			X	X	X					X	150,000.00 250,000.00 200,000.00 250,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	2		X	X	X							250,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$6,360,445.00

SIMON A. SANCHEZ HIGH SCHOOL

Background

Simon A. Sanchez High School is located in the village of Yigo. The campus is situated west of GHURA 506 and occupies Lot No 7022-2, totaling 28 acres. The site is generally flat except for southwestern corner which slopes away to F.B. Leon Guererro Middle School. Enrollment stands at 1,847 for 1997-98 school year. Juan Jacinto Road provides access to the school from Marine Drive. Nishio Terrace Subdivision, Asatdas Subdivision, the GHURA Subdivision and a developing residential area are all in the immediate vicinity of the school. Figure 14.1 is a vicinity map showing the location of the school.

Sanchez High School was constructed in 1974. CMU was used for the walls and the roof was poured cement. The original school was constructed in a stand alone single building format with an open air gymnasium attached to the southern wall. The cafeteria is shared with F.B. Leon Guererro Middle School and is located between the two campuses. Covered walkways link the cafeteria to both schools.

Over the past 25 years, the school has undergone expansion and improvement. Several temporary rooms have been added. Permanent improvements include a science complex totaling twelve (12) rooms and the gymnasium conversion from an open air facility to a enclosed structure. Today, there are a total of ninety (90) permanent and temporary rooms used for instruction. Figure 14.2 is an updated site plan for the school.

The school was converted from a junior high into a high school in 1981. Parking facilities are required to accommodate student drivers. Additional parking was developed on the west side of the school in what was once a large open field. The school is connected to the public water and sewer system.

Physical Condition

Permanent Structures

The main class room structure is an enclosed two story rectangular (cubed shape) building. Externally the structure appeared to be in fair - good condition. Algae were observed in patches around the building and peeling and fading paint could be seen in several locations. Leaks were reported to be present in the main structure. According to school officials, the leaks have persisted despite efforts by contractors to correct the situation. A visual inspection of the interior of the school revealed a clean and well-maintained facility. DOE was forced to perform an air quality test to determine whether students and teachers were getting "sick" from the air. Poor ventilation, old carpets, dust mites, and musty odors have been a problem for years. The problem was resolved in early 1999 with carpets removed and replaced with floor tiles. Leaky air-condition units were sealed, filters replaced and air-condition vents cleaned out and serviced. Roof leaks were repaired and doors were replaced or repaired as needed.

A permanent set of classrooms constructed of CMU is located west of the main building. They are in good condition and look relatively new. There are a total of sixty-seven (67) permanent classrooms in the main structure and in the newer science building combined. There are two (2) fast track rooms (414, and 415) in fair condition. They are interconnected by a covered walkway.

Temporary Structures

There are twenty (20) temporary rooms on campus. There are four (4) different types of metal or butler buildings present between the main building and the cafeteria. These temporary buildings are in fair - good condition. There is a wooden temporary storage building and office behind the gym used by the maintenance workers that is in fair condition.

A series of covered walkways link the temporary rooms to the main building. Some of the walkways are constructed of concrete while others employ a combination of steel pipe, wood and/or sheet metal. The walkways were in good

condition. Similar to other schools, the canopies that cover the walkway need structural repair as they show deterioration of rust.

Sporting/Recreational Facilities

Simon Sanchez High School has an enclosed gymnasium. The gym is in good condition. Like many other school facilities across the island the gym had minor cracks and peeling paint.

Tennis courts, constructed in 1994 are located east of the school near the student parking lot. Open fields used for various P.E. activities comprise the bulk of the remaining recreational areas. Soccer goals and an informal softball field with a mesh netting backstop were observed to be in poor condition. The school is in need of a lighted track and field but no funding source has been identified.

School Grounds

There was very little landscaping observed at the school. Some bougainvillea was seen in different locations. The new science complex has a nice courtyard with some landscaping and significant potential.

The front of the school showed signs of neglect with trash along the cyclone fencing, a rusted flagpole and graffiti sprayed across planters surrounding a small statue. Since our assessment, the graffiti have been painted over and the statue given a new face lift. The main building itself has paint and algae problems. This area has very good potential but needs maintenance.

The student parking lot does not have landscaping and reflects poorly on the school. There are a few trees near the faculty parking and the entrance to the school and there are coconut trees in the seating area in front of the temporary classrooms. Improvements to the grounds and parking areas could have a significant and positive impact on the visual quality of the entire campus.

Access/Parking

Access into the school campus from Juan Jacinto Road is provided at the front of school and serves as a faculty parking area. A third gate provides access to the student parking lot. Only one of the gates was open during the site assessment, however it is presumed all gates would be open in the mornings and afternoons when students arrive and leave the campus.

The faculty parking area has ninety-three (93) regular stalls and five (5) handicapped stalls. There are two hundred eighty-seven (287) regular stalls in the student parking lot.

Existing School Capacity

Simon Sanchez has more students than the legislated capacity of 1,200 students. The school has expanded to accommodate the population growth. According to school administrators, there is a need for more large classrooms, storage space and teacher lounges. Teachers often have to share classroom space. Several rooms were converted to classrooms by constructing temporary walls. The rooms are not sealed off and noise becomes a problem during classroom instruction. Insulation and a permanent wall structure will reduce the noise. According to the staff, the temporary classrooms are small in size for high school students.

The school shares its cafeteria with F.B. Leon Guerrero Middle. School officials indicate that the cafeteria is undersized and are looking for a way to establish outside seating. Other facilities, for example the proposed track and field area could be shared. This will provide some cost savings and allow for additional support facility expansion to accommodate the existing population of both campuses.

ADA Compliance

The Department of Education conducted a study to determine what improvements were required to meet the ADA requirements. Duenas and Associates performed an assessment in 1994 and found that there were significant areas of

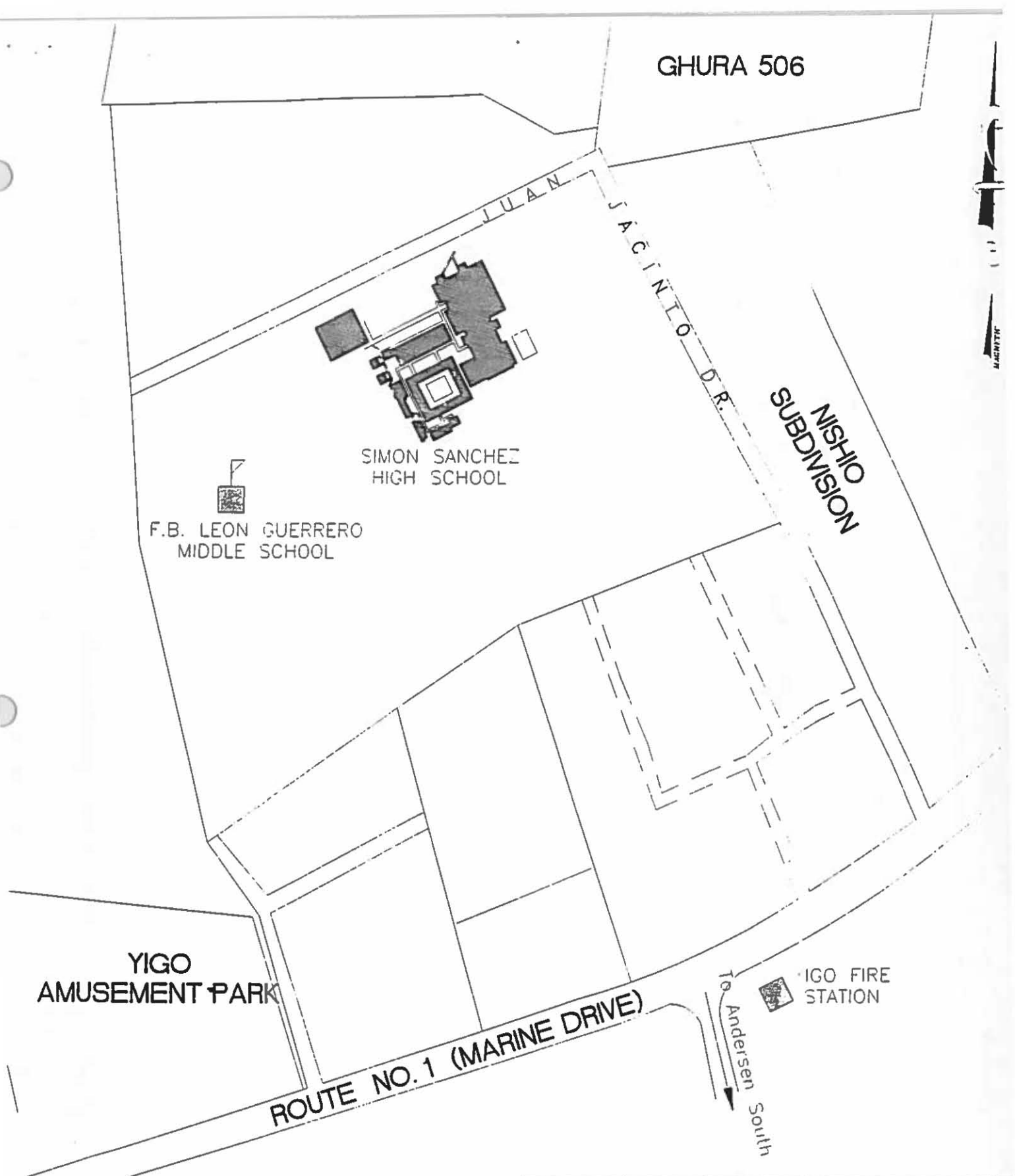
non compliance at Simon Sanchez. These deficiencies include: accessible route –exterior and interior, parking, curb ramps, stairs, elevators, doors, toilet rooms, sinks, shower stalls, assembly areas, signage, seating and tables. Handicapped railings in the main building and outside walkways have been installed. The elevator has been repaired. Budget cost estimated for the prescribed corrective actions totaled \$428,225.

Structural Analysis

According to GK2 Consulting Engineers, Simon Sanchez High structural systems are capable of resisting the 1991 UBC specified gravity, wind and seismic loads with the exception in insulated cases. The U.S. Navy Seabees made emergency repairs after the August 1993 earthquakes. A few observed cracks not repaired are recommended for the repair to prevent corrosion of the reinforcing bars. Wood and tin roof structures should be replaced with more permanent type of construction such as concrete, masonry or steel. Other recommendations made include repair cracks in concrete walls and roof by epoxy injection, replace metal covered walkway around the metal building classrooms. Several areas of canopy coverings/drain spouts are damaged and in need of repair and replacements. Preliminary construction cost estimates for recommended repair and upgrade work amounts to \$175,000.

Capital Improvement Projects

Over \$3.2 million in capital improvement projects have been identified for Simon Sanchez. Over \$400,000 has been estimated for replacing and renovating temporary classrooms. A new track and field facility and renovation are also needed for this school. The air conditioning system in the main building needs to be replaced. A permanent storage space is needed and can be located behind the cafeteria. A shelter to be used by students during lunch and breaks has been requested by school officials. A drainage system needs to be installed to meet the overall needs of the school. Water ponding is a problem at the entrance of the gym. The school has to comply with ADA requirements. The school is in need of these improvements to maintain and bring the school up to design standards. This facility shares the cafeteria with F.B. Leon Guerrero Middle School. Other facilities including the track and field should be also designed as a shared facility. Conceptual plans for a shared facility has been developed in the Ten Year Capital Facilities Plan which can be used as the basis of the conceptual plan.



GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

SIMON SANCHEZ HIGH SCHOOL VICINITY MAP

ET PROJECT NO. 15331-01

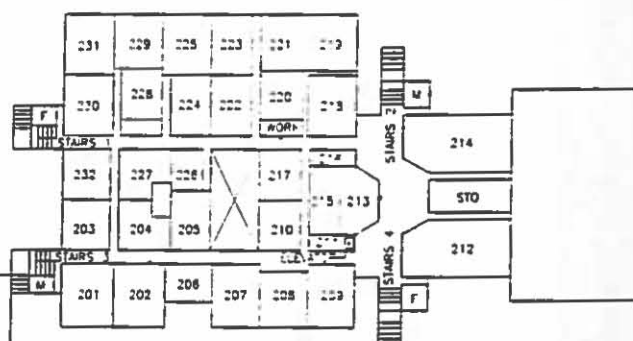
FIGURE 14.1

STUDENT
PARKING

SEE SECOND FLOOR THIS SHEET



SITE PLAN-FIRST FLOOR
SIMON SANCHEZ HIGH SCHOOL NO SCALE



SITE PLAN-SECOND FLOOR
SIMON SANCHEZ HIGH SCHOOL NO SCALE

GUAM PUBLIC SCHOOLS SYSTEM

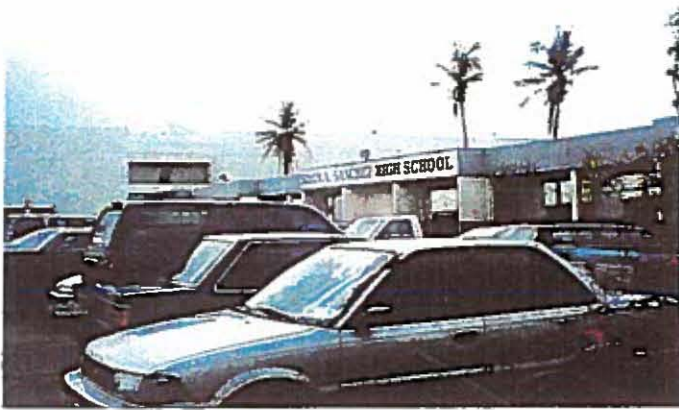
SOURCE DEPARTMENT OF EDUCATION
DEPARTMENT OF LAND MANAGEMENT ZONING MAP

TEN YEAR CAPITAL FACILITIES PLAN

SIMON SANCHEZ HIGH SCHOOL SITE PLAN

ET PROJECT NO. 15381-01





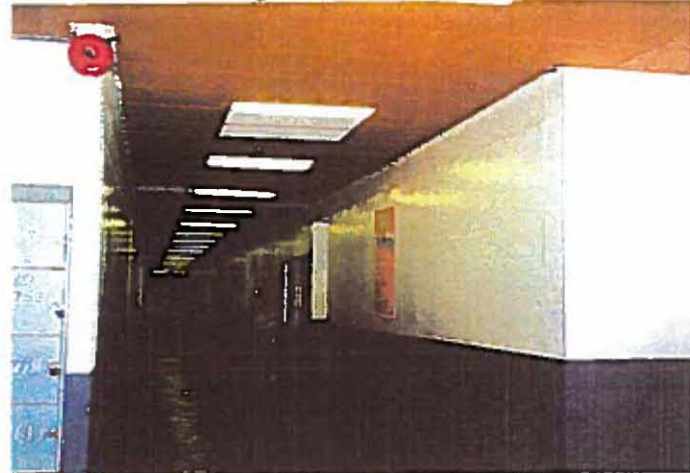
1. Entrance to Simon Sanchez



2. Parking lot at front of school



3. Permanent classrooms located west of main building



4. Hallway and classrooms



5. Temporary classrooms



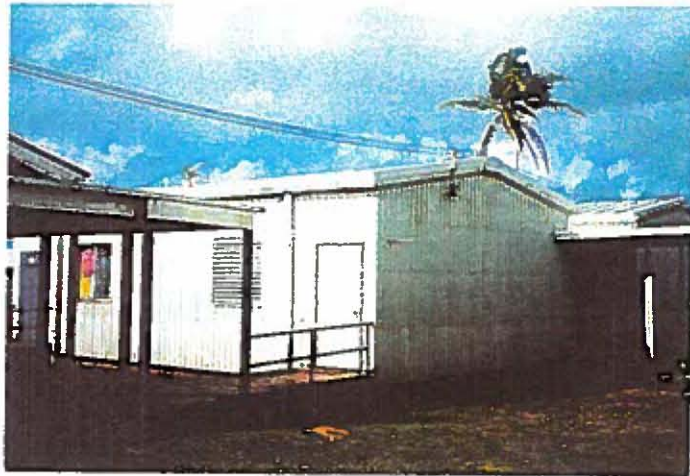
6. Courtyard



7. Open field and mesh netting back stop



8. Perimeter fence and statue



9. Temporary classrooms

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Simon Sanchez High School	Yigo	3	4	Lagu

[illegible]

Individual School Inventory Summary
Prepared for Guam Department of Education

School Summary				Conditions					Address:
	Name	Traffic Congestion	Access Problems	Drainage Problems	Views	Available services (water/sewer)	Quiet	Landscaping Buffers	
ELEMENTARY SCHOOLS									
1	Finegayan Elementary	N	N	Y	N	Y	N	N	10128, Dededo
2	Upl Elementary	N	N	Y	Y	Y	Y		7118-R5, Yigo
3	Yigo Elementary	Y	Y	N	N	Septic	Y	N	7003-1, 7003-2, 7001-1, 7004-6, 7004-7, Yigo
4	M.A. Uloa Elementary	Y	Y	Y	N	Y	N	N	10114, Dededo
5	Hamon Loop Elementary	Y	Y	Y	N	Y	N	N	10128, Dededo
6	Astumbo Elementary	N	N	Y	N	Y	Y	N	BLK 28 & R240, Dededo
7	Chief Brodie Memorial	Y	Y	Y	N	Y	N	N	5139-3-R1, Tamuning, Dededo
8	L.B. Johnson Elementary	Y	Y	Y	N	Y	N	N	5173-NEW-2, 5173-NEW-3, Tamuning, Dededo
9	Tamuning Elementary	Y	Y	Y	N	Y	N	Y	5173-NEW-1, Tamuning, Dededo
10	Wettengel	Y	Y	Y	N	Y	Y	Y	Lot #10057, Dededo
11	Agana Heights	Y	Y	Y	N	Y	Y	N	Lot 12-2 thru 9, #15, Agana Heights
12	B.P. Carbullido Elementary	Y	Y	Y	N	Y	Y	N	Block #1, Lot 14, Barrigada
13	Capt. H.B. Price Elementary	Y	Y	N	N	Y	N	N	2288-1-2 & 1109-R4, Mangilao - Barrigada
14	Ordot Chalan Pago Elementa	N	N	N	N	Y		N	3398 Ordot-Chalan Pago - Sinajana
15	J.Q. San Miguel Elementary	Y	Y	N	N	Septic	Y	N	168-1, 169A, 174-1, 177-1, 178-1, Sinajana
16	C.L. Taitano Elementary	Y	Y	N	N	Y	Y	N	Block #12, Lot #3, Sinajana
17	M.U. Lujan Elementary	Y	N	Y	Y	Septic	Y	N	117, Yona
18	P.C. Lujan Elementary	Y	N	Y	N	Septic	Y	N	2192, Barrigada
19	J.P. Torres Elementary	Y	N	N	Y	Y	Y	Y	470-R2, Santa Rita, Agat
20	Marcial Sablan	Y	Y	Y	Y	Y	Y	N	Block #13, Agat
21	Talofofo Elementary	N	N	N	N	Septic	Y	N	Portion of Lot #402, Talofofo
22	F.Q. Sanchez Elementary	N	Y	Y	Y	Y	Y	Y	163 & 164, Umatac
23	Inarajan Elementary	N	N	N	Y	Y	Y	Y	88 - Inarajan
24	Merizo Elementary	N	N	Y	Y	Y	Y	Y	505-R7, Merizo
25	H.S. Truman Elementary	N	N	N	Y	Y	Y	Y	454, Santa Rita
26	Mt. Santa Rosa	N	N	N	Y	Y	Y	Y	7118-R5, Yigo
MIDDLE SCHOOLS									
27	F.B. Leon Guerrero Middle	Y	N	N	N	Y	Y	N	7022-1, Yigo
28	Dededo Middle	Y	N	Y	N	Y	Y	N	10114, Dededo
29	L. P. Untalan Middle	Y	N	Y	N	Septic	N	N	1023-1B, 1021-1-1-1, 1021-1-1-1-2, 1024-REM, Barrigada
30	Agueda Johnston Middle	N	N	N	N	Y	Y	N	3395-R-1, Ordot/Sinajana
31	Piti Middle	N	N	N	Y	Y	Y	N	Parcel "C", Apra Harbor Area, Piti
32	Oceanview Middle	Y	Y	N	Y	Y	N	Y	Lot No. 442 Agat
33	Inarajan Middle	N	N	N	Y	Septic	Y	N	454-4 Inarajan
HIGH SCHOOLS									
34	Simon Sanchez High	Y	N	N	N	Y	Y	N	7022-2, Yigo
35	John F. Kennedy High	Y	Y	N	Y	Y	N	N	5139-R3, Tamuning, Dededo
36	George Washington High	N	N	N	N	Y	Y	N	5376-NEW-R5, Mangilao, Barrigada
37	Southern High	Y	N	N	Y	Y	Y	N	455 Santa Rita/Agat

Individual School Inventory Summary Prepared for Guam Department of Education																							
School Summary												Building Summary			Outdoor Facilities			Site					
	Name	Type	Location	School District	Date of Construct/Age	Cost of Building	Type	General Condition P/F/G/E/N	Structural Meets Code Y/N	ADA Compliant Y/N	1997/8 Pop.	Permanent	Temporary	Floor Area	Indoor Facilities adequate	Overall acreage	Play areas, Athletic Facilities	Parking	Size				
ELEMENTARY SCHOOLS				TOTAL:		28																	
1	Finagayan Elementary	1	Dededo	4	1972	1,732,511	CMU	G	N	N	1093	52	22	93,800	N	15	Play areas		Medium				
2	Upi Elementary	1	Yigo	4	1997	5,700,000	CMU	G	Y	Y	645	56	8	40,000	Y	45	Play areas		Large				
3	Yigo Elementary	1	Yigo	4	1968	1,295,000	CMU	F	N	Y	1182	49	16	40,435	N	15	Play areas		Medium				
4	M.A. Ulloa Elementary	1	Dededo	4	1965	982,073	CMU	G	Y	N	1073	47	16	56,636	N	10	Play areas	66	Small				
5	Harmon Loop Elementary	1	Dededo	4	1971	608,532	CMU	G	N	N	869	30	12	47,160	N	12	Play areas		Medium				
6	Astumbo Elementary	1	Dededo	4	1997	7,300,000	CMU	New	Y	Y	734	36	0	51,903	Y	8	Play areas		Medium				
7	Chief Brodie Memorial	1	Tamuning	2	1965	720,000	CMU	G	N	Y	742	28	8	14,600	N	Shared	Play areas		Small				
8	L.B. Johnson Elementary	1	Tamuning	2	1974	165,000	CMU	F	N	N	433	22	3	24,891	N	3	Play areas		Small				
9	Tamuning Elementary	1	Tamuning	2	1995	11,280,000	CMU	New	Y	Y	830	44	0	69,217	Y	7	Play areas		Medium				
10	Wettengel	1	Dededo	2	1968	1,695,000	CMU	F	N	Y	947	38	8	49,084	N	15	Play areas		Medium				
11	Agana Heights	1	Agana Heights	3	1958	562,919	CMU	P/F	N	N	527	23	6	31,582	N	9	Play areas	35	Small				
12	B.P. Carbullido Elementary	1	Barrigada	3	1965	738,192	CMU	F	N	Y	571	22	4	40,275	N	9	Play areas		Small				
13	Capt. H.B. Price Elementary	1	Mangilao	3	1958	672,438	CMU	F/G	N/A	N	988	30	25	27,688	N	8	Play areas	46	Small				
14	Ordot Chalan Pago Elementary	1	Ordot	3	1997	7,000,000	CMU	G	Y	Y	608	31	0	14,600	Y	12	Play areas		Medium				
15	J.Q. San Miguel Elementary	1	Toto	3	1971	715,667	CMU	F	N	N	686	28	8	27,904	N	15	Play areas		Medium				
16	C.L. Taitano Elementary	1	Sinajana	3	1958	731,898	CMU	P/F	N/A	N	774	42	5	43,345	N	6	Play areas	18	Small				
17	M.U. Lujan Elementary	1	Yona	3	1973	165,000	CMU	G	N	N	931	43	1	48,820	N	15	Play areas		Medium				
18	P.C. Lujan Elementary	1	Barrigada	3	1962	300,000	CMU	F	N	N	708	43	1	43,822	N	15	Play areas		Medium				
19	J.P. Torres Elementary	1	Agat	1	1956	180,500	CMU	P/F	N	N	189	19	4	19,680	Y	9	Play areas	19	Small				
20	Marcial Sabian	1	Agat	1	1972	743,072	CMU	G	N	N	757	24	20	44,217	Y	15	Play areas	19	Large				
21	Talofoto Elementary	1	Talofoto	1	1965	473,347	CMU/Precast	G	Y	N	381	18	8	27,158	N	9	Play areas	33	Small				
22	F.Q. Sanchez Elementary	1	Umatac	1	1953	900,000	CMU	P/F	N/A	N/A	114	9	0	11,000	N	11	Play areas		Small				
23	Inarajan Elementary	1	Inarajan	1	1997	5,700,000	CMU	G	Y	Y	421	31	0	34,160	N	17	Play areas		Medium				
24	Merizo Elementary	1	Merizo	1	1966	649,573	CMU	G	N	N	334	13	7	34,469	N	11	Play areas	31	Small				
25	H.S. Truman Elementary	1	Santa Rita	1	1966	726,637	CMU	F/G	N	Y	341	24	9	30,677	N	18	Play areas		Medium				
26	Mt. Santa Rosa	1	Yigo	4	1998		Wood/Tin	F	N/A	Y		0	32	24,570	N	Shared	Play areas		Medium				
MIDDLE SCHOOLS				TOTAL:		7																	
27	F.B. Leon Guerrero Middle	2	Yigo	4	1974	495,000	CMU	F/G			1348	51	10	64,496	Y	21	Gym/Open		Medium				
28	Benavente (Dededo) Middle	2	Dededo	2	1966	330,000	CMU/Precast	F	Y	N	1365	71	28	57,804	Y	24	Gym/Open	128	Medium				
29	L. P. Untalan Middle	2	Barrigada	3	1958	660,362	CMU	F	N	N	1098	41	13	49,145	Y	11	Gym/Open	73	Small				
30	Agueda Johnston Middle	2	Ordot / Sinajana	3	1966	1,892,681	CMU	F	N/A	N	608	57	10	37,831	Y	20	Gym/Soccer	95	Medium				
31	Jose L.G. Rios (Piti) Middle	2	Piti	1	Under construct	2,700,000	CMU	N/A	N/A	N/A	876	36		33,283	Y	18	Gym/Open		Medium				
32	Oceanview Middle	2	Agat	1	1959	5,500,479	CMU	F	N	N	677	62	5	57,804	Y	27	Gym/Soccer	82	Large				
33	Inarajan Middle	2	Inarajan	1	1973	3,828,702	CMU	F/G	N	Y	857	6	25	52,700	Y	32	Gym/Open		Large				
HIGH SCHOOLS				TOTAL:		4																	
34	Simon Sanchez High	3	Yigo	4	1974	2,535,770	CMU	F/G	Y	Y	1847	67	12	131,112	Y	28	Gym/Open	287	Large				
35	John F. Kennedy High	3	Tamuning	2	1959	2,262,588	CMU	P/F	N/A	N	2520	104	4	127,592	N	32	Gym/Track	168	Large				
36	George Washington High	3	Mangilao	3	1965	3,485,702	CMU	F/G	N	Y	2459	110	4	138,521	N	68	Gym/Track		Large				
37	Southern High	3	Agat	1	1997	117,000,000	CMU	G	Y	Y	2062	147	0	510,891	Y	44	Gym/Track/Swim	864	Large				



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**TEN YEAR
ENROLLMENT PROJECTION
TECHNICAL REPORT
FOR THE
TEN YEAR CAPITAL FACILITIES PLAN**

JUNE, 1999



A tyco INTERNATIONAL LTD. COMPANY

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TEN YEAR ENROLLMENT PROJECTION TECHNICAL REPORT

EXECUTIVE SUMMARY

By the year 2010, there will be over 50,000 school-age children or 58 per cent more than in 1990 (32,131 people). The population increase is attributed to a natural increase of the population at an average annual rate of 1.68 per cent and a fertility rate of 3 per cent during the planning period.

Between 1999 and the year 2010, public school enrollment will increase in elementary and secondary schools. From 1999 through 2010, elementary school enrollment from kindergarten through Grade 5 is expected to increase by 4,199 students, or 24 per cent. Grades 6-8 will grow steadily within the ten-year horizon with an additional 2,893 more students by the year 2010. Grades 9-12 will grow almost 50 per cent or 4,504 new students by the year 2010.

DOE PROJECTED ENROLLMENT BY GRADES K - 12

Year	K - 5	6 - 8	9 - 12	Total
2000	18,563	7,497	9,639	35,699
2001	19,336	7,809	10,040	37,185
2002	20,214	8,163	10,496	38,873
2003	21,062	8,506	10,936	40,504
2004	21,816	8,810	11,328	41,954
2005	22,054	9,514	11,676	43,244
2006	22,167	9,310	12,857	44,334
2007	22,137	9,939	13,101	45,177
2008	21,888	10,032	13,680	45,601
2009	21,966	10,068	13,729	45,762
2010	21,966	10,068	13,729	45,762

Source: U.S. Census and Earth Tech

The DOE Division of Research and Planning (RP&E) project future student enrollment using a cohort survival technique. RP&E's five year enrollment projection indicate that by SY 2003-04 there will 32,684, an increase of 1,013 students from SY 1998-99. RP&E projections indicate that the growth for the five year period will be 3 percent. This differs from the projection we have made which is estimated to be a total student population of 41,954 in SY 2003-04 or 9,270 more students than RP&E projections.

Forecasts are based on assumptions. We recognize that there is a difference from our estimates and DOE's RP&E. Because of the variation in projections, the enrollment forecast discussed in this report and DOE's RP&E's are summarized in Table 3B and are given as a range of low, high and most likely scenarios.

PROJECTED ENROLLMENT BY GRADES K – 12 LOW, HIGH AND MOST LIKELY

School Year	Low	High	Most Likely
2000	31,900	40,699	35,699
2001	32,061	42,185	37,185
2002	32,216	43,873	38,873
2003	32,470	45,504	40,504
2004	32,684	46,954	41,954

Source: Census, DOE RP&E, and Earth Tech

DOE is projected to need 23 new schools to meet the population growth for the ten year period 2000 - 2010: 12 elementary, 6 middle and 5 high schools. The northern district is projected to have over 27,000 school aged children by the 2010. Eight new elementary, 2 middle, and 3 high schools will be needed for the northern area. The central district is expected to have over 15,000 students. Four new elementary, 2 middle and 2 high school will be needed in the central. The southern district is projected to have about 8,000 students.

I. INTRODUCTION

This Technical Report is part of the Department of Education (DOE) Ten Year Facilities Master Plan Study. The goal of this report is to project future student enrollment on an island-wide basis and by school district. The ethnicity of the student population is also forecasted. The project team identified the three major ethnic groups attending Guam's public school and examined historical trends of each group. We then forecasted the growth for these groups of students for the planning period.

The ten year forecast was prepared using the U.S. Census as the basis of Guam's population projection. The Census is updated annually to reflect the birth and death statistics. Additionally, historical enrollments from 1986-87 through the 1997-98 school year, demographic data, current and future land uses were observed to validate the ten year projection. The forecast will help provide DOE with a picture of what the future holds in order to be better prepared to accommodate changes in enrollment and educational space requirements throughout its school system over the planning horizon.

The planning period for this study is ten years, i.e., 2000 to 2010. In developing the student population projection, several key documents were reviewed, including the Guam Highway Master Plan, the I-Tanota Guam Land Use Plan and the Guam Community College Master Plan. DOE's Research and Planning Office (RP&E) also conducts its own 5 year projection and utilizes a cohort survival model to project district wide

enrollment. With the exception of DOE's forecast, each of these studies projected a high population growth fueled by a healthy tourism economy.

Government planners have forecasted visitor arrivals to reach 2 million people, implying the need for 12,000 hotel rooms by the year 2001. Through Vision 2001, the Government of Guam proposes 12,000 hotel rooms by the year 2001. By the year 2010, Guam's population will grow between a minimum of 213,989 people (I'Tanota) and a high of 237,288 people (Highway Master Plan) - an additional 80,000 to 100,000 people from 1990. The projections are driven by employment growth in the visitor industry and other basic sectors of the economy of Guam and the external factors influencing that growth. The premise of these studies is that employment opportunities relative to the work force growth will determine in or out migration, and therefore population. (See Appendix A Population Projection Studies Summary)

Since these studies were completed, Guam has experienced three key events that have affected the economy. Several natural disasters including an earthquake, two super typhoons, coupled by military downsizing and the collapse of the Asian economy have slowed Guam's economic growth. Visitor arrivals have dropped from an all time high of 1.4 million in 1997 to 1.2 million in 1998, a 15 per cent drop. Based on these exogenous factors, the population projections anticipated from these studies will not likely occur. Realizing that the economy will not continue to grow as it has in the past, the project team decided to base the Ten Year Enrollment projection using the U.S. Census projection which is updated annually to reflect the birth and death statistics.

II. METHODOLOGY

The projection relies on the U.S. Census projection, a Rural-Urban Projection cohort survival model. The model works with complete numbers of population, births, deaths and net number of migrants from different areas to arrive at a total. The population is validated by demographic, development trends and land-use information on island-wide basis and district level. The data include: population estimates and projections; housing permits data for the past five years; discussions with local officials and developers about the recent and proposed housing and economic growth, and our unique understanding of the broad demographic trends shaping the region as we move into the next century.

The project team's forecast is based upon DOE's actual enrollment from 1986-87 through the 1997-98 school. Historical student enrollment and enrollment trends significantly influence forecasts of future enrollment. The forecasts were prepared using the cohort survival and proportionate share analysis. The following assumptions are made:

- Guam's civilian population will grow at a net average annual growth rate of 1.68 per cent according to the Census.
- Guam economy will grow at a slow pace as compared to previous years.

- The fertility rate will be 3.0 per cent. The estimated fertility rate (TFR) of 3.7 for the period 1990-1995 will decrease by .7 children until the year 2010.
- The level of life expectancy gradually increases from 71.5 for males and 75.6 for females in 1990 to 75.0 and 79.2 in the year 2010.
- It is assumed that net migration remains zero for the entire period.
- The projection does not include the military population due to its unpredictable size into the future.
- The average household is 4.0 persons and the average family household size is 4.3 persons.

Although we assumed that the net migration is zero, we are aware of the migration that is taking place in and out of Guam. Based on the past census reports, the population has increased only by the amount of its natural growth (births minus deaths). This indicates that number of immigrants must equal the number of people who have left Guam during that same period.

The population projection is provided below. By the year 2010, the Census projects a school age population (5 – 17 years old) of 50,762.

III. TEN YEAR PROJECTION

By the year 2010, there will be over 50,000 school-age children or 58 per cent more than in 1990 (32,131 people). (See Chart 1: Projected Population Breakdown) The population increase is attributed to a natural increase of the population at an average annual rate of 1.68 per cent and a fertility rate of 3 per cent during the planning period.

Table 1: TEN YEAR POPULATION PROJECTION - CHILDREN BORN AND 5 - 17 YEARS OLD

Year	Total Pop.	Children Born	5-17 years
2000	154,178	3,889	40,699
2001	156,931	3,814	42,185
2002	160,015	3,762	43,873
2003	163,029	3,717	45,504
2004	165,980	3,678	46,954
2005	168,876	3,648	48,244
2006	171,728	3,634	49,334
2007	174,541	3,619	50,177
2008	177,320	3,614	50,601
2009	180,073	3,617	50,762
2010	182,812	3,632	50,762

Source: Guam Census Estimated Midyear Population Projected

Table 1.1 HISTORICAL STUDENT ENROLLMENT BY GRADE LEVEL

School Year	Elementary (K-5)	Middle (6-8)	High (9-12)	Total Enrollment
1986-87	12,659	5,528	6,804	24,991
1987-88	12,696	5,632	7,078	25,406
1988-89	12,359	5,582	7,258	25,199
1989-90	13,128	5,622	7,121	25,871
1990-91	13,401	5,564	7,046	26,011
1991-92	14,258	6,095	7,510	27,863
1992-93	15,181	6,588	7,631	29,400
1993-94	16,011	6,654	7,752	30,417
1994-95	16,618	7,104	7,989	31,711
1995-96	16,821	7,094	8,083	31,998
1996-97	17,750	7,187	8,001	32,938
1997-98	16,878	6,827	8,888	32,593

Source: DOE RP&E

Total student enrollment for grades K-12 has increased from 24,991 students in SY 1986-87 to 32,593 students in SY 1997-1998 – a net increase of 7,602 students. Over the past 10 years enrollments have grown at all levels. Elementary enrollment increased by 4,519 students; middle schools are up by 1,245 students; and high schools grew by 1,630 students.

Over the past ten years, the private school student enrollment reached a high of 6,774 students in 1993-94 school year and a low of 4,100 students in 1995-96. The project team assumes that the number of students attending private schools will continue into the future. We forecast that some 5,000 students will attend private schools each year through the year 2010. (See Chart 2: Student Enrollment Private and Public)

Table 2: PAROCHIAL AND PRIVATE SCHOOL ENROLLMENT

School Year	Total
1987-1988	5,545
1988-1989	5,674
1989-1990	5,697
1990-1991	5,293
1991-1992	6,415
1992-1993*	4,865
1993-1994	6,774
1994-1995	4,214
1995-1996	4,100
1996-1997**	4,449

*Does not include St. Johns and Trinity Christian Schools

**Preliminary

Source: 1996-1997 Guam Annual Economic Review

The total number of school age population is reduced by 5,000 students each year to reflect the number of students who will likely attend private schools. Table 3 indicates the total number of school-aged students that will likely attend Guam's public school from the year 2000 – 2010. By the year 2010, we project that DOE's total student enrollment will be 45,762 or 14,102 more students from SY 1998-99.

Table 3: DOE PROJECTED ENROLLMENT

Year	5-17 years	Less Private Schools	DOE Total
2000	40,699	5,000	35,699
2001	42,185	5,000	37,185
2002	43,873	5,000	38,873
2003	45,504	5,000	40,504
2004	46,954	5,000	41,954
2005	48,244	5,000	43,244
2006	49,334	5,000	44,334
2007	50,177	5,000	45,177
2008	50,601	5,000	45,601
2009	50,762	5,000	45,762
2010	50,762	5,000	45,762

Source: Census Report and Earth Tech

Table 3A and Chart 3 shows the projected student enrollment by age group SY 2000 – 2010 K - 12.

Between 1999 and the year 2010, public school enrollment will increase in elementary and secondary schools. The primary reason for the increase is a relatively high fertility rate creating a population that has a fairly young age structure. Although the 1 to 4 year old age group is projected to decline slightly over the planning period, increases in the school-age populations are expected during the next 10 years. From 1999 and beyond, the 5- to 11-year-old age group will continue to increase the elementary enrollment through the year 2010. The projected increase in the 12- to 17- year old population will increase the number of middle and high school students.

Between 1999 and 2010, elementary school enrollment from kindergarten through Grade 5 is expected to increase by 4,199 students, or 24 per cent. Grades 6-8 will grow steadily within the ten-year horizon with an additional 2,893 more students by the year 2010. Grades 9-12 will grow almost 50 per cent or 4,504 new students by the year 2010.

From the year 2000 – 2005, K - 5 will grow an annual average rate of 4 per cent as a result of the baby boom experienced during 1995 - 1999. The second half of this period from 2005 - 2010, we expect to see this age group to peak at roughly 22,000 students in 2007 and then gradually fall below 22,000 students through 2010.

Middle school grades 6- 8 will grow at an annual average of 4.8 per cent during 2000 – 2005. From year 2005 to 2010, the average annual growth will be around 2.3 per cent and will peak at 10,000 students by the year 2010.

High school grades 9 – 12 will also grow at an average annual rate of 4 per cent during the first five years (2000- 2005). We expect this group to reach over 13,000 students by the year 2007 and steadily grow each year by 3 per cent to 13,700 students by the year 2010.

Table 3A: DOE PROJECTED ENROLLMENT BY GRADES K - 12

Year	K - 5	6 - 8	9 - 12	Total
2000	18,563	7,497	9,639	35,699
2001	19,336	7,809	10,040	37,185
2002	20,214	8,163	10,496	38,873
2003	21,062	8,506	10,936	40,504
2004	21,816	8,810	11,328	41,954
2005	22,054	9,514	11,676	43,244
2006	22,167	9,310	12,857	44,334
2007	22,137	9,939	13,101	45,177
2008	21,888	10,032	13,680	45,601
2009	21,966	10,068	13,729	45,762
2010	21,966	10,068	13,729	45,762

Source: U.S. Census and Earth Tech

Chart 4 shows the Actual and Projected School Enrollment by Grade Level from SY 1990 through SY 2010. (See Appendix B -Guam Census 1990 - 2010 the total population and by age group)

The population projection for 1998 and 1999 for the school age group of 5 – 17 was 37,515 and 39,167 respectively. DOE's enrollment for SY 1998 – 1999 was over 31,000. Estimated private school enrollment is at 5,000. There is a difference of 1,500 school age persons that are not attending either public or private schools. The Ten Year Enrollment Projection for the planning period includes *all* school-aged persons who are likely to attend school, *minus* the 5,000 students allocated for private school attendance.

DOE Division of Research, Planning and Evaluation

The DOE Division of Research and Planning (RP&E) utilizes the cohort survival technique to project future student enrollment. This technique employs yearly live birth counts which creates kindergarten seed numbers for each progressive projection year. Cohort ratios from kindergarten to first grade, first grade to second grade, second grade to third grade, all the way to eleventh to twelfth grade are calculated based on past years enrollment. If a five year cohort estimate is desired, the basis of the ratios would be the past five years actual DOE enrollment. If a three year cohort estimate is desired, then the cohort ratios are based on the immediate past three years. These cohort ratios act as multiplier to the yearly projected kindergarten enrollment which produces the projected enrollment per grade. Table 3C shows the five year graded DOE enrollment history for school years 1994-95 through 1998-99, the resulting average cohort ratios, the kindergarten seed numbers based on live births from 1994-1998, and the five year enrollment projections by grade for school years 1999-2000 through 2003-2004.

DOE's RP&E's five year enrollment projection indicate that by SY 2003-04 there will 32,684, an increase of 1,013 students from SY 1998-99. RP&E projections indicate that the growth for this period will be 3 percent. This differs from the projection we have

made which is estimated to be a total student population of 41,954 in SY 2003-04 or 9,270 more students than RP&E projections.

Forecasts are based on assumptions. We recognize that there is a difference from our estimates and DOE's RP&E. Because of the variation in projections, the enrollment forecast discussed in this section and DOE's RP&E's is summarized in Table 3B and are given as a range of low, high and most likely scenarios.

Table 3B: PROJECTED ENROLLMENT BY GRADES K – 12 LOW, HIGH AND MOST LIKELY

School Year	Low	High	Most Likely
2000	31,900	40,699	35,699
2001	32,061	42,185	37,185
2002	32,216	43,873	38,873
2003	32,470	45,504	40,504
2004	32,684	46,954	41,954

Source: Census, DOE RP&E, and Earth Tech

Based on 5 yrs.

GUAM DEPARTMENT OF EDUCATION
Districtwide Enrollment Projection
May 1999

Five Year Graded Enrollment History	1994-95	1995-96	1996-97	1997-98	1998-99	Four Year Survival	Cohort Ratio	Average	
Kindergarten	2,931	2,961	3,025	2,765	2,181				
First	2,981	2,994	3,168	2,809	2,950	K-1st		1.02	
Second	2,835	2,856	3,093	2,919	2,783	1st-2nd		0.98	
Third	2,753	2,739	2,900	2,761	2,844	2nd-3rd		0.96	
Fourth	2,587	2,722	2,814	2,697	2,683	3rd-4th		0.98	
Fifth	2,531	2,549	2,750	2,549	2,661	4th-5th		0.97	
Sixth	2,396	2,384	2,471	2,559	2,467	5th-6th		0.95	
Seventh	2,433	2,342	2,339	2,281	2,468	6th-7th		0.96	
Eighth	2,275	2,368	2,377	2,173	2,270	7th-8th		0.98	
Ninth	2,795	2,862	3,226	3,310	3,002	8th-9th		1.35	
Tenth	2,268	2,122	2,090	2,321	2,278	9th-10th		0.72	
Eleventh	1,666	1,666	1,444	1,528	1,656	10th-11th		0.71	
Twelfth	1,262	1,433	1,241	1,309	1,428	11th-12th		0.86	
K-5	16,618	16,821	17,750	16,500	16,102	Information on this half of the graph is used to generate projections in the lower left quadrant of the table			
6-8	7,104	7,094	7,187	7,013	7,205				
9-12	7,991	8,083	8,001	8,468	8,364				
K-12	31,713	31,998	32,938	31,981	31,671				
Five Year Enrollment Projections						Ratio of KG to Live Births Five Years Earlier			
Year:	1999-00	2000-01	2001-02	2002-03	2003-04				
Kindergarten	3,111	2,937	2,997	3,033	3,043	Year	Enrollment	Year	Births
First	2,228	3,179	3,001	3,062	3,099	1994	2,931	1989	3,565
Second	2,879	2,175	3,102	2,928	2,988	1995	2,961	1990	3,850
Third	2,678	2,770	2,092	2,984	2,817	1996	3,025	1991	3,921
Fourth	2,786	2,623	2,713	2,049	2,923	1997	2,765	1992	4,214
Fifth	2,608	2,708	2,549	2,637	1,992	1998	2,181	1993	4,409
Sixth	2,534	2,484	2,579	2,428	2,511	1999	3,111	1994	4,427
Seventh	2,372	2,437	2,388	2,480	2,335	2000	2,937	1995	4,180
Eighth	2,414	2,320	2,384	2,336	2,425	2001	2,997	1996	4,265
Ninth	3,061	3,255	3,129	3,214	3,150	2002	3,033	1997	4,316
Tenth	2,174	2,217	2,358	2,266	2,328	2003	3,043	1998	4,330
Eleventh	1,629	1,554	1,585	1,686	1,620				
Twelfth	1,427	1,403	1,339	1,366	1,452	0.82	0.7027		
Projections used Kg/Live Birth Ratio of 0.7027						0.77			
K-5	16,289	16,390	16,454	16,694	16,862	0.77			
6-8	7,320	7,241	7,351	7,244	7,271	0.66			
9-12	8,291	8,430	8,411	8,532	8,551	0.49			
K-12	31,901	32,061	32,216	32,469	32,684	Creates Kindergarten Seed Numbers for Projections			

IV. POPULATION IMPACT ON GUAM'S PUBLIC SCHOOL SYSTEM

The 1990 Census of Guam enumerated a total resident population of 133,152 people, reflecting an annual population growth of 2.28 per cent since the 1980 census (105,979). This means that there were 27,000 more people living in Guam in 1990 than there were in 1980. Almost 50 per cent (62,614 persons) of Guam's population lived in the villages of Dededo, Yigo and Tamuning.

In 1990, there were 17,567 housing units in northern Guam, compared to 13,244 in 1980. The central villages totaled 41,168 people, up 21 per cent from 1980. There were a total of 10,947 housing units in these villages. The southern villages of Guam had a population of 28,920 people compared to 23,870 in 1980. There were 6,763 housing units in the southern villages in 1990. (See Chart 6 Housing Units 1980 - 1990)

During the past two decades, Guam's population grew at a rapid rate. Guam's infrastructure did not keep pace with the population growth. Schools were impacted directly by the growing population some more than others. DOE and the Government of Guam did not build new schools to accommodate the growth. Rather, DOE addressed the growth by adding temporary classrooms where growth was occurring and/or changed attendance area boundaries to accommodate the students accordingly.

Guam's public schools grew disproportionately, with the northern school districts experiencing a higher growth rate compared to the other districts. The central district also experienced growth, and the southern district grew at a fairly slow pace compared to the north. School Enrollment by Region SY 1986 - 1998 is shown in Table 4. In school year 1986-87, there were 12,659 students attending 24 elementary schools. By SY 1996-97, there were 17,750 elementary students attending the same 24 schools, an increase of 5,091 students.

Capacity was added to the existing schools to accommodate the additional students by building temporary classrooms. These temporary classrooms have since become permanent structures to support the current enrollment.

No new schools were built during the '80s. Several elementary schools have consistently had high enrollment totals for an elementary school. This occurs more often in the north, where schools have had a student population in excess of 1,500 students.

Schools were built in the 1950s through 1970s to accommodate the population of that period. Schools were not constructed to meet any additional growth or expansion. Temporary classrooms were added on to school facilities without much consideration of classroom arrangements in relation to the academic support areas and administrative areas. While the temporary classrooms added capacity to accommodate the students, the general support facilities, i.e. cafeteria, library, storage, and the administrative offices, remained the same size but now have to support, in some instances, nearly double their original capacity.

Table 4: SCHOOL ENROLLMENT BY REGION SY 1986 - 1998

				School Year												
School	Type	Location	District	1998-99	1997-98	1996-97	1995-96	1994-95	1993-94	1992-93	1991-92	1990-91	1989-90	1988-89	1987-88	1986-87
Finegayan Elementary	1	Dededo	4	1,073	1,093	1,535	1,538	1,509	1,220	1,384	1,290	1,188	1,135	690	1,043	1,011
Upi Elementary	1	Yigo	4	940	645	1,263	1,012	1,097	1,191	870	845	778	922	938	1,038	964
Daniel L. Perez (Yigo Elementary)	1	Yigo	4	808	1,182	1,230	950	982	1,078	944	916	842	884	824	735	700
M.A. Ulloa Elementary	1	Dededo	4	1,011	1,073	1,307	1,419	1,258	1,290	1,264	1,253	1,128	1,108	1,111	994	1047
Juan M. Guerrero (Harmon Loop Elementary)	1	Dededo	4	750	869	930	911	811	902	880	735	716	723	690	691	659
Astumbo Elementary	1	Dededo	4	751	734	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mt.Santa Rosa	1	Dededo	4	430												
F.B. Leon Guerrero Middle	2	Yigo	4	1,349	1,346	1,370	1,278	1,400	1,200	1,429	1,317	976	970	939	912	852
Simon Sanchez High	3	Yigo	4	1,856	1,847	1,796	1,808	1,715	1,699	1,647	1,704	1,629	1,445	1,377	1,320	1,189
Sub-total				8,968	8,789	9,431	8,916	8,772	8,580	8,418	8,060	7,257	7,187	6,569	6,733	6,422
Chief Brodie Memorial	1	Tamuning	2	661	742	742	662	731	n/a	n/a	25	69	n/a	n/a	n/a	n/a
L.B. Johnson Elementary	1	Tamuning	2	409	433	411	380	364	325	331	296	273	286	271	312	192
Tamuning Elementary	1	Tamuning	2	815	830	772	629	605	601	558	537	475	472	511	525	535
Wettengel	1	Dededo	2	823	947	899	842	771	847	808	785	784	764	734	708	686
Vicente Benavente (Dededo) Middle	2	Dededo	2	1,432	1,365	1,767	1,697	1,718	1,652	1,617	1,550	1,420	1,421	1,422	1,461	1,503
John F. Kennedy High	3	Tamuning	2	2,422	2,520	2,365	2,329	2,219	2,293	2,285	2,199	2,108	2,095	2,169	2,319	2,176
Sub-total				6,562	6,837	6,956	6,539	6,408	5,718	5,599	5,392	5,129	5,038	5,107	5,325	5,092
B.P. Carbullido Elementary	1	Barrigada	3	580	571	571	535	532	545	511	535	485	431	431	451	459
Price Elementary	1	Mangilao	3	761	988	992	980	927	988	840	767	723	694	680	636	638
Ordot Chalan Pago Elementary	1	Ordot	3	603	608	563	591	539	438	436	396	350	353	340	336	340
J.Q. San Miguel Elementary	1	Toto	3	614	686	682	627	590	643	596	546	537	588	554	535	523
C.L. Taitano Elementary	1	Sinajana	3	740	774	726	757	767	682	679	595	592	577	556	591	596
Agana Heights	1	Agana Heights	3	500	527	521	459	461	463	429	443	401	417	401	396	408
M.U. Lujan Elementary	1	Yona	3	804	931	840	876	881	966	894	839	753	687	716	667	662
P.C. Lujan Elemetary	1	Barrigada	3	579	708	700	646	651	753	709	694	605	557	498	548	555
L. P. Untalan Middle	2	Barrigada	3	1,105	1,098	1,312	1,317	1,231	1,168	1,109	1,004	980	953	924	906	902
Agueda Johnston Middle	2	Ordot / Sinajana	3	966	608	1,305	1,294	1,336	1,276	1,165	1,053	1,035	1,062	1,095	1,164	1,173
George Washington High	3	Mangilao	3	2,286	2,459	2,222	2,159	2,234	2,012	2,094	2,125	1,908	2,109	2,214	2,114	2,167
Sub-total				9,538	9,958	10,434	10,241	10,149	9,934	9,462	8,997	8,369	8,428	8,409	8,344	8,423
J.P. Torres Elementary	1	Agat	1	175	189	344	351	356	334	369	333	361	353	318	188	173
Marcial Sablan	1	Agat	1	736	757	902	941	902	970	968	844	801	652	652	724	804
Talofofo Elementary	1	Talofofo	1	399	381	368	376	388	332	325	278	262	265	255	240	283
F.Q. Sanchez Elementary	1	Umatac	1	107	114	114	124	129	131	135	115	122	133	135	112	123
Inarajan Elementary	1	Inarajan	1	404	421	413	399	444	411	399	323	336	322	323	320	378
Merizo Elementary	1	Merizo	1	305	334	352	374	335	336	309	279	271	246	215	242	284
H.S. Truman Elementary	1	Santa Rita	1	313	341	573	442	588	565	543	589	549	559	516	664	639
Jose Rios (New Piti) Middle	2	Piti	1	913	876	837	909	860	835	821	760	742	779	769	766	756
Oceanview Middle	2	Agat	1(Middle)	624	677											
Inarajan Middle	2	Inarajan	1	816	857	596	599	559	523	447	411	411	437	433	423	342
Southern High	3	Agat	1	1,800	2,062											
Oceanview High	3	Agat	1(High)			947	1,053	1,041	1,048	1,032	1,000	940	958	994	867	842
Inarajan High	3	Agat	1			671	734	780	700	573	482	461	514	504	458	430
Sub-total				6,592	7,009	6,117	6,302	6,382	6,185	5,921	5,414	5,256	5,218	5,114	5,004	5,054
Total				31,660	32,593	32,938	31,998	31,711	30,417	29,400	27,863	26,011	25,871	25,199	25,406	24,991

SOURCE: DOE RESEARCH, PLANNING & EVALUATION

New schools were not built until the mid-'90s. Southern High, the most expensive school ever to be constructed on Guam (\$115 million) was completed in 1996 to serve the southern villages. This school facility has a state of the art theater facility, swimming pool, track and field and gymnasium. Astumbo Elementary in Astumbo, Dededo was built in 1997. Upi Elementary in Yigo was rehabilitated and renovated in 1998. Temporary classrooms were set-up to accommodate the students attending Upi Elementary while it was under construction. The temporary classrooms will continue to be used in what is now called Mt. Santa Rosa Elementary School in Yigo. A new school, Machananao Elementary, is under construction in the Agafa Gumas/Machananao area in Yigo. Machananao Elementary is expected to open in the Fall of 1999.

The total number of teachers from SY 1988-89 through 1997-98 is shown in Table 5. The total number of teachers employed by DOE varied each year. In SY 1991 – 1992 there was total of 1,219 teachers and in 1996-97 there were 2,034 teachers. The student /teacher ratio for SY 1988-89 through 1998-99 is shown in Table 5A. In SY 1998 – 1999 student/teacher ratio the elementary student teacher ratio was at 15 to 1 and the secondary at 16 to 1. DOE is obligated to follow the Board-Union contract regarding the maximum number of students per elementary and secondary classrooms. Each year teachers and supporting staff are hired or removed based on the total student enrollment.

Table 5: TOTAL TEACHERS - ELEMENTARY AND SECONDARY

School Year	98-99	97-98	96-97	95-96	94-95	93-94	92-93	92-91	90-91	89-90	88-89
Elementary	1063	1074	1034	941	937	908	623	827	786	737	701
Secondary	1010	988	912	860	859	859	831	392	717	590	678
Total	2073	2062	1946	1801	1796	1767	1454	1,219	1,503	1,327	1,379

Source: DOE RP&E and 1997-98 Guam Annual Economic Review

Table 5A: STUDENT TEACHER RATIO

School Year	98-99	97-98	96-97	95-96	94-95	93-94	92-93	92-91	90-91	89-90	88-89
Pupil/Teacher ratio elementary	15	16	17	18	18	18	24	17	17	18	18
Pupil/Teacher ratio secondary	16	16	17	18	18	17	17	35	18	22	19

Source: DOE RP&E and 1997-98 Guam Annual Economic Review

Charts 7 and 8 illustrates the Student Teacher Ratio for Elementary and Secondary Schools.

There are six middle schools serving some 7,187 students in school year 1996-97. This is an increase of 30 per cent or 1,659 more students from school year 1986-87. In 1997, Oceanview High School was converted to a middle school when Southern High school opened. From 1990 through 1998, F.B. Leon Guerrero and Dededo Middle Schools consistently had student population over 1,300 students. On the other hand, Inarajan Middle had less than 600 students over the same period.

In school year 1996-97, five high schools housed 8,001 students, an increase of 18 per cent since 1986 (6,804). Through the years, John F. Kennedy and George Washington

High had enrollments of 2,200 students. Southern High opened its doors in 1997 with an enrollment total over 2,000 students. The attendance areas included the immediate surrounding villages of Agat, Santa Rita, Merizo and Inarajan as well as Yona and Talofoto. With an enrollment total of over 2,000 students, high schools on Guam are large in size. Except for Southern High, these schools have added temporary classrooms or are utilizing every available room including cafeteria and gymnasium areas to conduct classroom teaching.

It is interesting to note that the per cent of growth in the middle school does not correlate with the per cent of growth in the high schools. This we believe is attributed to the high dropout rate experienced throughout the high school system with estimates anywhere between 20 and 40 per cent. If DOE's goal is to reduce the drop out rate on Guam, then the likelihood of the DOE projected enrollment for 2000 – 2010 will occur.

A. DOE School Regions

In school year 1997-98, DOE organized the schools into four regions.

Region 1 serves the southern villages of Talofoto, Inarajan, Merizo, Umatac, Agat and Santa Rita. All the students residing in this district are able to attend the schools in their village. Region 1 includes: Merizo Elementary, Inarajan Elementary, Talofoto Elementary, F.Q. Sanchez Elementary, Marcial Sablan (formerly Agat) Elementary, H.S. Truman Elementary, J.P. Torres Elementary, Jose L.G. Rios (Piti) Middle, Oceanview Middle, Inarajan Middle and Southern High School.

With the opening of Southern High in 1997-98 Oceanview High was converted to a middle school and Inarajan High was closed. F.Q. Sanchez Elementary was closed in 1998. (See Figure 2: Region 1 Map, Table 4 Enrollment by Region, and Figure 1 School Year 1997-1998 Attendance Area)

Region 2 includes: the elementary schools of Chief Brodie Memorial, L.B. Johnson, Tamuning and Wettengel, and V. SA. Benavente (Dededo) Middle and John F. Kennedy High school. These schools served the villages in the northern region. Students from Tamuning and Dededo attend Chief Brodie; L.B.J and Tamuning Elementary. Wettengel Elementary and V. SA Benavente (Dededo) Middle are located in Dededo and attendance area covers all of Dededo village. While these schools primarily serve the northern villages, JFK has an attendance area that covers Tamuning, Dededo as well as Agana, Asan Maina, Barrigada, and Mangilao. (See Figure 3: Region 2 Map)

Region 3 combines the central schools on island: B.P. Carbullido, Price Elementary, Ordot-Chalan Pago Elementary, J.Q. San Miguel Elementary, C.L. Taitano Elementary, Agana Heights Elementary, M.U. Lujan Elementary, P.C.

Lujan Elementary, L.P. Untalan Middle, Agueda Johnston Middle and George Washington High school. (See Figure 4: Region 3 Map)

Feeling the population growth in the north, several central schools extended their attendance boundaries to include villages in the north. For example, students from Tamuning, Upper Macheche Hill, Harmon, Liguana Terrace, Dededo and Route 16 were bussed to P.C. Lujan Elementary and Untalan Middle School. Carbullido and Price Elementary served the surrounding villages of Barrigada and Mangilao. Price Elementary served Mangilao, the fastest growing community (4.27 per cent per annum in 1990). Students from Layang, Barrigada attended either Carbullido or Price Elementary, depending on which side of the street they lived on.

Region 4 is comprised of the northern schools in Dededo and Yigo. They are: Finegayan Elementary, Upi Elementary, Daniel L. Perez (Yigo) Elementary, M.A. Ulloa Elementary, Juan M. Guerrero (Harmon Loop) Elementary, Astumbo Elementary, Mt. Santa Rosa Elementary, F.B. Leon Guerrero Middle and Simon Sanchez High school. (See Figure 5: Region 4 Map)

In SY 1998-1999, DOE redrew the school attendance area and schools in Regions 2 and 4. Region 2 gained Finegayan, M.A. Ulloa, Astumbo Elementary and Jose L.G. Rios Middle (formerly New Piti). These schools were in Region 4 in the previous year (SY 1997 - 1998). M.U. Lujan Elementary in Region 3 in 1997 was moved to Region 1 in 1998. All the other schools remained unchanged. (See Figure 1A SY 1998 - 1999 Attendance Area.)

Region 2 and 4 served the districts of Yigo, Dededo and Tamuning with a K-12 enrollment total of 15,434 students in school year 1998-99. The elementary schools consistently had enrollment in excess of the legislated size of 550 students per school. Finegayan, Yigo, Upi, Ulloa and Juan M. Guerrero (Harmon Loop) all experienced enrollment figures as high as 1,200 students. Wettengel's enrollment wavered between 700 to 950 students during the last ten years. New schools in the north have helped to alleviate the overcrowding and large school population experienced in the past years.

There are two middle schools and two high schools serving Yigo, Dededo and Tamuning. These two schools have consistently had student populations over 1,000 students with F.B. Leon Guerrero Middle at 1,292 and V. SA. Benavente (Dededo) Middle at 1,423 in 1998-99 for a total of 2,715 middle school students. The legislature mandate requires an enrollment capacity of 700 students for middle and 1,200 for high school. Simon Sanchez High and John F. Kennedy have a combined total of 4,373 students in 1998-99.

In school year 1998-99, Region 3 had a total K-12 enrollment of 9,618 (K-5 at 5,172, Grades 6-8 at 2,078 and Grades 9-12 at 2,368). Student enrollment in the elementary schools ranged from 500 - 700 students except for the villages of Mangilao and Yona, the fastest growing communities in the '90s. Price Elementary reached an all time high of

992 students in school year 1996-97. M.U. Lujan Elementary reached a high enrollment total of 931 students in 1997-98. Ordot-Chalan Pago Elementary school almost doubled its student body since 1988 from 340 to 608 students.

There are four schools in Region 4 that tend to have higher enrollment than other schools in this district. They are Marcial Sablan Elementary, Jose L.G. Rios (New Piti) and Inarajan Middle and Southern High. In school year 1998-99 Marcial Sablan had over 700 students, Piti Middle and Inarajan Middle had over 800 students and Southern High at 1,784. In general, these schools are close to the legislated enrollment size. However, these schools were not originally designed to meet the additional capacity.

Each school re-configured its existing facilities and added temporary classrooms to house the students according to where space was available. From our observation and discussion with administrators at each of the site we visited, school construction and renovations were temporary in nature. Master plans for the expansion were not developed, thus each site layouts reflected poor planning or no planning to properly address vehicular traffic, parking, and pedestrian walkways. The school layout lacked an arrangement of classrooms to support the needs of the students for a more child-scaled environment or to make the school less institutional. Many of the classrooms were located away from the academic support areas like libraries, computer labs and teacher workrooms. The schools do not meet all the legal requirements, i.e. ADA, fire lanes, fire codes, zoning code and will have to be modernized in order to get them up to standard and into compliance code.

V. POPULATION DISTRIBUTION

In 1990, 31,728 people or about twenty four per cent of the population, lived in Dededo, Guam's most populated district, followed by Tamuning at 16,673 people (12.5 per cent) and Yigo with 14,213 people (10.7 per cent). Thus almost 50 per cent of the people lived in three districts and the rest were distributed over the other 16 districts. Guam's fastest growing district was Mangilao, albeit from a relatively small base. It grew by 4.3 per cent per annum, from 6,840 to 10,483 people.

Districts which grew significantly faster than the Guam average (2.28) were Mangilao, and Chalan Pago - Ordot (3.6 per cent). Districts which grew significantly slower than the Guam average were Asan, which grew at only 0.2 per cent, Merizo (0.5 per cent), Sinajana (0.7 per cent), Agana Heights (1.1 per cent) and Mongmong-Toto-Maite (1.1 per cent).

There are many factors influencing these variations in population growth overall and by district. It is known from the census that more than half of the population was not born in Guam. People moved to Guam from the US (military personnel), Philippines (contract workers), from the Federated States of Micronesia, Korea, Japan, China, the Northern Mariana Islands and Palau. Certain areas appeal to the newcomers as well as the local

population. The north and central villages experienced new housing developments, apartment and condominium construction and commercial businesses, making these districts attractive places to live.

The rest of the population was distributed over the other 16 villages. In 1990, thirty one percent (41,618) of the population lived in Central Guam. The most populated villages were Mangilao, Barrigada, Momong-Toto-Maite and Chalan Pago. The southern villages were home to 22% or 28,920 people. Yona's population has grown by 26% since 1980. Santa Rita has grown steadily with a total population of 11,204 in 1990, up 22% from 1980. Agat's population was up 24% in 1990 compared to 1980

Table 6: POPULATION DISTRIBUTION AND GROWTH BY DISTRICT, 1980 and 1990

District	1980 Pop.	1980 Dist. (%)	1990 Pop.	1990 Dist. (%)	Growth Rate 1980-1990
Agana	896	0.8	1,139	0.9	2.40
Agana Heights	3,284	3.1	3,646	2.7	1.05
Agat	3,999	3.8	4,960	3.7	2.15
Asan	2,034	1.9	2,070	1.6	0.18
Barrigada	7,756	7.3	8,846	6.6	1.31
Chalan Pago Ordot	3,120	2.9	4,451	3.3	3.55
Dededo	23,644	22.3	31,728	23.8	2.94
Inarajan	2,059	1.9	2,469	1.9	1.82
Mangilao	6,840	6.5	10,483	7.9	4.27
Merizo	1,663	1.6	1,742	1.3	0.46
Mongmong-Toto-Maite	5,245	4.9	5,845	4.4	1.08
Piti (1)	2,866	2.7	1,827	1.4	-4.50
Santa Rita(1)	9,183	8.7	11,857	8.9	2.56
Sinajana	2,485	2.3	2,658	2.0	0.67
Talofofo	2,006	1.9	2,310	1.7	1.41
Tamuning	13,580	12.8	16,673	12.5	2.05
Umatac	732	0.7	897	0.7	2.03
Yigo	10,359	9.8	14,213	10.7	3.16
Yona	4,228	4.0	5,338	4.0	2.33
Total	105,979	100.0	133,152	100.0	2.28

Source: South Pacific Commission

Deviation of district = district growth rate minus national growth rate (2.28).

(1). There was a redefinition of the district boundaries between Piti and Santa Rita. Military personnel stationed on a vessel in 1980 were part of Piti in the 1980 census. The same vessel was part of Santa Rita in the 1990 census.

A. Future Growth Areas

The northern region will continue to be the most heavily populated districts. Development will continue to extend progressively outward from Tumon along Marine Drive towards Dededo and Yigo. The tourism industry will continue to extend outward from Tumon with commercial development activities occurring to support the tourism industry. Expansion of residential development and redevelopment will continue to occur closest to the main highways.

Large tracts of residential lots under the Chamorro Land Trust program are located in the heart of the rural and agricultural areas of Dededo and Yigo. For the most part, infrastructure (water, sewer, power) is not currently available, thus development of these lots are sporadic and unplanned. The CLTC recipients of these properties are ready to build their homes and are putting pressure on the politicians to develop the infrastructure. Once these tracts are developed, there is the potential of over 4,000 new residential households to be located in Dededo and Yigo.

In addition to the Trust lands, construction activities are anticipated for a mix of low- to medium-density residential and commercial projects as property owners begin to develop in order to maximize their potential uses under the I'Tanota Plan, Guam Land Use Plan. Already, private developers have built single family homes in Santa Ana and Machanao, Dededo and in Wusstig, Yigo. Besides private developers, the Government of Guam, through the Guam Housing Corporation and the Guam Housing and Urban Renewal Authority, have plans to develop low- to middle-income housing developments in several large tracts in Dededo.

The land in the Yigo area, specifically between Route 1 and 15, are slated for moderate-intensity development under the I'Tanota Plan. Yigo will be primarily residential development with small- to medium-size commercial business facilities to support this growing community. There are large tracts of land available in Yigo and several private developers are looking at developing residential areas.

Predominantly, single family residential units are being built or planned in the villages of Dededo and Yigo. Guam's family household size in 1990 indicated that there were 4.3 persons per family. With this in mind, each new residential household will potentially add two new students to the district.

The villages of Barrigada, Mangilao, and Chalan Pago Ordot will continue to grow with in-filling of higher density residential and commercial developments due to the availability of public infrastructure. I'Tanota Plan stipulates moderate density in these villages, envisioning primarily residential development with churches, schools, clinics and some limited commercial development in central Guam. Agana Heights and Sinajana will experience in-filling with medium density housing developments, i.e., townhouses, patio homes, zero-lot line and low-rise homes.

Yona is expected to continue its current development trend of residential homes and small to medium-sized commercial development. Several multi-residential housing units overlooking the cliffs of Yona have received development approval and construction is expected in the near future. The I'Tanota plan has provided Agat and Santa Rita the opportunity to develop higher intensity development in the future. Resort development in this area is proposed and will likely have a synergistic effect on the community as a

whole. Proposed multi-family housing, motels/hotels, clinics, commercial development and offices are envisioned. These resorts will provide work opportunities. Rural land is still available for development. The Chamorro Land Trust has leased out several large tracts of land and once the infrastructure is developed, there is the potential of 300+ new single residential units to be constructed in the Agat and Santa Rita.

The southernmost villages of Umatac, Merizo, Inarajan and Talofofo are proposed to retain their village character. Due to the physical constraints (steep slopes, flood plains, and wetlands) as well as limited to poor infrastructure, development in this area is limited. The practice of passing land on to the children is a common practice to the families residing in the southern villages. Development will continue and the family lots will be subdivided at a higher density.

We have projected the growth for each district based on current and future development trends and land use. The northern district will continue to grow with an estimated total over 90,000 residents by the year 2010, an increase of 32 per cent from 1995. Over 56,000 people will reside in the central villages with most growth occurring in the villages of Barrigada, Mangilao, Yona, Chalan Pago-Ordot and Momong-Toto-Maite. Growth will occur in the southern district but at a much slower pace compared to the central and northern districts. We estimate that the population in the south will be around 35,000. The village of Agat is expected to grow at annual rate of 2.3 per cent and Talofofo at annual 3.2 per cent a year to 2010

By the year 2010, the school-aged population will be over 50,000 people. Based on housing developments and land use trends the northern district, including the village of Tamuning, Dededo, and Yigo, is estimated to have over 27,000 school aged children by the year 2010. The central district is expected to have over 15,000 students and about 8,000 for the southern districts.

Table 7: STUDENT DISTRIBUTION BY DISTRICT 1990 – 2010

District	1990	1995	2000	2005	2010
Northern	13,452	15,180	21,840	25,988	27,384
Central	8,997	10,149	12,312	14,354	15,273
Southern	5,412	6,382	6,557	7,767	8,021

The expected DOE enrollment is as follows:

Table 8: DOE ENROLLMENT BY GRADE

Grade	2000	2005	2010
K – 5	18,563	22,054	21,966
6 – 8	7,497	9,514	10,068
9 – 12	9,639	11,676	13,729
Total	35,699	43,244	45,763

Guam is divided into three districts: north, central and south. The number of students and grade levels are projected for each district as follows:

Table 8A: BY DISTRICT GRADE K – 12 BREAKDOWN

Northern District

North	2000	2005	2010
K-5	11,357	13,294	13,185
6-8	4,586	5,735	6,043
9-12	5,897	7,038	8,240
Total	21,840	26,067	27,468

Central District

Central	2000	2005	2010
K-5	6,402	7,363	7,328
6-8	2,586	3,176	3,359
9-12	3,324	3,898	4,580
Total	12,312	14,437	15,267

Southern District

South	2000	2005	2010
K-5	3,404	3,948	3,854
6-8	1,375	1,703	1,766
9-12	1,768	2,090	2,409
Total	6,547	7,742	8,029

As discussed earlier, DOE organizes its schools in four regions. Regions 2 and 4 serve the northern district where there are 11 elementary schools, 2 middle and 2 high schools. Region 3 serves the central villages with 8 elementary, 2 middle and 1 high school. Region 1 is comprised of the southern villages and has 7 elementary schools, 3 middle, and 1 high school located in this region.

Based on the projected growth, Regions 2, 3, and 4 will be the most impacted. In the Northern District, the expected enrollment for K – 5 will be 13,185 by the year 2010. If DOE was to follow the legislated design standard of 550 students for elementary schools, 700 for middle and 1200 for high, we will need 8 new elementary schools, 4 new middle and 3 new high schools for Regions 2 and 4. In the Central District, 4 new elementary, 2 middle and 2 new high schools are required to meet the growth projected for the central area. Overall, the number of new schools required to meet the population growth for the year 2010 are 12 elementary, 6 middle and 5 high schools.

As discussed in the Conceptual Site plans and Facility Standards report, we recommend that DOE and the legislature take a closer look at its existing design enrollments and modify them for future facilities. There are two reasons why a modification of the standards is desirable. First, the numbers do not “add up”, i.e. there is no logical progression from elementary to high schools in terms of the numbers of students. Because Guam is changing to a system where students attend a school within their

districts, it is important to have a mathematical relationship between the design enrollments for elementary, intermediate, and high schools.

The second reason is that some design enrollments are lower than is necessary or desirable from the standpoint of efficiency or cost effectiveness. Properly designed, a school with higher enrollments than legislated can offer a supportive educational environment. One example is the recently constructed Tamuning Elementary School, a successful facility that is designed for more than 800 students, about 150% of the legislated maximum. Its use of separate courtyard buildings provides a child-scale environment despite the larger number of students. The number of students in some schools also may not justify the high costs for required facilities such as cafeterias, libraries, and athletic fields. That is particularly true for Middle Schools, which require a high level of music, art, and athletic facilities to service only 700 students.

We suggest that the maximum design enrollment for elementary at 800, middle at 1,120 and 1,700 for a high school. If these standards are adopted based on the projected enrollment for the northern district for the year 2010, a total of 6 elementary, 3 middle and 2 high schools will serve the projected growth for the northern district. For the central district will require 3 new elementary schools, 1 middle school and one high school. Again, we assumed a design standard of 1,120 for middle and 1,700 for a high school. The southern district will not require a new school for this planning period.

VI. PROJECTED ETHNIC DISTRIBUTION

There are three major ethnic groups attending Guam's public schools. The Chamorros, Guam indigenous population is the largest group followed by the Filipinos and then by the Micronesians. The Caucasian (White –non Hispanic) ranked third in number in 1991 however continued to decline through the years. Military downsizing and the decision to open a Department of Defense school may have attributed to the decline in this group. Filipinos has increased steadily through the years. From 1991 – 1997, the number of Filipino students rose over 16 per cent to 8,308 students.

In-migration to Guam from Micronesian (formerly the Trust Territory of the Pacific Islands) has increased steadily since 1986 when treaties assuring free entry to the United States were signed. The number of in-migrants to Guam from the Federated States of Micronesia (FSM) alone has doubled between 1991 and 1997 to about 3,475 students. DOE is mandated to provide free public education for all of Guam's children. The Compact of Free Association affords FSM citizens the right to attend school on Guam without special permit. No period of residency is required.

Table 9 provides a breakdown of the student population by ethnicity from SY 1991 – 1997.

Table 9: STUDENT POPULATION BY ETHNICITY

School Year	1991	1992	1993	1994	1995	1996	1997
Chamorro	14,729	15,606	16,304	16,774	16,395	17,115	17,705
Filipino	7,131	7,416	7,603	7,912	7,862	8,510	8,308
Micronesian	1,707	2,562	2,009	2,364	2,693	3,009	3,475
White –Non ispanic	3,072	3,089	2,722	2,592	2,009	1,995	1,141

Source: DOE RP&E

We looked at the growth trend of each of the major groups and made the following assumptions. The Chamorro population will grow at annual rate of 3 per cent from 2000 to 2005 and to 2 per cent annually from 2006 to 2010. The Filipino population will grow at annual rate of 3 per cent from 2000 to 2005 and from 2006 to 2010 at 2 per cent. Micronesian students will continue to in-migrate to Guam as provided for in the Compact of Free Associations to attend Guam's public schools. The growth will slow down as compared to the past because of Guam's economic slowdown. We anticipate the annual growth for this group at 4 per cent during 2000 to 2005 and then 3 per cent annually to 2010.

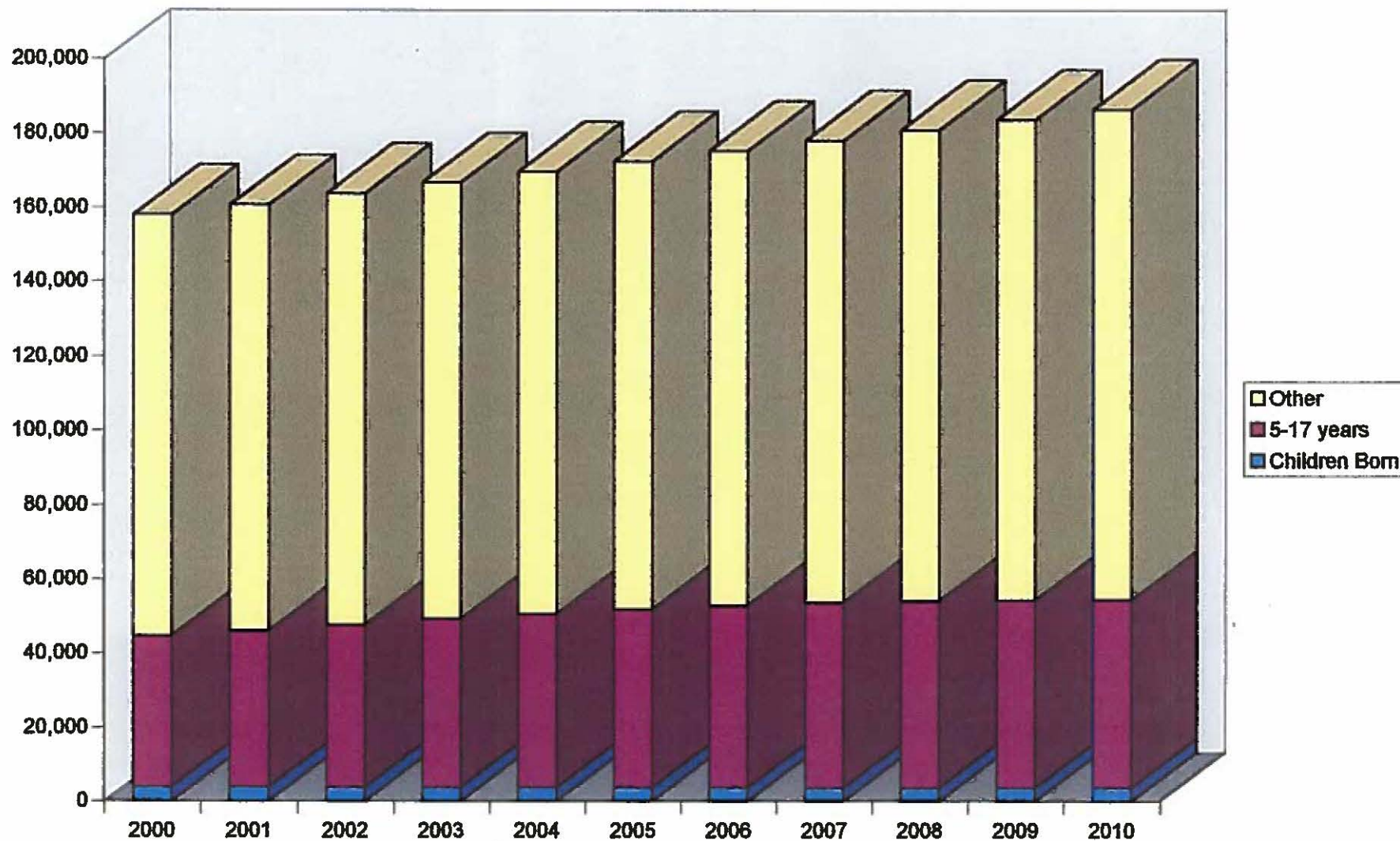
By the year 2010, the major ethnic group will continue to be Chamorros at 53 per cent of the student population. The Filipino population is expected to grow from 8,308 in 1997 to 11,717 by the year 2010 (up 41 per cent). Micronesian students will grow from 3,475 in 1997 to 6,155 by the year 2010 (77 per cent).

Table 9A: PROJECTED STUDENT POPULATION BY ETHNICITY

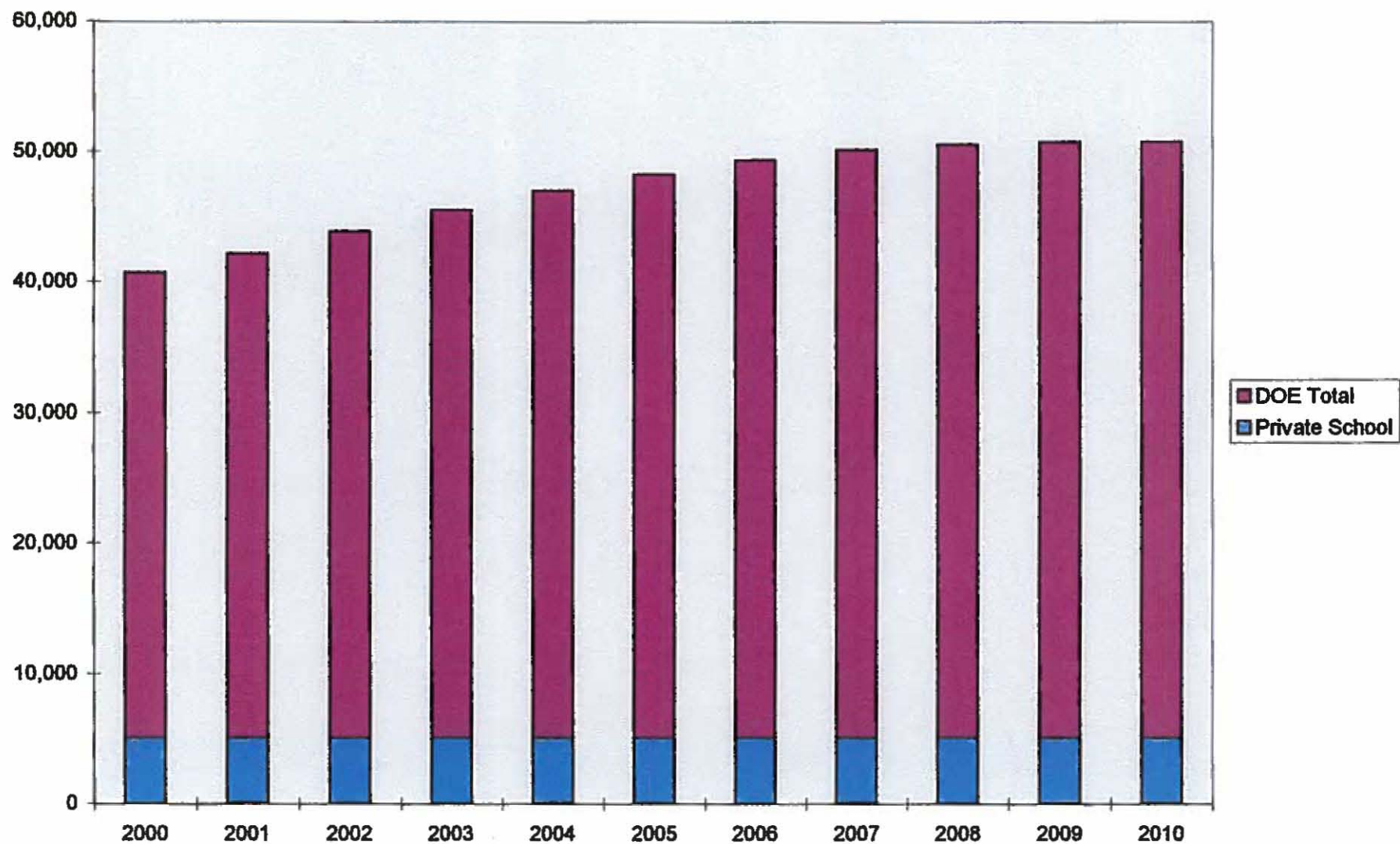
	1998	1999	2000	2005	2010
Chamorro	18,095	18,525	19,081	22,120	24,422
Filipino	8,674	8,888	9,154	10,612	11,717
Micronesian	3,996	4,196	4,364	5,309	6,155

Source: Earth Tech

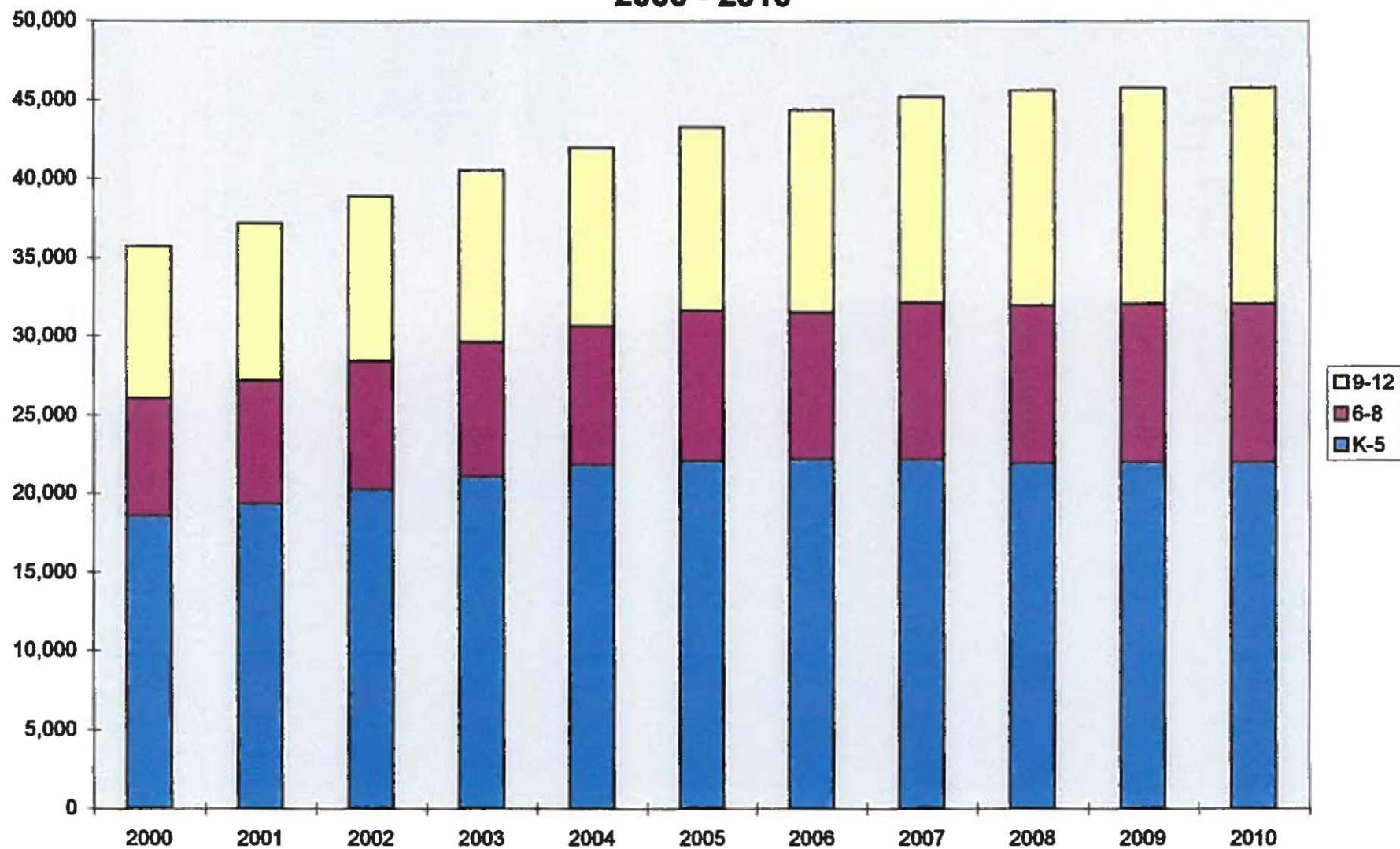
Ten Year Population Projection



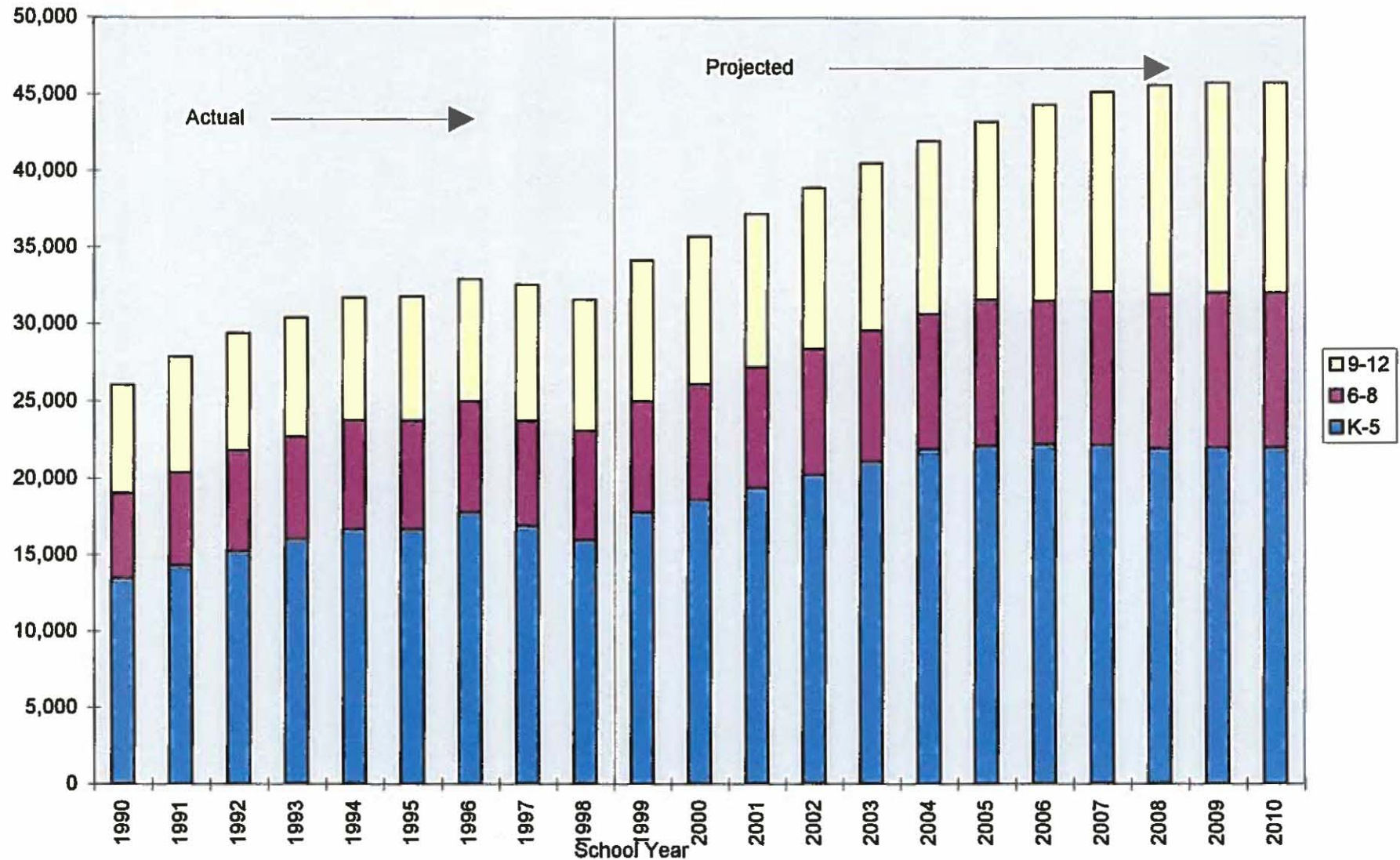
Student Enrollment Private and Public



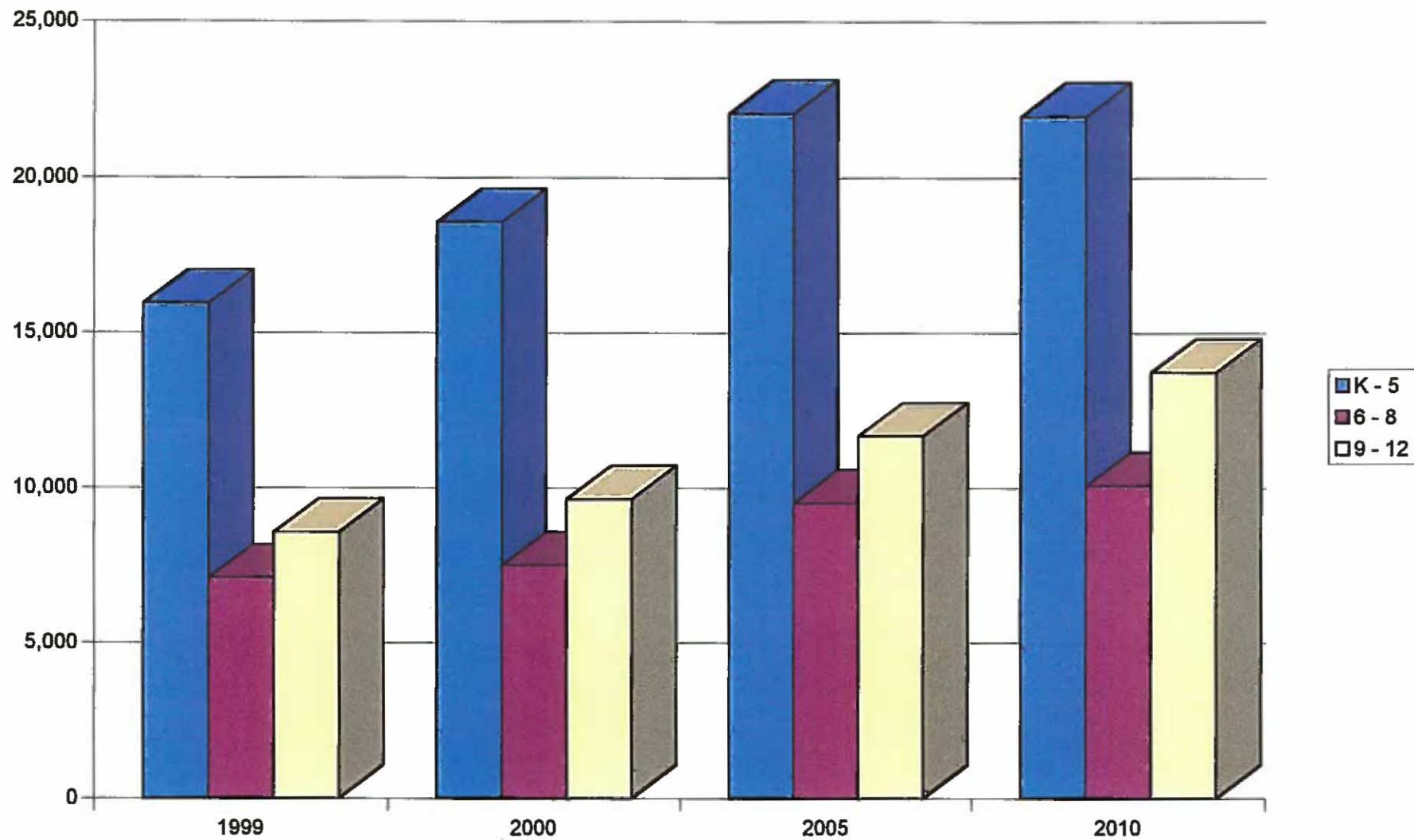
Projected DOE By K-5, 6-8, 9-12 2000 - 2010



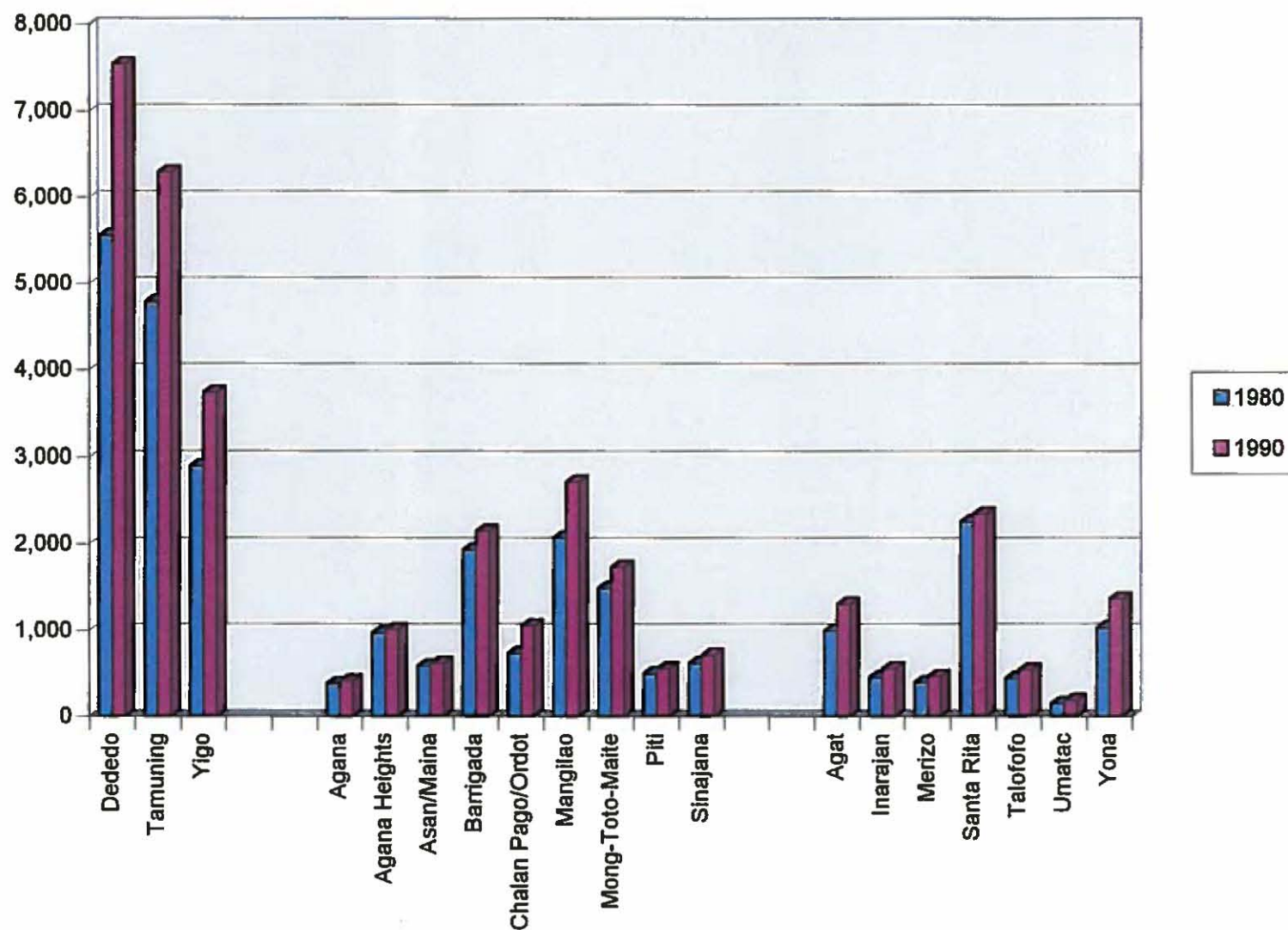
Actual & Projected Student Enrollment K - 12



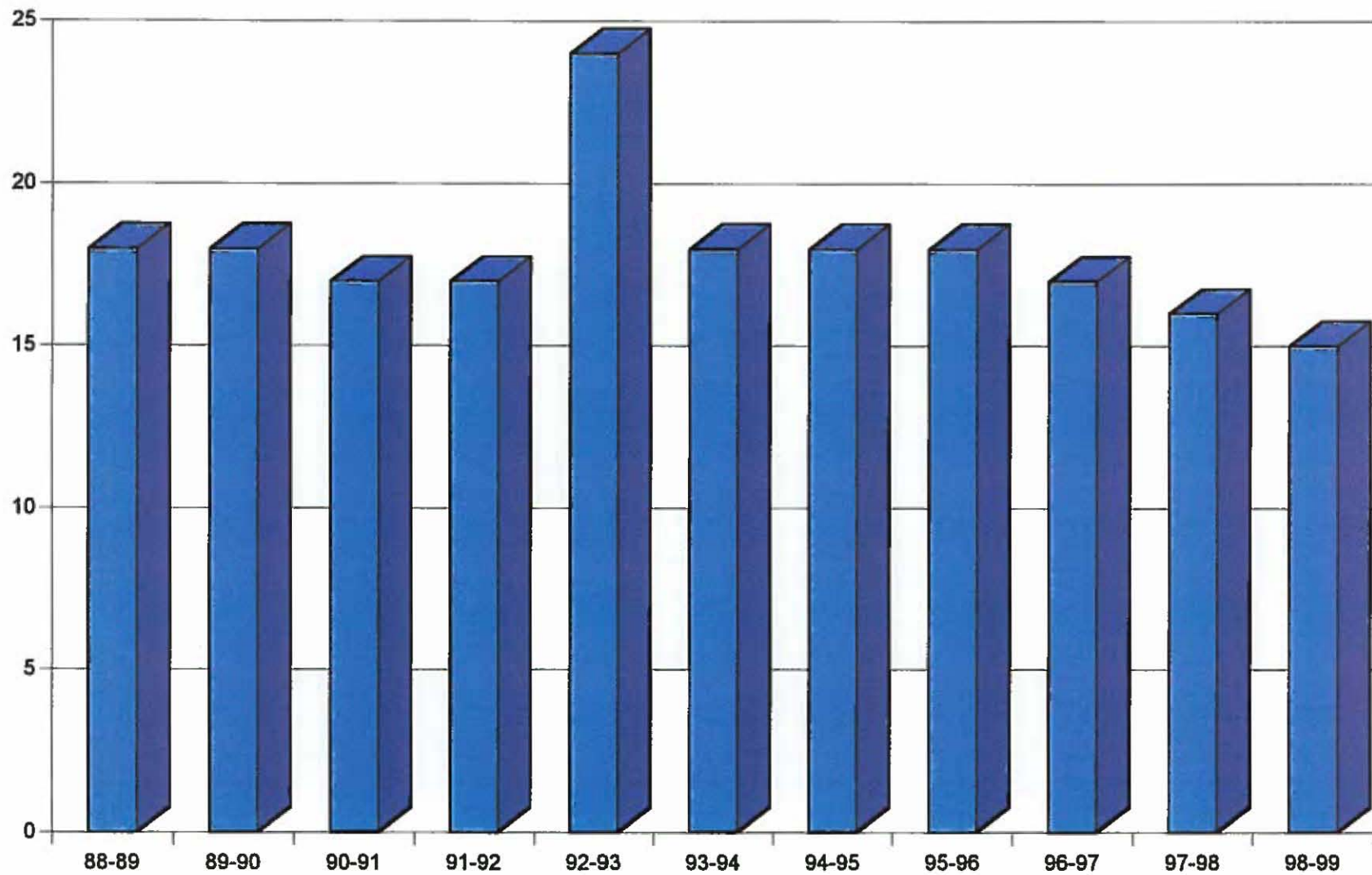
Projected DOE by Grade Level 1999 - 2000 - 2005 - 2010



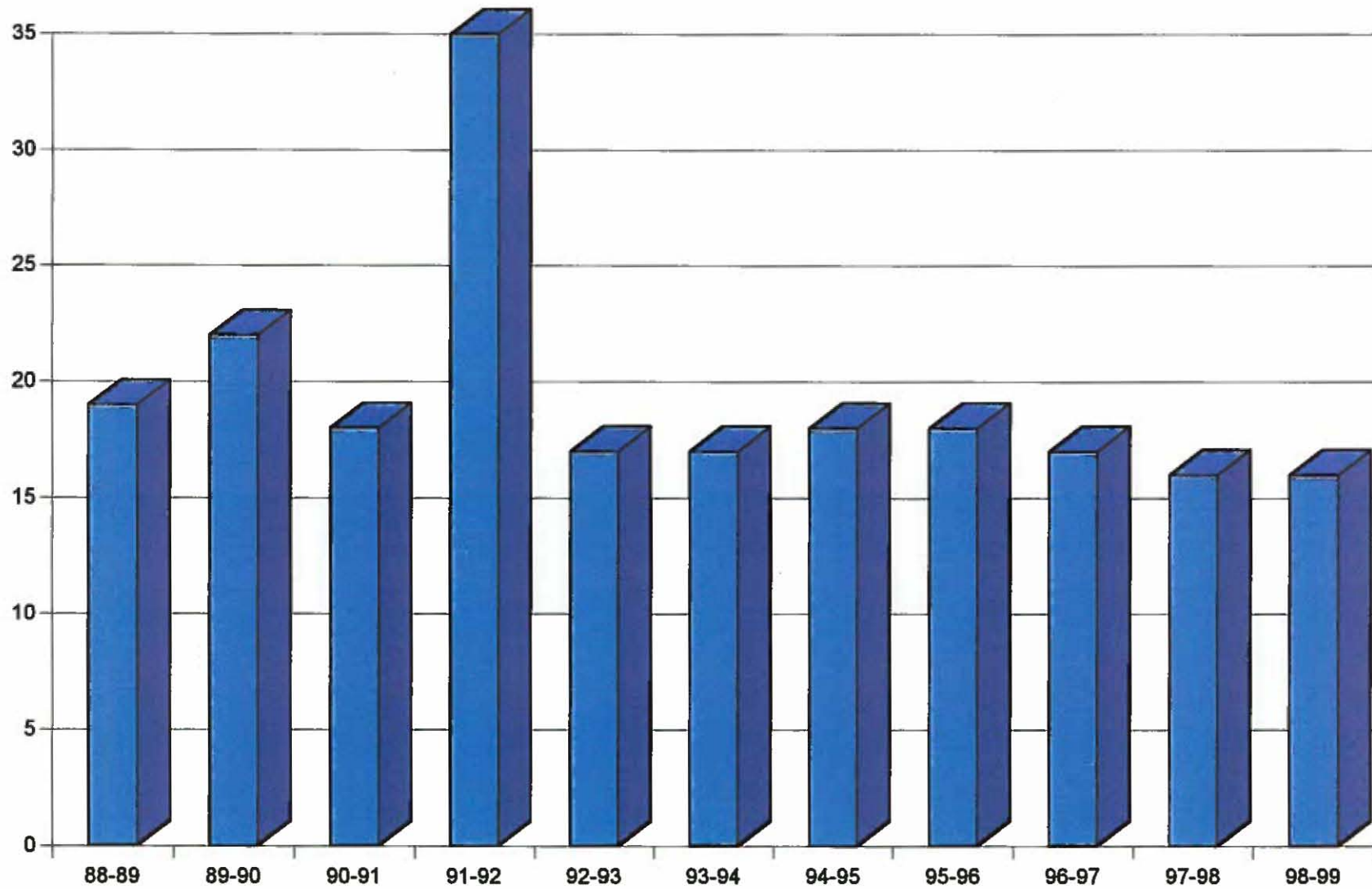
Housing Units 1980 - 1990



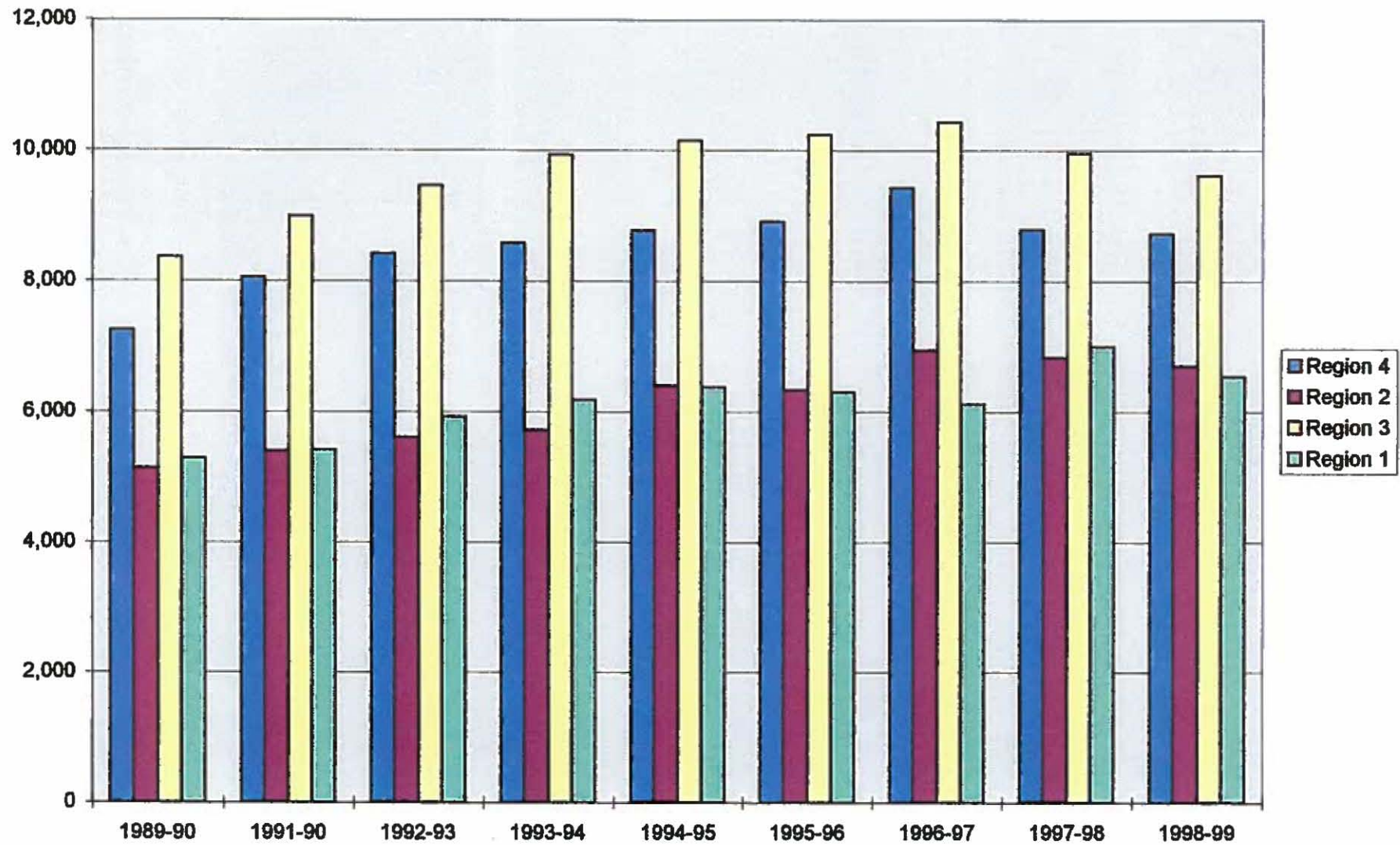
Pupil/Teacher Ratio Elementary



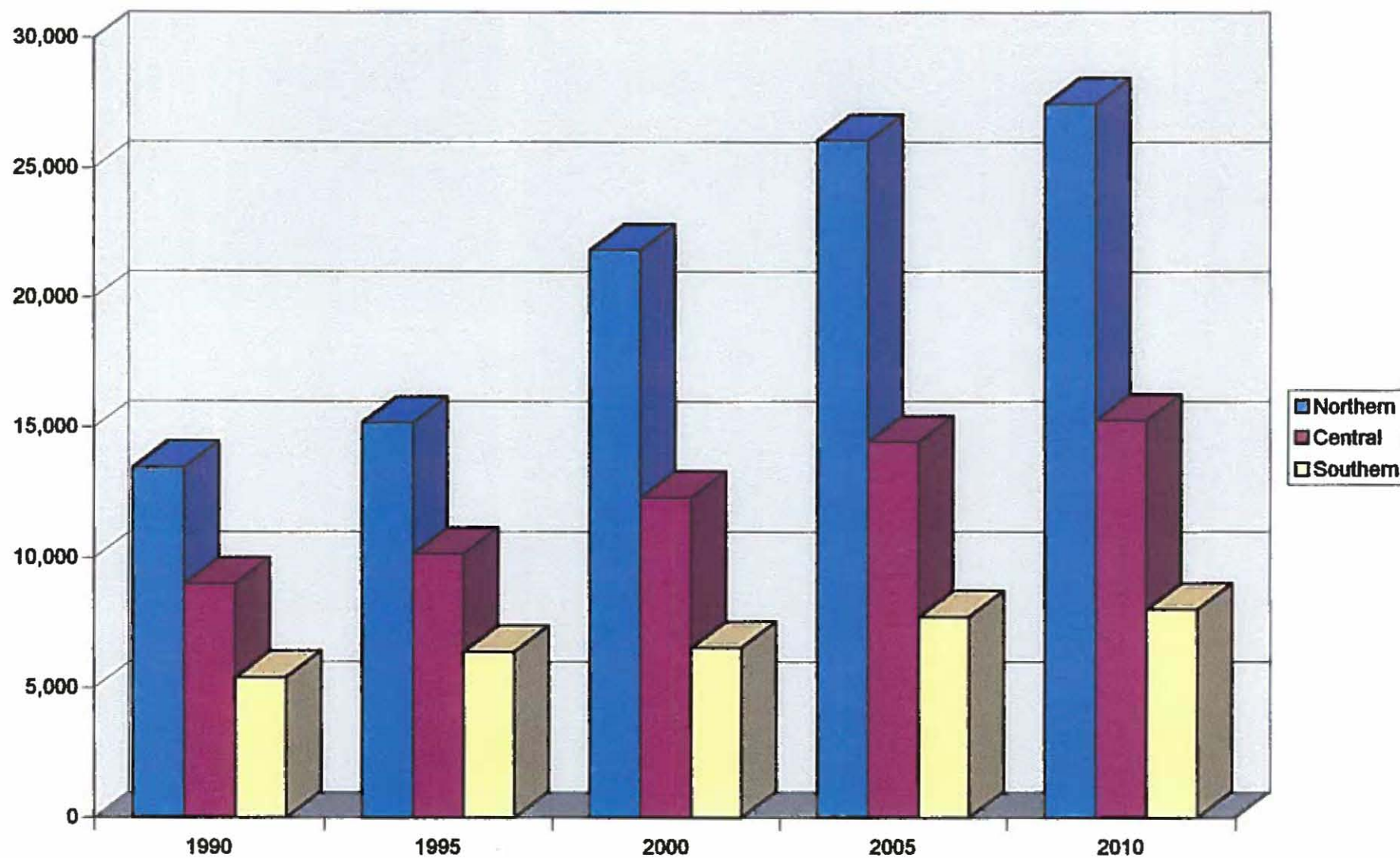
Pupil/Teacher Ratio Secondary



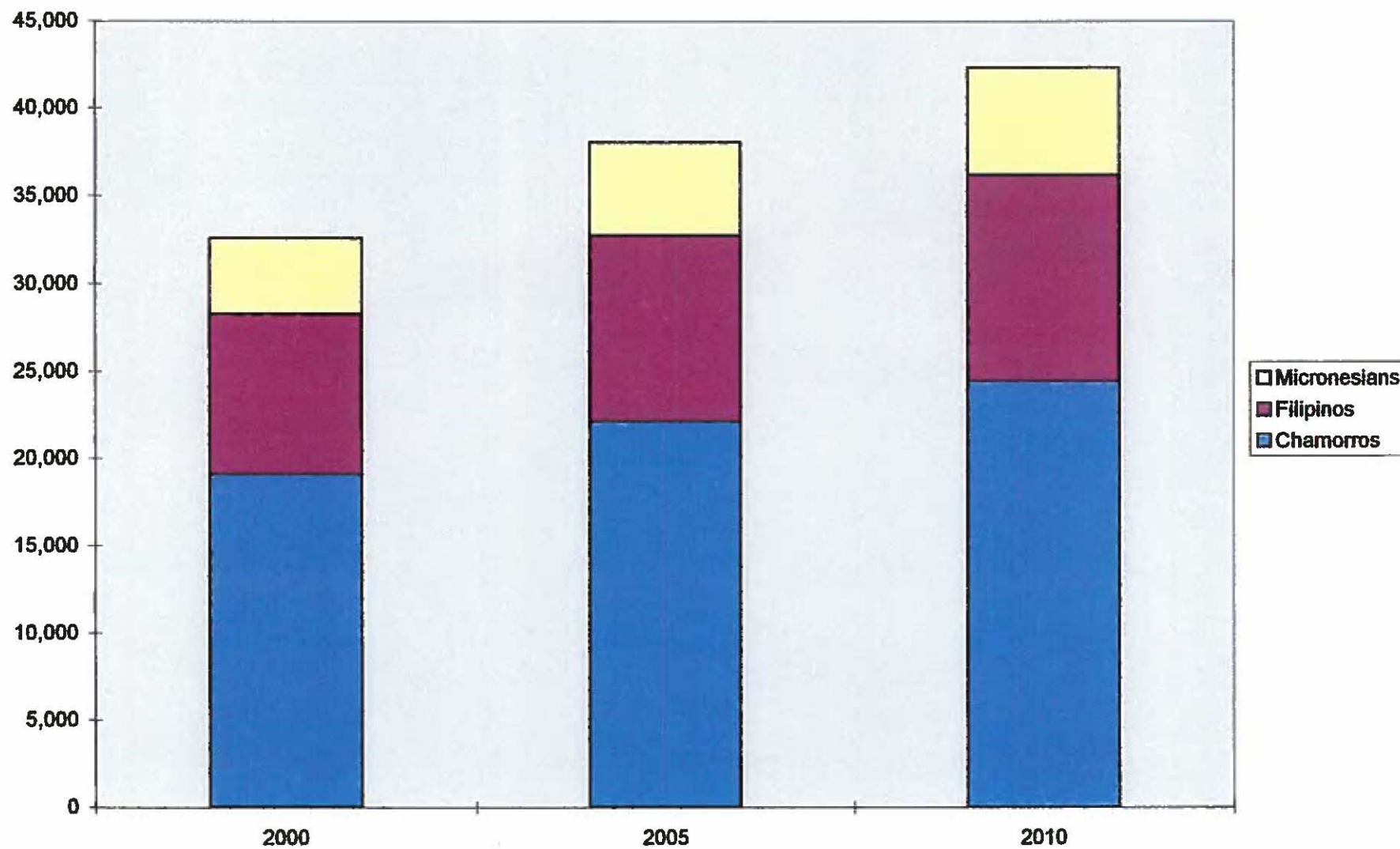
School Enrollment by Region 1989-90 to 1998-99



Student Distribution By District



Student Population by Ethnicity 2000 - 2010



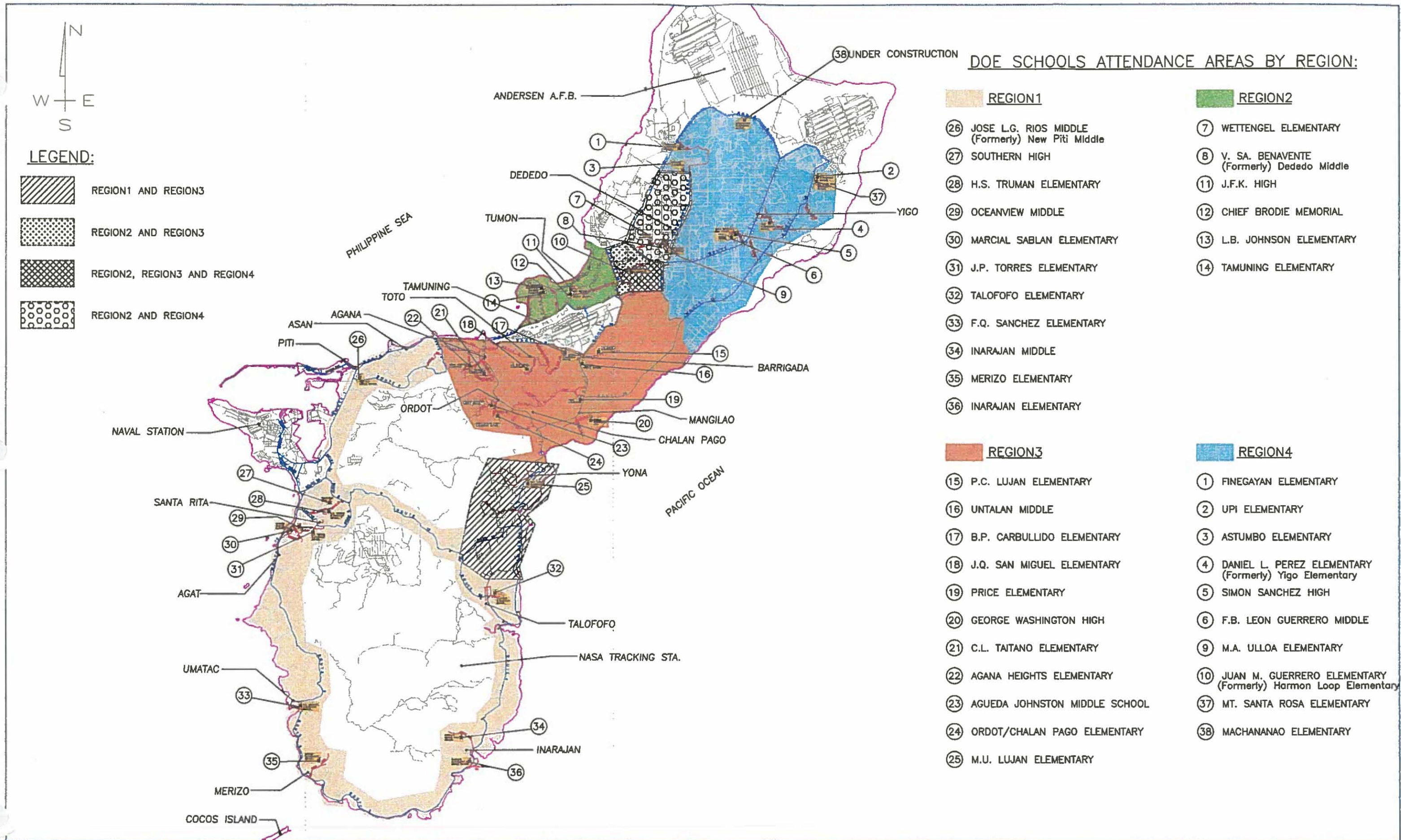


FIGURE 1

SCALE: AS SHOWN

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

TEN YEAR CAPITAL FACILITIES PLAN

REGIONS
SCHOOL YEAR 1997-98

ET PROJECT NO. 25381.01

PREPARED BY: ARA

CHECKED BY: CAI

DATE: APRIL 1999



790 SOUTH MARINE DRIVE
TAMUNING, GUAM 96931
PHONE: (671) 647-8083-5 FAX: (671) 647-8086

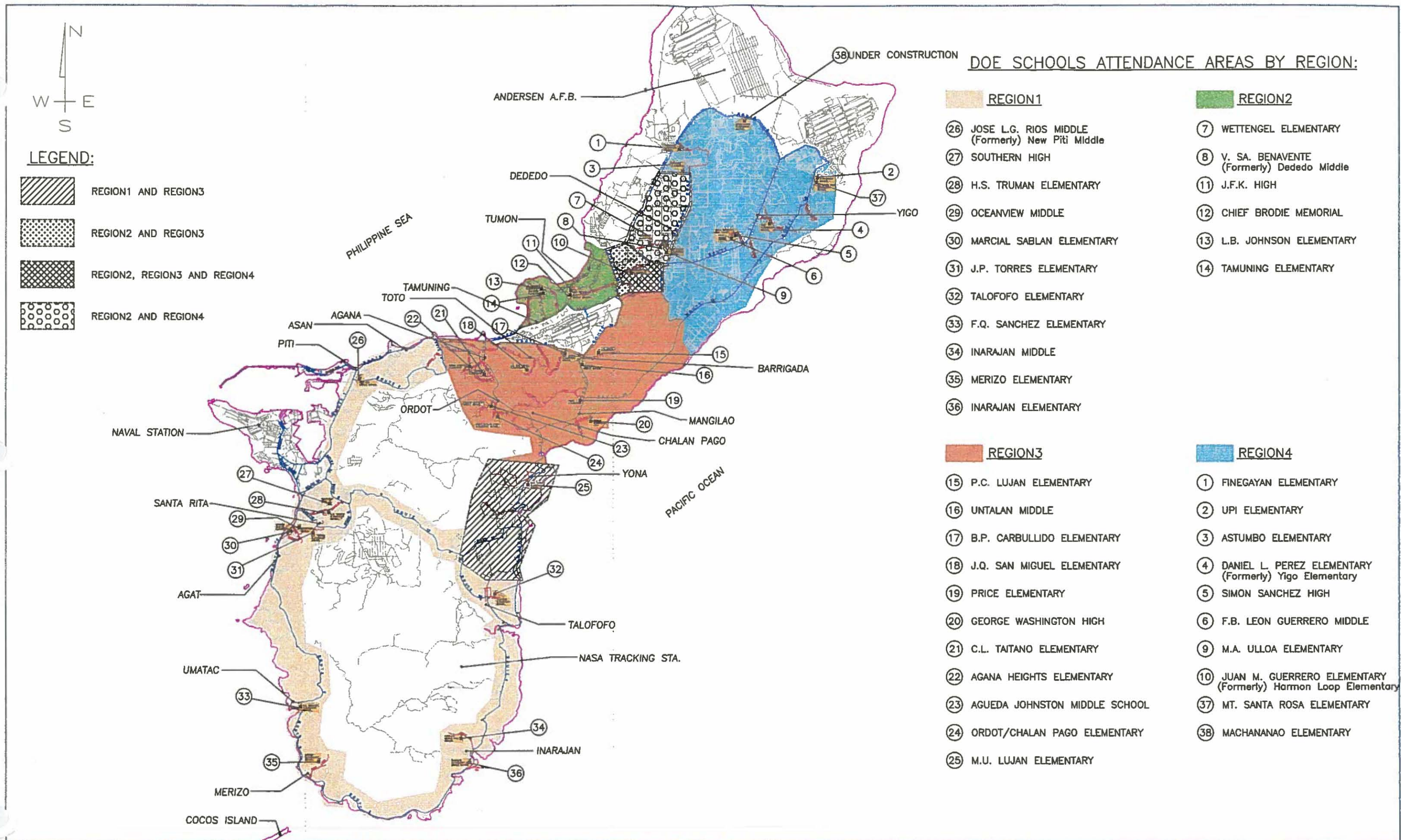


FIGURE 1

SCALE: AS SHOWN

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

TEN YEAR CAPITAL FACILITIES PLAN

REGIONS
SCHOOL YEAR 1997-98

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PREPARED BY: ARA

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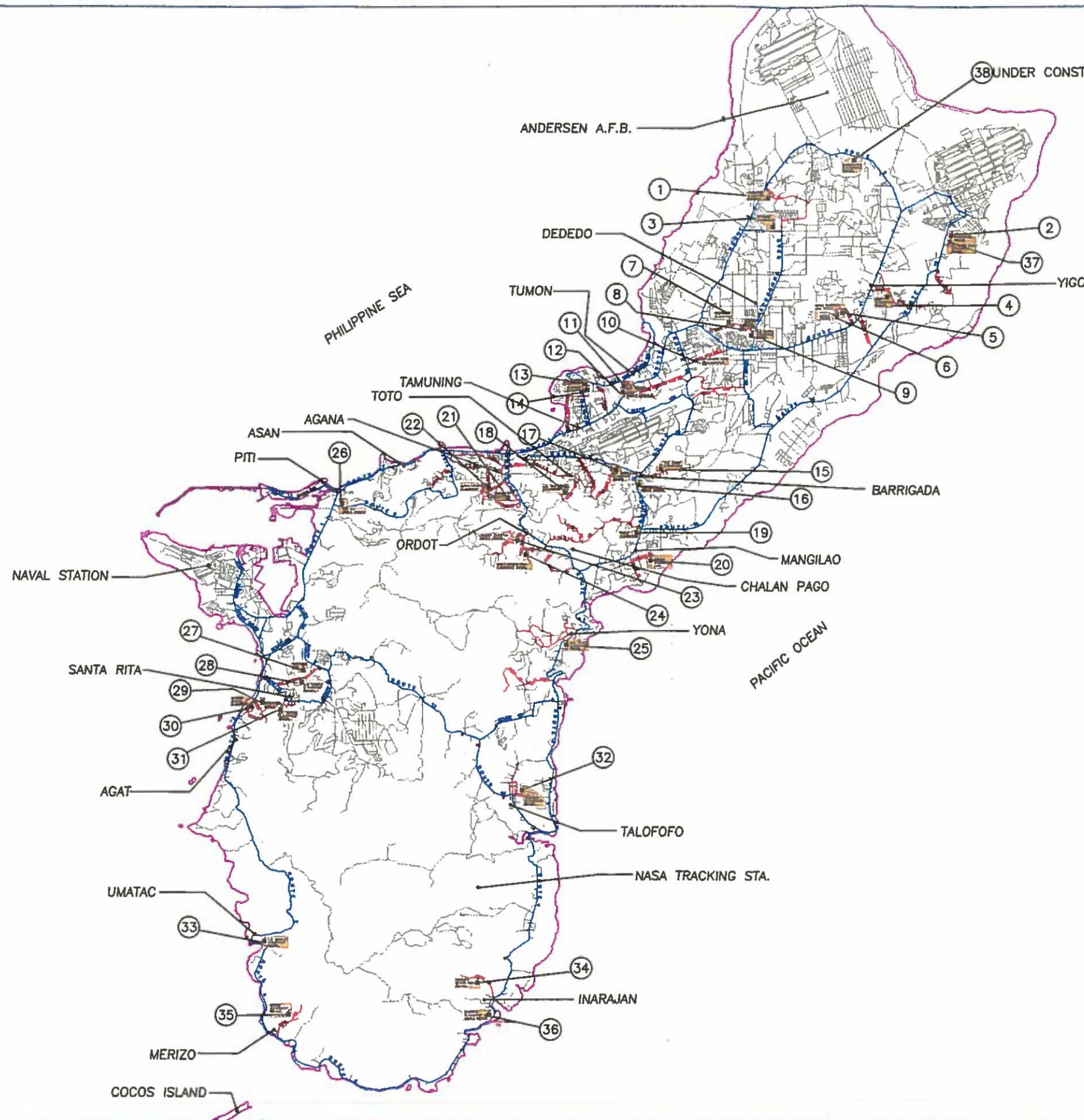
DATE: APRIL 1999

EARTH TECH

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TAMUNING, GUAM 96931
PHONE: (671) 647-8083-5 FAX: (671) 647-8086



LEGEND:



DOE SCHOOLS ATTENDANCE AREAS BY REGION:

REGION1

- 25 M.U. LUJAN ELEMENTARY
- 27 SOUTHERN HIGH
- 28 H.S. TRUMAN ELEMENTARY
- 29 OCEANVIEW MIDDLE
- 30 MARCIAL SABLAN ELEMENTARY
- 31 J.P. TORRES ELEMENTARY
- 32 TALOFOFO ELEMENTARY
- 33 F.Q. SANCHEZ ELEMENTARY
- 34 INARAJAN MIDDLE
- 35 MERIZO ELEMENTARY
- 36 INARAJAN ELEMENTARY

REGION2

- 1 FINEGAYAN ELEMENTARY
- 3 ASTUMBO ELEMENTARY
- 7 WETTENGEL ELEMENTARY
- 8 V. SA. BENAVENTE (Formerly) Dededo Middle
- 9 M.A. ULLOA ELEMENTARY
- 11 J.F.K. HIGH
- 12 CHIEF BRODIE MEMORIAL
- 13 L.B. JOHNSON ELEMENTARY
- 14 TAMUNING ELEMENTARY
- 26 JOSE L.G. RIOS MIDDLE (Formerly) New Piti Middle

REGION3

- 10 JUAN M. GUERRERO ELEMENTARY (Formerly) Harmon Loop Elementary
- 15 P.C. LUJAN ELEMENTARY
- 16 UNTALAN MIDDLE
- 17 B.P. CARBULLIDO ELEMENTARY
- 18 J.Q. SAN MIGUEL ELEMENTARY
- 19 PRICE ELEMENTARY
- 20 GEORGE WASHINGTON HIGH
- 21 C.L. TAITANO ELEMENTARY
- 22 AGANA HEIGHTS ELEMENTARY
- 23 AGUEDA JOHNSTON MIDDLE SCHOOL
- 24 ORDOT/CHALAN PAGO ELEMENTARY

REGION4

- 2 UPI ELEMENTARY
- 4 DANIEL L. PEREZ ELEMENTARY (Formerly) Yigo Elementary
- 5 SIMON SANCHEZ HIGH
- 6 F.B. LEON GUERRERO MIDDLE
- 37 MT. SANTA ROSA ELEMENTARY
- 38 MACHANANAO ELEMENTARY

FIGURE 1A

SCALE: AS SHOWN

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

TEN YEAR CAPITAL FACILITIES PLAN

REGIONS
SCHOOL YEAR 1998-99

ET PROJECT NO. 25381.01

PREPARED BY: ARA

CHECKED BY: CAI

DATE: APRIL 1999

EARTH TECH

790 SOUTH MARINE DRIVE
TAMUNING, GUAM 96931
PHONE: (671) 647-6083-5 FAX: (671) 647-6088



REGION 1 **DOE SCHOOLS:**

1. SOUTHERN HIGH SCHOOL
2. INARAJAN MIDDLE
3. JOSE L.G. RIOS MIDDLE
(Formerly) New Piti Middle
4. OCEANVIEW MIDDLE SCHOOL
5. MERIZO ELEMENTARY
6. INARAJAN ELEMENTARY
7. TALOFOFO ELEMENTARY
8. F.Q. SANCHEZ ELEMENTARY
9. MARCIAL SABLAN(AGAT) ELEMENTARY
10. H.S. TRUMAN ELEMENTARY
11. J.P. TORRES ELEMENTARY

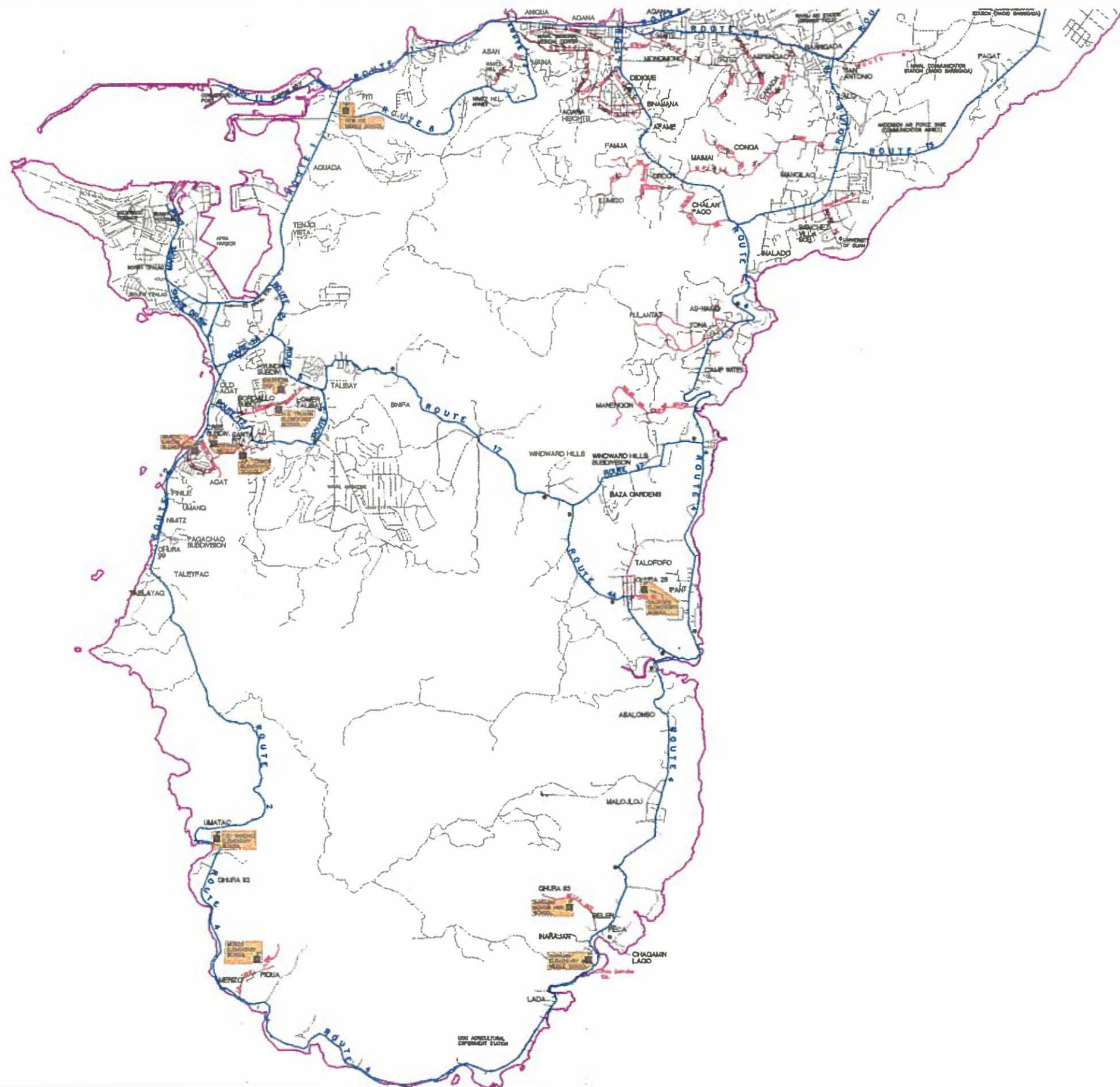


FIGURE 2

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

TEN YEAR CAPITAL FACILITIES PLAN

SCALE: AS SHOWN

REGION 1 **DOE SCHOOLS AND HOUSING SUBDIVISIONS**

ET PROJECT NO. 25381.01

PREPARED BY: ARA

CHECKED BY: CAI

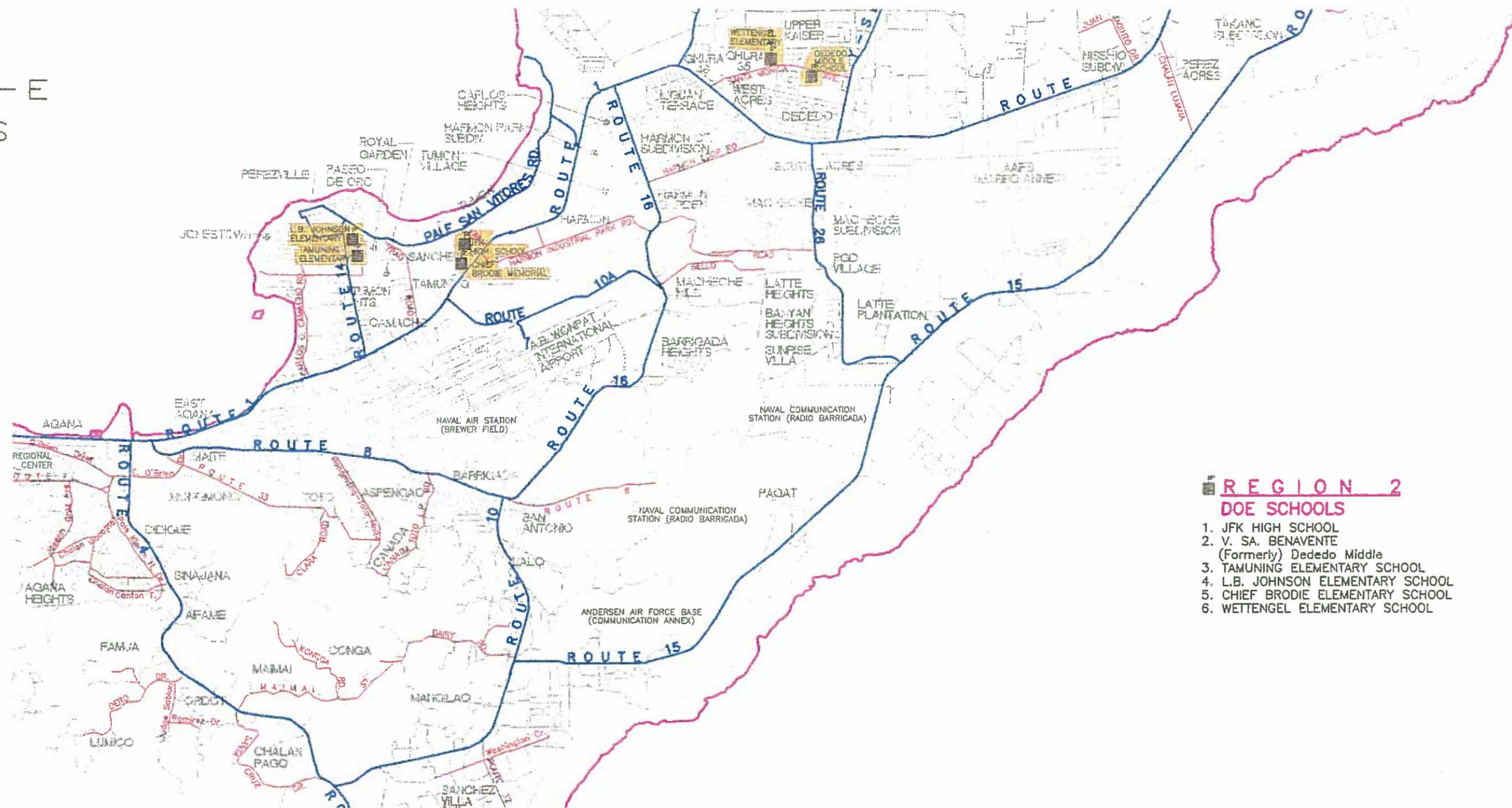
DATE: APRIL 1999

EARTH  TECH

790 SOUTH MARINE DRIVE

TAMUNING, GUAM 96931

PHONE: (671) 647-6083-5 FAX: (671) 647-6086



REGION 2 **DOE SCHOOLS**

1. JFK HIGH SCHOOL
2. V. SA. BENAVENTE
(Formerly) Dededo Middle
3. TAMUNING ELEMENTARY SCHOOL
4. L.B. JOHNSON ELEMENTARY SCHOOL
5. CHIEF BRODIE ELEMENTARY SCHOOL
6. WETTENGEL ELEMENTARY SCHOOL

FIGURE 3

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

TEN YEAR CAPITAL FACILITIES PLAN

SCALE: AS SHOWN

REGION 2 **DOE SCHOOLS AND HOUSING SUBDIVISIONS**

ET PROJECT NO. 25381.01

PREPARED BY: ARA

CHECKED BY: CAI

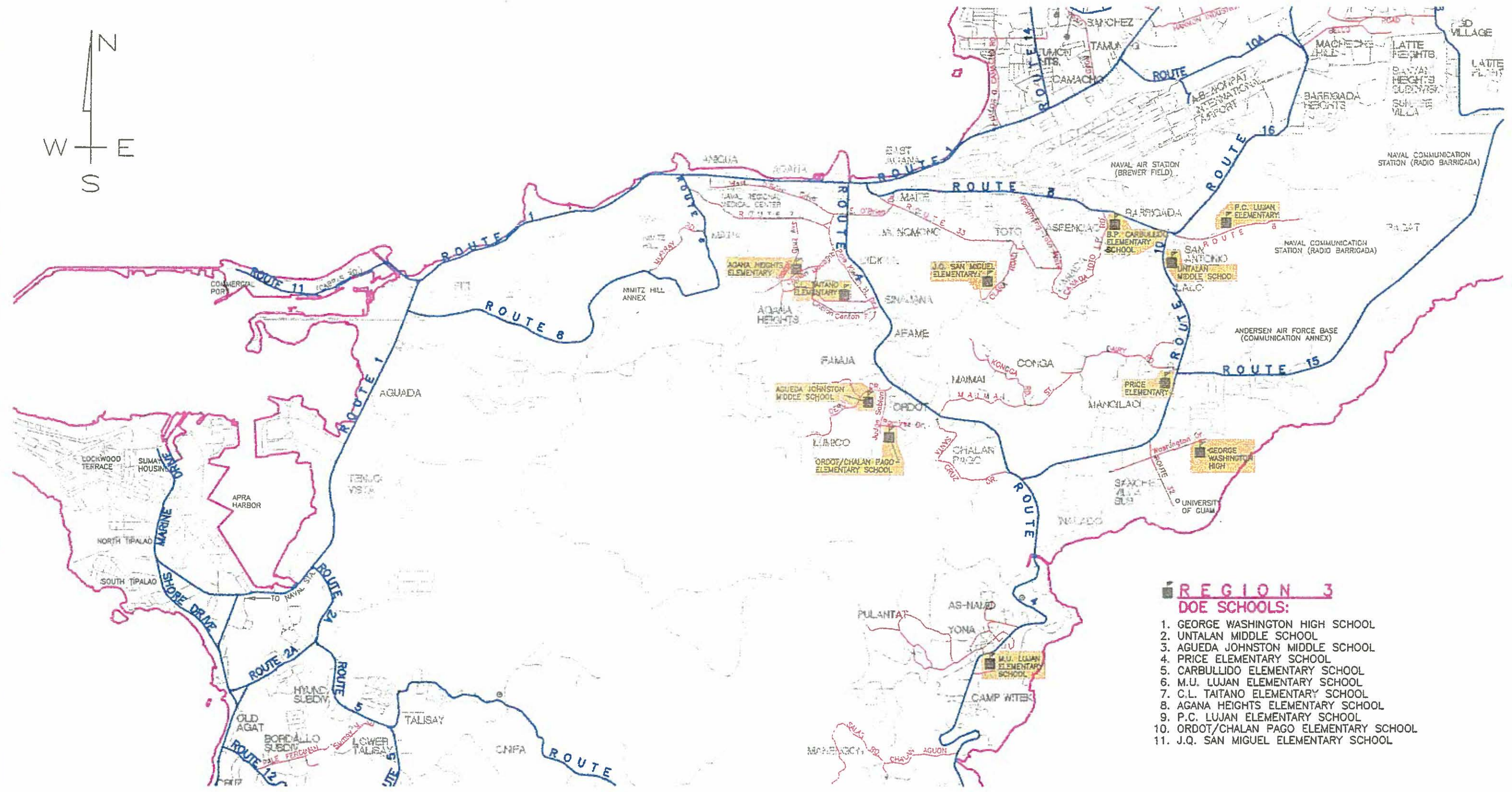
DATE: APRIL 1999

EARTH  TECH

790 SOUTH MARINE DRIVE

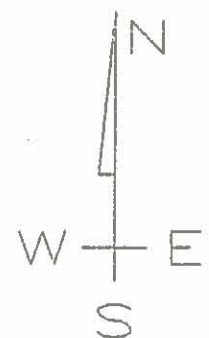
TAMUNING, GUAM 96931

PHONE: (671) 647-6083-5 FAX: (671) 647-6086



**REGION 3
DOE SCHOOLS:**

1. GEORGE WASHINGTON HIGH SCHOOL
2. UNTALAN MIDDLE SCHOOL
3. AGUEDA JOHNSTON MIDDLE SCHOOL
4. PRICE ELEMENTARY SCHOOL
5. CARBULLIDO ELEMENTARY SCHOOL
6. M.U. LUJAN ELEMENTARY SCHOOL
7. C.L. TAITANO ELEMENTARY SCHOOL
8. AGANA HEIGHTS ELEMENTARY SCHOOL
9. P.C. LUJAN ELEMENTARY SCHOOL
10. ORDOT/CHALAN PAGO ELEMENTARY SCHOOL
11. J.Q. SAN MIGUEL ELEMENTARY SCHOOL



REGION 4 **DOE SCHOOLS:**

1. SIMON SANCHEZ HIGH SCHOOL
2. F.B. LEON GUERRERO MIDDLE SCHOOL
3. UPI ELEMENTARY SCHOOL
4. DANIEL L. PEREZ ELEMENTARY (Formerly) Yigo Elementary
5. M.A. ULLOA ELEMENTARY SCHOOL
6. FINEGAYAN ELEMENTARY
7. ASTUMBO ELEMENTARY
8. JUAN M. GUERRERO ELEMENTARY (Formerly) Harmon Loop Elementary
9. MT. SANTA ROSA ELEMENTARY
10. MACHANANAO ELEMENTARY (Under Construction)

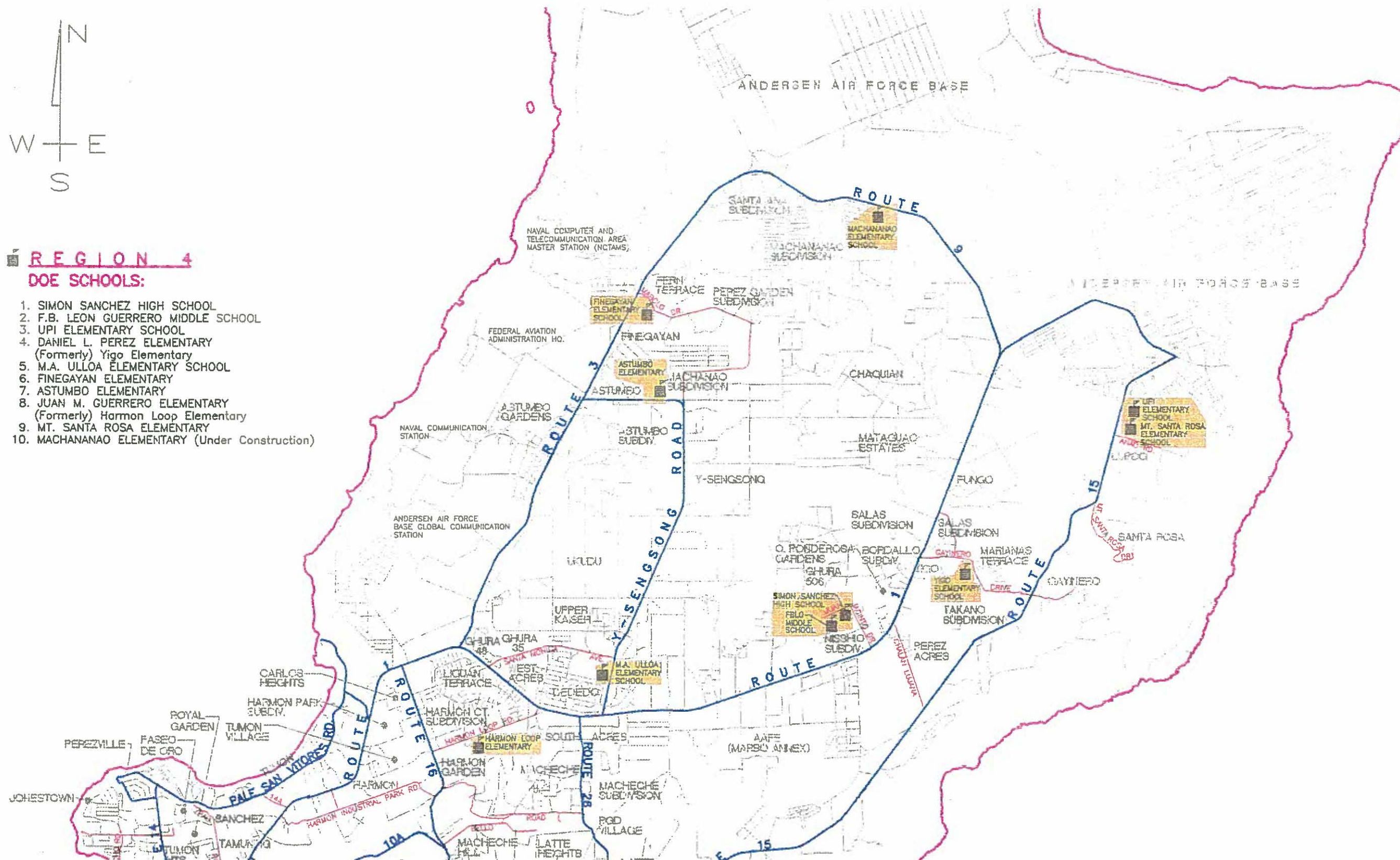


FIGURE 5

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

TEN YEAR CAPITAL FACILITIES PLAN

SCALE: AS SHOWN

REGION 4 **DOE SCHOOLS AND HOUSING SUBDIVISIONS**

ET PROJECT NO. 25381.01

PREPARED BY: ARA

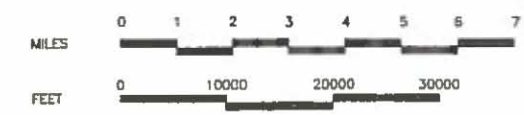
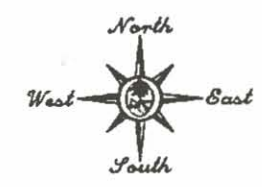
CHECKED BY: CAI

DATE: APRIL 1999

EARTH TECH

790 SOUTH MARINE DRIVE
TAMUNING, GUAM 96931
PHONE: (671) 647-6083-5 FAX: (671) 647-6086

G U A M



LEGEND:

VILLAGE

- AGANA
- AGANA HEIGHTS
- AGAT
- ASAN-MAINA
- BARRIGADA
- CHALAN PAGO-ORDOT
- DEDEDO
- INARAJAN
- MANGILAO
- MERIZO
- MONGMONG-TOTO-MAITE
- PITI
- SANTA RITA
- SINAJANA
- TALOFOFO
- TAMUNING
- UMATAC
- YIGO
- YONA

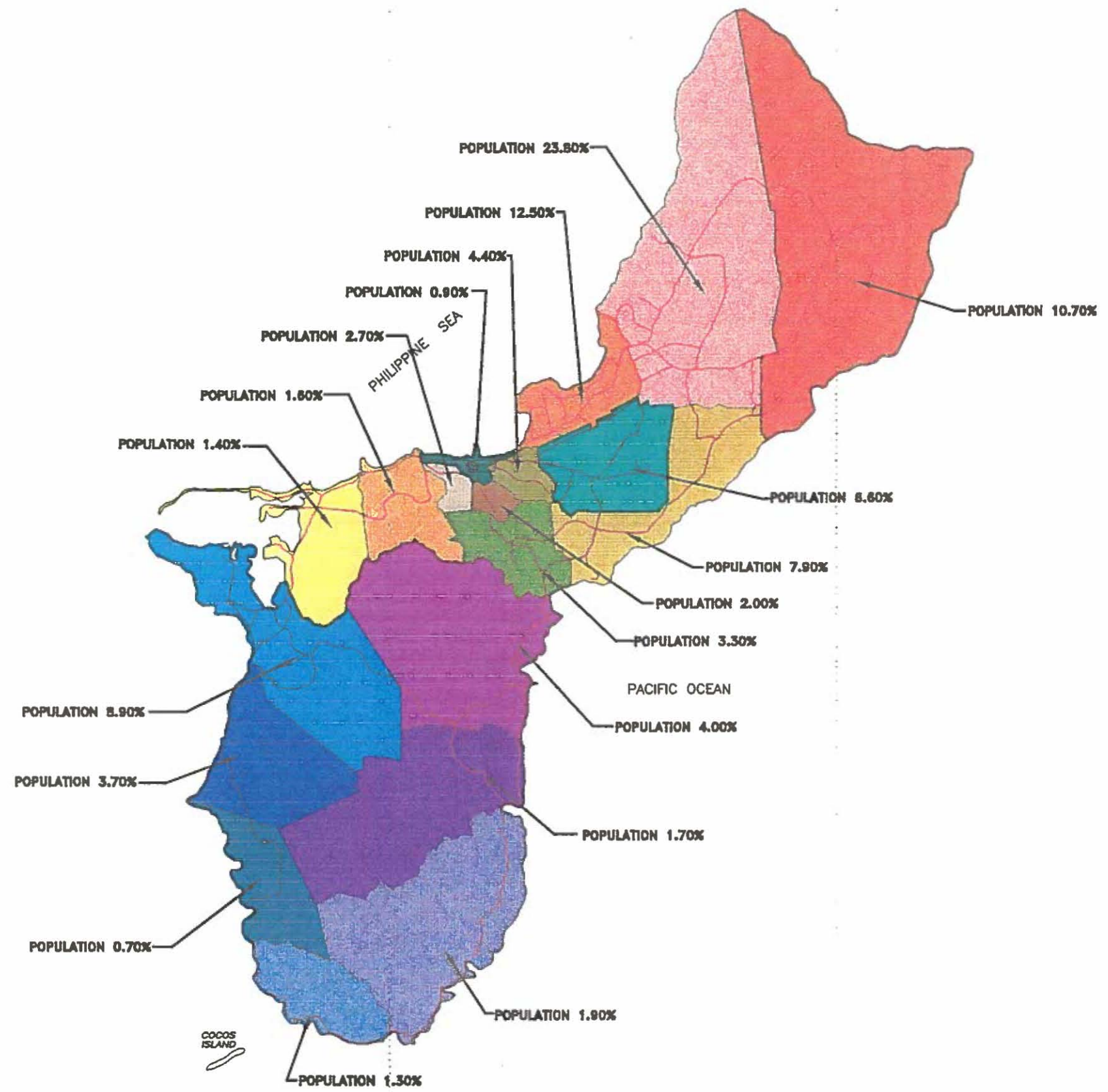


FIGURE 6

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

SCALE: AS SHOWN

TEN YEAR CAPITAL FACILITIES PLAN

VILLAGES AND 1990 STUDENT POPULATION DISTRIBUTION

ET PROJECT NO. 25381.01
PREPARED BY: ARA
CHECKED BY: CAI
DATE: APRIL 1999

EARTH TECH
790 SOUTH MARINE DRIVE
TAMUNING, GUAM 96931
PHONE: (671) 647-6083-5 FAX: (671) 647-6086

Population Projection Summary

	Name of Study			South Pacific Commission (SPC)			GCC
	Census	I/Tanota	Highway	SPC 1	SPC 2	SPC 3	Plan
1990	134,110	133,152		109,051			133,152
1991	138,083	137,444					
1992	142,184	140,466					
1993	143,618	142,843					
1994	142,888	145,270					
1995	143,856	149,462	158,676	123,315			
1996	144,923	153,706					
1997	146,328	158,003					
1998	149,101	162,354					
1999	151,716	166,761					
2000	184,178	171,224		138,088	137,177	135,925	155,723
2001	156,931	177,148					
2002	160,015	180,989					
2003	163,029	184,890					
2004	165,980	188,852					
2005	168,876	192,877					
2006	171,728	196,965					
2007	174,541	201,120					
2008	177,320	205,341					
2009	180,073	209,630					
2010	182,812	213,989	237,288	169,213	160,942	151,458	181,257
				For Civilian Population Only			

Projection Results and Comparison

School Year	Census Population	Census Children Born	Census 5-17 years	DOE Enrollment		DOE Enrollment			Private School	Less Private	Earth Tech Enrollment Forecast			Difference from DOE 5-Year Projection			
				Actual	Difference	Elementary K-5	Middle 6-8	High 9-12			Elementary K-5	Middle 6-8	High 9-12	K-5	6-8	9-12	Total
1990	134,110	3,850	32,131	25,871	6,260	13,128	5622	7121	5697	26,434							
1991	138,083	3,921	32,541	26,011	6,530	13,401	5564	7046	5293	27,248							
1992	142,184	4,214	33,113	27,863	5,250	14,258	6095	7510	6415	26,698							
1993	143,618	4,409	33,291	29,400	3,891	15,181	6588	7631	4865	28,426							
1994	142,888	4,427	33,249	30,417	2,832	16,011	6654	7752	6774	26,475							
1995	143,856	4,190	33,984	31,711	2,273	16,618	7104	7989	4214	29,770							
1996	144,923	4,265	34,955	31,998	2,957	16,821	7094	8083	4100	30,855							
1997	146,328	4,318	36,021	32,938	3,083	17,750	7187	8001	4449	31,572							
1998	149,101	4,165	37,515	32,593	4,922	16,878	6827	8888	5000	32,515							
1999	151,716	4,023	39,167	31,900	7,267	16,289	7320	8291	5000	34,167	17,767	7,175	9,225	1,478	(145)	934	
2000	154,178	3,889	40,699	32,061	8,638	16,390	7241	8430	5000	35,699	18,563	7,497	9,639	2,173	2,398	1,209	3,638
2001	156,931	3,814	42,185	32,216	9,969	16,454	7351	8411	5000	37,185	19,336	7,809	10,040	2,862	2,689	1,629	4,969
2002	160,015	3,762	43,873	32,470	11,403	16,694	7244	8532	5000	38,873	20,214	8,163	10,496	3,520	3,252	1,964	6,403
2003	163,029	3,717	45,504	32,684	12,820	16,862	7271	8551	5000	40,504	21,062	8,506	10,936	4,200	3,665	2,385	7,820
2004	165,980	3,678	46,954		46,954				5000	41,954	21,816	8,810	11,328	21,816	11,328	11,328	41,954
2005	168,876	3,648	48,244		48,244				5000	43,244	22,054	9,514	11,676	22,054	11,676	11,676	43,244
2006	171,728	3,634	49,334		49,334				5000	44,334	22,167	9,310	12,857	22,167	12,857	12,857	44,334
2007	174,541	3,619	50,177		50,177				5000	45,177	22,137	9,939	13,101	22,137	13,101	13,101	45,177
2008	177,320	3,614	50,601		50,601				5000	45,601	21,888	10,032	13,680	21,888	13,680	13,680	45,601
2009	180,073	3,617	50,762		50,762				5000	45,762	21,966	10,068	13,729	21,966	13,729	13,729	45,762
2010	182,812	3,632	50,762		50,762				5000	45,762	21,966	10,068	13,729	21,966	13,729	13,729	45,762

Source:U.S. Census, DOE RP&E and Earth Tech

DOE Ten Year Capital Facilities Plan

Student Population Distribution

District	Actual DOE	Projected Student enrollment				Percent Change	
	1998-99	1995	2000	2005	2010	2000-2010	1995-2010
Dededo	9,276	10,482	13,543	16,252	17,084	28%	63%
Yigo	3,351	3,180	4,356	5,402	5,726	31%	80%
Tamuning	3,031	2,880	3,940	4,413	4,678	19%	62%
Sub-total	15,658	16,522	21,840	26,067	27,468		
Agana	162	145	170	184	193	13%	33%
Agana Heights	687	652	721	779	818	13%	25%
Barrigada	1,923	1,827	2,308	2,654	2,813	22%	54%
Chalan Pago/Ordot	1,340	1,273	1,501	1,831	1,977	32%	55%
Mangilao	2,445	2,323	3,179	3,687	3,908	23%	68%
Mongmong-Toto-Maite	1,489	1,415	1,787	2,073	2,156	21%	52%
Sinajana	801	761	889	1,085	1,128	27%	48%
Yona	1,465	1,400	1,758	2,145	2,273	29%	62%
Sub-total	10,312	9,796	12,312	14,437	15,267	24%	
Agat	1,481	1,407	1,807	2,240	2,308	28%	64%
Asan-Maina	336	320	383	444	462	21%	44%
Piti	262	249	299	335	348	16%	40%
Santa Rita	984	886	1,063	1,275	1,314	24%	48%
Talofofo	1,184	1,125	1,328	1,591	1,639	24%	46%
Umatac	224	212	262	294	311	19%	47%
Merizo	619	588	706	780	822	16%	40%
Inarajan	638	606	702	772	826	18%	36%
Sub-total	5,728	5,393	6,547	7,742	8,029	23%	
Total	31,698	*31,711	40,699	48,244	50,762	2005-2010	2000-10%
Projected total	*31,551	31,711	40,699	48,245	50,764	5.22%	24.73%



Prepared for the
Department of Education
Project No. DOE RFP-002-97

**CONCEPTUAL SITE PLANS
& FACILITY STANDARDS
ELEMENTARY, INTERMEDIATE &
HIGH SCHOOL
FOR THE
TEN YEAR CAPITAL FACILITIES PLAN**

MARCH, 1999

PREPARED BY BELT COLLINS LTD.

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CONCEPTUAL SITE PLANS AND FACILITY STANDARDS ELEMENTARY, INTERMEDIATE AND HIGH SCHOOLS

I. PROJECT OVERVIEW

Project Goals

Guam's Department of Education (DOE) initiated this project to ensure that future schools in Guam meet DOE policies and educational goals. The plans are conceptual in nature, and can be adapted for specific sites and school facility programs as needed. The model layouts indicate the desired type of facilities and the functional relationship between program areas.

Belt Collins Ltd. prepared the conceptual school plans in this report as part of a larger school planning study being conducted by Earth Tech, Inc. for Guam's DOE. The plans were prepared with the assistance of DOE personnel and school principals who attended two workshops held in February and March of 1999. During the workshops, planning consultants from Belt Collins worked with DOE participants to develop conceptual site plans for three types of schools:

- Elementary Schools
- Intermediate (or Middle) Schools
- High Schools

There are two alternative layouts for each type of school. The first, Alternative A, is intended for sites located in rural or suburban locations where land is more available and less costly than in more densely developed areas. The second, Alternative B, is intended for smaller urban sites.

DOE Program Goals

Twelve criteria, produced by DOE personnel, were used to guide the development of the conceptual site plans.

1. Support existing educational programs.
2. Support future educational needs.
3. Support the growth of Alternative Learning Paths (ALPs) and the Arts program.
4. Develop a campus supportive of student's needs.
5. Improve flexibility for administrative planning.
6. Support parent and community involvement in school activities.
7. Improve circulation, parking, and service systems.
8. Expand campus open space, views, and landscaping.
9. Develop an efficient and financially realistic campus plan.
10. Keep the school campus scaled for students.

11. Provide a safe campus that is secure for both people and property.
12. Develop a campus that is reasonably low-maintenance.

II. DESIGN ENROLLMENT

The number and size of classrooms, dining halls, and other school facilities depends on the school population, or design enrollment. The design enrollments used for the conceptual plans are based on legislated requirements shown in the table below. If in the future those legislated design enrollments change, the conceptual layouts illustrated in this handbook can be adapted to meet the modified standards.

<i>Type of School</i>	<i>Legislated Standards (PL 24-73)</i>
Elementary	550
Intermediate	700
High	1,200

It is recommended that Guam's DOE and legislature take a closer look at its existing design enrollments and modify them for future facilities. There are two reasons why a modification of the standards is desirable. First, the numbers do not "add up", i.e. there is no logical progression from elementary to high schools in terms of numbers of students. Because Guam is changing to a system where students attend a school within their district, it is important to have a mathematical relationship between the design enrollments for elementary, intermediate, and high schools.

The second reason is that some design enrollments are lower than is necessary or desirable from the standpoint of efficiency or cost effectiveness. Properly designed, a school with higher enrollments than legislated can be a supportive educational environment. One example is the recently constructed Tamuning Elementary School¹, a successful facility that is designed for more than 800 students, about 150% of the legislated maximum. Its use of separate courtyard buildings provides a child-scale environment despite the larger numbers of students. The number of students in some schools also may not justify the high costs for required facilities such as cafeterias, libraries, and athletic fields. That is particularly true for Intermediate Schools, which require a high level of music, art, and athletic facilities to service only 700 students.

The table and flow chart on the next page illustrate one way to develop a design enrollment system that is reasonably efficient, meets student needs, and "adds up" as students progress from elementary through high school. There are two options, with the 6 team option recommended for rural areas and the 8 team option recommended for urban areas. Both "team" options are based on an Intermediate School enrollment, where students are organized into learning teams composed of approximately 140 students and 5 teachers.

¹ Designed by MCL- Guam architect Andy Laguaña.

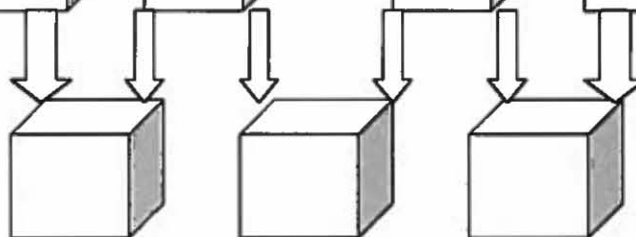
Hawaii Standards

The initial facility requirements for each type of school was based on the Hawaii DOE facility standards and Guam's legislated design enrollments. During the DOE workshops, those standards were modified to meet specific Guam DOE policies or educational needs.

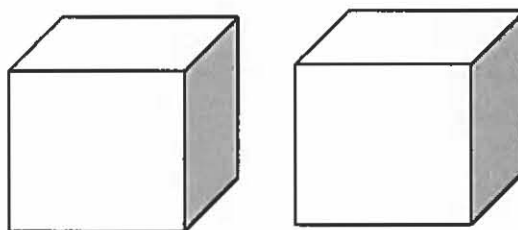
Elementary Schools:



Intermediate Schools:



High Schools:



Number of Schools	Type of School	Existing Standards: PL 24-73 / GPSS	Suggested Maximum Design Enrollment:	
			6 Team Option	8 Team Option
4	Elementary	550 / 600	600	800
3	Intermediate	700 / 1000	840 (single or shared facility)	1120
2	High	1200 / 1500	1300 (single or shared facility)	1700

III. D

III. DOE WORKSHOP STANDARDS

The two workshops attended by selected DOE personnel, school principals, and maintenance staff provided a unique opportunity to develop facility standards for future schools on Guam. The standards developed during the course of those workshops is contained in Sections 2, 3 and 4 of this document. It should be noted, however, that some standards are preliminary. The facility requirements used in this document are a starting point for architects and DOE personnel when planning new school facilities. That is particularly true for high schools, where the concept of a comprehensive facility based on four Academy programs is still in the developmental stage. It is a pilot program, and as such is not fully developed at this time.

Workshop No. 1

During Workshop No. 1, preliminary plans for elementary, middle and high schools were presented to DOE participants. Those preliminary plans are not reproduced in this document, but copies were distributed to all DOE workshop participants.

General Comments:

- Portables: Hawaii standards contain portables for a 10% student population growth or fluctuation. Portables should not be included in Guam's model school plans. In Guam, provide for a 10% expansion area that would accommodate additional permanent buildings for specialized programs or student expansion. Guam's expansion has historically been 100%; limit expansion to 10%.
- Drop Off Areas – Provide a covered area for student drop-off and pick-up, ideally on the leeward side of the building so that rain does not blow in.
- Major Walkways – Cover for rain protection. Provide covered areas and canopied walkways at all new schools.
- Building evacuations – An area that is a minimum 100 feet from buildings must be available in the event of a bomb threat. It should be large enough to hold the entire school population.
- Community Use – In the future, schools will be used increasingly by the public. They are community facilities.
- Air conditioning – Central Air Conditioning Handling Units should be located in a room or strategically within a cluster of rooms to allow for maintenance personnel access to conduct service or repair work out of the view and away from students.
- Supply rooms – General supply rooms are needed in all school facilities; usually there is too little storage space. Supplies include books, general supplies, etc.
- Use of Schools as Emergency Typhoon Shelters – Schools are used as typhoon shelters yet they are not designed to include critical elements to ensure safety during and in the aftermath of a major disaster. Potable and non-potable water systems, emergency or back-up power for communication, facility health and safety precaution

(sanitization), building and facility access are major issues that need to be addressed if schools are to continue to be used for shelters.

- General Maintenance – Past experience of the maintenance staff indicate that many problems are caused by poor quality materials, poor design, lack of on-island maintenance and service support for capital equipment or inadequate funding.
- Build energy efficient schools – Schools should be designed to be energy efficient. There are some days when power outages occur and windows and doors should be able to provide effective ventilation. Too many schools are built without taking advantage of the natural environment to detract from the harsh elements of the sun, rain and storms. Landscaping and use of trees and shrubbery for shade and cross ventilation will help reduce the cost of cooling the classrooms. Develop an energy conservation plan to reduce utility bills.
- Build schools that support communication technology - New schools should be build and equipped to support new instructional methods. Access to computer technology, modern laboratories and shops equipped to support new, technology based teaching should be built.

Elementary School Comments

- Head Start: Provide one available classroom located in a central location for this (itinerant) program. Head Start has its own standards that should be provided for. Other special programs, and counseling, could share a multi-purpose room that would be scheduled on an annual basis.
- Special Classrooms: Mandated special classrooms are needed for Chamorro, LOTE, GATE, and special education. Physical education is another “specials” program taught outside the classroom.
- Music and Art – These are taught in general classrooms; do not include special rooms for art and music.
- Physical Education – Provide a covered court area for PE classes on rainy days (same as Hawaii standard). Locate in a central area.
- Special Education – Integrate special education classrooms into each grade-level cluster of classrooms.
- Play Space – Keep separate play areas for kindergarten, grades 1-2, and grades 3-5 as shown. Play areas should be furnished with age-appropriate equipment and should be landscaped and have grassy area avoiding open gravel and rock surfaces.
- Restrooms – It is board policy that restrooms be provided for kindergarten students, with access from the classroom. It is OK to have two classrooms share a restroom. Special education classrooms also have their own bathrooms. Provide restrooms near the nurse’s office and near play areas.

- Special Events – Provide an area that can be used for special events. One idea is to use the covered court area for seating and locate a stage next to it for presentations. Another idea is to put seating in a sloped, terraced area. Provide for landscape with lots of trees and shrubbery for shade.
- Student Drop Off – Parents drop-off about 50% of students; the remainder arrive by bus. Parents park and walk their children into the school, so provide pedestrian walkways from the parking lot to the school entry.

Middle School Comments

- Computers – Computers should be integrated into the classrooms rather than segregated into specific areas. Provide one open lab for general student use. It is necessary to provide the infrastructure for computers in new schools. Design schools to be equipped with communication technology.
- Character – Middle Schools are more like high schools than they are like elementary schools.
- Teaming concept – Guam's Middle Schools use a teaming concept. Each team has 140 students and 5 core teachers. The team should be located in one area; it is preferable to move the teachers around rather than the students if needed.
- Specialized classes: Career counseling, business classes, and home economics are included.
- Athletic Fields: There is a problem with locating these fields in the rear of the school; that required off-campus people to travel through campus. Vandalism is a potential problem. Athletic fields, and other school facilities used by the public, should be located in one area that can be gated off from the rest of campus for security reasons. Provide with separate restrooms. Requirements: (1) soccer, (2) track, (3) softball, (4) basketball (three covered courts), (5) volleyball (three courts).
- Cafeteria – Locate near the gymnasium and other shared facilities.
- Classroom locations – Separate academic classes from the special programs.
- Buses – Provide a separate drop-off so that buses do not impede vehicular traffic.
- Library – This could be a shared facility (with a high school).
- Outdoor gatherings – Space is needed for outdoor activities such as Chamorro Week. An area is needed to assemble the entire student body (up to 600 people).
- Parking – Amount shown for both staff and visitors is probably not adequate. Staff parking should be closer to the Administration area. There are a lot of "itinerant" teachers that need parking.

- Medical Emergencies – Provide road access to the nurse's office so that parents can pick up their children when sick or injured children can be transferred to emergency vehicles. Provide emergency road access to the athletic fields.
- Classroom sizes and features – Classrooms should be large enough for computers and book storage. Each classroom should have an office and general storage area for teachers. (Model drawn showing office next to hallway so that it has access to classroom *and* hallway.)

High School Comments

- Academy Organization - Guam has a pilot program that organizes the high school curriculum into four primary areas:
 1. Tourism (restaurants, hospitality)
 2. Marketing
 3. Construction
 4. College Prep
- Comprehensive – High schools should be comprehensive, i.e. have all four academy areas. (Note: This is expensive, and one option is to provide three academy areas per school or magnet schools for specific types of study. Problem with magnet schools is even distribution geographically and providing access to all students.)
- Special classes or areas – ROTC (including an armaments room), nursing assistants (needs potable water), foreign language, business education.
- Industrial arts (construction) – Includes wood shops, electrical shops, carpentry, masonry, and CAD.
- Art and Music – Provide both a choral and band room for music. Provide a minimum of 2 art studios and a ceramics studio with kiln.
- Optional academic organization – If academy organization is not used, the classroom clusters could be used for traditional academic areas: math, science, english, social science, and languages.
- Parking – Provide for up to 65% of licensed students.
- Security – Reduce areas of non-visibility (corners) in the plan; supervision is an issue. In the plan, look at joining clusters in order to improve supervision. Safety audits of schools are important due to the recent incidents of school shooting and gun toting.
- Maintenance – Provide a workshop at 30' x 30'. Make sure there is adequate dumpster space (20' x 20'). The maintenance area should be away from buildings, and closer to athletic fields and access roads.

- Swimming Pools – Should not be standards; they are too expensive and difficult to maintain. Keep as an option for special circumstances.
- Athletics: Provide a concession stand and locate parking near the court games. Include 4 tennis courts, 3 volleyball courts, and 3 basketball courts. Movable bleachers are not practical in Guam because of occasional high wind conditions. They are usually concrete. Provide parking for events and community use near the athletic fields.

Workshop No. 2

During Workshop No. 2, preliminary site plans for elementary, middle and high schools were presented to DOE participants. Belt Collins Ltd. developed the plans by using criteria established by DOE participants during Workshop No. 1. See the final DOE report for the names of workshop participants.

Workshop Comments:

- Design Enrollments: Keep to legislated standards. School plans can be updated later if design enrollments change.

Elementary School Comments

- Restrooms: Show restrooms for kindergarten and special education classrooms.
- Special Classrooms: Required classrooms are 1/school for GATE, and 2/school for Chamorro. The type of school population determines the number of LOTE classrooms. One alternative to having separate rooms for everyone is to have shared classrooms with separate offices attached to the classrooms (offices should be accessible from the corridor). For Alternative A, expand the center “common area” for specialized classrooms. For Alternative B, incorporate the specialized classrooms into each cluster.
- Covered courts: These are desirable; look good.
- Amphitheater: This should be covered. Outdoor amphitheaters should be framed in a natural setting, with lots of trees and shrubbery to provide shade for students. Don’t build amphitheaters dominated by pavement and concrete surroundings.
- Emergency evacuation: An assembly area is needed that meets two qualifications: (1) 100 feet from buildings and (2) near a roadway access area. Students sometimes wait in the evacuation area for parents to pick them up from school.
- Anti-graffiti paint: Use anti-graffiti paint on exterior building surfaces.

Middle School Comments

- Numbers of Teams: Keep models at 6 teams (legislated design enrollment).
- Visitor parking and Administration: Locate visitor parking near administration. Either move the administration area or add about 20 visitor parking spaces near the existing administration location.
- Cafeteria: If possible, locate near visitor parking.
- Arts/Music: Locate away from the Administrative area.
- Walkways: Cover all major walkways.
- Access Roads: Include an access road to the athletic fields in order to deliver field equipment. An access road is also needed for ambulance vehicles during athletic events.

Consultant response: Access roads are added, and some pedestrian walkways are sized and structured to accommodate emergency and/or service vehicles.

- Parking stalls: About 120 spaces needed for staff, and 20 for visitor parking. Handicap stalls are additional.
- Multi-story classroom buildings: One-story buildings are preferred for security reasons. Students can be monitored more easily in a one-story environment.
- Expansion: One idea is to build one-story buildings, structured for future expansion to two stories.

Consultant response: There are better methods for building expansion capacity into school facilities. The above suggestion is *NOT* a recommended solution for providing future school expansion for the following reasons:

- (1) it results in incomplete buildings that are unattractive and that lack roofs needed for sun control;
 - (2) it assumes a potential 100% expansion capacity, which is not DOE policy;
 - (3) it is difficult and expensive to determine structural load capacity for an existing building so these structures are rarely expanded as planned; and
 - (4) it requires a major capital investment prior to actual need; that is expensive because foundations and utilities must be built at twice the actual loads.
- Assembly Area: Include an assembly area sized to hold the school population or more.

High School Comments

- Academic requirements: The type and number of classrooms are preliminary because the Academy program is a pilot program. There are currently no specific academy requirements.

- Visitor parking: Locate near the Administration area.
- Restrooms: Locate restrooms for students near the athletic fields. Also add a concession stand. Make sure that restrooms are included in the theater. In the academies, separate the male/female restrooms. (Consultant note: The layouts do not separate restrooms because of the extra cost; however, this is an option that could be explored during building design.)
- Baseball: Locate so that home run balls will not hit parked cars.
- Athletic fields and courts: Shouldn't we indicate the desired orientation of each type of sport?

Consultant response: Because the site plans are abstract and are not specific sites, orientation was not indicated in the site plans.

- Emergency access: Include ambulance access to the football field.
- Clusters and security:
 - (1) Remove the blind corners in the layouts.
 - (2) Security could be a problem with the separated clusters.
 - (3) Separate clusters allow more flexibility in terms of community use, because one cluster could be opened up without opening up all clusters.

Consultant response: Blind corners were eliminated when possible. Some separations between the clusters was reduced to improve security. However, the cluster concept is central to meeting educational and social goals, and that concept was retained. The issue of community use is at odds with security requirements; this will be noted in the DOE report and should be considered when designing future facilities.

- Shared facilities:
 1. Move the cafeteria to the shared facility area; one idea is to have one kitchen and separate dining rooms for Middle and High schools.
 2. Do not include the library in the shared facility area.
 3. Put softball in the shared facility area, but keep baseball near the high school.
 4. Put volleyball and basketball courts in the shared facility area, but keep tennis near the high school.
 5. Soccer field: A separate soccer field is needed for a high school facility
 6. Specialized Academic Area: This makes sense, but it is preferred that these classrooms be located in the central area. In Alternative A, locate where the cafeteria is now sited.
- PE and Athletic Offices: Locate in locker rooms to allow for supervision of the locker rooms.
- ROTC: Separate this facility from the athletic rooms; locate closer to athletic fields.

- Student Center and Store: For alternative A, locate the store with specialized classrooms or explore the idea of connecting to the cafeteria. Another option is to locate at ends of the Academy cluster pairs. For Alternative B, locate closer to the Gym.
- Cafeteria: For Alternative B, locate cafeteria closer to the Gym. It is desirable for students to use gym at lunch hours.
- Theater: Unsure whether a theater should be included in all high schools because of the cost.

Consultant response: A theater is shown in the conceptual layouts. However, the final DOE report recommends that only low-cost theaters be constructed (or that theater construction be delayed) until Guam's basic facility requirements and repairs are complete. Two types of low-cost theaters could be constructed: (1) a "black box" theater or (2) a covered, open-air amphitheater.

- Swimming Pools: Some DOE participants want to include pools with minimum standards, but financial and maintenance personnel think pools should be optional because of their high capital and maintenance costs.

Consultant Response: A swimming pool is not shown in the conceptual layouts. The reasons are stated below.

Workshop Notes

Two types of facilities contained in Hawaii's minimum standards for high schools, theaters and swimming pools, were discussed at length during the planning workshops. Both are expensive to build and to maintain. While theaters are retained in the conceptual plans, swimming pools are an optional facility.

- *Theaters*: Theaters remain in the school plans for two reasons. The first is that lower-cost facilities can be built, and the second is that theaters are closely linked to a school's academic programs. However, it is recommended that only lower-cost theaters, such as black-box and open-air facilities, be built until higher priority changes are made to Guam's schools.
- *Swimming Pools*: Swimming pools were not retained as a required feature because their capital and maintenance costs are extremely high. Therefore, they do not meet two DOE program goals – that school facilities be "financially realistic" and "reasonably low-maintenance". Unlike theaters, it is not possible to build low-cost swimming facilities.

ELEMENTARY SCHOOLS

SECTION 2:

Guam's elementary schools teach children in kindergarten through fifth grades. Most educational activities occur in the classroom, and grade-level classrooms form the basic organizational structure of elementary schools. Although children leave the classroom for physical education, lunch period, and special classes such as Chamorro, the focus of each day is classroom learning.

Two elementary school layouts, Alternative A and B, cluster classrooms by grade level around an open space or courtyard that has direct access to a play area. The purpose of creating smaller groups of classrooms is to create an efficient yet child-scaled environment that meets the developmental needs of young students. There are a limited number of centralized, shared facilities: a combined cafeteria/auditorium, administration building, and covered courts that can be used for outdoor events.

Both Alternative A and B share other common features:

- **Classrooms:** Grade levels can use the outdoor garden for educational purposes (plantings) or for grade-level activities or meetings. If desired, an "expansion classroom" can be added to each grade-level cluster in order to provide for a modest expansion of the school population without resorting to portables. Whenever possible, orient the classroom in a north/south window orientation and provide wide roof overhangs for sun control. Each cluster also has its own restroom, except for kindergarten — which has a restroom adjacent to each classroom.
- **Special Classrooms:** Most special classrooms — special education, Chamorro, GATE, and LOTE — are integrated into clusters but are near central walkways. Centrally located multi-purpose rooms can be used for Head Start classes, group counseling sessions, and other itinerant activities. Increase the efficiency of special classrooms by adding an office (with access to both the classroom and corridor); this allows two teachers with fifty percent or lower loads to share one room. If additional special classrooms are desired, locate them next to the multi-purpose rooms within a central area.
- **Shared Facilities:** The administration area, library, and cafeteria are grouped together in a central location that is accessible to all classrooms. The administration facility is located next to the visitor and staff parking lots. Design the cafeteria as a wide, column free multi-purpose area with a high ceiling. Locate the library in quiet location with good access to all classrooms; ideally, include views to a landscaped courtyard from the library.
- **Performances and School Events:** Special events can either be held indoors in the cafeteria or outdoors under cover. The cafeteria has a stage at one end that can be used for meetings, performances, and group events. The same stage can be opened up at one end for outdoor events. The outdoor covered courts can be used for informal

events or for stage seating. If possible, create a natural or man-made amphitheater next to the covered courts for additional event seating.

- **Physical Education:** Under dry conditions, children can play in separate play areas located next to each classroom cluster. When it rains, the covered PE courts next to the cafeteria can be used for PE classes.
- **Pedestrian Access:** A covered drop-off area doubles as a direct pedestrian connection to the surrounding neighborhood. Covered walkways connect all major facilities.
- **Vehicular Access and Parking:** Most vehicular access and parking facilities are located next to the public roadway. About half of elementary children arrive by bus, and half by car. Typically, parents and the general public will park in the front of the school. However, a rear parking lot could be provided for after-school events.
- **Emergency evacuations:**
 1. *Bomb threats:* An emergency evacuation "holding area" is provided that is over 100 feet from school buildings. Use the designated holding area for children who are waiting for pick-up by parents or buses.
 2. *Typhoon warnings:* Children can wait in the covered drop-off area for parents or buses to pick up the children.
- **Security:** Provide an attractive fence and gate for the public side of the property. Use a security fence and lighting for side and rear perimeter of the property. By using a cleared setback for the security fence, access to/from the fence can be monitored by school personnel.

Alternative A: Suburban or Rural Location

Minimum site: 20 acres

Provide elementary schools in suburban or rural locations with direct access to a public roadway, but do not locate them next to a major highway. Establish a direct pedestrian link to neighborhood walkways or other public facilities.

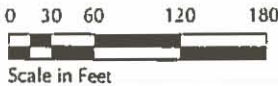
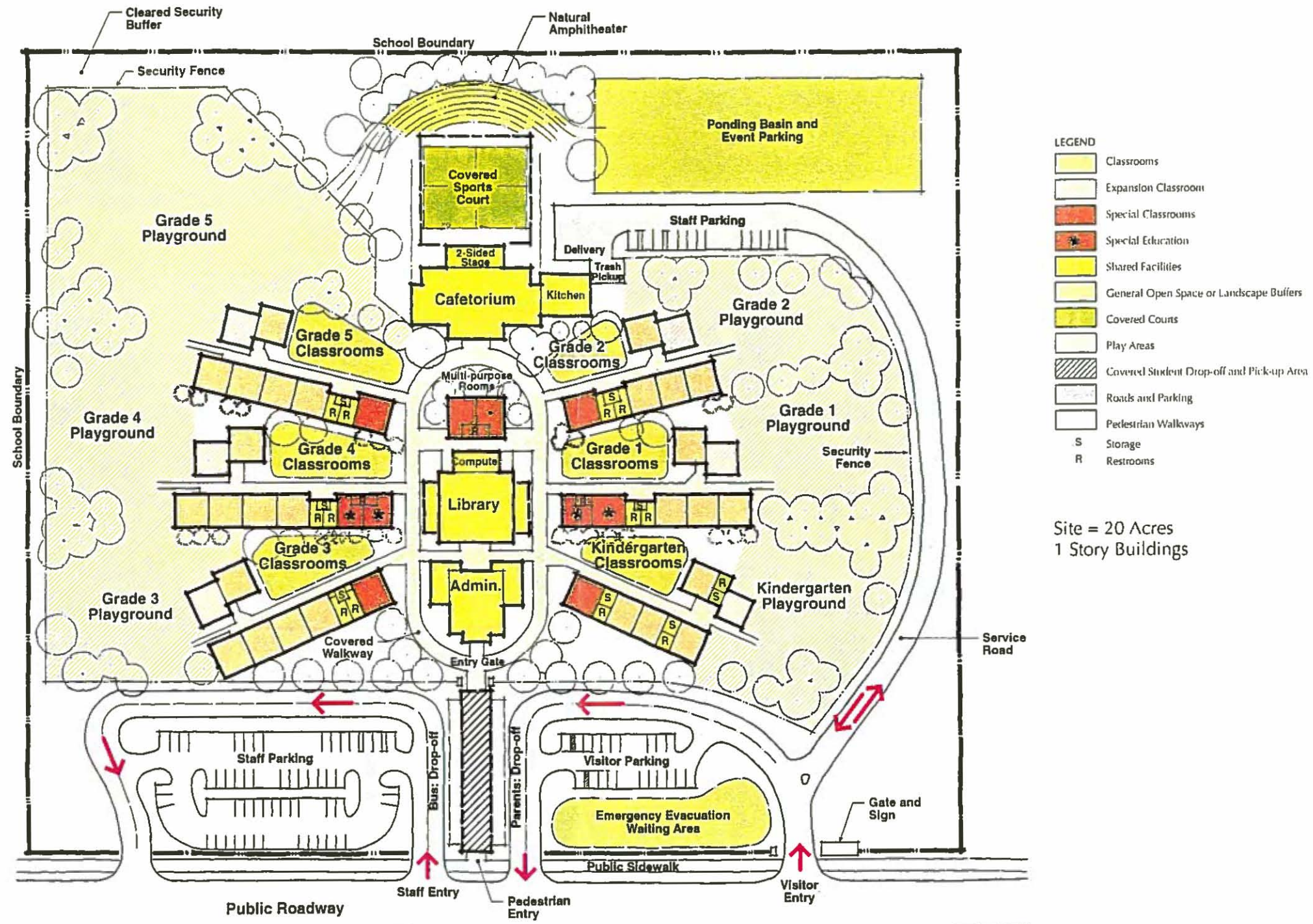
Alternative A has classroom clusters for each grade level, each with direct access to a play area. Play areas could be subdivided by grade level or combined for joint use. This plan provides a separate area for bus and vehicular drop-offs or pick-ups; visitor and staff parking are also separate, but each has access to the administration area. If the school site lies on a corner lot, provide access to the rear parking lot from the street and eliminate the service road.

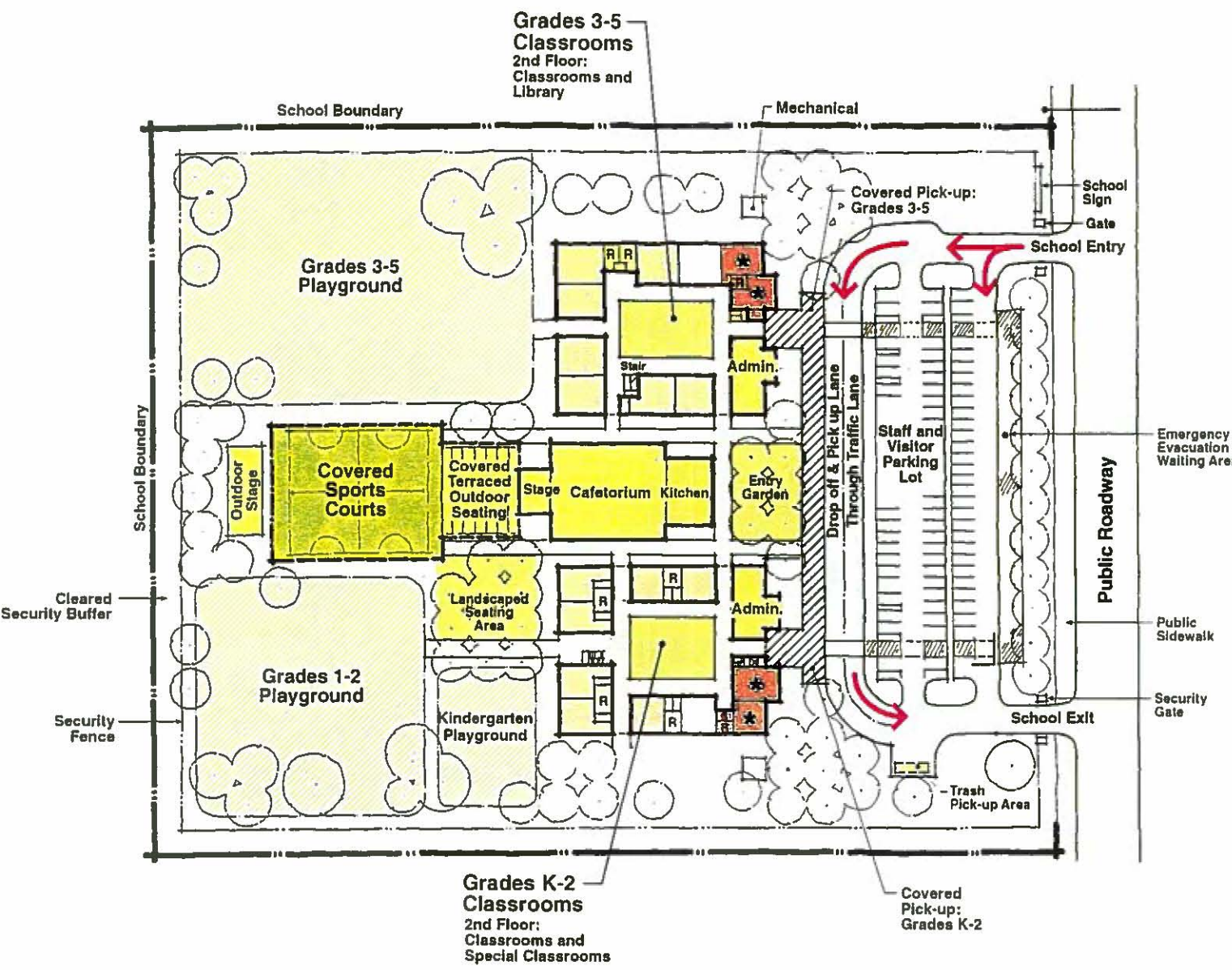
Alternative B: Urban Location

Minimum site: 11 acres

An urban site is usually small and its facilities concentrated. It may be located near a heavily trafficked road, so the site layout uses the parking lot and administrative facilities to create a buffer between classroom areas and public roads. Locating administrative areas near parking also makes it easy for parents or visitors to first check in with administrative staff.

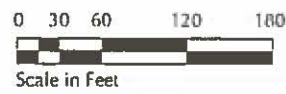
Alternative A is very similar to Tamuning Elementary School, designed by Guam architect Andrew Laguaña. That school is an excellent example of an urban elementary facility. Both classrooms and play areas are subdivided into two primary groups: Grades K - 2 and Grades 3-5. Classrooms are located on two levels, organized around a landscaped courtyard with direct access to outdoor play areas. Kindergarten classrooms have an adjacent bathroom and require ground level access, making it more difficult to integrate these classrooms into a two-story structure. Another option is to develop a separate cluster or facility for kindergarten classrooms.





- LEGEND
- Classrooms
 - Expansion Classroom
 - Special Classrooms
 - Special Education
 - Shared Facilities
 - General Open Space or Landscape Buffers
 - Covered Courts
 - Play Areas
 - Covered Student Drop-off and Pick-up Area
 - Roads and Parking
 - Pedestrian Walkways
 - S Storage
 - R Restrooms

Site = 11 Acres
1 and 2 Story Buildings



General Classroom Kindergarten	General Classroom Kindergarten	General Classroom Kindergarten	General Classroom Kindergarten	Expansion Classroom Kindergarten
900 sf	900 sf	900 sf	900 sf	900 sf

General Classroom (1-2)	General Classroom (1-2)	General Classroom (1-2)	General Classroom (1-2)	General Classroom (1-2)	General Classroom (1-2)	General Classroom (1-2)
1150 sf	1150 sf	1150 sf	1150 sf	1150 sf	1150 sf	1150 sf

Expansion Classroom (1-2)	Expansion Classroom (1-2)
1150 sf	1150 sf

General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)
1250 sf	1250 sf	1250 sf	1250 sf	1250 sf	1250 sf	1250 sf
General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)	General Classroom (3-5)
1250 sf	1250 sf	1250 sf	1250 sf	1250 sf	1250 sf	1250 sf
Expansion Classroom (3-5)	Expansion Classroom (3-5)	Expansion Classroom (3-5)				
1250 sf	1250 sf	1250 sf				

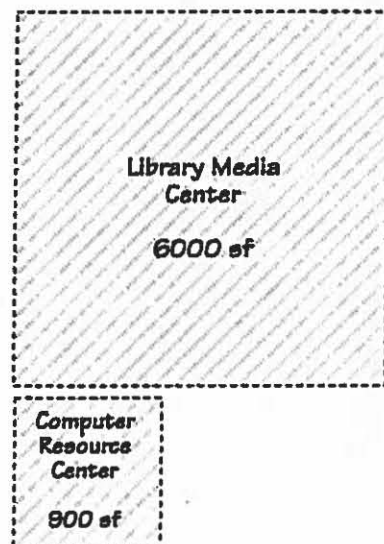
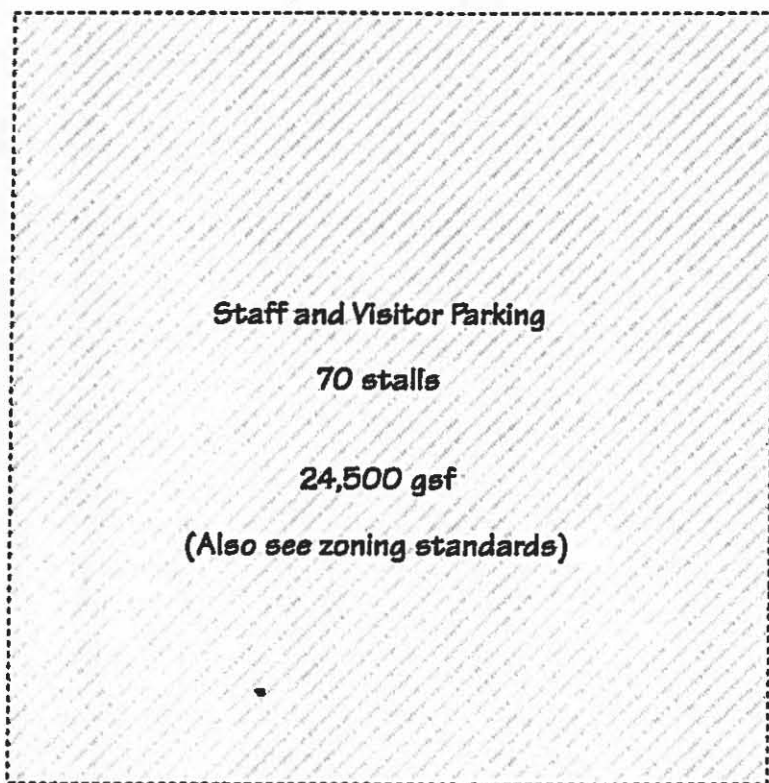
Multi-Purpose Room	Multi-Purpose Room	Special Classroom (GATE)	Special Classroom (Chamorro)	Special Classroom (Chamorro)	Special Classroom (LOTE)
1250 sf	1250 sf	1250 sf	1250 sf	1250 sf	1250 sf

See DOE for
additional
LOTE requirements

Special Ed. Self Contained	Special Ed. Resource	Special Ed. Resource	Special Ed. Resource	Itinerant
1400 sf	810 sf	810 sf	810 sf	330 sf

CLASSROOMS (Net SF)





OUTDOOR GATHERINGS: Include a covered, outdoor seating area with stage. See Elementary School site layouts for examples.

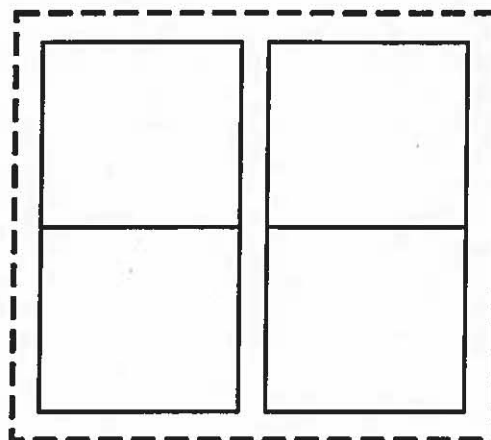
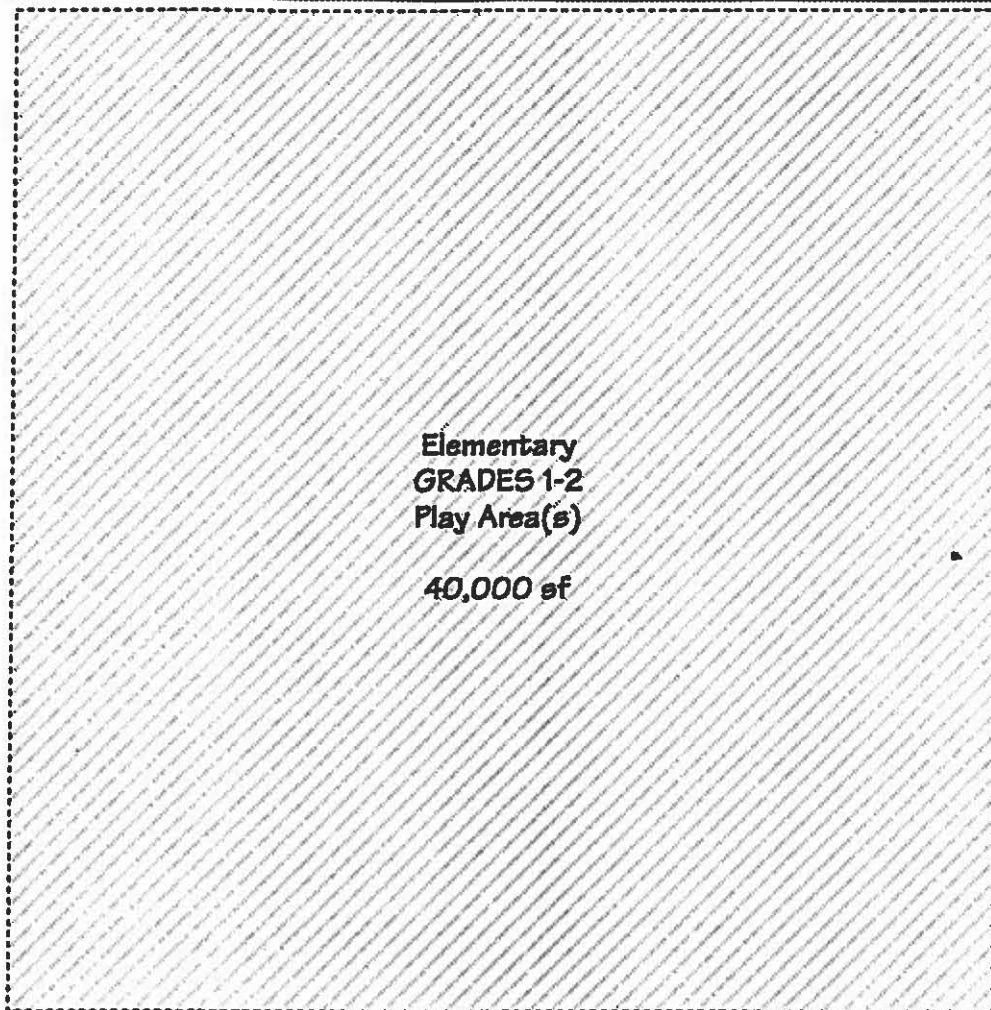
SUPPORT FACILITIES (Net SF)

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Scale in Feet

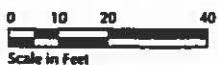
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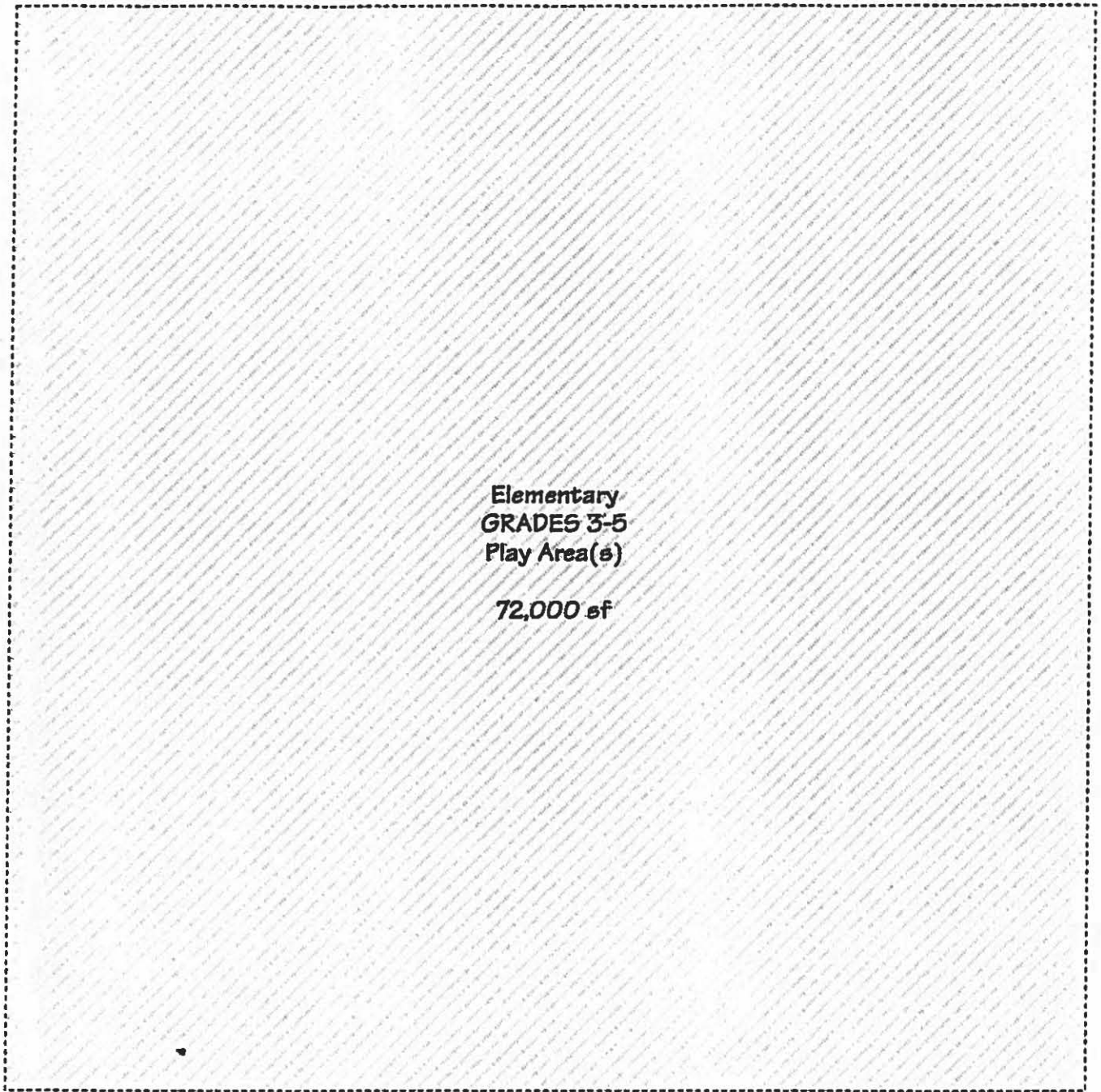
SPACE STANDARDS ELEMENTARY SCHOOL

Prepared for Guam Department of Education
March 1999

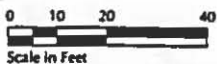


ATHLETIC FACILITIES





ATHLETIC FACILITIES



INTERMEDIATE SCHOOLS

SECTION 3:

Intermediate Schools, often called Middle Schools, are organized around learning teams of 140 students each. Each learning team is taught by a group of 5 teachers in the same number of classrooms. Learning teams are physical units of classrooms grouped together around a central open space; they form the basic organizational structure of an Intermediate School.

- **Shared Facilities:** Intermediate schools contain significantly more shared facilities than do elementary school facilities. Learning teams share a library, a multi-purpose dining area, administration facilities, specialized classrooms, and athletic facilities. Parking requirements are also higher, in part because intermediate schools have more community use. In both conceptual plans, shared facilities are grouped together with easy access to/from the classrooms via covered walkway.
- **Community Use:** A feature of the Intermediate School layouts is dual entry and drop-off areas, each with its own parking lot. While this system may be confusing for first-time visitors, its primary purpose is providing separate access to facilities typically used by the community. During after-school hours, the event parking area and community-use facilities are accessible to the public while other school buildings are closed off to the public. During the school day, the primary entry point is the staff/visitor lot near the administration building. Another advantage of this arrangement is that separate student drop-off areas for automobiles and buses are available, reducing congestion during morning drop-off or afternoon pick-up periods.

Alternative A: Suburban or Rural Location

Minimum site: 35 acres

This plan can be used as a stand-alone facility or as a shared Intermediate/High School when combined with the High School plan, Alternative A. The required acreage is similar to Alternative B because much of the land requirement is determined by parking and athletic facilities. Depending on the shape of the actual site, either Alternative A or B layout could be used for a suburban school.

Intermediate schools should be located with direct access to a public roadway, but if located on a major highway, include additional acreage for a setback and landscape buffer from the road. Ideally, develop a plan that establishes a pedestrian link between the school and the surrounding neighborhood or other public facilities.

- **Classrooms:** Organize classrooms for learning teams around a central open area. Each courtyard area has two teams, and there is an expansion area available for the optional addition of two more learning teams.

- **Special Classrooms:** Special education classrooms are integrated into the courtyard configuration, and three additional classrooms for special classes are located nearby. Music, Art, Home Economics, and the larger Special Education classroom are located in a central area that is accessible to all students.
- **Performances and School Events:** Unlike Alternative B, this plan does not include an outdoor covered amphitheater. Therefore, provide some covered stands at the athletic field to accommodate large public events. Also consider adding a stage and additional space to the dining hall for smaller performances or school events. When this plan is combined with High School Alternative A, gathering areas are provided within the shared facilities
- **Emergency evacuations:**
 1. *Bomb threats:* Students can use the covered athletic field stands if waiting to return to classrooms. If an area for student pick-up is needed, then develop a paved (or grasscrete) pad along the visitor/staff parking lot exit road.
 2. *Typhoon warnings:* Use both the auto and bus drop-off areas for student pick-up.

Alternative B: Urban Location

Minimum site: 30 acres

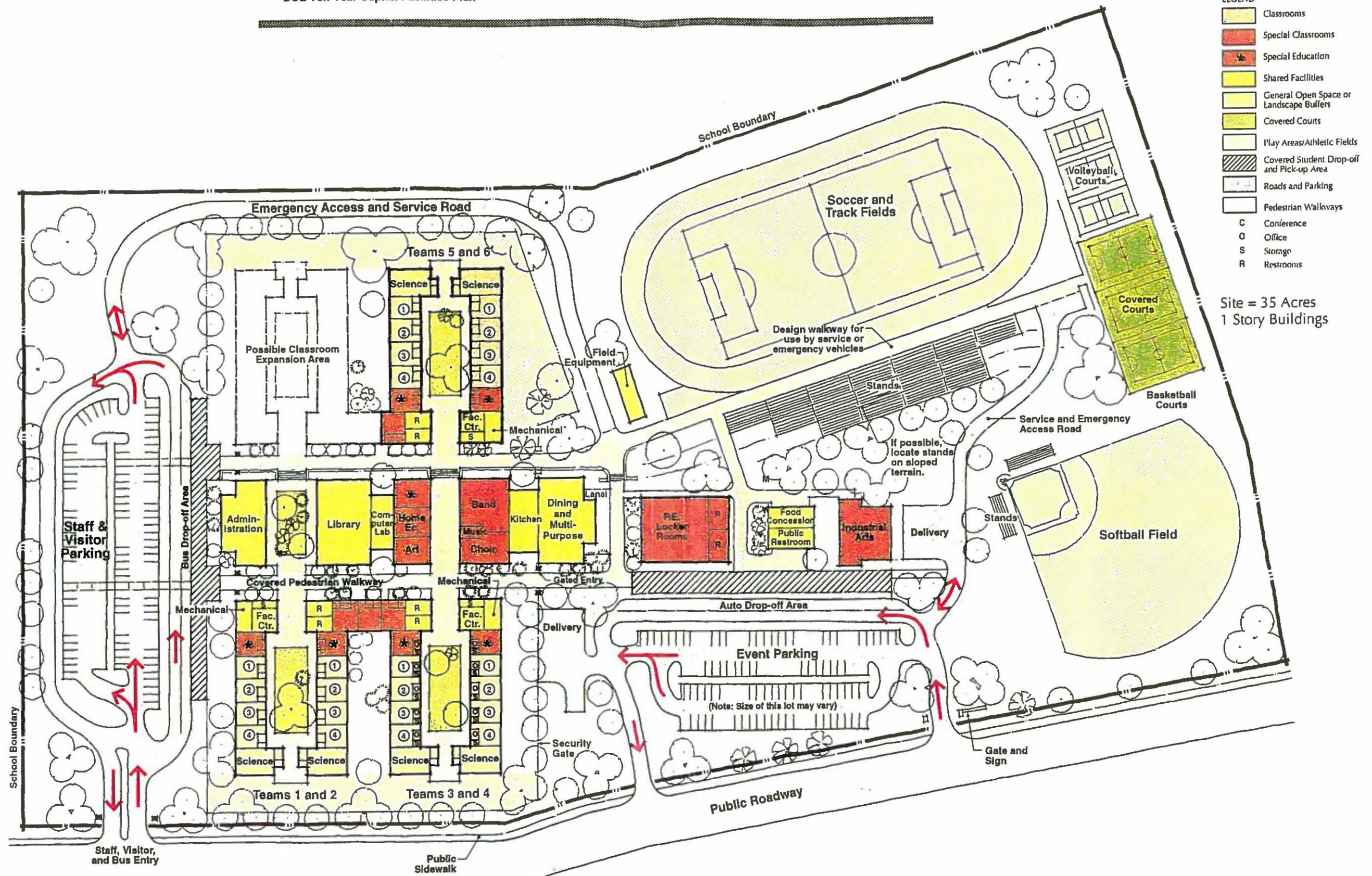
Intermediate schools in urban locations should be located with direct access to a public roadway; however, if the school site is near a major highway include additional acreage. Use the additional land for a wider setback and landscape buffer than is shown in the conceptual plan. Develop a plan that establishes a pedestrian link between the school and its surrounding neighborhood.

- **Classrooms:** Learning teams are organized into two-level courtyard buildings, with one team on each level. Two teams share a central open space. If a large site is available, provide an expansion area for one additional courtyard building. The special education classrooms are integrated into the courtyard buildings, and special classrooms are located along the main pedestrian corridor. Special classrooms that require sound isolation and/or large spans and high ceilings are located in the shared facility area.
- **Shared Facilities:** All shared facilities are located between the regular classrooms and the athletic facilities in order to shield classrooms from the noise of PE classes or service activities. The PE lockers are located under the viewing stands.
- **Performances and School Events:** This plan includes both an indoor and outdoor stage attached to the cafeteria. The outdoor stage is attached to a covered outdoor amphitheater that could be used for informal performances or class meetings. Cover the viewing stands.
- **Pedestrian Access:** A two-level covered walkway provides access to the primary academic facilities, and that walkway is connected to a network of walkways connecting all campus facilities. Those shared facilities that could be used by the

community (athletic fields, cafetorium, etc.) are all accessible from the pedestrian walkway along the service lane. Plant trees along this walkway in order to make it a pleasant area for public events.

- **Emergency evacuations:**

1. *Bomb threats:* The open area near the event parking lot could be used as a holding area for students waiting for parent pick-up. The covered basketball courts or viewing stands could also be used.
2. *Typhoon warnings:* Use the two covered pick-up areas at opposite ends of the school.

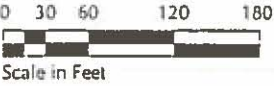
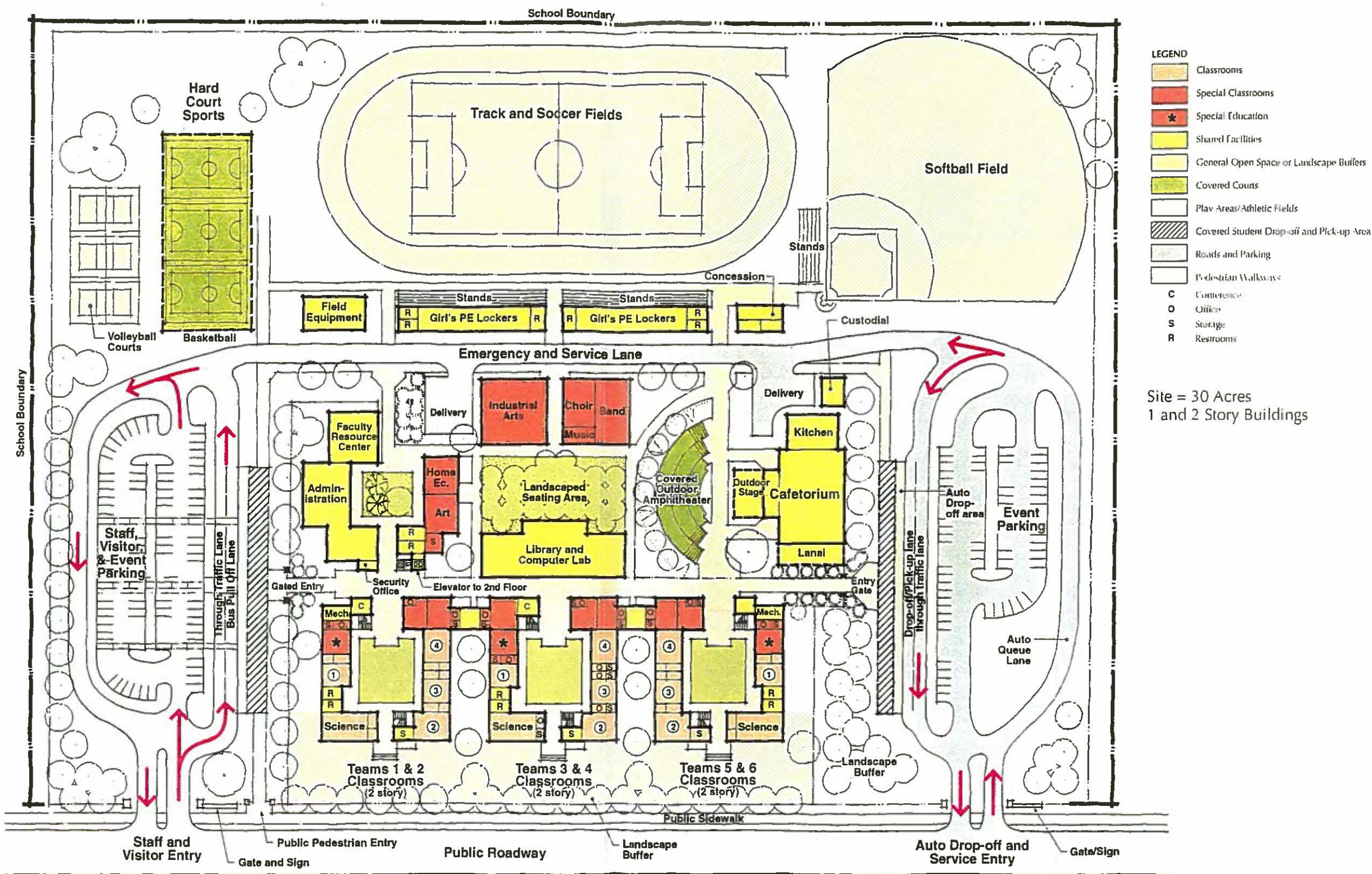


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Scale in Feet
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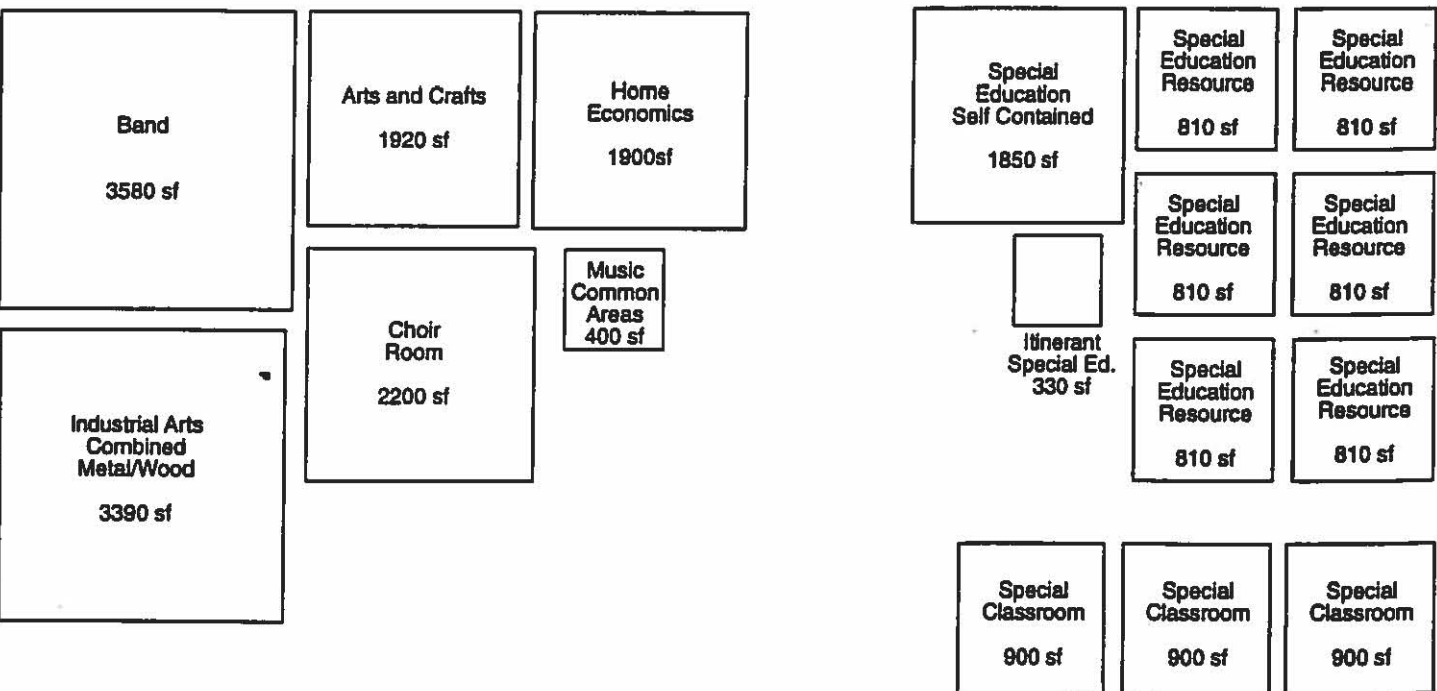
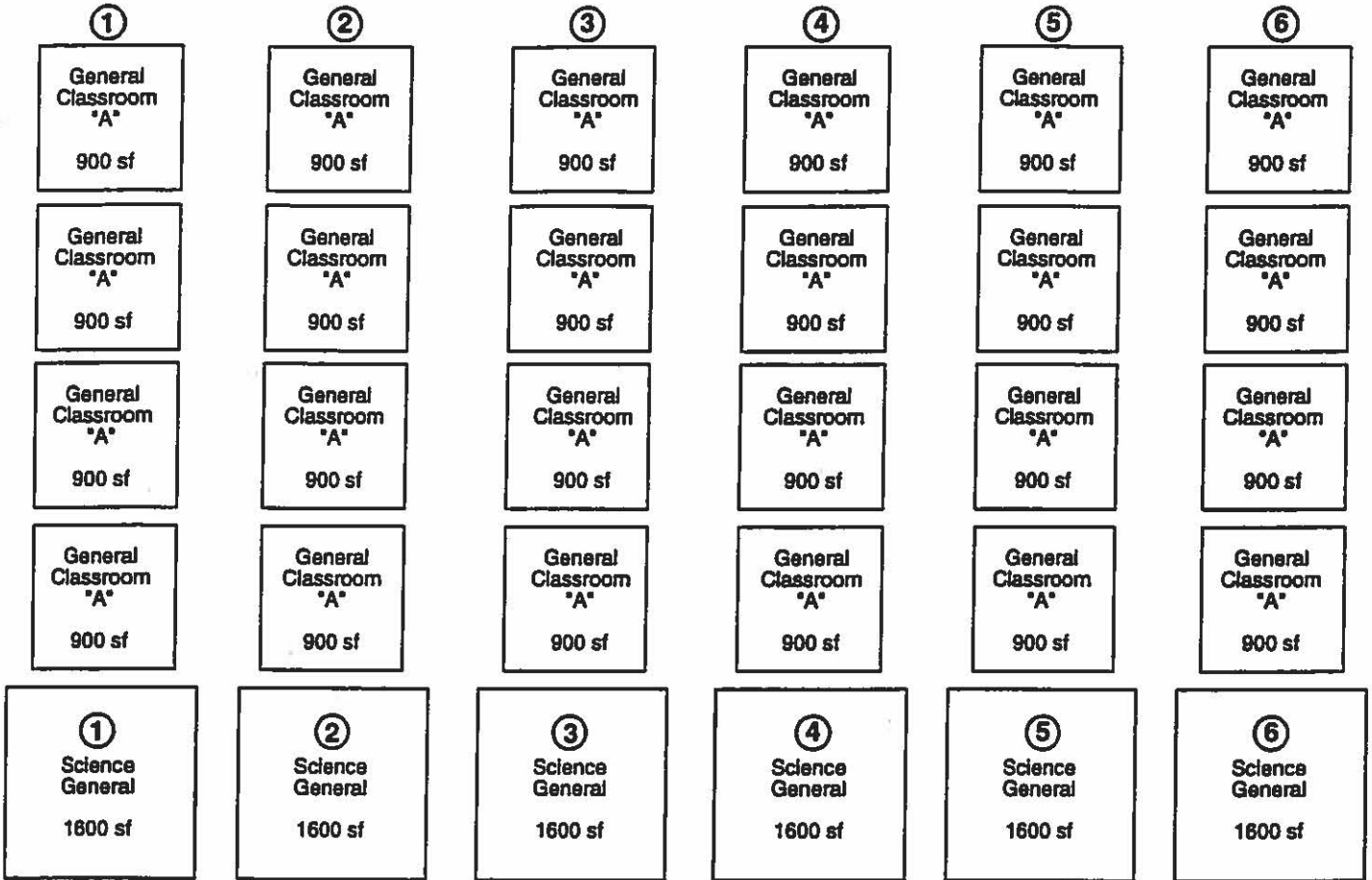
Academic Facilities

Potential Shared Facilities
(See High School layout, Alternative A)

INTERMEDIATE SCHOOL
CONCEPTUAL SITE PLAN
Alternative A (Suburban & Rural Lot)
March 1999

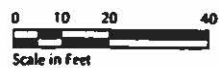


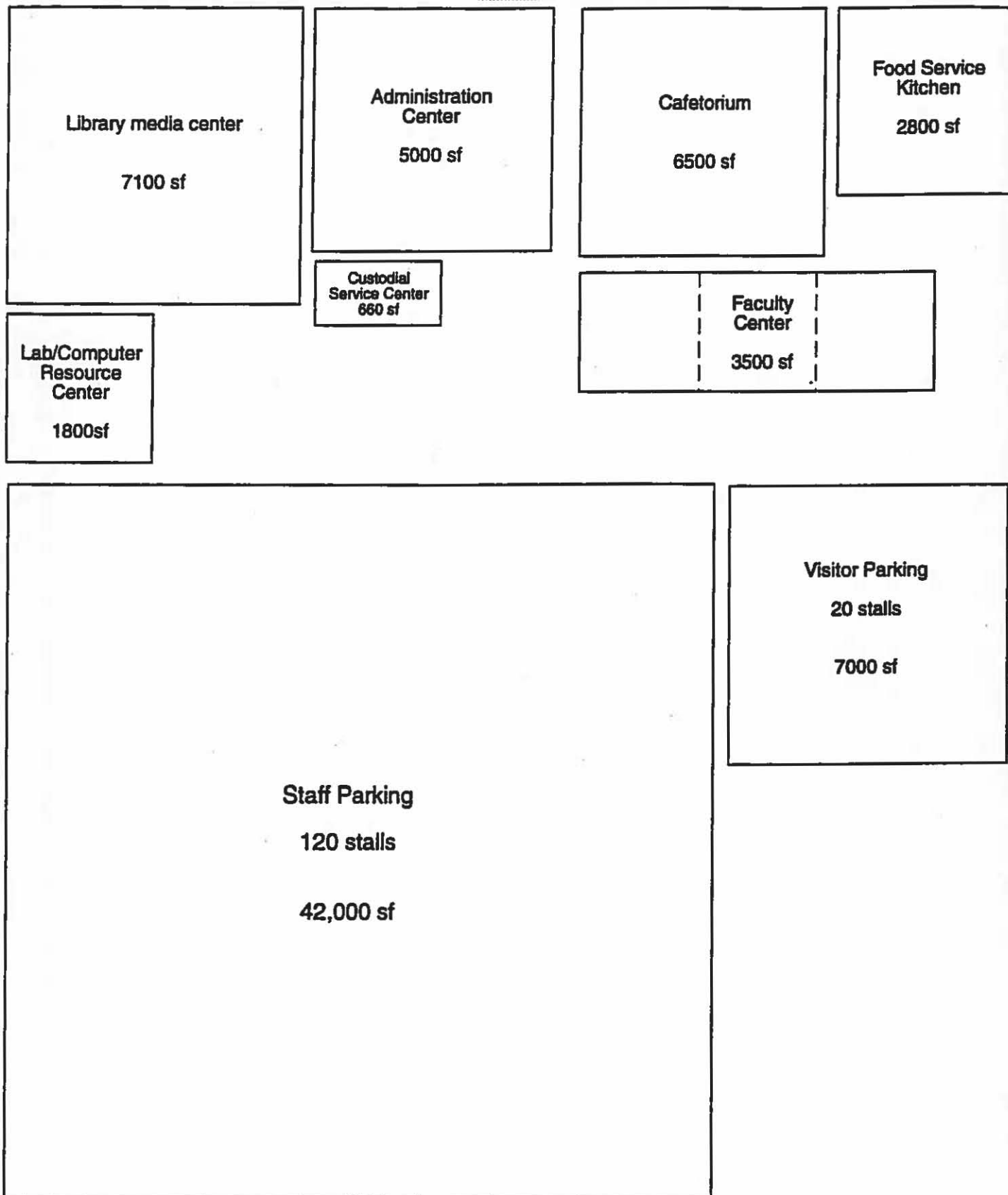
6 Teams at 5 Classrooms Each:



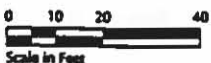
See DOE for Special Classroom requirements (LOTE, etc.)

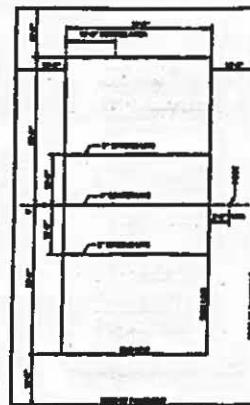
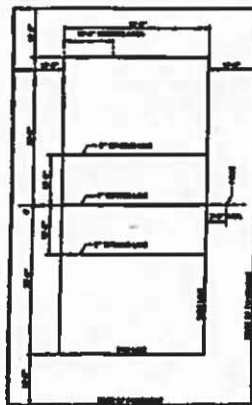
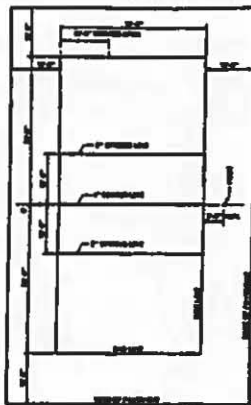
CLASSROOMS

SPACE STANDARDS
INTERMEDIATE SCHOOLPrepared for Guam Department of Education
March 1999

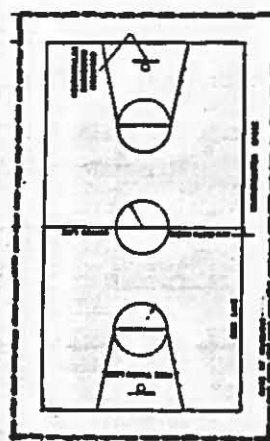
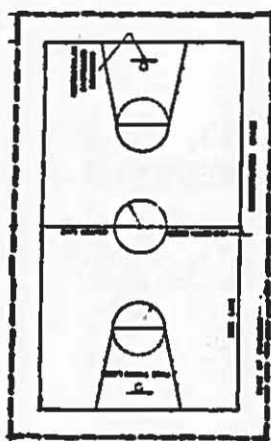
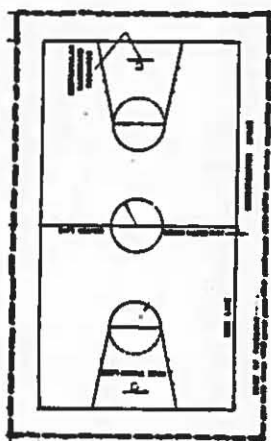


SUPPORT FACILITIES

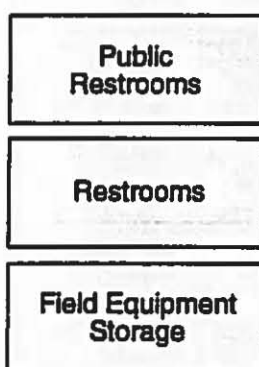
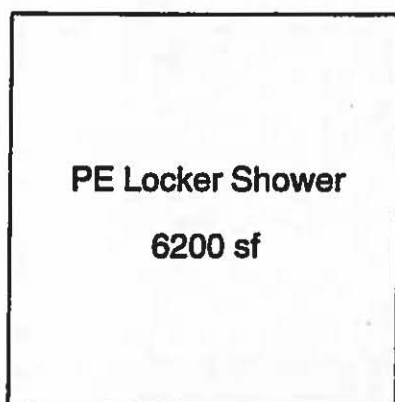




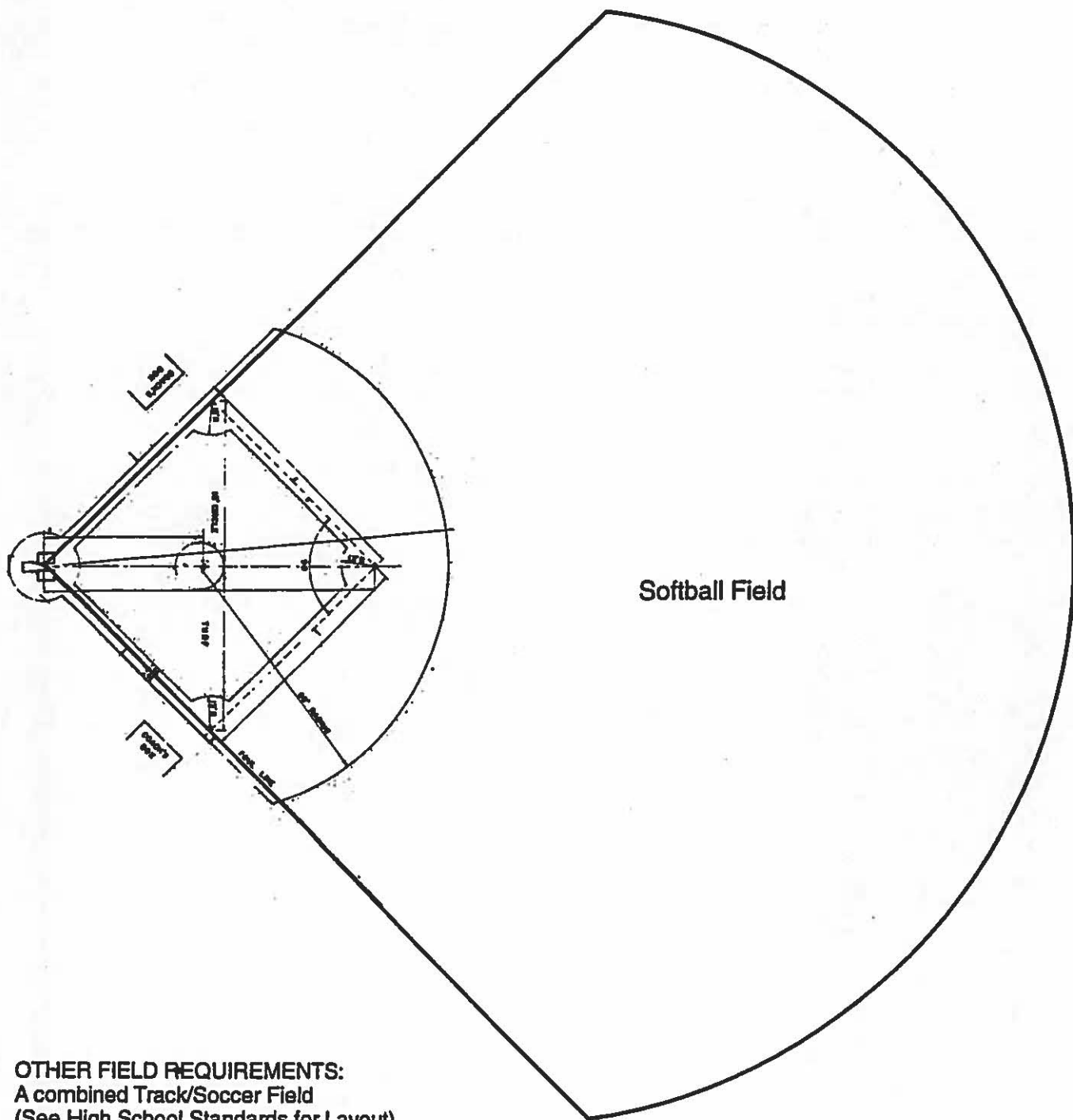
3 Volleyball Courts



3 Basketball Courts



ATHLETIC FACILITIES



OTHER FIELD REQUIREMENTS:
A combined Track/Soccer Field
(See High School Standards for Layout)

ATHLETIC FACILITIES



Belt Collins Hawaii

SPACE STANDARDS
INTERMEDIATE SCHOOL
Prepared for Guam Department of Education
March 1999

HIGH SCHOOLS

SECTION 4:

The conceptual plans for High Schools are based on a pilot program initiated by the Guam DOE that organizes academic classrooms into four groups called academies. Each group relates to a segment of the Guam employment market:

1. Construction Academy
2. Marketing Academy
3. Tourism (restaurants, hospitality) Academy
4. College Prep Academy

Because this is a pilot program, the classroom requirements for each academy are not yet clearly defined at this time.

The DOE requested that all High Schools be comprehensive, i.e. that they contain all four academies. In order to keep costs to a minimum, the number and size of each academy should be studied more closely before developing a high school construction program. The number, type, and size of academy groups in a high school may depend on the local population and the proximity of other high schools within a district.

Like the intermediate schools, the high school layouts utilize several key elements:

- Athletic Fields – High school requirements include a combined soccer/track/football field, baseball and softball fields, and three types of court sports. If desired, provide enough space for a future swimming pool.
- Classrooms organized by Academy – Four academies are organized around a central courtyard space. While the entry to each courtyard is kept relatively open for security reasons, each academy should have a distinct identity.
- Centralized shared facilities - These include administration, library, special classrooms (art, science labs, foreign language, etc.), a dining hall, and PE/Athletic facilities.
- Community use – A large number of high school facilities are appropriate for community use. They include athletic facilities, industrial arts workshops, dining halls, theaters, and specialized classrooms.
- Campus entry points – There are two covered drop-off areas that could be specialized for auto or bus drop-off activities..

- Dual parking lots – Locate the staff/visitor lot near administration and the event/student lot near athletic fields and other community facilities. The extra parking for students can double as event parking.
- Gatherings – There are three types of facilities for large school or public gatherings:
 1. *Theater* – Include a mid-sized (600-seat) theater for arts performances and smaller group events. We recommend that DOE only build low-cost facilities such as a black-box, open air, or a community theater at this time. Make the theater location large enough to accommodate an indoor facility at a later date.
 2. *Gymnasium* – The gym can be used for school meetings, rallies, and larger group events. Locate the gym near the cafeteria and student center so that students use the gym during lunch breaks.
 3. *Athletic stands* - Partially cover the track/soccer field viewing stands so they can be used for public events.

Alternative A: Suburban or Rural Location

Minimum site: 43 acres

This layout can be used either for a stand-alone high school or a shared intermediate/high school facility. If a shared facility, combine this plan with the academic portion of the intermediate school (Alternative A) plan. The purpose of the shared facility is efficiency; by sharing the largest and most expensive school facilities, per pupil costs can be reduced. There is also greater justification for introducing more extensive athletic or arts facilities in a shared school plan.

The locker rooms shown are larger than for a high school only facility; they are sized for a combined middle/high school locker room. For Alternative A's shared plan option, three athletic facilities are for high school use only: the tennis courts, baseball field, and football field. A separate soccer field is needed only for the shared intermediate/high school facility.

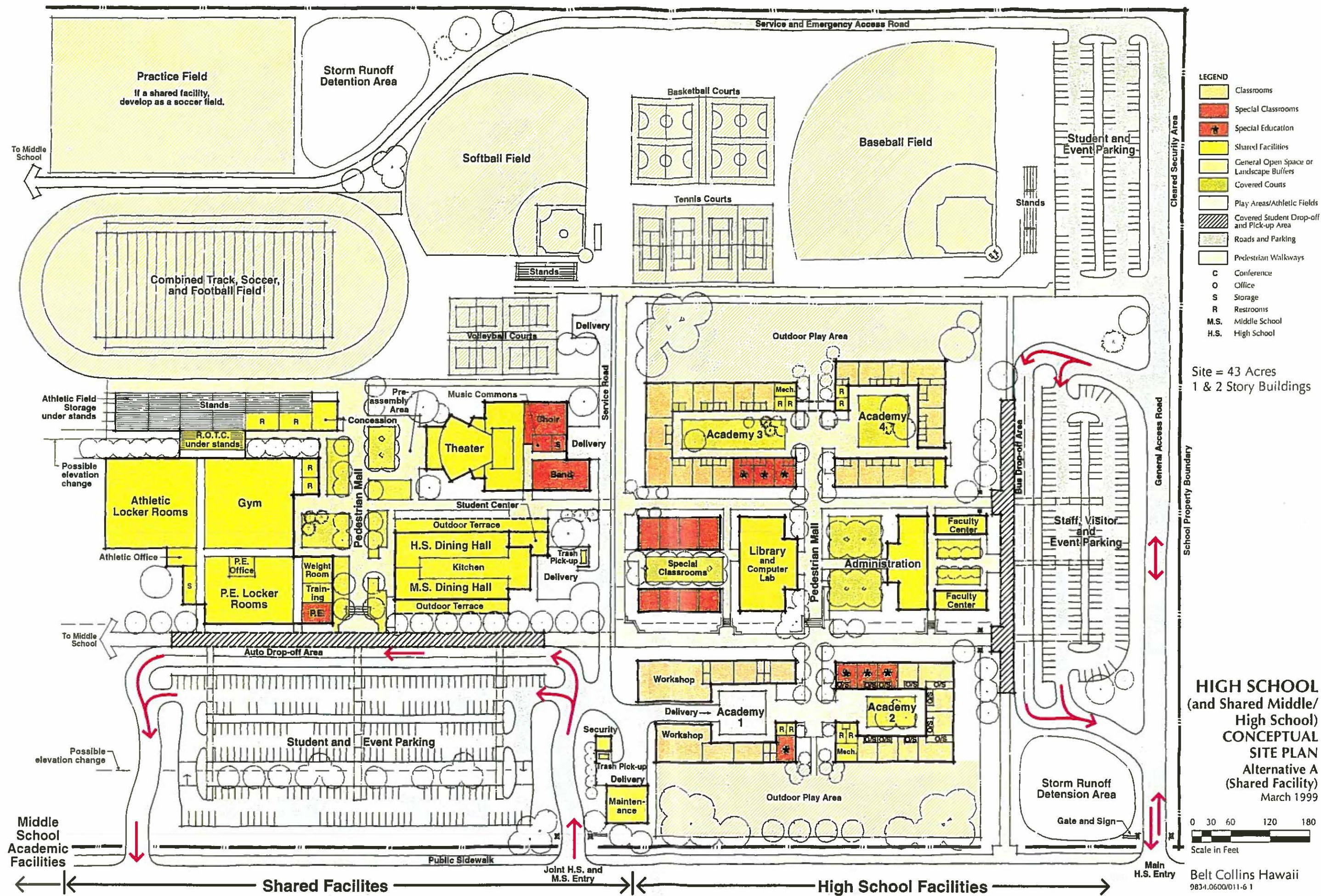
The number of centralized, special classrooms depends on how many academic functions remain within each Academy. The actual number of specialized classrooms required may be greater than those shown in layout A. Art, science, and foreign language are three categories of classes that could be located in a central, shared area.

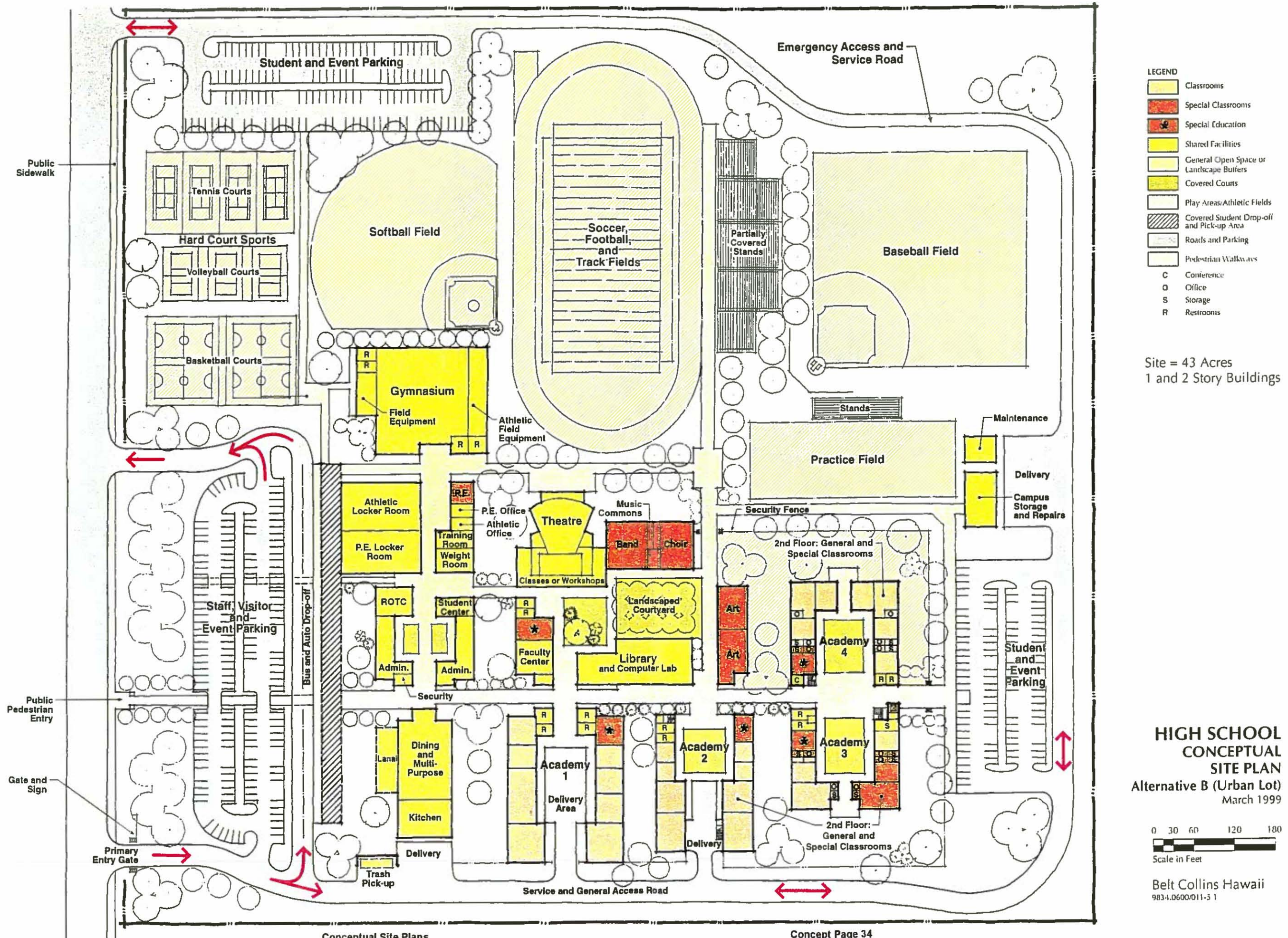
Alternative B: Urban Location

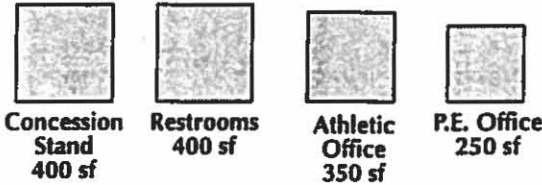
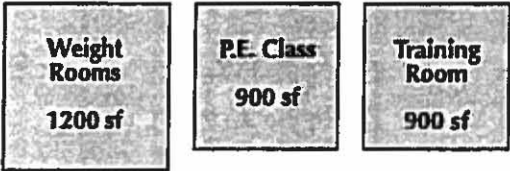
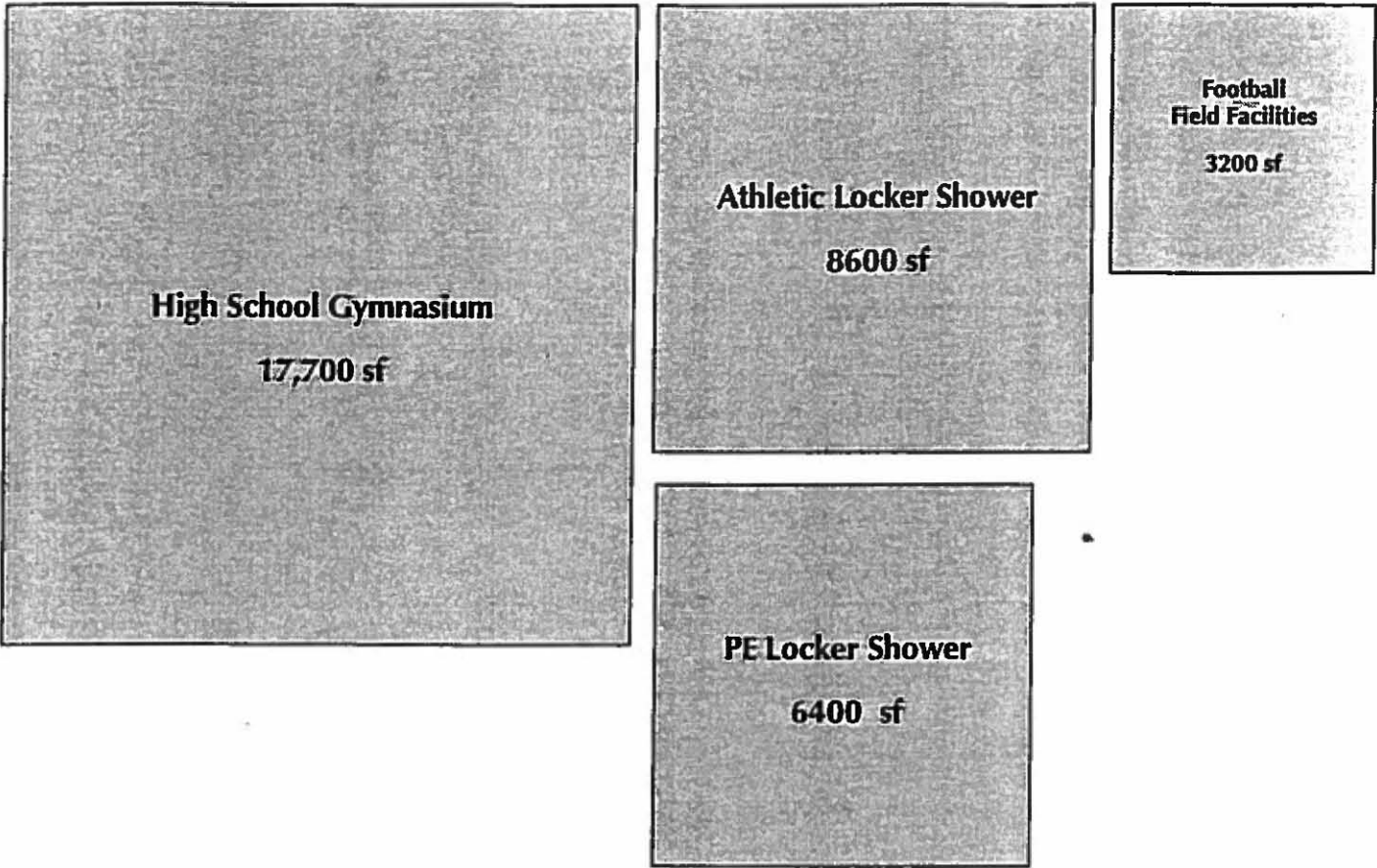
Minimum site: 43 acres

High schools in urban locations require a large amount of valuable land because of the acreage required for parking and athletic fields. In fact, the land requirement is the same for both urban and suburban schools.

Because of the high traffic levels, high schools should have direct access to a larger public roadway. However, the noise and congestion often associated with such roadways is not compatible with the needs of academic facilities. For that reason, this plan has a front and back side, with academic classrooms located furthest away from the main roadway. A parking lot, athletic fields, and non-academic facilities are used as a buffer to screen out undesirable noise and to create a more quiet, secluded environment for classrooms and academic buildings.







ATHLETIC FACILITIES



COMPREHENSIVE HIGH SCHOOLS:

Note: Academy classroom requirements are preliminary. See DOE for updated standards.

Academy 1: Tourism

General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf
General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf

Academy 2: Marketing

General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf
General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf

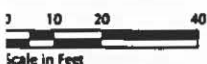
Academy 3: College Prep

General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf
General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf

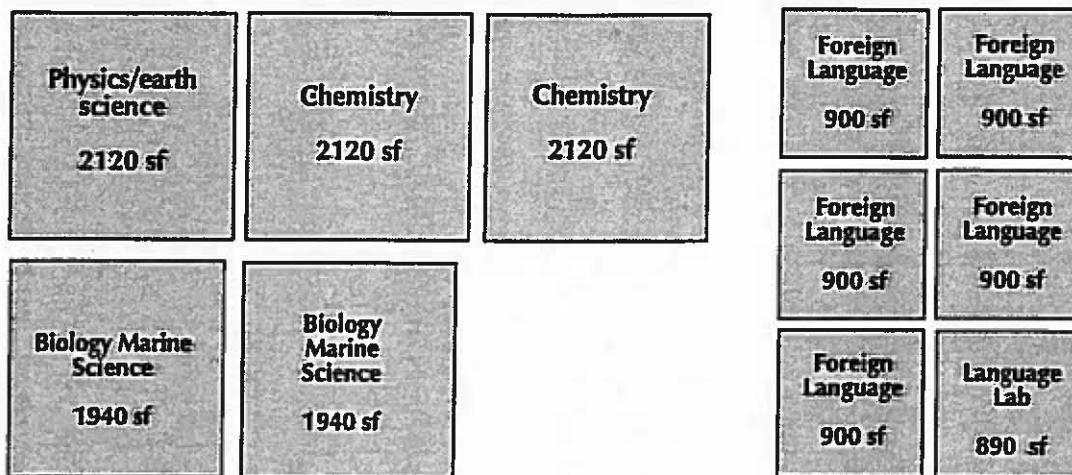
Academy 4: Industrial Arts

General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	General Classroom "A" 900 sf	Industrial Arts 3500 sf	Industrial Arts Labs 3500 sf
General Classroom "A" 900 sf	General Classroom "A" 900 sf					

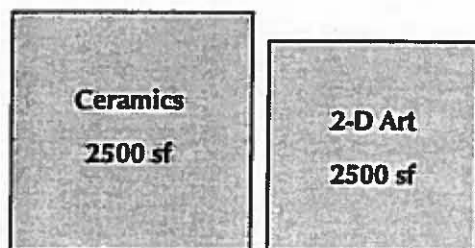
GENERAL CLASSROOMS
(Net SF)



Special Academic Areas

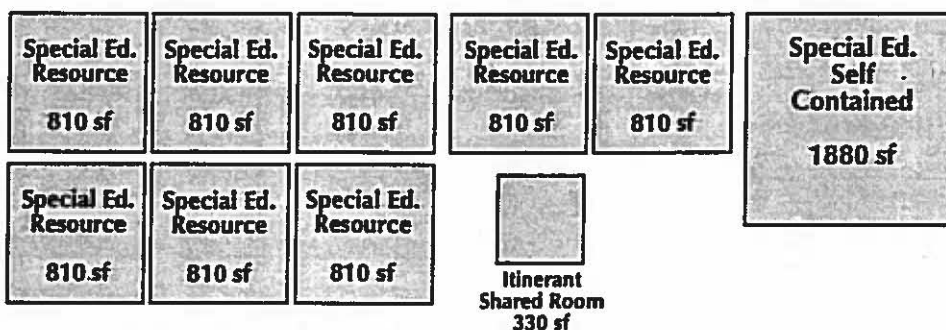
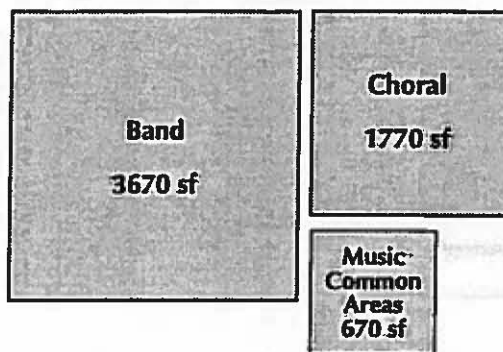


Art

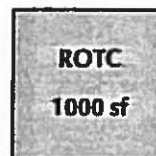
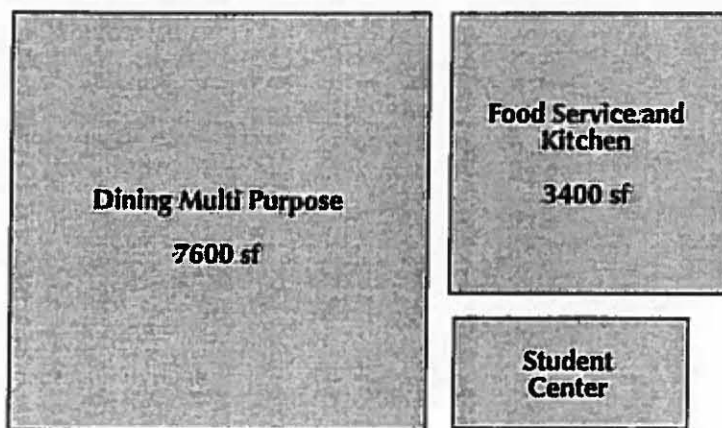
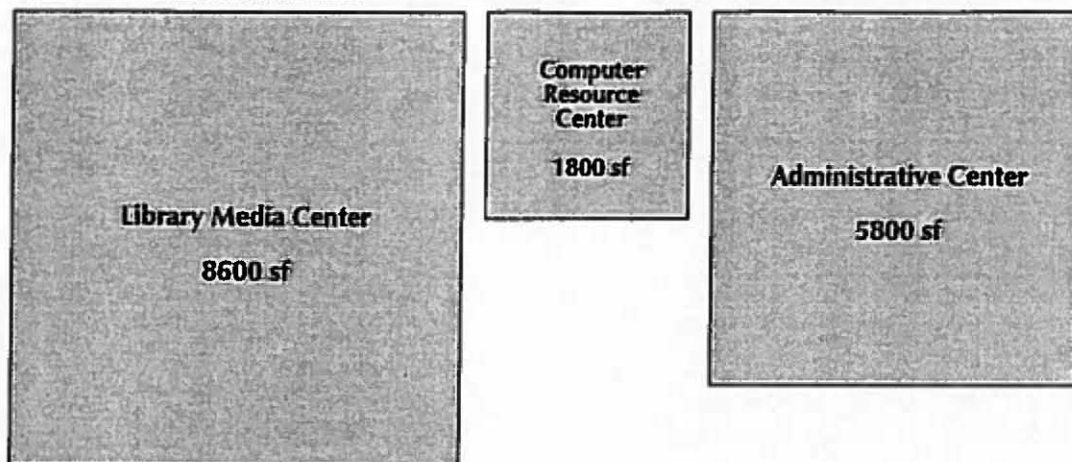


Theatre (600 seat) –
size will vary

Music

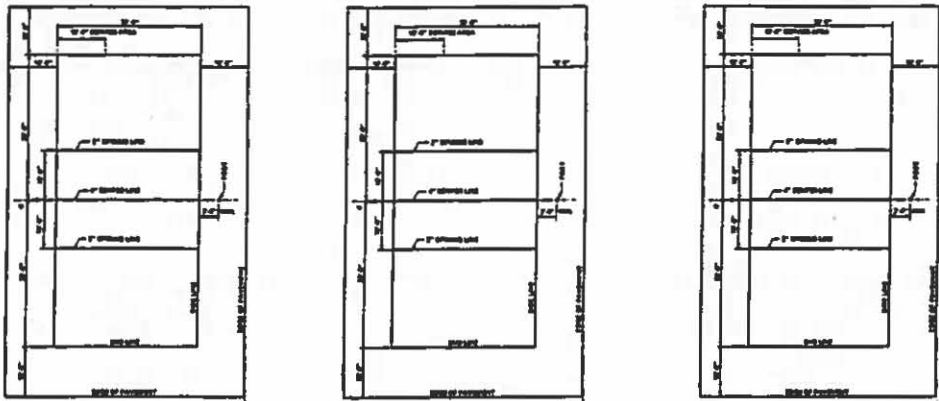
SPECIAL CLASSROOMS
(Net SF)

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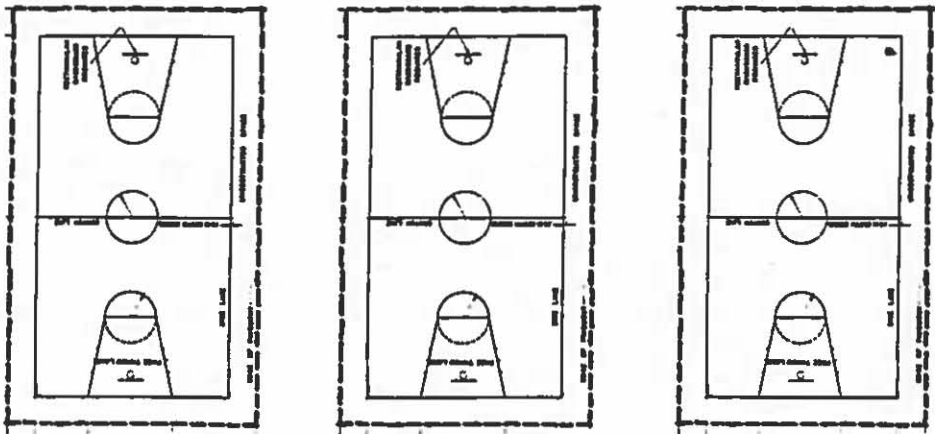


SUPPORT FACILITIES (Net SF)

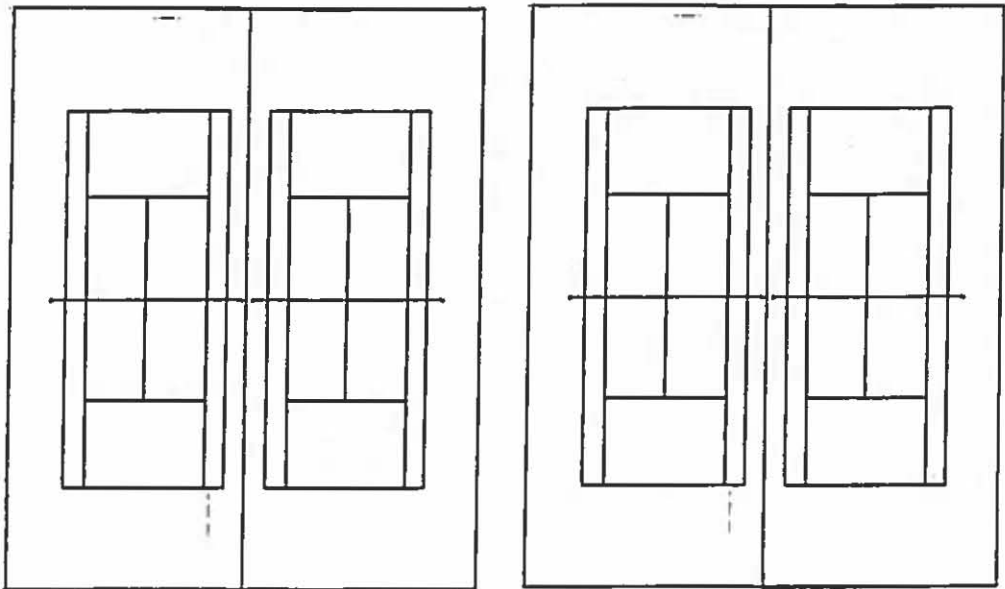




3 Volleyball Courts



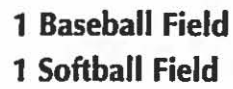
3 Basketball Courts



4 Tennis Courts

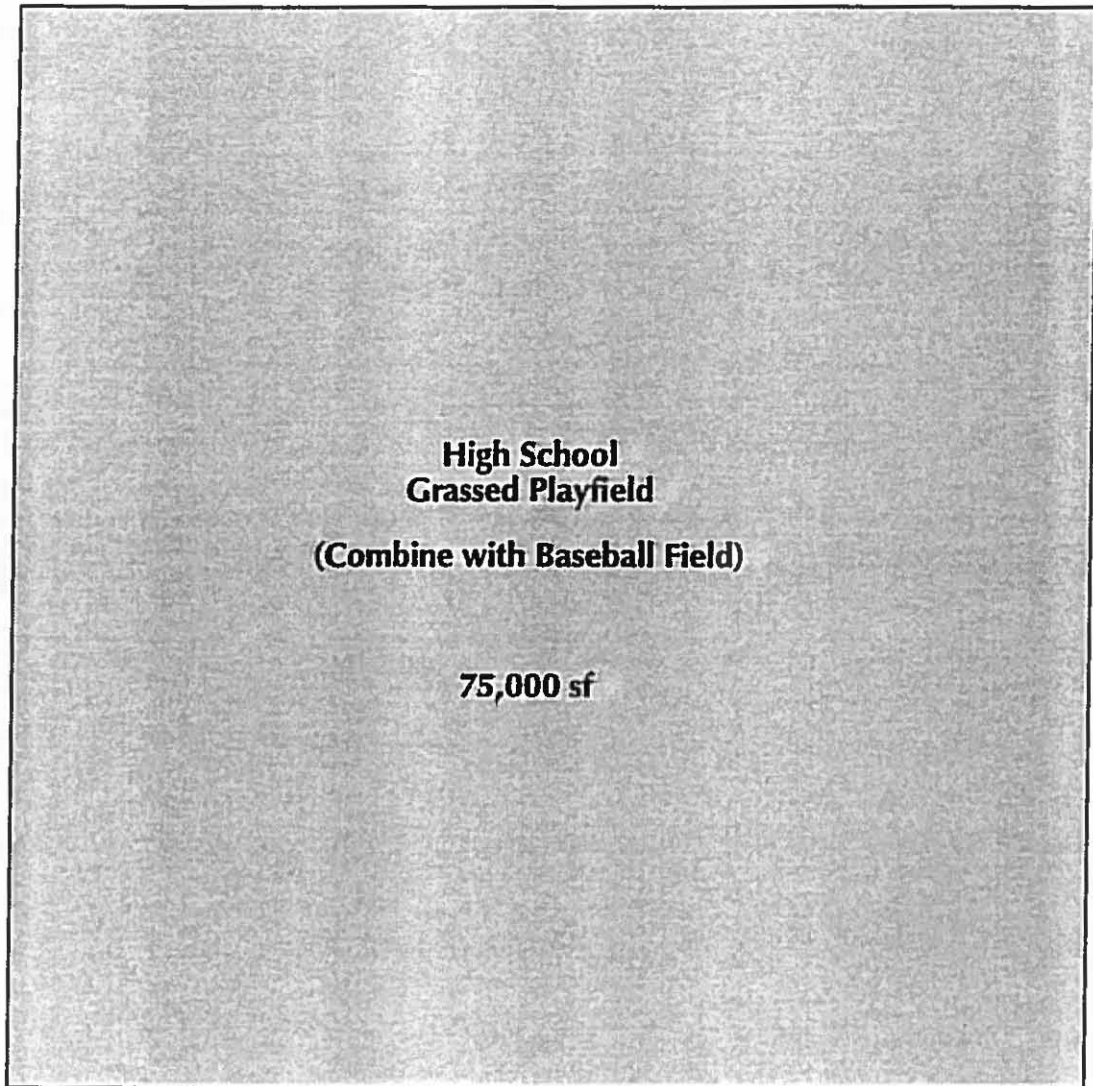
ATHLETIC FACILITIES



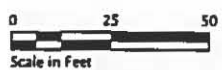


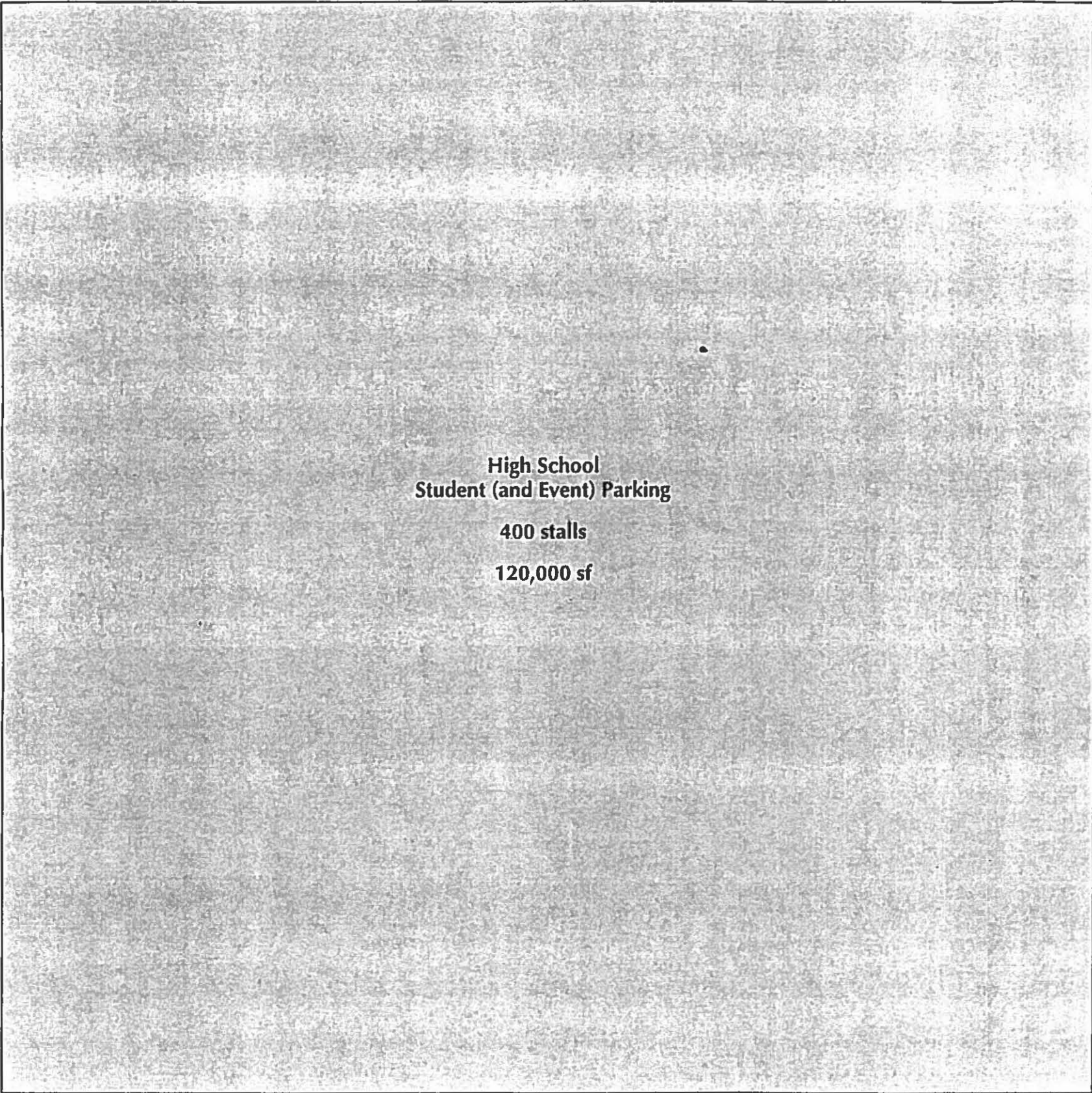
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Concert Page: 40



ATHLETIC FACILITIES

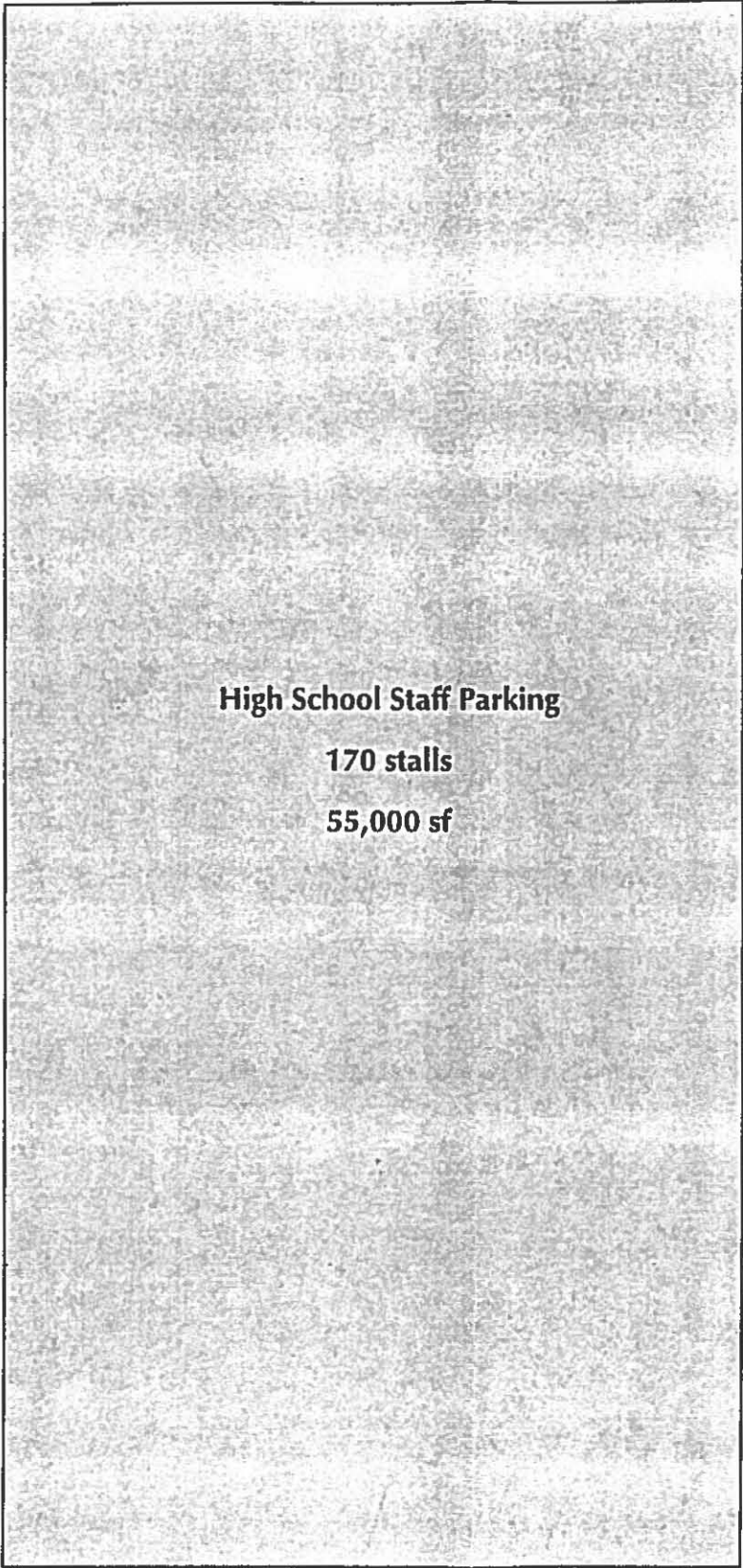




**High School
Student (and Event) Parking**

400 stalls

120,000 sf



High School Staff Parking

170 stalls

55,000 sf



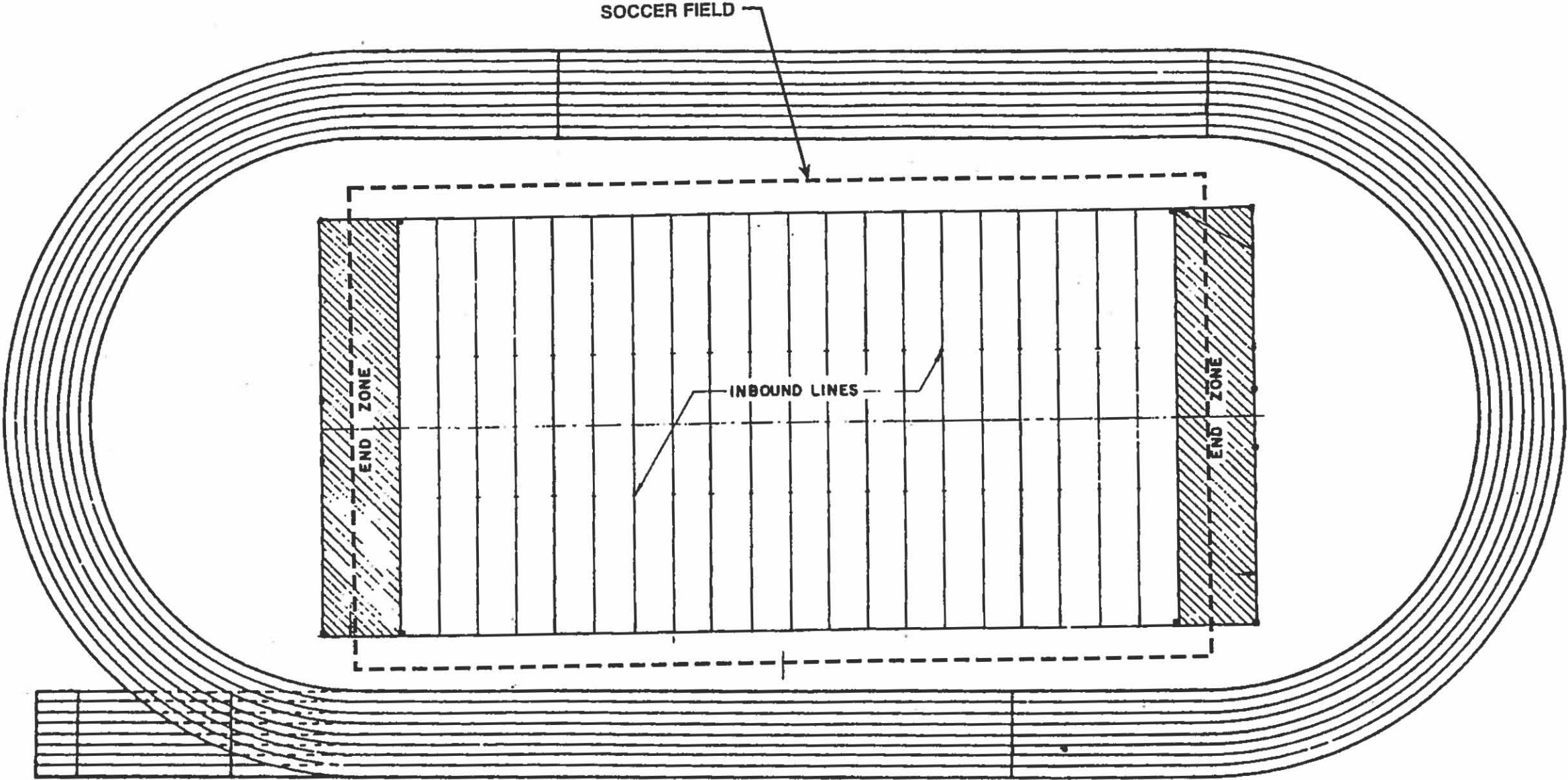
**High School
Visitor Parking**

30 stalls

10,500 sf

SUPPORT FACILITIES





COMBINED FOOTBALL, TRACK, AND SOCCER FIELDS
(Use removable goal posts for soccer field, and include a separate soccer field for combined Middle School/High School.
Use metric standards for track.)

ATHLETIC FACILITIES
(Track standards are metric)

0 25 50
Scale in Feet

Belt Collins Hawaii
9834.06NOV04-1.1

SITE DEVELOPMENT

SECTION 5:

This final section presents an overview of site development issues discussed during the DOE Workshops. It includes two sections: (1) Site Development Issues and (2) Site Selection Criteria).

SITE DEVELOPMENT ISSUES

The following issues were considered when developing the preliminary school layouts for Guam DOE.

- **Academic Support Areas:** Spaces such as libraries, teacher workrooms, and computer labs should be located near or within classroom arrangements.
- **Community Use:** The use of public schools by the community is a major issue that affects school layouts in Guam. The facilities most frequently used by the public are:
 1. Cafeterias
 2. Outdoor Gathering Areas (amphitheaters, covered stadiums, covered courts)
 3. Athletic Fields and Court Sports

These facilities should be located near visitor and event parking areas. Security is also an issue; making school facilities more available to the public also makes them more vulnerable to vandalism. In the model conceptual plans, each site is organized so that facilities used by the public are separate from the remainder of the campus.

Classrooms and industrial arts facilities may be used for adult classes. One of the advantages of using courtyard buildings is that individual buildings can be opened after-hours to the public while keeping other academic facilities securely gated.

- **Classroom Arrangements:** Developing smaller clusters of classrooms that are organized around a landscaped courtyard reduces the institutional feeling of a school and creates a more child-scaled environment. Clusters can be organized by grade level, academic subject, or learning teams. Educational programs can also affect classroom arrangements.
- **Energy Use:** Classrooms can be sited to allow controlled lighting conditions (a north/south orientation) and reduced air conditioning costs. Landscaping can also be used to reduce air conditioning costs in classrooms and other areas.
- **General Support Areas:** Administrative offices, dining halls, and auditoriums are areas that can be located away from classrooms, and closer to visitor parking areas. Along with some athletic facilities, these are often spaces visited or used by parents or the public. They should be located in areas accessible to the public, such as locations are near visitor parking lots, public roads, and public walkways.
- **Landscape and Open Space:** Shaping the land, especially near elementary school classrooms, extends the learning environment to the outside of the building.

Classrooms can be sited around a landscaped courtyard, creating a more child-scaled environment in a larger school. Trees can also be used to create attractive pedestrian walkways, provide shade for buildings or play areas, screen undesirable views, and control harsh winds by creating windbreaks. Children typically need a place to play and expend energy; open spaces should be located near classrooms (if air-conditioned) or dining halls. Landscaping a portion of the outdoor areas with large trees makes them livable in a tropical climate. If it is not possible to afford all landscaping up-front, then develop a landscape master plan that can be implemented over time. The landscaping portion of a project usually will be less than 10% of the overall site-planning budget.

- **Legal Requirements:** Legal or regulatory requirements that may affect site layouts include zoning standards (setbacks, maximum site coverage, height limits, etc.) fire lanes, fire codes (K-2 classrooms should occupy the ground level), and ADA requirements.
- **Lighting:** For both safety and security reasons, provide lighting in all school areas that will be used during evening hours.
- **Mechanical Systems:** The organization of mechanical space for large school facilities is outside the scope of this project. However, interviews with some of Guam's school facility managers indicates that the preference is for a decentralized system. The layouts show spaces within or near each courtyard building for mechanical equipment that services that area. Enclosed areas are preferable to open-air storage for security and noise reasons. We recommend that school architects conduct additional discussions with operational managers when designing future schools in Guam.
- **Physical Education and Athletics:** Athletic fields require large areas of relatively flat land. Outdoor athletic activities are often noisy, and should be located away from classrooms; if used for marching band practice, locate away from residential areas. In order to maximize flexible use of fields by the coaching staff, place them together whenever possible. Athletic spaces that are used for games, which the public attends, should be easy to find and placed near visitor or event parking lots.
- **Parking:** Locate parking lots in areas with easy access to local streets. However, it is not desirable to locate parking lots in areas where they dominate public views to the school. Develop a landscape buffer between parking lots and other uses.
- **Pedestrian Walkways:** All campus layouts prepared for this project create safe, walkable campus environments. Pedestrian walkways that connect the primary academic facilities are kept away from vehicular roads, and other pedestrian connections keep conflicts to a minimum. Whenever possible, create a pedestrian link between the school entry and public walkways or nearby public facilities. A clear, organized, and spacious walkway system helps to orient users and creates a well-functioning environment. Walkways are often social gathering areas for students and teachers; provide shade trees and seating areas along them. Because of Guam's frequent rains, all major walkways should be partially or fully covered. Design service roads and pedestrian walkways near athletic fields for dual use by pedestrians and

service/emergency vehicles. We recommended that the DOE purchase smaller maintenance carts for use along covered pedestrian walkways.

- **Social Needs:** Often, areas that are not designated for specific classroom activities are overlooked in school planning programs. These include conference rooms, teacher/parent meeting rooms, faculty meeting areas, and small to large gathering areas for students. School programs should be modified whenever possible to meet social needs.
- **Vehicular Traffic:** It is important to provide a substantial, on-campus area for the drop off and pickup of children by either bus or private auto. Ideally, children should be able to exit from the right hand side of the car onto a pedestrian walkway that leads to school facilities. For safety reasons, locate vehicular roadways away from school activity areas. If it is necessary to route service roads or fire lanes through or near the center of campus, then limit deliveries to off-hours. If possible, locate faculty and staff parking lots away from the visitor lot and student drop off and pickup traffic; this allows teachers to avoid the heavy traffic associated with before and after-school activities.

Standards

The photographs displayed on the following pages illustrate several design ideas that are incorporated into the conceptual site plans. Although defining design guidelines for future schools is outside the scope of this project, these examples begin to show what is possible.

Courtyards

Courtyards are a traditional way to organize buildings around a central open space. They are used extensively throughout the conceptual plans. Courtyard buildings and layouts create organized, smaller scale environments that relate to a child's developmental needs and to educational groups. For example, grade-level classrooms for elementary schools and learning teams for intermediate schools can be organized around an open courtyard. If properly landscaped, courtyards add visual appeal, shade from the sun, and a place for students to sit or read. Keep courtyards relatively small. A larger outdoor area, such as the one shown at Southern High, is too large to perform its function as a social and organizational feature.

Pedestrian Walkways

Because students and teachers walk from one area of campus to another, pedestrian walkways are the "glue" that holds a school together. Rain is frequent in Guam, so it is recommended that all major walkways be partially or fully covered. Keep covered walkways along the edge of courtyard buildings open for both aesthetic and security reasons.

Architectural Styles

There are many types of architectural styles appropriate for Guam's schools, and several are shown in this section's color inserts. Because of the island's tropical climate, sloped

roofs and wide roof overhangs are recommended. If properly attached for typhoon winds, colored tiles can be used effectively to link school architecture to island traditions.

Athletic Stands

Developing attractive yet typhoon-proof stands for high school facilities presents a challenge for Guam's educational architects. For flat, urban school sites, either push the stands up against a gymnasium wall or hide the tall back side of athletic stands with trees or a tall hedge. When designing for sloped rural sites, a good way to blend concrete stands into the setting is to create terraced platforms for athletic fields. Then set the stands into the slope between the terraced fields.

Gates and Security

Security is a major issue for Guam's schools, and gates and fences often play a strong role in developing the physical character of a campus. This is especially true at public entries, public street edges, and campus interior locations where gates and fences either present a welcoming or unfriendly image for students, parents, and the public. Although security is an important issue, fences and gates should not create a prison-type of environment. Low walls, thick landscape hedges, and gates or walls similar to those used at Tamuning Elementary School produce a positive image while maintaining security. When it is necessary to use metal-mesh fences in public areas, hide them with landscape materials.

Provide security lighting along side and rear perimeter walls, and keep a cleared area near the fence or wall for security reasons.

One of the best ways to keep a campus interior secure is to locate classroom, library, and cafeteria windows so that faculty and staff can observe outdoor activity areas. For courtyard layouts, keep interior courtyard windows large and limit exterior perimeter openings to high windows or louvered vents.

SITE SELECTION CRITERIA

Site development patterns affect the overall success of an educational facility. With a large public capital investment at stake, it pays to have site selection criteria and site development guidelines for each type of school facility. Typically, the expertise of a site planner and architect are needed when selecting school sites. When selecting a site for a new school facility, it is important to remember that the required acreage may be more than the minimum site listed on the conceptual site plans in this document. Actual sites may be oddly shaped or contain land that cannot be used because of steep topography, existing easements, or other reasons. In those cases, the site layouts will be less efficient than the model plans.

Factors That Affect Site Planning

Whether a school facility will be used as an elementary, middle, or high school, the following factors apply.

- **Location.** A school site should be located near the population it serves, with proximity most important for elementary schools. Schools located near target populations make family participation in school activities easier and reduce transportation costs. If the proposed school site is adjacent to other public uses, then some of the school's facilities can be used off-hours for other purposes. Examples include the parking lot, dining hall, auditorium, and athletic fields or playgrounds.
- **Access.** The size, location, condition, and traffic levels of existing roadways or bus routes that service a particular site affect the school's layout and operations. Nearby traffic or noise may produce safety hazards or an undesirable environment for teaching. Elementary and intermediate schools, in particular, should have adequate road access but should not be located off or near major highways. Pedestrian access is also important. If local walkways connect to the school's entry area and interior walkways, then students/parents can more easily walk to/from school.
- **Adjacent Land Use.** A school should be compatible with surrounding uses. School traffic or outdoor activities can negatively impact dense residential neighborhoods. This is less a problem with elementary or intermediate schools than it is with high schools. If a high school is located next to a residential area, then it is important to locate a buffer area along that boundary in order to maintain privacy and reduce noise for local residents. Adjacent land use should also be compatible with educational needs. Avoid sites with adjacent uses that produce high levels of noise, traffic, or pollution. Most residential development, small-scale commercial activity, public uses, and natural preserves are compatible neighbors.
- **Size of the Site.** The minimum site for elementary schools is 10 to 12 acres; for Intermediate Schools 15 to 18 acres; for High Schools 30 to 35 acres. Sites at the low end of the range require two or more story structures. If a site contains steep land, natural vegetation to be retained, or areas difficult to develop for technical reasons, a larger site is needed. In less developed areas, it may be necessary to control storm drainage by installing detention basins; this also increases land requirements. Larger sites can be developed as a park/school combination and include facilities used for other purposes. Finally, it is important that the site accommodate activities that require large areas: (1) athletic facilities and outdoors play areas; (2) off-street loading requirements, particularly student drop off/pickup areas, and (3) off-street parking.
- **Topography.** Nearly flat or mildly rolling land is easier to develop than a site with steep slopes. A minimum slope of 1 to 2% is required for good site drainage, and a slope of 2% to 5% provides good drainage and maximum development flexibility. Land with a 10% slope can be graded for athletic fields and school facilities, but extensive grading affects costs and increases land requirements. Conversely, a site with slope variations and natural vegetation is more attractive than a nearly flat site.

- **Site Development Costs.** Steep topography and underdeveloped services (roads, utilities) increase site development costs. Depending on the services required, site development costs could vary from 8% to 12% of the entire building construction cost excluding land. If a school site is small, and also has steep slopes, extensive grading and retaining wall construction will increase development costs. A small site also requires multi-story structures that may need elevators for ADA (American Disability Act) compliance and sprinkler systems for K-2 classrooms located above the ground floor.
- **Utilities.** Construction costs will be less if water, gas, electrical power, and storm/sanitary sewer lines are available near the school site. Check to determine if the line capacity is adequate to meet school needs. If on-site treatment fields for wastewater must be provided without cesspools (check Department of Health rules), then more land is needed for leaching fields.
- **Soil Types.** Unless soil types are known, it is wise to take test borings to determine whether existing soils will drain properly or support building loads. Problem soils limit available building sites and produce additional excavation or other costs for a school construction project.
- **Environmental Factors.** A number of environmental conditions may determine what proportion of a site is usable or even whether the area should be used for a school facility. The presence of hazardous wastes, high noise levels, adjacent industrial facilities, or high voltage transmission lines may eliminate a site from consideration. If there are wetlands on a proposed site, the extent and location of the wetlands should be determined prior to land purchase. Wetlands usually must be preserved, and their size and location may have a negative impact on the school layout or its functional operations.



1. Courtyard and entry at Tamuning Elementary School.



2. Steps along courtyard edge at Tamuning Elementary provide informal seating.



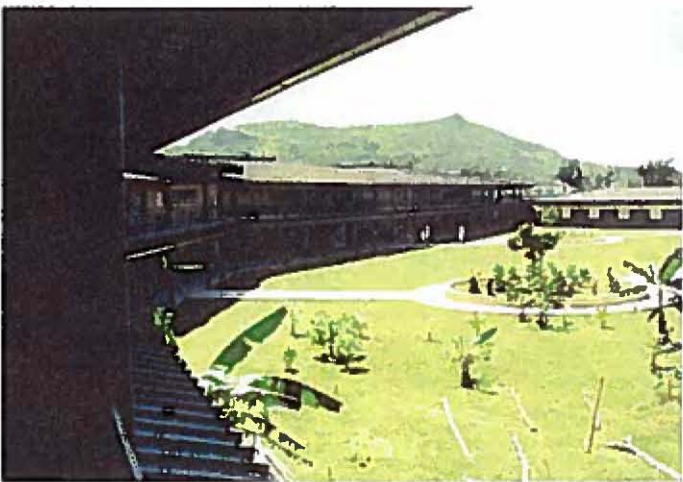
3. U-shaped courtyard



4. Landscaped classroom courtyard at George Washington High School.



5. Landscaped courtyard provides seating and sun control.



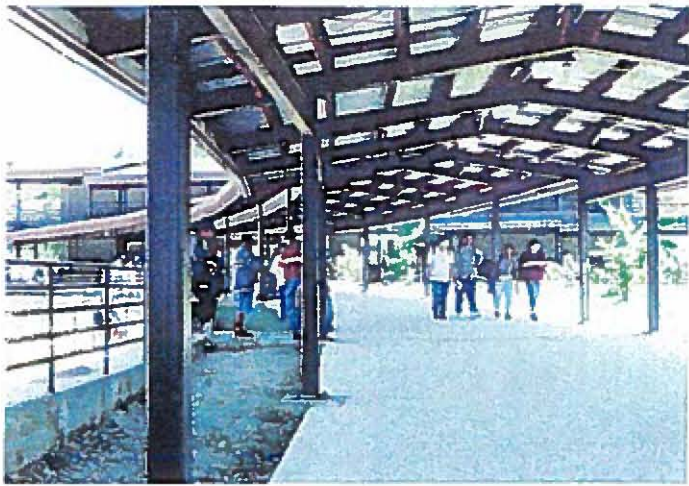
6. Large outdoor area at Southern High School.

COURTYARDS

Prepared for Guam Department of Education
March 1999



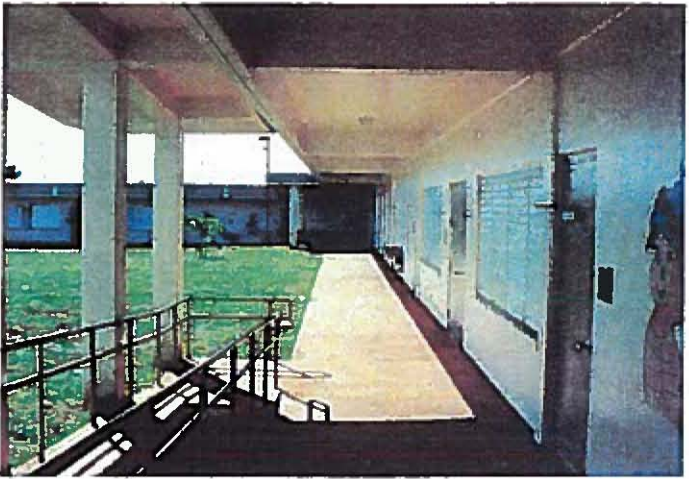
1. Outdoor, tree-lined walkway



2. Outdoor covered walkway at Southern High.



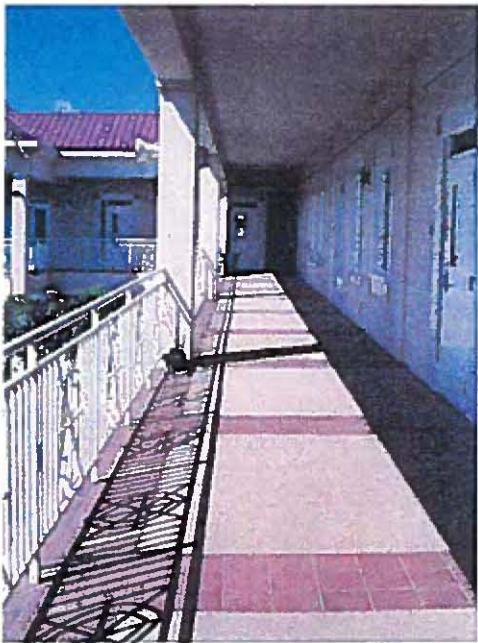
3. Covered outdoor walkway



4. Covered outdoor corridor



5. Covered corridor



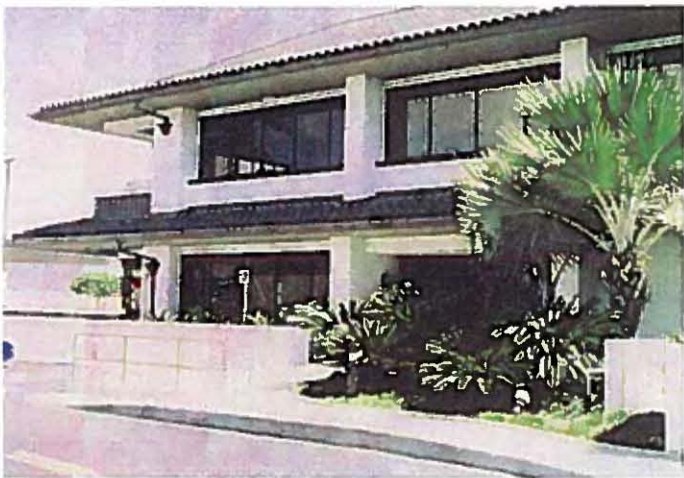
6. Second level corridor



1. Tamuning Elementary front facade and drop-off area.



2. Traditional architectural style used for a high school facility.



3. Building elements: Tile roofs, roof overhangs, and large window openings.



4. Building elements: Sloped tile roof, roof overhangs, and decorative wall grills.



1. Treated wooden seats, set into the hillside, produce attractive yet sturdy athletic field stands.



2. Concrete viewing stands are set into hillside.



3. High School athletic facilities can be built on terraced land (also see photo 2).



1. Courtyard building entry gate at Tamuning Elementary.



2. Public entry gate and sign



3. Don't use this type of fence for public areas and entry point.



4. Security fence and lighting



1. Sun protection device



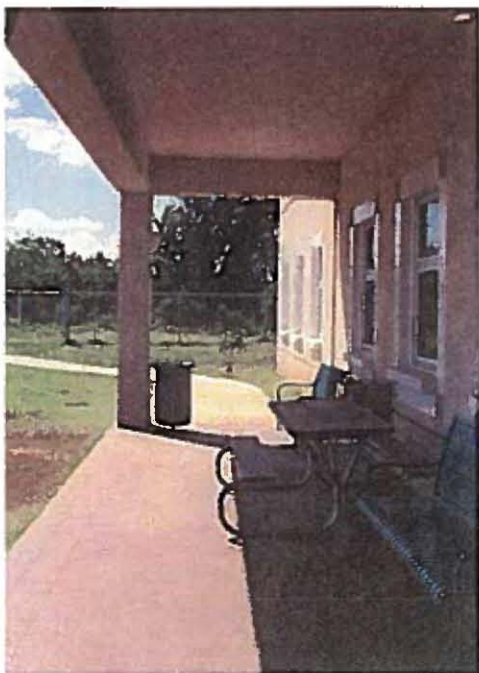
2. Outdoor seating area



3. Industrial Arts shops at Southern High School.



4. Trash collection area at Tamuning Elementary.



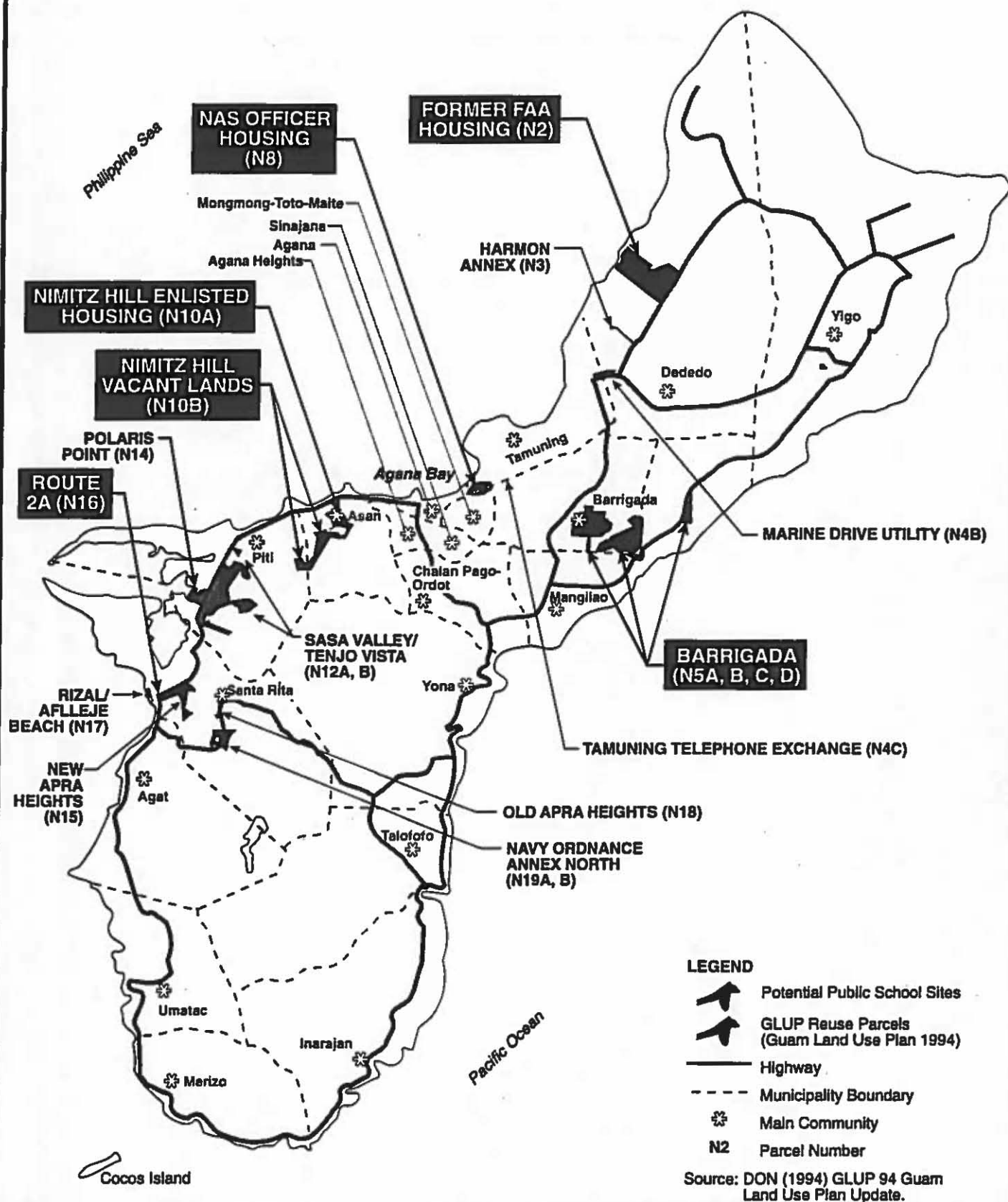
5. Supervisory seating at playground.



6. Screened mechanical area at Tamuning Elementary.

New School Sites

Most schools require large amounts of land, and there are few such designated sites on Guam. Land is expensive, and its costs reduce the public funds available for school construction. One way to increase the number of new school sites on Guam at low cost is to designate selected parcels of land being transferred by the U.S. Navy to the Government of Guam for school use. Only a small portion of several "GLUP" parcels, shown on the following page, is needed for both economic development and a school. Larger parcels large enough to accommodate an intermediate or high school include Barrigada A/B/D, Former FAA Housing, and NAS Officer Housing. Smaller sites that could accommodate an elementary school include Nimitz Hill Enlisted Housing, Nimitz Hill Vacant Lands, and the Route 2A property.



0 1 2 3 4 5

SCALE IN KILOMETERS

0 1 2 3

SCALE IN MILES



**GLUP REUSE PARCELS:
POTENTIAL PUBLIC SCHOOL SITES**



Prepared for the
Department of Education
Project No. DOE RFP-002-97

CAPITAL IMPROVEMENT PLAN
FOR THE
TEN YEAR CAPITAL FACILITIES PLAN

JUNE, 1999



A **tyco** INTERNATIONAL LTD. COMPANY

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CAPITAL IMPROVEMENT PLAN

I. SUMMARY

A Capital Improvement Plan (CIP) is prepared as part of the Ten Year Facilities Plan. The creation of a CIP is an important management tool. The plan has been developed to improve the physical environment of the more than 32,000 students who attend Guam's public schools. Secondly, the CIP is created to provide the roadmap outlining what the department should do to rebuild existing schools and to secure the funding necessary to build new schools.

DOE and the Government of Guam share the responsibility for prioritizing and allocating funds for school construction and improvements. The development of this plan provides DOE with a capital planning document focused on determining existing and future needs, and a prioritization of those needs for presentation to the policy-makers of Guam so they may identify and allocate the funding sources required to implement the plan. The report includes the following:

1. A review of the school district's physical inventory to assess current and future capital requirements. A comprehensive profile of existing school facilities which includes information on capacities, design, age and condition was obtained from various sources including on-site assessments. A database was developed to describe the condition of the existing school facilities.
2. An assessment to determine the demand on existing facilities over the next 10 years using enrollment projection data was developed for this study. Based on the enrollment projections and legislated enrollment capacity guidelines, the demand for school facilities will exceed the supply within the 10-year planning horizon. DOE will need a total of 23 new schools – 12 elementary, 6 middle and 5 high schools - to meet the long-term demand for the projected ten-year period.
3. Ongoing maintenance for each school is not funded appropriately. Our site assessment revealed that 14 existing facilities have deteriorated due to the lack of a long-term maintenance program. The combination of aging school buildings and extended periods of capital and operating budget underfunding have resulted in the deterioration of school infrastructure. The 14 schools surveyed are in need of substantial capital work and modernization.
4. There are 9 schools that are over 40 years old. These schools will require major modernization work and retrofit. By the end of the ten-year planning period, another 14 schools will be over 40 years old. (School districts in the U.S. use a target school life of 40 years.) Correcting structural, inadequate building code violations and pursuing ADA compliance have been identified which will improve the condition of these existing school

facilities. Modernization of major components including roofs, plumbing, retrofit of electrical and communication system upgrades and/or replacement are also identified. Cable lines, phone lines and electrical wiring upgrades are needed to support those new instructional methods which rely heavily upon modern technology. Improvements to support facilities i.e. cafeterias, athletic fields, gymnasiums, and auditoriums improvements are necessary. The urgency of repair and renovation work needed to bring the existing facilities up to standard was a major consideration in the prioritization and scheduling of projects within the first 5 years of the planning period.

5. Guam's schools have large enrollments and are overcrowded. In SY 1986-87, the total DOE enrollment was 24,991 students. By SY 1997-98 there were 32,593 students – a net increase of 7,602 students. This growth was primarily accommodated within the existing schools through the building of additional classrooms. All existing schools have been expanded to accommodate the growth experienced during the last two decades. Almost all schools have doubled their capacity by adding temporary and “fast track” classrooms. Classrooms were built in the schoolyard where space was available. In some cases, libraries, cafeterias, other available rooms were used to house students for classroom instruction. Overcrowding in the common areas, bathrooms, library, cafeteria and play areas are the norm.
6. The newer buildings have physical defects. The construction of the “fast track” and temporary classrooms employ inferior building materials which decayed more quickly than the materials used in the older buildings. As a result, a number of classrooms and buildings are showing signs of significant wear and tear.
7. The CIP projects will cost over \$500 million for the renovation of existing schools, and the building of new schools, over the planning period. In light of the current economic downturn, identifying a dedicated source of funding(s) to support the plan will require DOE officials and policy-makers to come up with creative solutions that may include a number of options. The financial plan section outlines potential funding opportunities to be explored.

II. INTRODUCTION

Various studies have reported that an appropriate school facility is critical for high quality learning. Well maintained schools provide an image to the children and their families that education is important and inspires them to make a commitment to learn. DOE wants to raise the standard of its facilities and through the CIP plan, DOE will be able to move in that direction. DOE understands that it can not do it alone and must work hard to educate the community, the public and the decision-makers on the value of improving its school system. The projected cost of this CIP is over \$500 million.

The generation of capital construction funds for educational purposes requires a substantial commitment from the government and the people of Guam. For more than two decades, DOE has

not been able to secure a stable stream of money to fund the maintenance and upkeep of its school buildings and to build new schools where population growth has occurred. This continues to be the problem today. While resources are shrinking, capital infrastructure continues to grow. It will even be more difficult for DOE to obtain necessary funding for capital improvement projects.

Guam's fiscal crisis has forced the government to target limited resources towards more critical operations. Since 1995, a stagnant revenue base has forced the Government of Guam to deliver the range of necessary services with fewer and fewer resources. Tough choices are being made to prioritize capital expenditures for government services and programs. For DOE, the challenge is even greater to secure its share of capital funds to build new schools and to maintain existing schools. This plan provides the short and long term needs of each school; forecasts the number of new schools required to meet the enrollment projection; and a financial plan that helps to identify potential funding sources to support the over \$500 million price tag for rebuilding existing schools and the construction of new school facilities.

III. CAPITAL IMPROVEMENT PLAN

This section of the report identifies various CIP funding sources for each school. The information found in the CIP list was originally prepared by DOE's Facilities and Maintenance CIP (F&M) Division. Assessments to determine the physical condition of each of the schools have been conducted by DOE staff and engineering consulting firms since 1991. The scope of this review included assessments of the mechanical, electrical and plumbing systems, structural and major components of life safety and code compliance and ADA.

As part of the Ten Year Facilities Plan, Earth Tech's scope of work included an inventory of 15 schools as identified by DOE. An inventory was performed at each of the 15 schools to include: building and site general condition and state of repair; the facility's organization of space; the size, location and layout of the site; and local environmental conditions including traffic, noise, and safety considerations. The project team also reviewed the CIP list prepared by DOE and verified the CIP improvements identified for each of the 15 schools. Information derived from the site assessment was augmented and validated with existing DOE plans and facility assessments reports completed by local engineering firms to include structural issues and ADA compliance.

These assessments were used to establish the renovation projects outlined in the CIP list for a ten year period. The results of our school visits were found to be consistent with DOE's school assessment. We believe that the CIP list is an accurate representation of the CIP project needs for each of the schools. We have also identified additional improvement projects for consideration for each of the 15 schools we visited.

A detailed CIP project priority list for each school is provided in this section as well as overall summary table. Almost \$95 million is needed to repair and renovate existing school facilities.

DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY

SUMMARY TABLE
CAPITAL IMPROVEMENT PROJECTS

Replacement/Renovation of Temporary Classrooms	7,230,000
General	22,570,000
ADA Compliance	15,472,720
Structural Repairs	19,081,660
Renovation of Main Buildings	4,800,000
Infrastructure	1,175,000
Recreational Facilities	10,460,000
Electrical System Upgrades	560,000
Intercom, Security and Fire Alarm	4,410,000
Airconditioning System	8,305,000
Sub-total Cost Estimate	\$ 94,064,380
12 New Elementary Schools	\$ 156,000,000
5 New Middle Schools	\$ 102,000,000
4 New High Schools	\$ 160,000,000
Sub-total Cost Estimate	\$ 418,000,000
Total Cost Estimate	\$ 512,064,380

A detailed summary for each of the categories is also provided at the end of this section. The summary tables include the following information:

Name of the school and location

The type of school: 1 -Elementary, 2-Middle, and 3- High

School region as established by DOE: Region 1, 2, 3 and 4 and School District proposed by the Legislature: Haya, Luchan, Kattan, and Lagu

Project sub-category

Project priority

Implementation schedule Year 1 – Year 10

Estimated cost

The report is organized by type of school: elementary, middle and high schools beginning with the schools we visited.

Summary of Findings and Recommendations

There are three major problems affecting Guam's public school buildings. First, nearly 80 percent of all school buildings were constructed over 25 years ago and suffer structural, ADA non-compliance and system defects. Older school buildings are not equipped to support new instructional methods. All of the school buildings require significant repairs and modernization. Over the next several years, thousands of new students are expected to enter the public schools and cause even more overcrowding. Many of the buildings that require minor capital work will need extensive repair or replacement. Additionally, educational enhancements such as computer technology and labs and shops in which students learn by doing rather than listening will require classroom space that is conducive to these new technologies.

Second, rather than building new schools to accommodate the population growth, existing schools have added temporary and fast track classrooms -doubling school enrollment for many schools. Overcrowding in the northern and central district is the norm in a number of schools. A legislated mandate setting the ceiling for school enrollment for K-12 for new schools is in place. Conceptual plans for model schools have been developed which include design standards for new schools. Based on the project population growth, 23 new schools will need to be built over the ten year planning horizon.

Finally, the lack of an on-going basic repair and maintenance program has been one of the primary contributors to the current state of decay in Guam's school facilities. A steady funding source to support the maintenance of existing facilities must be earmarked to ensure that the buildings are better maintained to prevent a renewed cycle of deterioration of the renovated and new schools.

Renovation and Repair of Existing Schools

There are 37 public schools; 32 of which are 25 years old or older. Seven schools were built in the '90s (J.P. Rios (New Piti) Middle is currently under construction). A majority of the schools have not received any substantial capital improvements and are deteriorating. Several schools show signs of wear and are difficult to maintain in an acceptable condition. Except for the new schools built within the last five years, DOE schools are not in full compliance with ADA guidelines.

In general, the schools are fairly maintained given the resources provided to DOE's Facilities and Maintenance and school custodial staff. However, without a long-term maintenance program in place, schools will continue to deteriorate. This will accelerate the need for renovation and perhaps replacement of new schools in order to meet the standard.

In some of the schools, the building of temporary additions and renovation of existing buildings have taken place and have helped to keep the schools in fair to good condition. As these building age, the cost for renovations or repair may be greater than the rate of return. Temporary buildings are a case in point. Through the years, DOE has invested a substantial amount of money to build and repair temporary classrooms. However, when you compare the life span of a temporary building it is usually half the life span of a permanent structure.

DOE needs to take a different approach from what was done in the past to address overcrowding. Public policy dictates the size for a new school: 550 for an elementary school, 700 for middle and 1,200 for high school. DOE should not continue to add temporary classrooms to existing schools. Permanent classrooms should be built at existing schools to reduce the number of portable classrooms at each school. Financial constraints to build new schools may hinder the implementation of this policy. However, effort should be made to build new schools. DOE officials would also like to see designing a more economical "portable" classroom, that can be easily moved or relocated to any schools with increased enrollment. It should be noted that the type of design for these "portable" classrooms meet building code and be typhoon proof. Innovative designs to move the structure should also be explored.

As noted earlier, 32 schools are 25 years and older. Nine schools are over 40 years old. Based on the National Center for Education Statistics, school buildings begin rapid deterioration after 40 years. Schools over 40 years old are also in need of modernization for plumbing, lighting and electrical systems. The cost to modernize carries a high price tag. The CIP list identifies modernization project improvements for each school.

New Schools and Replacement of Old Schools

Based on the Ten-Year Population Projection, 23 new schools will need to be constructed over the next 10-year period. These new schools will relieve overcrowding and meet the population growth expected during this planning period. Public policy also dictates the size of the school and the

majority of all existing schools exceed the legislated capacity. The projected population growth will occur in the north. Based on the projected population growth, DOE will need 8 new elementary schools, 4 new middle schools, and 3 high school in the north; 4 new elementary, 2 middle and 2 new high schools in the central area.

The design capacity for new schools is based upon the legislated enrollment standards. Preliminary space standards for elementary, middle and high schools were defined for this study. Based on these design standards, we project the cost for design and construction for an Elementary school - \$13 million; Middle School - \$17 million; and High School - \$32 million. The lead time required to construct a new school is about 24 months for elementary schools, 30 months for middle schools and 35 months for high schools. This includes time for site acquisition, design, approvals and construction.

School buildings that are old and costly to maintain should be gradually replaced. One school that will cost \$4.8 millions to repair is J.P. Torres Elementary School. The school has major structural deficiencies that will require large amount of money to bring to standard. We recommend that DOE review its option to close this school. Renovation of schools and the building of new schools should follow the design standards established by the Ten Year Capital Facilities Plan.

On-going Maintenance and Repair of Existing Schools

DOE needs to develop within its annual budget an "operation and maintenance" category which is funded appropriately. The lack of an adequate operation and maintenance budget to support basic repairs and maintenance has caused minor repair problems to evolve into major repairs and will cost more money than if it was addressed earlier. In 1998, the Department of Education proposed a budget level of \$181 million. Of that amount, \$143 million or almost 80 per cent was earmarked for teachers and instructional support personnel. The remaining 20 per cent would cover the entire school system needs for supplies, materials, utilities and equipment.

The Facilities & Maintenance (F&M) section was projected to receive a \$4.5 million budget for personnel, operating expenses and capital outlay for 1998-99. An additional \$2.4 million would fund contractual services for air conditioning preventive maintenance and repair and grounds keeping services. F&M provide for the repair and general maintenance of all DOE schools. The budget did not include an operation and maintenance category. No capital improvement projects were funded. Each individual school has non-instructional support staff to assist in the day to day operation and is augmented by the F & M staff. In 1998, there were a total of 135 employees with expertise in carpentry, electrical, plumbing, refrigeration, air conditioning, welding and general maintenance and administrative support activities. In the past, air conditioning preventive maintenance and repair, security systems and grounds keeping were contracted out. In 1998, DOE's budget problems required that grounds keeping contracts be rescinded. The budget cutback will further exacerbate the ability of DOE to target limited resources to the highest priority repairs.

Concentrate Resources in a Few Schools

Almost \$95 million is needed to renovate and repair the 37 schools over the next five years. The ideal situation for DOE is to fully fund all repairs. However, with such a large price tag associated with this CIP program, it is more likely that DOE will receive incremental amounts to fund these repairs. DOE should concentrate repairs and renovation for a few schools each year to bring the schools up to standard rather than spreading the limited funds to address a particular system defect for all schools. For example DOE has programmed structural repairs for all schools in their annual CIP budget request. This will result in developing an inventory of schools that are maintained at a level of good repair, that will provide students with an adequately sized classrooms, cafeterias, technological supporting classrooms, i.e. computer and laboratory, gymnasiums and play areas.

Promote Intensive Utilization of School Facilities

Alternative school year schedules that promote more intensive use of a number of schools can provide the basic strategy for DOE to meet its pressing facility needs. This will help reduce the number of new schools to be built for this planning period. DOE officials are hard pressed to find a dedicated funding source(s) to fund new schools in light of a stagnant economy and limited revenue base. A year-round calendar would utilize buildings for the same number of hours each day but would extend instruction into summer months. By alternating groups of students who are in session at any given time, year-round calendars can increase capacity by 33 percent or more. By combining an extended school year with a longer school day, double shift calendars can have two groups of students use the same school during the day and for more months of the year. This will, in fact, double a school building's capacity. This option will provide DOE an opportunity to ensure adequate space for projected enrollment growth. At the same time, DOE must adequately fund its operation and maintenance needs because year round schooling intensifies the wear and tear of the buildings. DOE will need to insure that the \$95 million in CIP repair is funded and scheduled during the first five years of the planning period to repair existing schools in order to bring them up to standard.

Several DOE schools have adopted and implemented a year-round program. More schools should also adopt the year-round calendar. For the past two years, double sessions have been held at Agueda Johnston Middle School. Two groups of student are attending schools: Agueda Middle attends from 7 a.m. to 12 p.m. and Piti Middle from 12:30 p.m. to 5:30 p.m.

We recognize that implementing these schedule changes would place significant demands on school administrators, teachers, support staff and families. However, we believe that we are realistic in addressing the CIP needs of DOE in an economically challenged community.

IV. CAPITAL IMPROVEMENT PROJECT PRIORITY SCHEDULE

DOE's F&M CIP Division prepared a list of improvements and cost estimates for each school which will address the short term maintenance needs of that particular school. A CIP list has been prepared for all schools. We visited 14 schools and verified the improvements. We found that list was fairly accurate and identified additional capital improvements projects for inclusion. A summary of our findings for each of the schools is provided below. The remaining schools CIP projects are listed at the end of this section.

MARIA A. ULLOA ELEMENTARY SCHOOL

Capital Improvement Project Priority Schedule

The school is in good condition. During the site assessment, we identified additional capital improvement projects for inclusion.

- expansion of dining facility.
- construction of new bathrooms
- additional storage space for supplies in the administration and custodial areas
- upgrade of electrical and telephone lines.

The CIP list includes the replacement of temporary classrooms with \$300,000 earmarked for improvements. Temporary classrooms should be replaced by a permanent structure. In the past, DOE has spent millions of dollars in the repair and replacement of temporary structures. The short-term cost of addressing the needs for additional classrooms was the impetus of building these temporaries. However, given the amount of money invested and the maintenance requirements or the lack of maintenance of these structures is not effective in the long run. We recommend that DOE formulate a policy and implement a program to replace the temporary classrooms at this school. The total CIP request for M.A. Ulloa is \$2,609,200.

AGANA HEIGHTS ELEMENTARY

Capital Improvement Projects

The school is in good condition. DOE's CIP Division prepared a list of improvements for this school which will address the short-term maintenance needs of this school. Other maintenance problems identified during the visit include:

- A leaky waterline located in the playground.
- Develop a traffic control plan.

The CIP list includes the replacement of temporary classrooms with \$250,000 earmarked for improvements. Temporary classrooms should be replaced by a permanent structure. DOE should replace all the temporary classrooms in this school. The total CIP request is \$2,786,660.

C. L. TAITANO ELEMENTARY

Update as of May 2000: C. L. Taitano is currently undergoing re-construction. Projected completion date has yet to be determined by Department of Public Works.

Capital Improvement Plans

Except for the "A" Building, the school is in good condition. A capital improvement project priority list was prepared by DOE and is included. We verified the list with the school officials and one additional request to add a restroom facility in Building C has been added. Determining the structural condition of Building A must be given top priority and effort to repair or replace the building should be pursued. Total CIP request is \$2,504,550.

J.P. TORRES ELEMENTARY

Capital Improvement Projects

The condition of the school is poor. A capital improvement project priority list was prepared by DOE and is included. A total of \$ 4.8 million of improvements have been identified for this school. The school has major structural deficiencies that will require large amount of investment dollars. The construction of a retaining wall is also needed to protect the school. Several classrooms are not being used due to leaks, and typhoon related damage. This school has a large price tag for repairs. At this time, we recommend that DOE review its option to close this school. The neighborhood school of H.S. Truman and Marcial Sablan Elementary could serve the students who will otherwise attend J.P. Torres. The projected population growth for the south will not require a new elementary school.

CAPTAIN H.B. PRICE ELEMENTARY SCHOOL

Capital Improvement Projects

In general, the school is in good condition. Almost half of the classrooms at Price Elementary are temporary classrooms. As discussed earlier, DOE should develop a policy addressing the replacement of temporary classrooms. A total of \$ 700,000 has been earmarked to repair and or replace temporary classrooms. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. The cafeteria will need to be expanded to accommodate the existing population. Storage areas, a resource room and a teacher's lounge are also needed to support the school faculty and staff. The design standards and site layout developed for the Ten Year Capital Facilities should be used to establish a desired site plan and construction documents prior to any construction activities. Total CIP request \$2,613,095.

TALOFOFO ELEMENTARY SCHOOL

Capital Improvement Projects

Talofofo Elementary is in good condition. Talofofo Elementary has a high percentage of temporary classrooms. Cost estimates in the amount of \$350,000 have been slated for repairs during the next five years. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. The projected population growth for this area will require additional classrooms. This school has a current enrollment total below the legislated design enrollment. DOE has an opportunity to take a proactive step in developing this school to meet the future needs of its student population. DOE should build permanent classrooms and expand its capacity to meet the projected growth. Like, Price Elementary, the design standards and site layout developed for the Ten Year Capital Facilities should be used to establish a desired site plan and construction documents prior to any construction activities. Total CIP request is \$1,619,300.

MARCIAL A. SABLAN ELEMENTARY SCHOOL

Capital Improvement Projects

The permanent building is in good condition. Marcial Sablan Elementary has as many temporary classrooms as permanent classrooms. The temporary rooms are in need of roof repair, and are inadequate in size. A proposed budget of \$300,000 has been slated for repairs during the next five years. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. A site layout using the design standards and concept developed by the Ten Year Capital Facilities Plan should be developed. Other improvements that need to be address include: the drainage system, traffic circulation and expansion of the parking lot. Total CIP requirements is \$2,711,150.

MERIZO ELEMENTARY SCHOOL

Capital Improvement Projects

In general, the school is in good condition. Merizo Elementary has a high percentage of temporary classrooms. Cost estimates in the amount of \$250,000 have been slated for temporary classroom repairs during the next five years. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. The projected population growth for this area will require additional classrooms to accommodate the growth. This school has a current enrollment total below the legislated design enrollment. DOE has an opportunity to take a proactive step in developing this school to meet the future needs of its student population. DOE should develop permanent structures at this school. The design standards

and site layout developed for the Ten Year Capital Facilities should be used to establish a desired site plan and construction documents prior to any construction activities. Total CIP \$2,181,600.

DEDEDO MIDDLE SCHOOL

Capital Improvement Projects

The main campus is in fair to good condition. Over \$3.3 million in capital improvement projects, including the rehabilitation of temporary buildings identified by DOE. Over 25 per cent of the classrooms are temporary rooms. The temporary rooms need new roofs, and are inadequate in size. A proposed budget of \$480,000 has been slated for replacement of the temporary buildings during the next five years. In addition, \$450,000 is budgeted for the replacement of the Butler buildings. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. DOE should develop permanent structures at this school. A master plan that includes the proposed CIP improvements and layout that organizes the overall facilities, and improves interior and exterior circulation should be developed. The standards and guidelines prepared by the Ten Year Capital Facilities Plan should be used to guide the designers to develop a master plan and construction documents.

L.P. UNTALAN MIDDLE SCHOOL

Capital Improvement Projects

The permanent structure found in this school is in good condition. Over \$3.5 million in capital improvement projects, including the replacement of temporary buildings and the construction of a track and field identified by DOE are listed. There are 23 temporary classrooms. The temporary rooms need new roofs, and are inadequate in size. A cost estimate in the amount of \$400,000 has been identified for replacement of the temporary buildings during the next five years. Additional cost estimates of \$300,000 for the roof repair and termite treatment have been identified. Although the repairs will address the short-term needs, it will be more cost effective if the temporary classrooms are replaced with permanent structures. DOE should develop permanent structures at this school. Other improvements requested by school officials include an employee parking lot and trash area. This can be incorporated without much cost in the design for track and field.

AGUEDA JOHNSTON MIDDLE SCHOOL

Capital Improvement Projects

The general condition of the main facility is in fair condition. A structural assessment of this building was not available. The building should be assessed for structural integrity. Over \$2.8 million in capital improvement projects have been identified for Agueda Middle. Construction of a track and field, renovation of the gym, locker rooms and restrooms are the top ticket items. Other CIP improvements needed at the school is a nurse's room with a restroom and private rest area. As

suggested earlier, a preventive maintenance program should be developed and implemented to provide the necessary upkeep and improve the overall condition of the school. This is important especially because the school is under double sessions.

OCEANVIEW MIDDLE SCHOOL

Capital Improvement Projects

The school is in good condition. Over \$3.8 million in capital improvement projects have been identified for Oceanview Middle. Construction of a track and field, renovation of the gym, locker rooms and restrooms are the top ticket items. Over a \$ 1 million has been earmarked for the renovation of the main building and replacement of temporary classrooms. As discussed in the report, DOE should replace the temporary buildings with permanent structures. In the case of Oceanview Middle, the school has since been converted to a middle school and now has excess capacity. Planning efforts should focus on how to improve the facility and determine which temporary buildings should be removed. In addition, "A" building has serious termite infestation and an assessment is needed to determine the structural viability of that building. School officials have also identified the need to replace the covered canopies. On-going preventive maintenance program is also required to improve the physical appearance and upkeep of the facility.

J.P. RIOS (NEW PITI) MIDDLE SCHOOL

In 1997, the school was destroyed by Super Typhoon Paka. Plans have been developed by the Department of Public Works to re-construct consistent with the original layout. We have reviewed the construction documents which provide a general layout of the proposed school. The school is one story with three wings connected by a center wing. The administration office and the cafeteria are located in front of the school. There are a total of 34 regular sized classrooms and two (2) laboratory sized rooms. Courtyards are located between the wings.

The construction costs for the school is \$2.7 million. The Federal Emergency Management Act (FEMA) will fund 90 percent of the cost. The remaining 10 percent will be funded by GovGuam.

JOHN F. KENNEDY HIGH SCHOOL

Capital Improvement Projects

The main building is old and run down. Over \$6.8 million in capital improvement projects have been identified for J.F. Kennedy High. Over \$3.5 million has been estimated to renovate the main building. Another \$250,000 will be used to replace temporary classrooms. ADA compliance requirements list over \$760,000 for improvements. DOE should weigh the cost of these CIP improvements versus building a new school. The cost for renovation is a large investment vis a vis the age of the building and its current condition. The price of this real estate property should also be

considered. A cost benefit analysis will provide valuable information to DOE and to the policy makers in determining the best course of action to take.

SIMON A. SANCHEZ HIGH SCHOOL

Capital Improvement Projects

The school is in good condition. Over \$3.2 million in capital improvement projects have been identified for Simon Sanchez. Over \$400,000 has been estimated for replacing and renovating temporary classrooms. A new track and field facility and renovations are also needed for this school. The main building needs to have its air conditioning system replaced. The school has to comply with ADA requirements. The school is in need of these improvements to maintain and bring the school up to the design standards. This facility shares the cafeteria with F.B. Leon Guerrero Middle School. Other facilities including the track and field should be also designed as a shared facility. Conceptual plans for a shared facility has been developed in the Ten Year Capital Facilities Plan which can be used as the basis of the conceptual plan.

V. FINANCING PLAN FOR THE TEN YEAR FACILITIES PLAN

Overview

Guam, like most U.S. communities is struggling to address how to build new schools and renovate existing ones. DOE will need over \$500 million to fund the construction of new schools and to renovate and modernize existing schools for the planning period of 2000 - 2010. A CIP program to appropriately fund this plan is discussed in this section.

Funding for most of Guam's capital improvement projects come primarily by floating general obligation bonds or revenue bonds. In 1993, the Government of Guam (GovGuam) issued a \$175 million in general obligation bonds to construct Southern High School, Tamuning Elementary School, and Astumbo Elementary. General obligation bonds carry the full faith and credit of the government. Revenue to pay interest and retire the debt of the bond comes from the general fund. The general fund is comprised of revenues raised from a variety of taxes – income and gross receipt taxes, real property taxes, tourist attraction fund and business license taxes, territorial highway fund, other taxes and Section 30 income taxes. Since 1994 through present, Guam's economic downturn have caused significant reduction in tax revenues to GovGuam, while government expenditures remained constant. Various government and business officials predict that the economy has already bottomed out and will turnaround during the second half of the year. Others say recovery will take at least two to three years.

Table 1: GENERAL FUND – ACTUAL AND FORECAST

General Fund	FY 1994 Actual	FY 1995 Actual	FY 1996 Actual	FY 1997 Actual	FY 1998 Estimate	FY 1999 Forecast
	\$501.46	\$524.36	\$530.01	\$515.61	\$503.75	\$486.80

Source: Guam Finance Commission

Currently, Guam has \$850 million in long term debt financed by the general obligation bonds. Guam's debt limit is set at 10 percent of the total value of Guam's real estate. At this time, Guam may have reached its financing ability to float new bonds. The General Fund pays for the operations of the Government as well as capital improvements. With a stagnant economy, the projected revenue for the General Fund is projected to decline. The first option is look towards funding this CIP through the issuance of a general obligation bond. However, this may not be an option. Given that there is a decreasing revenue base, GovGuam must implement cost saving measures and fiscal responsibility to live within its means and to reduce the deficit. The likelihood of borrowing new money to fund new projects is constrained until such time GovGuam demonstrate fiscal responsibility and the economy turns around generating more revenues to fund existing expenditures.

A list of potential funding sources to support this plan is discussed in this section. These options are discussed for consideration. A funding scheme is developed realizing some of these funding options. This scheme should be further reviewed and modified to reflect the strategy of DOE.

Potential Funding Sources

Guam's current financial condition impedes the ability of the GovGuam to raise the immediate capital resources necessary to fund the needs of Department Education's Ten Year Facilities Plan with existing resources. Basically, every revenue source and/or special accounts have been earmarked to fund vital construction projects and the operation of the GovGuam. The success of this plan requires the identification of new funding sources and tapping into that source. We will explore what options are available to us.

Typical methods to finance capital improvement projects are discussed below.

Current Revenue

Pay-As-You-Go is the financing of improvements from current revenues such as general taxation, fees, service charges, special funds, or special assessments.

Reserve Funds

In reserve fund financing, funds are accumulated in advance for capital construction or purchase. The accumulation may result from surplus or "earmarked" operational revenues, funds in depreciation reserves, or the sale of capital assets.

Special Reserve Fund Monies

School districts may use General Fund monies for facility purpose if such monies are available. A Special Reserve Fund-Capital Projects may be established by a district for the purpose of school facility construction.

General Obligation Bonds

Guam's primary method of financing CIP projects is through general obligation bonds. The taxing power of a jurisdiction is pledged to pay interest upon, and retire the debt. General obligation bonds are sold to finance schools, infrastructure, municipal buildings, parks, recreation facilities etc. Voter approvals is require for new projects to be funded by the general obligation bonds.

Revenue Bonds

Revenue bonds are frequently sold for projects, such as water and sewer system, that produce revenues. Such bonds are not included in the state or territory imposed debt limits like the general obligation bonds, because they are not backed by the full faith and credit of the local jurisdiction, but are financed in the long run through service charges or fees.

Lease-Purchase

Local governments using the lease-purchase method prepare specifications for a needed public works project that is constructed by a private company or authority. The facility is then leased by the municipality. Funds to pay lease come dedicated revenue sources or from a government appropriation. At the end of the lease period, the title to the facility can be conveyed to the municipality without any future payments. The rental over the years will have paid the total original cost plus interest.

Authorities and Special Districts

Special authorities or districts may be created, usually to provide a single service such as schools, water, sewage treatment, toll roads, or parks. They are formed usually to avoid restrictive local government debt limits and as a way to finance facilities serving more than one jurisdiction. Financing can come through revenue bonds retired by user charges and may have power to tax to raise funds.

Developer Fees

School districts are authorized to collect fees from developers to mitigate overcrowded conditions in schools. Fees assessed must be justified by the need for schools caused by the development. Fees are often set for residential projects and commercial/industrial projects per square foot.

Sale or Lease of Surplus Property

Income from the sale or lease of Government properties is allocated for the construction of new schools and the renovation of existing school buildings.

State and Federal Grants

State and federal grants-in-aid programs are available to finance a number of programs. These may include streets, water and sewer facilities, airports, parks and playgrounds, etc. The cost of funding these facilities may be borne completely by grant funds or local share may be required. Federal General Revenue Sharing and Community Development Block Grants have given local governments more choice in how to spend their grant money. Much of this money has been used to finance capital improvements

A database search was performed to identify federal grants applicable to Guam and found the following grants that may be applicable to fund school construction and improvements. Effort to determine whether funds under these programs should be pursued by DOE via Guam's federal program's clearinghouse, through Guam's Congressmen's office or the U.S. Department of Education. These federal programs are as follows:

- Coastal Zone Management Administration Awards - \$49,696,000 grants
- Community Development Block Grants/Special Purpose Grants/Insular Areas - \$6,996,000 grants
- Community Economic Adjustment Planning Assistance - \$26,575,000 grants
- Education and Human Resources - \$632,496,000 grants

- Education for Homeless Children and Youth - \$27,996,000 grants
- Immigrant Education - \$149,996,000 grants
- Planning and Program Development Grants - \$11,406,000
- Special Education Preschool Grants \$373,981,000 grants

Compact Impact Aid Funds

The Compact of Free Association Act authorized unrestricted immigration of Federated States of Micronesia (FSM) and Marshalls citizens into the United States, its territories and possessions. This enabled citizens of these islands to enter Guam to live and work. GovGuam provides for the education and social services to these Micronesian immigrants. GovGuam receives some compensation from the federal government for providing such services albeit not full compensation. Public Law No. 24-18 designate all funds provided Guam through the United States Department of the Interior Budget for any purpose associated with the impact of the Compacts of Free to be used exclusively for the construction of new public schools in Guam. Guam is expected receive over \$10 million in 1999.

School Modernization Bonds

President's Clinton's Initiative to build and renovate schools via the School Modernization Bonds and Qualified Zone Academy Bonds. \$22 billion in School Modernization Bonds would be available over two years (\$11 billion in 2000 and \$11 billion in 2001) for construction and renovation of public school facilities. The Federal Government would provide tax credits to bond holders in lieu of interest payments on School Modernization Bonds, and the state or school district would only be responsible for repaying the principal. This proposal would save millions of dollars in interest payments for states and territories. In the future, this tax credit should be applicable for any new general obligations bonds for Guam.

Lottery Revenue Bonds

Several states have instituted lottery and have earmarked revenues to fund education programs and buildings. Nevada, Florida and New Mexico are just a few states that have lottery benefit their educational systems. Lottery Revenue Bonds are used to finance the cost of construction, renovation and rehabilitation of public schools. Lottery revenues have been generated through a variety of games, provides diversity to the revenue base which promotes the stability of total lottery revenue. In Florida's lottery games are mix of instant and on-line games. The Florida Lotto is the leading revenue producing game, accounting for 54% of on-line sales and 39% of combined sales in fiscal year 1997. The Department of Lottery emphasizes instant ticket sales to generate revenue growth, introducing 33 games in 1997 alone. Lottery revenues have exceeded \$2 billion for eight consecutive years with very little fluctuation under various economic conditions. The lottery revenue bonds are expected to provide up to \$2.5 billion in financing for educational facilities for Florida public schools to relieve classroom overcrowding.

Gaming Fees and Tax

Legalize and regulate casino industry. New revenue sources will come from gaming fees and levy taxes. The gaming industry has the potential to bring in new revenue sources to the island. With a

healthy tourism industry to support the casino industry, one study reports that the revenue generated from the casino industry could be as much as \$147 million per year. Based on graduated tax structure, a tourist based casino industry could deposit \$43.5 million directly into the general fund through taxable revenues. This revenue source could be used to fund the CIP projects.

Financing Strategy

A Ten Year Capital Plan Funding Source Summary to fund over \$500 million in improvements identifies five major funding sources: General Revenue Appropriation, Federal Grants, Compact Impact Aid, Gaming Fees and Taxes and other Funds like the Tourism Attraction Fund, Real Property tax, fuel tax or use tax. Federal grants and other funds from private corporations, and non-profit organizations are available for school improvements. Effort to develop a plan of action on how to get more private and non-profit partnership should be pursued. Guam is expected to receive \$11 million in Compact Impact Aid. Public Law 24-18 earmarks these funds to be used exclusively to fund the construction of new schools. (See Appendix D) DOE should aggressively pursue this source to fund this Ten Year Capital Plan.

A new source of revenue that fund CIP improvements in several mainland school districts is the proceeds from casino and lottery/gaming fees and taxes. Casino gambling is illegal in Guam. However, dog racing, bingo, cockfighting and raffles are popular amusement games that are legal. In the past, Guam's community has rejected the idea of legalizing casino gambling. Government leaders have pursued avenues to generate new revenue from other industries, i.e. insurance, banking, aviation, and light manufacturing have been pursued. There are revenue opportunities to be realized from these industries, but the demand for new revenue sources to fund the needs of Guam's infrastructure i.e. new schools, water, sewer and roads improvements are by far greater than what these industries can generate. Based on the success of communities in the mainland who have secured gaming revenues to fund school improvements and the building of new schools, we believe another review of lotteries and gaming be considered by the community. Funds generated from this industry should be used to fund DOE's CIP plan. At the least, the government should impose taxes on the current gaming activities and earmark those funds for education.

Ten Year Capital Plan Summary

Table 2 provides a detailed breakdown of the projects funded for the ten year period. For the first five years, CIP projects to correct structural, inadequate building code violations and pursuing ADA compliance have been identified which will improve the condition of these existing school facilities. Modernization of major components including roofs, plumbing, retrofit of electrical and communication system upgrades and/or replacement are also identified. Cable lines, phone lines and electrical wiring upgrades are needed to support those new instructional methods which rely heavily upon modern technology. Improvements to support facilities i.e. cafeterias, athletic fields, gymnasiums, and auditorium improvements are necessary. The urgency of repair and renovation work needed to bring the existing facilities up to standard was a major consideration in the prioritization and scheduling of projects within the first 5 years of the planning period.

The first three years, \$2 million per year has been earmarked to fund ongoing maintenance for all schools. By the year 2003/04 to 2009/10, the O & M budget will increase to \$3 million each year. The new school construction budget is funded in the first year for the preparation of construction documents, site work and environmental studies for the northern high school. Additional funds have been earmarked each year for new school construction. The goal of this CIP plan is begin new school construction by the year 2003/04 in order to build a total of 23 new schools – 12 elementary, 6 middle and 5 high schools. The projected number of new schools is based on the legislated enrollment capacity for new schools and the enrollment projection for the ten-year period.

Table 3 provides a breakdown of each year's potential funding sources. Since school projects do not directly result in the generation of fees, we have identified these funding sources to directly fund the CIP projects and or to finance general obligation bonds. Because of the large amount of financing needed for the implementation of the CIP recommended in this Ten Year Facilities Plan, DOE and the Government of Guam will in all likelihood require some combination of all the funding methods identified. The Guam Economic Development Authority's specialized financial consultant staff should be brought on board to begin to structure the type of bond and the bond structure to be used to finance the CIP projects.

Table 2

DEPARTMENT OF EDUCATION

TEN YEAR CAPITAL PLAN SUMMARY

PROJECT PRIORITY	PROJECT DESCRIPTION	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/007	2007/08	2008/09	2009/10	Total
John F. Kennedy High	Renovation/Repair	6,360,445										
Simon Sanchez High	Renovation/Repair	3,253,225										
C.L. Taitano Elementary	Renovation/Repair	2,504,550										
M.A. Ulloa Elementary	Renovation/Repair	2,609,200										
Marcial Sablan Elementary	Renovation/Repair	2,711,150										
L.P. Untalan Middle	Renovation/Repair	3,561,940										
Agana Heights Elementary	Renovation/Repair		2,786,660									
Price Elementary	Renovation/Repair		2,613,095									
Dededo Middle	Renovation/Repair		3,309,685									
G.W. High	Renovation/Repair		5,736,300									
Talofofo Elementary	Renovation/Repair	1,619,300										
Merizo Elementary	Renovation/Repair		2,181,600									
Agueda Johnston Middle	Renovation/Repair		3,293,190									
Oceanview Middle	Renovation/Repair			3,864,175								
Inarajan Elementary	Renovation/Repair			434,790								
Inarajan Middle	Renovation/Repair			5,832,470								
Chief Brodie Elementary	Renovation/Repair		1,588,330									
L.B. Johnson Elementary	Renovation/Repair			2,427,870								
Wettengel Elementary	Renovation/Repair			1,866,970								
Carbullido Elementary	Renovation/Repair			4,199,845								
J.Q. San Miguel Elementary	Renovation/Repair			1,950,000								
M.U. Lujan Elementary	Renovation/Repair			5,996,535								
Ordot/Chalan Pago Elem.	Renovation/Repair			930,200								
P.C. Lujan Elementary	Renovation/Repair			3,126,430								
Finegayan Elementary	Renovation/Repair				3,241,230							
Harmon Loop Elementary	Renovation/Repair				2,272,195							
Upl Elementary	Renovation/Repair				671,350							
Yigo Elementary	Renovation/Repair			1,965,830								
Mt. Santa Rosa Elementary	Renovation/Repair				450,000							
F.B. Leon Guerrero Middle	Renovation/Repair				2,240,990							
F.Q. Sanchez Elementary	Renovation/Repair				1,453,440							
H.S. Truman Elementary	Renovation/Repair				1,219,210							
Tamuning Elementary	Renovation/Repair				780,000							
Jose Rios (Piti) Middle	Renovation/Repair				200,000							
Operations and Maintenance	On-going repairs	2,000,000	2,000,000	2,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	27,000,000
Existing Schools Sub-Total		24,619,810	23,508,860	34,595,115	15,528,415	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	
New School Constructions		1,680,000	2,800,000	2,900,000	30,000,000	42,000,000	53,000,000	67,000,000	73,000,000	73,000,000	78,000,000	423,380,000
Total		26,299,810	26,308,860	37,495,115	45,528,415	45,000,000	56,000,000	70,000,000	76,000,000	76,000,000	81,000,000	539,632,200

Table 3

DEPARTMENT OF EDUCATION

TEN YEAR CAPITAL PLAN FUNDING SOURCE SUMMARY

FUNDING SOURCE	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
General Revenue Appropriation	10,000,000	10,000,000	10,000,000	10,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
Federal Grants	300,000	400,000	500,000	600,000	700,000	800,000	900,000	1,000,000	1,100,000	1,200,000
Compact Impact Aid	11,000,000	11,000,000	12,000,000	13,000,000	10,000,000	11,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Gaming Fees & Taxes	0	0	10,000,000	15,000,000	20,000,000	30,000,000	40,000,000	45,000,000	45,000,000	45,000,000
Other Funds	5,000,000	5,000,000	5,000,000	5,000,000	10,000,000	10,000,000	15,000,000	15,000,000	15,000,000	20,000,000
	26,300,000	26,400,000	37,500,000	43,600,000	45,700,000	56,800,000	70,900,000	76,000,000	76,100,000	81,200,000
										540,500,000

PROJECT PRIORITY SUMMARY

RENOVATION OF MAIN BUILDING

**REPLACEMENT/RENOVATION OF TEMPORARY
CLASSROOMS**

ADA COMPLIANCE

RECREATIONAL FACILITIES

STRUCTURAL REPAIRS

AIR CONDITIONING SYSTEM

GENERAL REPAIR

INTERCOM, SECURITY AND FIRE ALARM

ELECTRICAL SYSTEM UPGRADE

INFRASTRUCTURE

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project: RENOVAION MAIN BUILDING

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya		1	Year 1	1,100,000.00
H.S. Truman Elementary	Santa Rita	1	1	Haya				
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya				
Marcial Sablan(Agat) Elementary	Agat	1	1	Haya				
Merizo Elementary	Merizo	1	1	Haya				
Talofofo Elementary	Talofofo	1	1	Haya				
Inarajan Middle	Inarajan	2	1	Haya				
Oceanview Middle	Agat	2	1	Haya		1	Year 1	250,000.00
Piti Middle	Piti	2	1	Luchan		1	Year 1	
Southern High	Agat	3	1	haya				
Total								1,350,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan				
L.B. Johnson Elementary	Tamuning	1	2	Luchan				
Tamuning Elementary	Tamuning	1	2	Luchan				
Wettengel Elementary	Dededo	1	2	Lagu				
Dededo Middle	Dededo	2	2	Lagu				
John F. Kennedy High	Tamuning	3	2	Luchan		2	Years 2-4	3,000,000.00
Total								3,000,000.00
Agana Heights Elementary	Agana Heights	1	3	Kattan				
Carbullido Elementary	Barrigada	1	3	Kattan				
C.L. Taitano Elementary	Sinajana	1	3	Kattan				
J.Q. San Miguel Elementary	Toto	1	3	Kattan				
M.U. Lujan Elementary	Yona	1	3	Haya				
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan				
P.C. Lujan Elementary	Barrigada	1	3	Kattan				
Price Elementary	Mangilao	1	3	Kattan				
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan				
L.P. Untalan Middle	Barrigada	2	3	Kattan				
George Washington High	Mangilao	3	3	Kattan				
Total								0
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu				
Harmon Loop Elementary	Dededo	1	4	Lagu				
M.A. Ulloa Elementary	Dededo	1	4	Lagu				
Upl Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu				
FBLG Middle	Yigo	2	4	Lagu				
Simon Sanchez High	Yigo	3	4	Lagu				
Mt. Santa Rosa Elementary	Yigo	1	4	Lagu				450,000.00
Total								450,000.00
Total								\$ 4,800,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

**Project:
REPLACEMENT/RENOVATION
OF TEMP. CLASSROOMS**

- (1) Butler Buildings
(2) Fast Track Classrooms**

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya				
H.S. Truman Elementary	Santa Rita	1	1	Haya		3	Year 3	250,000.00
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya		3	Year 3	200,000.00
Marcial Sabian(Agat) Elementary	Agat	1	1	Haya	1	1	Year 1	300,000.00
Merizo Elementary	Merizo	1	1	Haya		3	Year 3	250,000.00
Talofofo Elementary	Talofofo	1	1	Haya		4	Year 5	350,000.00
Inarajan Middle	Inarajan	2	1	Haya				
Oceanview Middle	Agat	2	1	Haya		3	Year 2	300,000.00
					2	1	Year 1	200,000.00
Piti Middle	Piti	2	1	Luchan				
Southern High	Agat	3	1	Haya				
Total								1,850,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan		3	Years 3-4	150,000.00
L.B. Johnson Elementary	Tamuning	1	2	Luchan		3	Year 3	250,000.00
Tamuning Elementary	Tamuning	1	2	Luchan			Years 5-6	400,000.00
Wettengel Elementary	Dededo	1	2	Lagu				
Dededo Middle	Dededo	2	2	Lagu		5	Years 4-5	480,000.00
					1	2	Years 2-3	450,000.00
John F. Kennedy High	Tamuning	3	2	Luchan		3	Year 6	250,000.00
Total								1,980,000.00
Agana Heights Elementary	Agana Heights	1	3	Kattan		2	Year 3	250,000.00
Carbuido Elementary	Barrigada	1	3	Kattan				
C.L. Taitano Elementary	Sinajana	1	3	Kattan				
J.Q. San Miguel Elementary	Toto	1	3	Kattan		4	Years 5-6	300,000.00
M.U. Lujan Elementary	Yona	1	3	Haya		4	Year 5	200,000.00
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan				
P.C. Lujan Elementary	Barrigada	1	3	Kattan				
Price Elementary	Mangilao	1	3	Kattan		4	Years 5-6	350,000.00
					1	1	Year 1	350,000.00
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan				
L.P. Untalan Middle	Barrigada	2	3	Kattan		4	Years 4-5	400,000.00
George Washington High	Mangilao	3	3	Kattan				
Total								1,850,000.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu		3	Years 3-4	150,000.00
Harmon Loop Elementary	Dededo	1	4	Lagu		2	Year 6	250,000.00
M.A. Ulloa Elementary	Dededo	1	4	Lagu		4	Years 4-6	300,000.00
Upi Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu		1	Years 6-8	250,000.00
FBLG Middle	Yigo	2	4	Lagu		3	Years 5-6	200,000.00
Simon Sanchez High	Yigo	3	4	Lagu		3	Years 5-6	300,000.00
					1	2	Year 4	100,000.00
Total								1,550,000.00
Total								\$ 7,230,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
ADA COMPLIANCE

School Name	Location	Type	Region	School District	Project Priority	Year (1 - 10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya			155,440.00
H.S. Truman Elementary	Santa Rita	1	1	Haya	1	Years 1-4	404,210.00
Inarajan Elementary	Inarajan	1	1	Haya			299,790.00
J.P. Torres Elementary	Agat	1	1	Haya	1	Years 1-4	197,180.00
Marcial Sabian(Agat) Elementary	Agat	1	1	Haya	1	Years 1-4	449,150.00
Merizo Elementary	Merizo	1	1	Haya	1	Years 1-4	289,000.00
Talofofo Elementary	Talofofo	1	1	Haya	1	Years 1-4	169,300.00
Inarajan Middle	Inarajan	2	1	Haya	1	Years 1-4	342,470.00
Oceanview Middle	Agat	2	1	Haya	1	Years 1-4	363,415.00
Piti Middle	Piti	2	1	Luchan	1	Years 1-4	
Southern High	Agat	3	1	Haya			
Total							2,669,955.00
Chief Brodie Elementary	Tamuning	1	2	Luchan	1	Years 1-4	458,330.00
L.B. Johnson Elementary	Tamuning	1	2	Luchan	1	Years 1-4	735,370.00
Tamuning Elementary	Tamuning	1	2	Luchan			
Wettengel Elementary	Dededo	1	2	Lagu	1	Years 1-4	454,970.00
Dededo Middle	Dededo	2	2	Lagu	1	Years 1-4	427,685.00
John F. Kennedy High	Tamuning	3	2	Luchan	1	Years 1-4	760,445.00
Total							2,836,800.00
Agana Heights Elementary	Agana Heights	1	3	Kattan	1	Years 2-5	416,660.00
Carbullido Elementary	Barrigada	1	3	Kattan	1	Years 1-4	451,845.00
C.L. Taitano Elementary	Sinajana	1	3	Kattan	1	Years 1-4	754,550.00
J.Q. San Miguel Elementary	Toto	1	3	Kattan	1	Years 1-4	300,000.00
M.U. Lujan Elementary	Yona	1	3	Haya	1	Years 1-4	830,735.00
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan	1	Years 1-4	255,200.00
P.C. Lujan Elementary	Barrigada	1	3	Kattan		Years 1-4	603,430.00
Price Elementary	Mangilao	1	3	Kattan	1	Years 1-4	383,095.00
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan	1	Years 1-4	433,190.00
L.P. Untalan Middle	Barrigada	2	3	Kattan			348,940.00
George Washington High	Mangilao	3	3	Kattan	1	Years 1-4	451,300.00
Total							5,226,945.00
Astumbo Elementary	Dededo	1	4	Lagu			
Finegayan Elementary	Dededo	1	4	Lagu	1	Years 1-4	916,230.00
Harmon Loop Elementary	Dededo	1	4	Lagu	1	Years 1-4	541,195.00
M.A. Ulloa Elementary	Dededo	1	4	Lagu	1	Years 1-4	974,200.00
Upi Elementary	Yigo	1	4	Lagu			511,350.00
Yigo Elementary	Yigo	1	4	Lagu	2	Years 1-4	436,830.00
FBLG Middle	Yigo	2	4	Lagu	3	Years 5-6	930,990.00
Simon Sanchez High	Yigo	3	4	Lagu	1	Years 1-4	428,225.00
Mt. Santa Rosa Elementary	Yigo		4	Lagu	1	Years 1-4	
Total							\$ 4,739,020.00
Grand Total							15,472,720.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
RECREATIONAL FACILITIES
(1) Const. Track and Field
(2) Repair/Renov. Gym
(3) Repair/Renov. Restrooms/Locker Rooms
(4) Baseball Field
(5) Playground Improvement
(6) Construction of Outdoor Stage
(7) Renovation of Swimming Pool

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya	5	1	Year 1	150,000.00
H.S. Truman Elementary	Santa Rita	1	1	Haya	5	4	Year 4	100,000.00
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya	5	4	Year 4	75,000.00
Marcel Sablan Agat Elementary	Agat	1	1	Haya				
Merzo Elementary	Merzo	1	1	Haya	5	4	Year 5	100,000.00
Talofoto Elementary	Talofoto	1	1	Haya	5	4	Year 5	150,000.00
Inarajan Middle	Inarajan	2	1	Haya	1	1	Year 1	850,000.00
					3	2	Years 2-3	50,000.00
Oceanview Middle	Agat	2	1	Haya	1	1	Year 1	800,000.00
					2	2	Year 2	150,000.00
					3	2	Year 3	150,000.00
Piti Middle	Piti	2	1	Luchan	2	1	Year 1	150,000.00
Southern High	Agat	3	1	Haya				
Total								2,725,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan	5	4		80,000.00
					7	3	Year 3	40,000.00
L.B. Johnson Elementary	Tamuning	1	2	Luchan	5	3	Year 4	80,000.00
Tamuning Elementary	Tamuning	1	2	Luchan				
Wettengel Elementary	Dededo	1	2	Lagu	5		Year 3	100,000.00
Dededo Middle	Dededo	2	2	Lagu	1	1	Year 1	850,000.00
					2	2	Year 2	50,000.00
John F. Kennedy High	Tamuning	3	2	Luchan	1	1	Year 1	250,000.00
					2	2	Year 2	150,000.00
					4	4	Year 3	250,000.00
Total								1,850,000.00
Agana Heights Elementary	Agana Heights	1	3	Kattan	3	3	Year 4	150,000.00
Carbutido Elementary	Bamgada	1	3	Kattan				
C.L. Tartano Elementary	Sinajana	1	3	Kattan	3	2	Year 3	150,000.00
					5	3		100,000.00
					6	1	Year 1	60,000.00
J.Q. San Miguel Elementary	Toto	1	3	Kattan	5		Year 3	120,000.00
M.U. Luan Elementary	Yona	1	3	Haya	5	4		150,000.00
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan	5	2	Year 2	125,000.00
P.C. Luan Elementary	Bamgada	1	3	Kattan	5	3	Year 3	60,000.00
					6	3	Year 3	150,000.00
Price Elementary	Mangilao	1	3	Kattan				
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan	1	1	Year 1	800,000.00
					2	2	Year 3	120,000.00
					3	2	Year 2	150,000.00
L.P. Untalan Middle	Bamgada	2	3	Kattan	1	2	Year 3	800,000.00
					2	3	Year 4	150,000.00
George Washington High	Mangilao	3	3	Kattan	1	1	Year 1	240,000.00
					3	3	Year 3	150,000.00
Total								3,475,000.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu	5	3		150,000.00
Harmon Loop Elementary	Dededo	1	4	Lagu	5		Year 3	100,000.00
M.A. Uloa Elementary	Dededo	1	4	Lagu	5	1	Year 1	150,000.00
Upi Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu	5		Year 3	100,000.00
FBLG Middle	Yigo	2	4	Lagu	1	2	Year 2	850,000.00
					2	1	Year 1	10,000.00
Simon Sanchez High	Yigo	3	4	Lagu	1	2	Year 1	850,000.00
					2	3	Year 3	200,000.00
Total								\$ 2,410,000.00
Total								\$10,460,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project: **STRUCTURAL REPAIRS**
(1) Const. Of Retaining Wall

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya				48,000.00
H.S. Truman Elementary	Santa Rita	1	1	Haya		1	Year 1	
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya		7	Year 1	1,050,000.00
					1	3	Year 3	2,000,000.00
Marcial Sablan(Agat) Elementary	Agat	1	1	Haya		1	Years 2-3	417,000.00
Merizo Elementary	Merizo	1	1	Haya		1	Year 2	542,600.00
Talofoto Elementary	Talofoto	1	1	Haya		2	Year 2	
Inarajan Middle	Inarajan	2	1	Haya		1	Years 1-2	3,510,000.00
Oceanview Middle	Agat	2	1	Haya		1	Years 1-2	690,760.00
PtI Middle	PtI	2	1	Luchan		1	Year 1	
Southern High	Agat	3	1	haya				
Total								8,258,360.00
Chief Brodie Elementary	Tamuning	1	2	Luchan		1	Years 2	
L.B. Johnson Elementary	Tamuning	1	2	Luchan		1	Years 2	412,500.00
Tamuning Elementary	Tamuning	1	2	Luchan				
Wettengel Elementary	Dededo	1	2	Lagu		1	Years 2-3	132,000.00
Dededo Middle	Dededo	2	2	Lagu		1	Years 2-3	27,000.00
John F. Kennedy High	Tamuning	3	2	Luchan				
Total								571,500.00
Agana Heights Elementary	Agana Heights	1	3	Kattan		1	Years 2-3	630,000.00
Carbullido Elementary	Barrigada	1	3	Kattan		1	Years 2-3	2,548,000.00
C.L. Taitano Elementary	Sinajana	1	3	Kattan		1	Year 1	
J.Q. San Miguel Elementary	Toto	1	3	Kattan		2	Years 2-3	
M.U. Lujan Elementary	Yona	1	3	Haya		2	Years 2-3	3,915,800.00
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan		2	Year 2	
P.C. Lujan Elementary	Barrigada	1	3	Kattan		2	Years 2-3	193,000.00
Price Elementary	Mangilao	1	3	Kattan		1	Year 2	
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan		1	Years 2-3	
L.P. Untalan Middle	Barrigada	2	3	Kattan		1	Years 1-2	425,000.00
George Washington High	Mangilao	3	3	Kattan				2,215,000.00
Total								8,826,800.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu				
Harmon Loop Elementary	Dededo	1	4	Lagu		1	Year 1	126,000.00
M.A. Uiloa Elementary	Dededo	1	4	Lagu				
Upl Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu			Years 1-2	24,000.00
FBLG Middle	Yigo	2	4	Lagu			Year 4	
Simon Sanchez High	Yigo	3	4	Lagu		1	Years 1 and 3	175,000.00
Total								325,000.00
Total								\$ 19,081,660.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
AIR CONDITIONING SYSTEM
(1)Replacement of A/C
(2)Replacement of A/C Ducts
(3)Install Exhaust System
(4)Replace A/C in Cafeteria

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya				
H.S. Truman Elementary	Santa Rita	1	1	Haya				
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya	1	3	Years 4-5	250,000.00
Marcial Sablan(Agat) Elementary	Agat	1	1	Haya	1	2	Year 3	250,000.00
Merizo Elementary	Merizo	1	1	Haya	1	3	Year 4	150,000.00
Talofofo Elementary	Talofofo	1	1	Haya	1	3	Years 5-6	250,000.00
Inarajan Middle	Inarajan	2	1	Haya	1	4	Years 3-4	250,000.00
Oceanview Middle	Agat	2	1	Haya	1	3	Year 2	250,000.00
Piti Middle	Piti	2	1	Luchan				
Southern High	Agat	3	1	haya				
Total								\$ 1,400,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan	1	3	Years 7-8	200,000.00
L.B. Johnson Elementary	Tamuning	1	2	Luchan	1	4	Years 3-4	150,000.00
Tamuning Elementary	Tamuning	1	2	Luchan				
Wetengel Elementary	Dededo	1	2	Lagu	1		Years 7-8	250,000.00
Dededo Middle	Dededo	2	2	Lagu	1	3	Years 4-5	350,000.00
John F. Kennedy High	Tamuning	3	2	Luchan	4	2	Year 2	250,000.00
				Luchan	1	3	Years 3-4	350,000.00
Total								\$ 1,550,000.00
Agana Heights Elementary	Agana Heights	1	3	Kattan	1	3	Year 3	250,000.00
Carbuttido Elementary	Barrigada	1	3	Kattan	1	3	Years 5-6	200,000.00
C.L. Taitano Elementary	Sinajana	1	3	Kattan	1		Years 4-5	250,000.00
J.Q. San Miguel Elementary	Toto	1	3	Kattan	1	3		250,000.00
M.U. Lujan Elementary	Yona	1	3	Haya	1	3	Years 4-5	300,000.00
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan	1		Year 3	150,000.00
P.C. Lujan Elementary	Barrigada	1	3	Kattan	1	2		250,000.00
Price Elementary	Mangilao	1	3	Kattan	1	3	Year 3	250,000.00
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan	1	3	Year 3	300,000.00
L.P. Untalan Middle	Barrigada	2	3	Kattan	1	2	Years 2-3	250,000.00
George Washington High	Mangilao	3	3	Kattan	1	3		600,000.00
Total								\$ 3,050,000.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu	1	3	Years 4-6	350,000.00
Harmon Loop Elementary	Dededo	1	4	Lagu	3	1	Year 1	5,000.00
					1		Years 2-3	200,000.00
					4	3		250,000.00
M.A. Ulloa Elementary	Dededo	1	4	Lagu	1	1		150,000.00
Upi Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu	1	1	Year 1	200,000.00
FBLG Middle	Yigo	2	4	Lagu				
Simon Sanchez High	Yigo	3	4	Lagu	1	4	Years 9-10	700,000.00
					2	1	Year 2	350,000.00
					3	2	Year 1	100,000.00
Total								\$ 2,305,000.00
Total								\$ 8,305,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
GENERAL
(1)Termite-Treatment
(2)Roof Repair/Insulation
(3)Parking Lot Upgrading/ Expansion/Lighting
(3a)Parking Lot Lighting
(4)Perimeter Fencing
(5)Cafeteria Equipment
(6)Dining Facility
(6a)Const. Of Kitchen Facilities
(7)Louvered Window
(8)Main Canopies
(9)Removal/Replace of Asbestos Tiles
(10)Const. Of Covered Walkways
(11)Grease Trap Renovation
(12)Landscaping Work

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
P.O. Sanchez Elementary	Umatac	1	1	Haya				
H.S. Truman Elementary	Santa Rita	1	1	Haya	1	3	Years 2, 6	60,000.00
					2	2	Year 2	150,000.00
					4	4	Year 4	75,000.00
Inarajan Elementary	Inarajan	1	1	Haya	1	3	Years 2,6,10	60,000.00
					4	1	Year 1	75,000.00
J.P. Torres Elementary	Agat	1	1	Haya	1	2	Years 2,6,10	50,000.00
					2	1	Year 1	350,000.00
					3	2	Year 2	200,000.00
					5	3		150,000.00
Marcial Sablan(Agat) Elementary	Agat	1	1	Haya	1		Years 2, 6, 10	60,000.00
					2	2	Year 4	250,000.00
					3	1	Year 1	150,000.00
					5	2	Year 4	300,000.00
Merizo Elementary	Merizo	1	1	Haya	4	3	Year 4	60,000.00
					3	4	Year 4	150,000.00
					7	2	Year 2	30,000.00
					2	2	Year 3	200,000.00
					5	3	Year 3	200,000.00
					1	2	Years 2,6,10	60,000.00
Talofofo Elementary	Talofofo	1	1	Haya	2	3	Year 3	150,000.00
					4	4	Year 4	100,000.00
					5	3	Year 3	180,000.00
					6	3		150,000.00
					7	3	Year 4	120,000.00
Inarajan Middle	Inarajan	2	1	Haya	1	2	Years 2,6,10	50,000.00
					2	2	Year 2	300,000.00
					3	2	Year 2	50,000.00
					5	3	Year 4	250,000.00
Oceanview Middle	Agat	2	1	Haya	1	1	Years 2, 6	60,000.00
					4	2	Year 2	200,000.00
					5	2	Year 3	250,000.00
Piti Middle	Piti	2	1	Luchan				
Southern High	Agat	3	1	Haya				
Total								\$ 4,490,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan	1	3	Years 3, 9	50,000.00
					2	2	Year 2	150,000.00
					3	4	Year 4	50,000.00
					4	4	Year 8	80,000.00
					6	2	Year 4	150,000.00
					7	3	Years 6-7	100,000.00
L.B. Johnson Elementary	Tamuning	1	2	Luchan	1	3	Year 5	50,000.00
					2	4	Year 6	150,000.00
					6	5	Year 8	350,000.00
Tamuning Elementary	Tamuning	1	2	Luchan	1		Years 4, 10	80,000.00
					2		Year 10	300,000.00
Nettengel Elementary	Dededo	1	2	Lagu	1		Years 5, 10	50,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
GENERAL
(1)Termite Treatment
(2)Roof Repair/Insulation
(3)Parking Lot Upgrading/Expansion/Lighting
(3a)Parking Lot Lighting
(4)Perimeter Fencing
(5)Cafeteria Equipment
(6)Dining Facility
(6a)Const. Of Kitchen Facilities
(7)Louvered Windows
(8)Main Canopies
(9)Removal/Replace of Asbestos Tiles
(10)Const. Of Covered Walkways
(11)Grease Trap Renovation
(12)Landscaping Work

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
					2	3	Year 3	200,000.00
					5		Year 6	350,000.00
					11			80,000.00
Dededo Middle	Dededo	2	2	Lagu	1	3	Years 5, 10	75,000.00
					2	3	Year 4	300,000.00
					7	3	Year 6	150,000.00
John F. Kennedy High	Tamuning	3	2	Luchan	1	4	Years 4, 10	150,000.00
					2	3	Year 5	250,000.00
					3	3	Year 3	200,000.00
					5	4	Years 6-7	250,000.00
Total								\$ 3,565,000.00
Agana Heights Elementary	Agana Heights	1	3	Kattan	1	4	Years 2,6,10	50,000.00
					2	3		150,000.00
					4	4	Year 4	80,000.00
					5	3	Year 3	250,000.00
					6	5	Year 4	160,000.00
Carbullido Elementary	Barrigada	1	3	Kattan	2	2	Year 4	150,000.00
					3	2	Year 3	90,000.00
					4	4	Year 7	150,000.00
					5	2	Years 3-4	250,000.00
					7	3	Year 5	180,000.00
C.L. Taitano Elementary	Sinajana	1	3	Kattan	1	3	Years 2,6,10	60,000.00
					2	2	Year 2	250,000.00
					3	2	Year 2	200,000.00
					4	4	Year 4	80,000.00
					5	2		200,000.00
					6	2	Year 2	160,000.00
					7	3	Year 3	90,000.00
J.Q. San Miguel Elementary	Toto	1	3	Kattan	1		Years 2,6,10	80,000.00
					2	3	Year 4	350,000.00
					4		Year 5	150,000.00
					5		Years 9-10	200,000.00
M.U. Lujan Elementary	Yona	1	3	Haya	1	2	Years 2,6,10	75,000.00
					2	3	Year 3	350,000.00
					4	3	Year 4	95,000.00
					6a	1	Year 1	80,000.00
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan	1	4	Years 2, 6, 10	50,000.00
					5	4		200,000.00
P.C. Lujan Elementary	Barrigada	1	3	Kattan	1	1	Years 2,5, 10	60,000.00
					2	2	Year 3	300,000.00
					3	1	Year 1	150,000.00
					3a	1	Year 2	100,000.00
					5		Year 3	200,000.00
					5		Year 1	850,000.00
					7	3	Year 5	80,000.00
Price Elementary	Mangilao	1	3	Kattan	1	4	Years 2,6,10	100,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
GENERAL
(1) Termite Treatment
(2) Roof Repair/Insulation
(3) Parking Lot Upgrading/
Expansion/Lighting
(3a) Parking Lot Lighting
(4) Perimeter Fencing
(5) Cafeteria Equipment
(6) Dining Facility
(6a) Const. Of Kitchen Facilities
(7) Louvered Window
(8) Main Canopies
(8) Removal/Replace of Asbestos Tiles
(10) Const. Of Covered Walkways
(11) Grease Trap Renovation
(12) Landscaping Work

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1 - 10) Implementation	Subtotal Cost
					2	1	Year 2	300,000.00
					3	3	Year 3	200,000.00
					4	4	Year 3	80,000.00
					5	2	Years 2-3	200,000.00
					6	1	Year 1	250,000.00
Agueda Johnston Middle	Ordor/Sinajana	2	3	Kattan	1	4	Years 2,6,10	60,000.00
					2	3	Year 5	250,000.00
					3	4	Year 3	150,000.00
					4	4	Year 4	80,000.00
					5	3	Years 4-6	250,000.00
					7	3	Year 5	250,000.00
P. Untalan Middle	Barrigada	2	3	Kattan	1	3	Years 2,6,10	50,000.00
					2	3	Year 3	250,000.00
					4	4	Year 6	150,000.00
					5	4	Years 4-6	200,000.00
					6	3	Year 3	250,000.00
George Washington High	Mangilao	3	3	Kattan	1	4	Years 2,6, 10	150,000.00
					2	3	Year 3	650,000.00
					5	3	Year 2	350,000.00
					6	2	Year 2	500,000.00
Total								\$ 10,620,000.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu	1	3	Years 3-9	80,000
					2	4	Years 2,3	400,000.00
					4	2	Year 2	200,000.00
					6a	1	Year 1	780,000.00
Harmon Loop Elementary	Dededo	1	4	Lagu	1	3	Year 4	50,000.00
					2	2	Year 3	350,000.00
					5	3	Years 3-6	250,000.00
M.A. Uiloa Elementary	Dededo	1	4	Lagu	1		Years 2, 7	60,000.00
					2	2	Years 1-2	300,000.00
					3	3	Year 4	100,000.00
					4	3	Year 3	160,000.00
					5	2	Year 2	
					7	3	Year 3	75,000.00
Upi Elementary	Yigo	1	4	Lagu	12	1	Year 1	160,000.00
Yigo Elementary	Yigo	1	4	Lagu	1		Years 4, 9	
					2	2	Year 2	350,000.00
					5		Year 4	300,000.00
					9	3	Years 3-4	
FBLG Middle	Yigo	2	4	Lagu	1		Years 4, 10	
					3	3	Year 2	150,000.00
					9	2	Year 3	
					10	2	Year 2	100,000.00
Simon Sanchez High	Yigo	3	4	Lagu	1	4	Years 4, 10	50,000.00
								\$ 3,695,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
GENERAL
(1) Termite Treatment
(2) Roof Repair/Insulation
(3) Parking Lot Upgrading/ Expansion/Lighting
(3a) Parking Lot Lighting
(4) Perimeter Fencing
(5) Cafeteria Equipment
(6) Dining Facility
(6a) Const. Of Kitchen Facilities
(7) Louvered Window
(8) Main Canopies
(9) Removal/Replace of Asbestos Tiles
(10) Const. Of Covered Walkways
(11) Grease Trap Renovation
(12) Landscaping Work

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
Total								\$ 22,570,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
**INTERCOM, SECURITY AND
FIRE ALARM**
(1) Intercom Upgrading
(2) Security Alarm Upgrading
(3) Replacement of Fire Alarm
System

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.O. Sanchez Elementary	Umatac	1	1	Haya			Years 2-3	100,000.00
H.S. Truman Elementary	Santa Rita	1	1	Haya			Year 1	80,000.00
					3	1		
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya	1	2	Year 3	100,000.00
					3	1	Year 1	40,000.00
Marcial Sablan(Agat) Elementary	Agat	1	1	Haya		3	Years 3-4	180,000.00
Merizo Elementary	Merizo	1	1	Haya		3	Years 3-4	150,000.00
Talofoto Elementary	Talofoto	1	1	Haya				
Inarajan Middle	Inarajan	2	1	Haya		3	Years 3-5	180,000.00
Oceanview Middle	Agat	2	1	Haya		3	Years 2-4	200,000.00
Piti Middle	Piti	2	1	Luchan				
Southern High	Agat	3	1	Haya				
Total								\$ 1,030,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan	2	2	Years 3-5	
					3	1	Year 1	80,000.00
L.B. Johnson Elementary	Tamuning	1	2	Luchan		3	Year 3	150,000.00
Tamuning Elementary	Tamuning	1	2	Luchan				
Wetengel Elementary	Dededo	1	2	Lagu			Years 5-7	250,000.00
Dededo Middle	Dededo	2	2	Lagu		4	Years 3-6	150,000.00
John F. Kennedy High	Tamuning	3	2	Luchan		2	Years 2-4	250,000.00
Total								\$ 880,000.00
Agana Heights Elementary	Agana Heights	1	3	Kattan		3	Year 4	150,000.00
					3	1	Year 1	50,000.00
Carbullido Elementary	Barrigada	1	3	Kattan		2	Years 4-6	200,000.00
C.L. Taitano Elementary	Sinajana	1	3	Kattan	1	2	Year 3	75,000.00
					2	2	Year 3	75,000.00
					3	1	Year 1	
J.O. San Miguel Elementary	Toto	1	3	Kattan		3	Years 3-5	200,000.00
M.U. Lujan Elementary	Yona	1	3	Haya				
Ordof/Chalan Pago Elementary	Ordof	1	3	Kattan		3	Years 5-6	150,000.00
P.C. Lujan Elementary	Barrigada	1	3	Kattan				
Price Elementary	Mangilao	1	3	Kattan			Years 3-5	150,000.00
Agueda Johnston Middle	Ordof/Sinajana	2	3	Kattan		4	Years 3-4	150,000.00
L.P. Untalan Middle	Barrigada	2	3	Kattan		4	Years 4-6	150,000.00
George Washington High *	Mangilao	3	3	Kattan		2	Years 3-5	200,000.00
Total								\$ 1,550,000.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu				150,000.00
					3	1	Year 1	85,000.00
Harmon Loop Elementary	Dededo	1	4	Lagu		3	Years 3-5	150,000.00
M.A. Uilosa Elementary	Dededo	1	4	Lagu	1		Years 3-4	250,000.00
					2	3	Years 4-6	
					3	1	Year 1	90,000.00
Upl Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu	1	2	Years 3-4	150,000.00
					3	1	Year 1	75,000.00
FBLG Middle	Yigo	2	4	Lagu		2	Year 3	
Simon Sanchez High	Yigo	3	4	Lagu				
Mt. Santa Rosa Elementary	Yigo	1	4	Lagu				
Total								\$ 950,000.00
Total								\$ 4,410,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
ELECTRICAL SYSTEM
UPGRADE

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya				
H.S. Truman Elementary	Santa Rita	1	1	Haya				
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya				
Marcial Sablan(Agat) Elementary	Agat	1	1	Haya		1	Year 1	180,000.00
Merizo Elementary	Merizo	1	1	Haya				
Talofofo Elementary	Talofofo	1	1	Haya				
Inarajan Middle	Inarajan	2	1	Haya				
Oceanview Middle	Agat	2	1	Haya				
Piti Middle	Piti	2	1	Luchan				
Southern High	Agat	3	1	Haya				
Total								\$ 180,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan				
L.B. Johnson Elementary	Tamuning	1	2	Luchan				
Tamuning Elementary	Tamuning	1	2	Luchan				
Wettengel Elementary	Dededo	1	2	Lagu				
Dededo Middle	Dededo	2	2	Lagu				
John F. Kennedy High	Tamuning	3	2	Luchan				
Total								0
Agana Heights Elementary	Agana Heights	1	3	Kattan				
Carbulido Elementary	Barrigada	1	3	Kattan				
C.L. Taitano Elementary	Sinajana	1	3	Kattan				
J.Q. San Miguel Elementary	Toto	1	3	Kattan				
M.U. Lujan Elementary	Yona	1	3	Haya				
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan				
P.C. Lujan Elementary	Barrigada	1	3	Kattan				
Price Elementary	Mangilao	1	3	Kattan				
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan		2	Year 3	300,000.00
L.P. Untalan Middle	Barrigada	2	3	Kattan				
George Washington High	Mangilao	3	3	Kattan		2	Year 2	80,000.00
Total								\$ 380,000.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu				
Harmon Loop Elementary	Dededo	1	4	Lagu				
M.A. Ulloa Elementary	Dededo	1	4	Lagu				
Upi Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu				
FBLG Middle	Yigo	2	4	Lagu				
Simon Sanchez High	Yigo	3	4	Lagu				
Total								0
Total								\$ 560,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

Project:
INFRASTRUCTURE:
(1)Sewer
(2)Water
(3)Power
(4)Storm Drain

School Name	Location	Type	Region	School District	Project Sub	Project Priority	Year (1-10) Implementation	Subtotal Cost
F.Q. Sanchez Elementary	Umatac	1	1	Haya				
H.S. Truman Elementary	Santa Rita	1	1	Haya				
Inarajan Elementary	Inarajan	1	1	Haya				
J.P. Torres Elementary	Agat	1	1	Haya	4	2	Year 2	150,000.00
Marcial Sablan (Agat) Elementary	Agat	1	1	Haya	4	2	Year 2	175,000.00
Merizo Elementary	Merizo	1	1	Haya				
Talofofo Elementary	Talofofo	1	1	Haya				
Inarajan Middle	Inarajan	2	1	Haya				
Oceanview Middle	Agat	2	1	Haya				
Piti Middle	Piti	2	1	Luchan	4	2	Year 2	50,000.00
Southern High	Agat	3	1	Haya				
Total								375,000.00
Chief Brodie Elementary	Tamuning	1	2	Luchan				
L.B. Johnson Elementary	Tamuning	1	2	Luchan		1	Year 1	100,000.00
Tamuning Elementary	Tamuning	1	2	Luchan				
Wettengel Elementary	Dededo	1	2	Lagu				
Dededo Middle	Dededo	2	2	Lagu				
John F. Kennedy High	Tamuning	3	2	Luchan				
Total								100,000.00
Agana Heights Elementary	Agana Heights	1	3	Kattan	4	2	Year 2	200,000.00
Carbullido Elementary	Barrigada	1	3	Kattan				
C.L. Taitano Elementary	Sinajana	1	3	Kattan				
J.Q. San Miguel Elementary	Toto	1	3	Kattan				
M.U. Lujan Elementary	Yona	1	3	Haya				
Ordot/Chalan Pago Elementary	Ordot	1	3	Kattan				
P.C. Lujan Elementary	Barrigada	1	3	Kattan	1		Year 1	50,000.00
					4	3	Year 2	80,000.00
Price Elementary	Mangilao	1	3	Kattan				
Agueda Johnston Middle	Ordot/Sinajana	2	3	Kattan				
L.P. Untalan Middle	Barrigada	2	3	Kattan	1	1		140,000.00
George Washington High	Mangilao	3	3	Kattan	2	3	Year 3	150,000.00
Total								620,000.00
Astumbo Elementary	Dededo	1	4	Lagu				
Finegayan Elementary	Dededo	1	4	Lagu				
Harmon Loop Elementary	Dededo	1	4	Lagu				
M.A. Ulloa Elementary	Dededo	1	4	Lagu				
Upi Elementary	Yigo	1	4	Lagu				
Yigo Elementary	Yigo	1	4	Lagu	4	2	Year 2	80,000.00
FBLG Middle	Yigo	2	4	Lagu				
Simon Sanchez High	Yigo	3	4	Lagu				
Total								80,000.00
Total								\$ 1,175,000.00

ELEMENTARY SCHOOLS

B.P CARBULLIDO ELEMENTARY

CHIEF BRODIE ELEMENTARY

F.Q. SANCHEZ ELEMENTARY

FINEGAYAN ELEMENTARY

H.S. TRUMAN ELEMENTARY

HARMON LOOP ELEMENTARY

INARAJAN ELEMENTARY

J.Q. SAN MIGUEL ELEMENTARY

L.B. JOHNSTON ELEMENTARY

M.U. LUJAN ELEMENTARY

MT. SANTA ROSA ELEMENTARY

ORDOT/CHALAN PAGO ELEMENTARY

P.C. LUJAN ELEMENTARY

TAMUNING ELEMENTARY

UPI ELEMENTARY

WETTENGEL ELEMENTARY

YIGO ELEMENTARY

DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY

School Name	Location	Type	Region	Proposed School District
B.P. Carbullido Elementary School	Samigada	1	3	Kattan

[illegible]

Replacement Cost

5.408.000,00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Chief Brodie Elementary School	Tamuning	1	2	Luchan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	3			X	X							150,000.00
ADA COMPLIANCE	1	X	X	X	X							458,330.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage (7)Renovation of Swimming Pool	4 3			X								80,000.00 40,000.00
STRUCTURAL REPAIRS	1		X									
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	3							X	X			200,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	3 2 4 4 2 2 3		X	X	X				X	X		50,000.00 150,000.00 50,000.00 80,000.00 150,000.00 100,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replace/Install Fire Alarm System	2 1	X		X	X	X						80,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$ 1,588,330.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
F.Q. Sanchez Elementary School	Umatac	1	1	Hays

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING	1	1										1,100,000.00
REPLACEMENT OF TEMP CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE												155,440.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	1	1										150,000.00
STRUCTURAL REPAIRS												48,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)												
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies												
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System												
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$1,453,440.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Finegayan Elementary School	Dededo	1	4	Lagu

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	3			X	X							150,000.00
ADA COMPLIANCE	1	X	X	X	X							916,230.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	3											150,000.00
STRUCTURAL REPAIRS												0
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	3				X	X	X					350,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies (9)Const. Of Kitchen Facilities (Design Completed)	3 4 2 1		X X	X X						X		80,000.00 400,000.00 200,000.00 760,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replace/Install of Fire Alarm System	1 1	X										150,000.00 85,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$3,241,230.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
H.S. Truman Elementary School	Santa Rita	1	1	Haya

[illegible]

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
(Harmon Loop Elementary School) Juan M. Guerrero Elementary School	Dededo	1	4	Lagu

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	2						X					250,000.00
ADA COMPLIANCE	1	X	X	X	X							541,195.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage				X								100,000.00
STRUCTURAL REPAIRS	1	X										126,000.00
AIR CONDITIONING SYSTEM (1)Replacement of A/C System (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replace A/C System (cafeteria)	1 (cafeteria) 3	X	X	X								200,000.00 5,000.00 250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	3 2 3			X	X							50,000.00 350,000.00 250,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	3			X	X	X						150,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$2,272,195.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Inarajan Elementary School	Inarajan	1	1	Haya

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE												299,790.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS * both elem and middle school												*3,510,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)												
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	3 1		X				X				X	60,000.00 75,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System												
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$ 434,790.00

Replacement Cost (*elem/middle schools)

7,488,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
J.Q. San Miguel Elementary School	Toto	1	3	Kattan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	4					X	X					300,000.00
ADA COMPLIANCE	4					X	X					300,000.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS	2		X	X								120,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	3											250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	3		X		X		X				X	80,000.00 350,000.00 150,000.00 200,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	3			X	X	X						200,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$1,950,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
L.B. Johnson Elementary School	Tamuning	1	2	Luchan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms	3			X								250,000.00
ADA COMPLIANCE	1	X	X	X	X							735,370.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	3				X							80,000.00
STRUCTURAL REPAIRS	1		X									412,500.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	4			X	X							150,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Construction of Dining & Kitchen Facility (7)Louvered Window (8)Main Canopies	3 4 5					X			X			50,000.00 150,000.00 350,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	3			X								150,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain	1	X										100,000.00
TOTAL												\$ 2,427,870.00

Replacement Cost

DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY

School Name	Location	Type	Region	Proposed School District
M.U. Lujan Elementary School	Yona	1	3	Hays

[illegible]

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Mt. Santa Rosa Elementary School				

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING	2				X							450,000.00
REPLACEMENT OF TEMP CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE	1	X	X	X	X							
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS												
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)												
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies (9)Const. Of Kitchen Facilities (Design Completed)												
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System												
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$ 450,000.00

Replacement Cost

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Ordot Chalan Pago Elementary School	Ordot	1	3	Kattan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE	1	X	X	X	X							255,200.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	2		X									125,000.00
STRUCTURAL REPAIRS(Kindergrarten Wing)	2		X									
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)				X								150,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	4 4		X				X				X	50,000.00 200,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	3					X	X					150,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$ 930,200.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
P. C. Lujan Elementary School	Barrigada	1	3	Kattan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE		X	X	X	X							603,430.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	3			X								60,000.00
STRUCTURAL REPAIRS	2		X	X								193,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	2											250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Improvement(Design Completed) (4)Perimeter Fencing (5)Cafeteria Equipment (6)Const. Of Dining Facility (Design Completed) (7)Louvered Window (8)Main Canopies (9)Parking Lot Lighting (10)Construction of Outdoor Stage	1 2 1 3 3 1 3	 X X X	X X X	X X X		X X					X	60,000.00 300,000.00 150,000.00 200,000.00 650,000.00 80,000.00 100,000.00 150,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System												
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer Connection (Plan Completed) (2)Water (3)Power (4)Storm Drain	3	X X	 X									50,000.00 80,000.00
TOTAL												\$ 3,126,430.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Tamuning Elementary School	Tamuning	1	2	Luchan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms						X	X					400,000.00
ADA COMPLIANCE												
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS												
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)												
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Improvement(Design Completed) (4)Perimeter Fencing (5)Cafeteria Equipment (6)Const. Of Dining Facility (Design Completed) (7)Louvered Window (8)Main Canopies (9)Parking Lot Lighting (10)Construction of Outdoor Stage					X					X X		80,000.00 300,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System												
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer Connection (Plan Completed) (2)Water (3)Power (4)Storm Drain												
TOTAL												\$ 750,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Upl Elementary School	Yigo	1	4	Lagu

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE												511,350.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS												
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)												
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies (9)Landscaping Work (not part of Contractor's Contract)	1	X										160,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System												
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$ 671,350.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Wettengel Elementary School	Dededo	1	2	Lagu

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms ADA COMPLIANCE	1	X	X	X	X							454,970.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage				X								100,000.00
STRUCTURAL REPAIRS	X		X	X								132,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)								X	X			250,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies (9)Grease Trap Renovation	3			X		X					X	50,000.00 200,000.00 350,000.00 80,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System						X	X	X				250,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$1,886,970.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
(Yigo Elementary School) D. L. Perez Elementary School	Yigo	1	4	Lagu

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms							X	X	X			250,000.00
ADA COMPLIANCE	2	X	X	X	X							436,830.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage				X								100,000.00
STRUCTURAL REPAIRS		X	X									24,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	1	X										200,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies (9)Removal/Replacement of Asbestos Tiles	2		X		X					X		350,000.00
					X							300,000.00
	3			X	X							
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replace/Install of Fire Alarm System	2			X	X							150,000.00
	1	X										75,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain	2		X									80,000.00
TOTAL												\$1,965,830.00

MIDDLE SCHOOLS

F.B. LEON GUERRERO MIDDLE

INARAJAN MIDDLE

JOSE RIOS (NEW PITI) MIDDLE

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
F. B. Leon Guerrero Middle School	Yigo	2	4	Lagu

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/ Renov. Of Butler Buildings (2)Repair/ Renov. Of Fast Track Classrooms	3					X	X					200,000.00
ADA COMPLIANCE	1	X	X	X	X							930,990.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair/ Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	2 1	X	X									850,000.00 10,000.00
STRUCTURAL REPAIRS					X							0
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)												
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies (9)Removal/Replacement of Asbestos Tiles (10)Const. Of Covered Walkways	3 2 2		X		X						X	150,000.00 100,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	2			X								
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												2,240,990.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Inarajan Middle School	Inarajan	2	1	Hays

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE	1	X	X	X	X							342,470.00
RECREATIONAL FACILITIES (1)Const. of Track and Field (Design Complete)	1	X										850,000.00
(2)Repair Renovation of Gym	2		X	X								50,000.00
(3)Renov. Repair of Restrooms and Locker Room												
(4)Baseball Field												
(5)Playground Improvement												
(6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS *(both elem and middle schools)	1	X	X									3,510,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	4			X	X							250,000.00
GENERAL (1)Termite Treatment	2		X				X				X	50,000.00
(2)Roof Repair/Insulation	2		X									300,000.00
(3)Parking Lot Upgrading/Expansion/Lighting	2		X									50,000.00
(4)Perimeter Fencing												
(5)Cafeteria Equipment	3				X							250,000.00
(6)Dining Facility												
(7)Louvered Window												
(8)Main Canopies												
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	3			X	X	X						180,000.00
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$ 5,832,470.00

*Replacement Cost (elem/middle schools)

*7,488,000.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
(Pitt Middle School) Jose Rios Middle School	Pitt	2	1	Luchan

[illegible]

HIGH SCHOOLS

GEORGE WASHINGTON HIGH SCHOOL

SOUTHERN HIGH SCHOOL

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
George Washington High School	Mangilao	3	3	Kattan

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING												
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE	1	X	X	X	X							451,300.00
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Roo (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage	1 3	X		X								240,000.00 150,000.00
STRUCTURAL REPAIRS												2,215,000.00
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System (4)Replacement of A/C (cafeteria)	3											600,000.00
GENERAL (1)Termite Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies	4 3 3 2		X X X	X			X			X		150,000.00 650,000.00 350,000.00 500,000.00
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System	2			X	X	X						200,000.00
ELECTRICAL SYSTEM UPGRADE	2		X									80,000.00
INFRASTRUCTURE (1)Sewer (2)Water(Plumbing System Upgrades) (3)Power (4)Storm Drain	3			X								150,000.00
TOTAL												\$5,736,300.00

**DEPARTMENT OF EDUCATION
TEN (10) YEAR CAPITAL FACILITIES PLAN
PROJECT PRIORITY**

School Name	Location	Type	Region	Proposed School District
Southern High School	Santa Rita	3	1	Hays

Project	Project Priority	Year Implementation										Subtotal
		1	2	3	4	5	6	7	8	9	10	
RENOVATION MAIN BUILDING	1	X										
REPLACEMENT OF TEMP. CLASSROOMS (1)Replacement/Renov. Of Butler Buildings (2)Repair/Renov. Of Fast Track Classrooms												
ADA COMPLIANCE												
RECREATIONAL FACILITIES (1)Construction of Track and Field (2)Repair Renovation of Gym (3)Renov. Repair of Restrooms and Locker Rooms (4)Baseball Field (5)Playground Improvement (6)Construction of Outdoor Stage												
STRUCTURAL REPAIRS												
AIR CONDITIONING SYSTEM (1)Replacement of Air Conditioner (2)Replacement of A/C Ducts (3)Installation of Exhaust System												
GENERAL (1)Termites Treatment (2)Roof Repair/Insulation (3)Parking Lot Upgrading/Expansion/Lighting (4)Perimeter Fencing (5)Cafeteria Equipment (6)Dining Facility (7)Louvered Window (8)Main Canopies (9) Restoration of Landscape	1 1	X X										
INTERCOM AND SECURITY - FIRE ALARM (1)System and Intercom Upgrading (2)Security Alarm System Upgrades (3)Replacement of Fire Alarm System												
ELECTRICAL SYSTEM UPGRADE												
INFRASTRUCTURE (1)Sewer (2)Water (3)Power (4)Storm Drain												
TOTAL												\$

APPENDIX D



Territory of Guam
Territorio de Guam

OFFICE OF THE GOVERNOR
OFISINAN I MAGA LAHI
AGANA, GUAM 96910 U.S.A

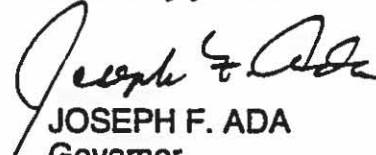
DEC 09 1993

The Honorable Joe T. San Agustin
Speaker, Twenty-Second Guam Legislature
155 Hessler Street
Agana, Guam 96910

Dear Mr. Speaker:

Transmitted herewith is Bill No. 351, which has been designated as Public Law
No. 22-42.

Sincerely yours,


JOSEPH F. ADA
Governor

Attachment

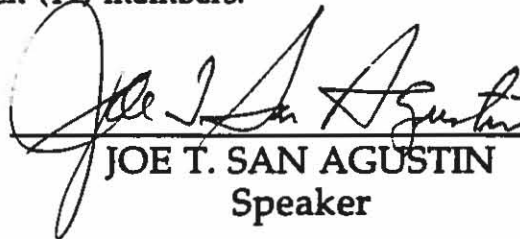


Commonwealth Now!

TWENTY-SECOND GUAM LEGISLATURE
1993 (FIRST) Regular Session

CERTIFICATION TO THE GOVERNOR OF PASSAGE OF AN ACT

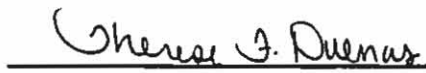
This is to certify that Substitute Bill No. 351 (LS), "AN ACT TO GRANT THE PEOPLE OF GUAM GREATER INFLUENCE IN THE ISLAND'S PUBLIC EDUCATIONAL SYSTEM THROUGH THE ESTABLISHMENT OF AN ELECTED TERRITORIAL BOARD OF EDUCATION; TO REPEAL AND REENACT §§3101, 3102, 3103, 3104, 3106, 3107, 3108, 3109, 3110, 3111, 3113, 3114, AND 3115, OF TITLE 17, GUAM CODE ANNOTATED, TO ADD A NEW §§3102.1, 3102.2, AND 3102.3 THERETO, AND TO REPEAL §§3105 AND 3112 THEREOF; TO INSTRUCT THE BOARD TO ESTABLISH EDUCATIONAL GOALS FOR THE DEPARTMENT AND TO PROVIDE MEANS FOR THE EVALUATION OF THE DEPARTMENT'S PERFORMANCE WITH SUCH GOALS; TO TASK THE BOARD TO ADOPT AN ANNUAL SCHOOL CALENDAR WHICH SHALL PROVIDE FOR MAKE-UP DAYS DUE TO NATURAL DISASTERS OR INCLEMENT WEATHER; TO ESTABLISH A BUDGET PROCESS FOR THE DEPARTMENT WHEREBY SUCH BUDGET IS SUBMITTED DIRECTLY TO THE LEGISLATURE; TO INSTRUCT THE BOARD TO ESTABLISH EDUCATIONAL PROGRAMS WHICH ENCOURAGE STUDENTS TO COMPLETE HIGH SCHOOL, AND REDUCE THE LOCAL HIGH SCHOOL DROP-OUT RATE; TO PROVIDE FOR THE PROPER PLANNING, DEVELOPMENT AND IMPLEMENTATION FOR THE CONSTRUCTION, RENOVATION AND MAINTENANCE OF EDUCATIONAL BUILDINGS AND FACILITIES; AND TO REGULATE THE ADMINISTRATION AND GOVERNANCE OF THE DEPARTMENT OF EDUCATION," returned to the Legislature without the approval of the Governor, was reconsidered by the Legislature and after such reconsideration, the Legislature did, on the 19th day of November, 1993, agree to pass said bill notwithstanding the objection of the Governor by a vote of two-thirds or more of all members thereof, to wit: by a vote of nineteen (19) members.


JOE T. SAN AGUSTIN
Speaker

Attested:


PILAR C. LUJAN
Senator and Legislative Secretary

This Act was received by the Governor this 24th day of November,
1993, at 10:00 o'clock A.M.


Theresa J. Duenas
Assistant Staff Officer
Governor's Office

**TWENTY-SECOND GUAM LEGISLATURE
1993 (FIRST) Regular Session**

Bill No. 351 (LS)

As substituted by the Committee on
Education, as further substituted by
the sponsor, and as further substituted
by the Committee on Rules

Introduced by:

M. Z. Bordallo
J. P. Aguon
C. T. C. Gutierrez
J. T. San Agustin
T. C. Ada
H. D. Dierking
M. D. A. Manibusan
E. P. Arriola
P. C. Lujan
T. S. Nelson
V. C. Pangelinan
D. Parkinson
E. D. Reyes
D. L. G. Shimizu
J. G. Bamba
A. C. Blaz
D. F. Brooks
F. P. Camacho
T. V. C. Tanaka
A. R. Unpingco

**AN ACT TO GRANT THE PEOPLE OF GUAM GREATER
INFLUENCE IN THE ISLAND'S PUBLIC EDUCATIONAL
SYSTEM THROUGH THE ESTABLISHMENT OF AN ELECTED
TERRITORIAL BOARD OF EDUCATION; TO REPEAL AND
REENACT §§3101, 3102, 3103, 3104, 3106, 3107, 3108, 3109, 3110,
3111, 3113, 3114, AND 3115, OF TITLE 17, GUAM CODE
ANNOTATED, TO ADD A NEW §§3102.1, 3102.2, AND 3102.3
THERETO, AND TO REPEAL §§3105 AND 3112 THEREOF; TO
INSTRUCT THE BOARD TO ESTABLISH EDUCATIONAL**

GOALS FOR THE DEPARTMENT AND TO PROVIDE MEANS FOR THE EVALUATION OF THE DEPARTMENT'S PERFORMANCE WITH SUCH GOALS; TO TASK THE BOARD TO ADOPT AN ANNUAL SCHOOL CALENDAR WHICH SHALL PROVIDE FOR MAKE-UP DAYS DUE TO NATURAL DISASTERS OR INCLEMENT WEATHER; TO ESTABLISH A BUDGET PROCESS FOR THE DEPARTMENT WHEREBY SUCH BUDGET IS SUBMITTED DIRECTLY TO THE LEGISLATURE; TO INSTRUCT THE BOARD TO ESTABLISH EDUCATIONAL PROGRAMS WHICH ENCOURAGE STUDENTS TO COMPLETE HIGH SCHOOL, AND REDUCE THE LOCAL HIGH SCHOOL DROP-OUT RATE; TO PROVIDE FOR THE PROPER PLANNING, DEVELOPMENT AND IMPLEMENTATION FOR THE CONSTRUCTION, RENOVATION AND MAINTENANCE OF EDUCATIONAL BUILDINGS AND FACILITIES; AND TO REGULATE THE ADMINISTRATION AND GOVERNANCE OF THE DEPARTMENT OF EDUCATION.

BE IT ENACTED BY THE PEOPLE OF THE TERRITORY OF GUAM:

Section 1. §3101 of Chapter 3, Title 17, Guam Code Annotated, is hereby repealed and reenacted to read:

"§3101. Department of Education. There is in the government of Guam a Department of Education (the "Department").

Section 2. §3102 of Chapter 3, Title 17, Guam Code Annotated, is hereby repealed and reenacted to read:

"§3102. Administration of the Department. The Department shall be administered through the Territorial Board of Education (the "Board") which shall be the governing and policy-making body of the Department. The Board shall:

(a) Establish the criteria for the qualifications of, select and hire a Director and Deputy Director of Education, set their

1 respective salaries and serve as the immediate supervisor of the
2 Director of Education;

3 (b) Establish policies to provide for a safe and healthful
4 environment in all premises under its control and used for the
5 education of students;

6 (c) Establish instructional priorities consistent with the
7 needs of students, their community and the economy;

8 (d) Establish policies governing student discipline and
9 control, including alternatives to traditional suspension and
10 expulsion policies;

11 (e) Establish policies to promote an efficient and effective
12 nutritional service program for students;

13 (f) Establish policies governing extracurricular and
14 interscholastic activities which are consistent with educational,
15 safety, health and behavioral policies established by the Board;

16 (g) Establish and approve rules and regulations for the
17 administration of the Department which are consistent with
18 recognized sound business principles and management and
19 government-wide rules and regulations;

20 (h) Establish policies to insure that the budget preparation,
21 submission and implementation reflect the Board's instructional
22 priorities;

23 (i) Develop an annual budget to fund the Department's
24 operations, which shall be for an amount no less than the average
25 budget for the preceding three (3) years, to be submitted to the
26 Legislature not later than July 30th of each fiscal year; within
27 forty-five (45) days from the date of such submission, the

1 Legislature may either approve or disapprove, in whole or in
2 part, such budget, and if the Legislature does not act upon such
3 budget within such period, the budget shall be deemed approved
4 and appropriated from the General Fund. Any supplemental
5 requirements shall also be submitted to the Legislature for
6 appropriation. There shall be reserved, annually, within the
7 General Fund the funds necessary to equal the average budget of
8 the Department for the preceding three (3) years, to fund the
9 Department's budget for the succeeding year's budget;

10 (j) Review periodically Departmental personnel policies
11 and make appropriate changes which shall be transmitted to the
12 Civil Service Commission for final approval;

13 (k) Review an annual audit by the Director of all personnel
14 employed by the Department;

15 (l) Establish and approve a ten- (10-) year plan, which
16 shall be updated annually if deemed necessary by the Board, for
17 the construction, renovation and maintenance of educational
18 buildings and facilities to properly meet the demands of the
19 educational system;

20 (m) Establish to be submitted to the Legislature for approval
21 an annual school calendar, which shall take into consideration
22 make-up days for instructional days lost due to natural disasters
23 or inclement weather, and that specifies the instructional days,
24 teacher workdays, holidays, and days for system-wide events and
25 for other educational activities;

1 (n) Establish educational programs which shall encourage
2 students to complete high school and reduce the local high school
3 dropout rate.

4 (o) Promulgate regulations for the election of members to
5 the Island-wide Board of Governing Students and for the
6 selection of the Board's student representative;

7 (p) Establish a pilot year-round school program by no later
8 than school year 1996-1997 to determine the feasibility of
9 implementing such a program on an island-wide basis."

10 Section 3. §3102.1 is hereby added to Chapter 3, Title 17, Guam Code
11 Annotated, to read:

12 "§3102.1. Director and Deputy Director. The Director of
13 Education (the "Director") and, in his absence, the Deputy Director
14 of Education (the "Deputy Director"), shall be the chief executive
15 officer of the Department. The Director and Deputy Director shall
16 serve in the exempted unclassified service, the qualifications for
17 which offices shall be established by the Board. Their respective
18 terms of office shall be five (5) years each, commencing with the date
19 of Board approval, and their terms may be renewed at the option of
20 the Board. The Board may, by a vote of seven (7) members, remove
21 the Director or Deputy Director from such position for cause. The
22 Director shall:

23 (a) Be the Executive Secretary of the Board;

24 (b) Enforce the policies, rules and regulations of the
25 Department;

26 (c) Attend all meetings of the Board and submit reports on
27 the general affairs of the Department;

1 (d) Prepare and submit an annual budget for the Board's
2 consideration and approval;

3 (e) Submit quarterly reports to the Board showing the
4 financial and budgetary condition of the Department;

5 (f) Hire employees in accordance with established criteria,
6 and assign or transfer employees for efficient and instructionally
7 sound operations;

8 (g) Ensure that employees whose job descriptions require
9 professional certification or professional, non-educational
10 qualifications have the required current credentials;

11 (h) Establish and maintain a list of fully qualified applicants
12 for positions in the Department and select and appoint from such
13 list in a manner consistent with Board policy and Guam law;

14 (i) Plan, coordinate, and control the services of employees
15 in the Department;

16 (j) Enter into contracts on behalf of the Department in
17 accordance with all applicable laws and regulations;

18 (k) Report to the Board, the Governor, and the Legislature
19 annually on the state of public education in Guam;

20 (l) Devote full time and energy to providing
21 administrative leadership as Superintendent; and

22 (m) Perform such other duties as the Board may require."

23 Section 4. §3102.2 is hereby added to Chapter 3, Title 17, Guam Code
24 Annotated, to read:

25 "§3102.2. Establishment of educational goals and annual
26 report. (a) The Board shall establish and properly implement
27 educational goals which shall work towards the continual

1 enhancement of the public educational system. Such goals may
2 include, but are not limited to, the following: (i) To provide adequate
3 facilities to accommodate existing and projected increases in school
4 population; (ii) To properly prepare pre-school children for school;
5 (iii) To insure optimum graduation from high school by establishing
6 programs to reduce the high school dropout rate; (iv) To increase the
7 annual standardized test scores for Guam students; and (v) To
8 provide safe, disciplined, and drug-free schools. Such goals shall be
9 reviewed and revised, if necessary, by the Board annually.

10 (b) Upon the establishment and adoption of such educational
11 goals, copies of such goals shall be transmitted to the Governor and
12 the Legislature.

13 (c) The Board shall annually assess the performance of the
14 Department against such goals, and shall report to the Governor
15 and the Legislature on the activities of the Department in the
16 implementation and realization of these educational goals. Copies
17 of such report shall be made available to the public.

18 (d) The Board may authorize the execution of contracts
19 between the Department and the U. S. Department of Defense in
20 order to assist in reaching the educational goals set by the Board;
21 provided, however, that no such contract may take effect until a copy
22 of the same as proposed to be executed has been delivered to the
23 Speaker of the Legislature and thirty (30) days after such delivery
24 have elapsed."

25 Section 5. §3102.3 is hereby added to Chapter 3, Title 17, Guam Code
26 Annotated, to read:

1 **"§3102.3. Attorney for the Department.** The Board may
2 employ an attorney to assist and represent it in all civil matters
3 which concern the Department. The Board may set the terms and
4 conditions for employment of the attorney or law firm, and the Civil
5 Service Commission shall establish the level of compensation. The
6 Board shall determine whether the appointment is a full-time
7 unclassified employee or an independent consultant.

8 The Attorney General shall assist the Department in all
9 litigation in which the Department is interested; provided, that the
10 Attorney General shall designate the attorney for the Department as
11 a Special Assistant Attorney General for such purpose."

12 Section 6. §3103 of Title 17, Guam Code Annotated, is repealed and
13 reenacted to read:

14 **"§3103. Territorial Board of Education.** (a) The Territorial
15 Board of Education (the "Board") shall consist of twelve (12)
16 members, nine (9) of whom shall be voting members, consisting of
17 seven (7) members who shall be elected by district, one (1) who shall
18 be elected by the Guam Parent-Teacher Association Congress, and
19 one (1) who shall be elected by the Island-wide Board of Governing
20 Students. Of the twelve (12) members, three (3) shall be non-voting,
21 **ex officio** members.

22 (b) The three (3) non-voting **ex officio** members shall be
23 selected by the interests they respectively represent: One (1) to be
24 selected by the Secretary of Defense or his designee to represent U.S.
25 Military personnel on Guam; one (1) to be selected collectively by the
26 administrative heads of non-public schools to represent non-public
27 schools; and one (1) to be selected by the exclusive bargaining unit

1 which represents teachers and other members of the bargaining unit
2 within the Department.

3 (c) The Board shall promulgate regulations for the election of
4 members to the Island-wide Board of Governing Students and for
5 the election of the Board's student representative."

6 Section 7. §3104 of Title 17, Guam Code Annotated, is repealed and
7 reenacted to read:

8 "§3104. Same: elected members; districts. (a) Seven (7)
9 voting members of the Board shall be elected by district in accordance
10 with the Election Law (Title 3, Guam Code Annotated); provided,
11 that candidates for such election shall be nominated only as provided
12 in §3106 of this Chapter. Employees of the Department are not
13 eligible to run.

14 (b) The election provided for in this section shall be non-
15 partisan, and no political party shall directly or indirectly sponsor,
16 nominate or endorse any of the candidates for such office.

17 (c) There shall be the following number of elected Board
18 members for the following districts composed of the municipalities as
19 set out in the following table:

Districts:	Municipalities:	No. of Board members:
District 1.	Dededo and Yigo,	2,
District 2.	Barrigada, Mangilao, and Sinajaña,	1,
District 3.	Tamuning, Agaña Heights, Mongmong-Toto-Maite, and Agaña,	2,
District 4.	Chalan Pago and Ordot, Yoña, Talofofo, Inarajan, and Merizo,	1,

District 5. Umatac, Agat, Santa Rita, Piti,
and Asan/Maina,

1."

Section 8. §3105 of Title 17, Guam Code Annotated, is hereby repealed
and reenacted to read:

"§3105. Island-wide Board of Governing Students. (a) The
Island-wide Board of Governing Students (the "Island-wide
Board"), which is hereby created, shall consist of a member of the
Youth Congress who shall be elected by its members and two (2)
members from each public high school elected by a plurality vote of
freshmen, sophomores, juniors, and seniors attending the public high
schools, voting in an election held in all the public high schools on one
day in May of each year. Such election shall be supervised by the
Director in cooperation with the student governing bodies of the
high schools.

(b) A candidate must be nominated by a petition signed by no
less than one hundred (100) freshmen, sophomores, juniors, or
seniors from the public high schools.

(c) Members of the Island-wide Board must attend the schools
they represent and must have and maintain at least a 2.5 grade point
average.

(d) No student may be a candidate if under suspension or on
academic probation at the time of nomination.

(e) The Island-wide Board shall meet at least once a month
during the school year to discuss matters relating to Guam's public
education system and to make recommendations to the Board."

Section 9. §3106 of Title 17, Guam Code Annotated, is repealed and
reenacted to read:

1 **"§3106. Nomination for election to the Board.** Nomination of
2 candidates for election to the Board shall be made by petition on
3 forms prescribed by the Election Commission and initiated by the
4 candidate. In order for a person's name to be placed on the ballot for
5 election to the Board, such petition must be signed by not less than
6 one hundred fifty (150) persons registered to vote in Guam and must
7 be filed with the Election Commission not more than sixty (60) days
8 nor less than forty-five (45) days prior to the election for such
9 members. No defect in any nominating petition presented to the
10 Election Commission shall prevent the filing of another petition
11 which is presented within the allowed filing period. Such petitions
12 shall be maintained on file with the Commission for not less than ten
13 (10) years."

14 **Section 10. §3107 of Chapter 3, Title 17, Guam Code Annotated, is**
15 hereby repealed and reenacted to read:

16 **"§3107. Same: first election: terms.** The members of the Board
17 shall be elected by district at the General Election to be held in
18 November of 1994. The terms of office of Board members elected
19 pursuant to this section shall commence at 12 o'clock noon on the
20 date of their certification of election by the Election Commission.
21 The four (4) Board members receiving the highest number of votes
22 shall serve until 12 o'clock noon on the first Monday of January,
23 1999. The remaining three (3) Board members shall serve until 12
24 o'clock noon on the first Monday of January, 1997."

25 **Section 11. §3108 of Chapter 3, Title 17, Guam Code Annotated, is**
26 hereby repealed and reenacted to read:

1 **"§3108. Same: subsequent elections: terms.** After the first
2 election, the terms of office for all elected members shall be four (4)
3 years. Terms of office for elected members shall commence at 12
4 o'clock noon on the first Monday of January following their election
5 and shall terminate at 12 o'clock noon on the first Monday of
6 January four (4) years thereafter."

7 **Section 12.** §3110 of Chapter 3, Title 17, Guam Code Annotated, is
8 hereby repealed and reenacted to read:

9 **"§3110. Same: membership prior to election.** The terms of
10 Board members in office on the effective date of this Chapter shall
11 terminate at 12 o'clock noon on the date of the commencement of the
12 terms of the first elected members."

13 **Section 13.** §3111 of Chapter 3, Title 17, Guam Code Annotated, is
14 hereby repealed and reenacted to read:

15 **"§3111. Same: vacancies.** Vacancies occurring on the Board
16 shall be filled through the selection of a person(s) by the remaining
17 members of the Board. In the selection of an individual to fill the
18 unexpired term, the Board shall announce such vacated position and
19 the remaining time period in such position to be filled, accept
20 applications from interested persons to fill the vacancy, and select
21 such person the Board deems most qualified among the applicants to
22 fill the vacant position. The vacancies shall be filled by the Board as
23 follows: In the case of a vacancy in an elected membership, from an
24 applicant from the member's district; in the case of a vacancy in an ex
25 officio membership, from an applicant from the organization which
26 selected the member originally."

1 **Section 14. §3113 of Chapter 3, Title 17, Guam Code Annotated, is**
2 hereby repealed and reenacted to read:

3 **"§3113. Same: officers of the Board. Officers of the Board**
4 shall include the Chairman and Vice-Chairman, and such other
5 positions which the Board deems necessary to effectively carry out its
6 responsibilities. Such Board officers upon election shall serve for a
7 term of one (1) year. Board officers shall be elected by a majority
8 vote of the members of the Board during one of the Board's meetings
9 held in November of each year."

10 **Section 15. §3114 of Chapter 3, Title 17, Guam Code Annotated, is**
11 hereby repealed and reenacted to read:

12 **"§3114. Same: meetings of the Board. Meetings of the Board**
13 shall be open and held at a regular time and place each month.
14 Special meetings may be called by the Chairman."

15 **Section 16. §3115 of Chapter 3, Title 17, Guam Code Annotated, is**
16 hereby repealed and reenacted to read:

17 **"§3115. Same: acts of the Board. The concurrence of five (5)**
18 members of the Board shall be necessary for the validity of any of its
19 acts."

20 **Section 17. Compensation. Board members shall be compensated at**
21 the rate of Fifty Dollars (\$50) per board meeting, not to exceed One Hundred
22 Dollars (\$100) per month.

23 **Section 18. Severability. If any provision of this Act or its application**
24 to any person or circumstance is found to be invalid or contrary to law, such
25 invalidity does not affect other provisions or applications of this Act which
26 can be given effect without the invalid provisions or application, and to this
27 end the provisions of this Act are severable. If the provision of this Act found

1 to be invalid is subparagraph (c) of §3104 as set out in Section 7 of this Act
2 because of a violation of the constitutional principle, "one man—one vote",
3 then those elected members of the Board of Education whose election districts
4 are so found to be in violation of such principle shall continue to hold office
5 until the next regularly scheduled election to the Board of Education, prior to
6 which election the Election Commission shall have drawn new boundaries for
7 the five (5) election districts which comply with the "one man—one vote"
8 principle.



Territory of Guam
Territorio de Guam

OFFICE OF THE GOVERNOR
SAN ANTONIO, GUAM
AGANA, GUAM 96910

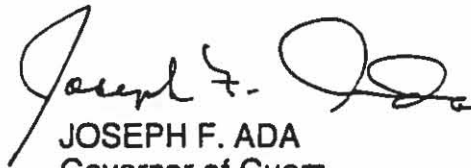
JUN 11 1993

The Honorable Joe T. San Agustin
Speaker, Twenty-Second Guam Legislature
155 Hesler Street
Agana, Guam 96910

Dear Mr. Speaker:

Transmitted herewith is Bill No. 483 which I have signed into law this date as
Public Law 22-18.

Sincerely yours,


JOSEPH F. ADA
Governor of Guam

Attachment



Commonwealth Now!

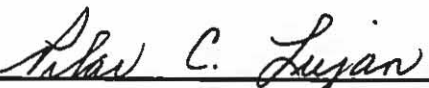
TWENTY-SECOND GUAM LEGISLATURE
1993 (FIRST) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO THE GOVERNOR

This is to certify that Substitute Bill No. 483 (COR), "AN ACT TO RESERVE GOVERNMENT REAL PROPERTY FOR FUTURE USE BY THE THREE BRANCHES OF GOVERNMENT," was on the 4th day of June, 1993, duly and regularly passed.


JOE T. SAN AGUSTIN
Speaker

Attested:


PILAR C. LUJAN
Senator and Legislative Secretary

This Act was received by the Governor this 4th day of June,
1993, at 5:45 o'clock P.M.


Assistant Staff Officer
Governor's Office

APPROVED:


JOSEPH F. ADA
Governor of Guam

Date: JUN 12 1993

Public Law No. 22-18

TWENTY-SECOND GUAM LEGISLATURE
1993 (FIRST) Regular Session

Bill No. 483 (COR)

As substituted by the Committee on
Housing and Community Development,
as further substituted by the
Committee on Rules, and as amended
by the Committee of the Whole.

Introduced by:

E. D. Reyes
T. S. Nelson
T. C. Ada
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J. T. San Agustin
F. R. Santos
D. L. G. Shimizu
J. G. Bamba
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D. F. Brooks
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T. V. C. Tanaka
A. R. Unpingco

**AN ACT TO RESERVE GOVERNMENT REAL
PROPERTY FOR FUTURE USE BY THE THREE
BRANCHES OF GOVERNMENT.**

1 BE IT ENACTED BY THE PEOPLE OF THE TERRITORY OF GUAM:

Section 1. Legislative findings and intent. §75104, Title 21, Guam Code Annotated, as amended, specifies that all government of Guam lands, excluding all lands dedicated to a specific public use by law, and all lands reserved in accordance with §60105, Title 21, Guam Code Annotated, are designated as available lands for the purposes of the Chamorro Land Trust Commission. The Director of Land Management (the "Director"), as authorized in said §60105, may, with legislative concurrence, reserve government land for the future use of the government of Guam, after having conducted a public hearing on such reservation of lands. Such hearing was held on May 7, 1993, and the Director has transmitted the reservation list for review by the Legislature, which is tasked with the requirement of approving the land reservation list in the form and content it deems appropriate within ninety (90) days of the first meeting of the Chamorro Land Trust Commission. The Commission's first meeting occurred March 16, 1993, thus making June 14, 1993 the last date for the Legislature's and the Governor's approval of the land reservation. Failure of the Legislature and the Governor to so enact such an approval measure within the ninety-(90-) day period would cause the placement of all available government lands under the authority of the Chamorro Land Trust Commission for use as Chamorro Homelands.

The process for reserving lands for future government use. A process for setting aside public lands for public purposes was developed and implemented by the Director, which required several months of intensive data gathering designed to support the recommendations of the Department of Land Management (the "Department"), which were derived from hundreds of hours of development planning and land use analyses. During the course of conducting this review of the government's present use and

1 future needs for public lands, the Legislature's Committee on Housing and
2 Community Development (the "Committee") arrived at several conclusions.
3 Firstly, a majority of the government agencies or entities requiring land were
4 ill-equipped and unprepared to present either short- or long- term plans for
5 their respective departments and agencies, and as a means of satisfying the
6 future possibility of needing land, presented unjustified programs aimed at
7 setting aside land now and planning for its productive use later. Second,
8 many agencies did not have, nor could they present, an acceptable notion of
9 what the agency must accomplish today in order to meet the public's growing
10 demand for services in the future. In short, there was a lack of vision and an
11 astounding inability to forecast public needs that lie ahead and how land
12 resources obtained by the agency could be utilized to support such need.
13 Third, the Committee recognized that there was a strong public outcry
14 against allowing any department or agency to reserve lands for future use,
15 particularly when no plans and funding programs existed to support such
16 reservation of land and when the impression of land banking was inherent in
17 the strategy of some departments and agencies. Finally, the Committee was
18 satisfied that, while efforts were now ongoing to satisfy the intent of the
19 Chamorro Land Trust legislation, there was a clear indication that greater
20 policy direction and more human and financial resources need to be allocated
21 to the government's land inventory program through the Department's
22 Geographics and Land Information System. The Department, the Data
23 Processing Division of the Department of Administration, and the Bureau of
24 Planning have made great strides in this area but such technical and
25 professional capability needs to be strengthened in many departments and
26 agencies throughout the government.

Guidelines governing land reservation. The Committee has adopted several criteria that would guide certain departments and agencies in their efforts to set aside public lands for future needs. The health, safety and education of the general public were the first and foremost criteria in the Committee's review. Secondly, if a government entity could clearly establish that there would be the benefit of direct essential services to the community if land be allocated to the respective requesting agency, there is high probability that such a request would be viewed favorably. The Committee advised all government entities seeking to reserve land that the Chamorro Land Trust Commission, with the assistance of the Legislature, would work with the respective department or agency should the entity need to acquire land after the adoption of the Government of Guam Reserved Lands List contained in this Act. This is not to state that land requests evolving after the implementation of this Act would not be subject to careful scrutiny and thorough consideration by the Commission and the Legislature but rather to stress that a balance of needs can be attained by working through the system. With respect to the issue of reserving land for public purposes in the future, the Legislature would be the appropriate conduit for such requests.

Legislative intent. It is the intent of the Legislature to satisfy the provisions of the Chamorro Land Trust Act, as amended, by establishing both a balance and a harmony of interests with respect to the allocation and utilization of public lands pursuant to the spirit of the Chamorro Land Trust Act. Further, it is the desire of the Legislature to see the fruition of rational land-use planning as envisioned in Public Law 20-147, an act establishing comprehensive development planning for Guam. Pursuant to the provisions of such public law, government of Guam entities must engage in long-range

1 development planning designed to accommodate the growing and diverse
2 interests of the community and ensure that the welfare of local residents and
3 the quality of their lives are enhanced and protected. It is the intent of the
4 Legislature to allow the public to continue its temporary use of reserved lands
5 placed under the charge of the Department before an agency or department is
6 scheduled to begin construction of a public building or facility on the property
7 so long as such temporary use does not delay, hamper or impede the final
8 development of the land or lands reserved by the respective government
9 entity. In conducting the review of lands reserved for public purposes, the
10 Legislature was inclined to allow certain agencies up to one (1) year to
11 develop a conceptual plan supporting their land reservations and up to three
12 (3) years to develop an integrated implementation plan including
13 architectural/engineering design and the availability of financial resources.
14 Failure by a department or agency to meet such guidelines would cause the
15 agency's reserved land or lands to be added to the Commission's list of
16 available lands. With respect to the designation of lands proposed for future
17 parks, conservation areas, wildlife refuge and natural preserves by any
18 government of Guam or Federal agency, it is the intent of the Legislature that
19 any such designation must receive legislative concurrence through the
20 submission to the Legislature of comprehensively integrated plans by the
21 Departments of Agriculture and Parks and Recreation for adoption by
22 statute.

23 **Section 2. Adoption of the Government of Guam Reserved Lands**
24 **List.** (a) The Government of Guam Reserved Lands List contained in the
25 exhibit annexed to paragraph (b) of this section is hereby adopted, pursuant
26 to the conditions established in this Act.

1 (b) **Government of Guam Reserved Lands List.** See the Exhibit
2 annexed hereto.

3 (c) **Other reserved lands.** The Department shall review all existing
4 public laws covering land transfers, rights-of-way, compensation for land
5 takings and other relevant issues to determine the land which must be made
6 available to satisfy the mandates of those laws. Lands meeting those
7 requirements shall be made a part of the Government of Guam Reserved
8 Lands List set out in the exhibit annexed to Section 2(b) of this Act. In
9 addition, with respect to all those properties identified for such public use
10 which are larger than necessary for the proposed public use, the Department
11 shall identify the surplus lands which shall become part of the Chamorro
12 Homelands. The Department shall complete its research and transmit its
13 findings to the Chamorro Land Trust Commission no later than one (1) year
14 from the effective date of this Act.

15 (d) The government-owned lots listed in Section 2, and described in the
16 attachment entitled "Public Utility Agency of Guam Future Land Use
17 Requirements", are reserved for the Public Utility Agency of Guam ("PUAG"),
18 pursuant to the provisions of this Act.

19 (i) PUAG is authorized to conduct exploratory well drilling
20 activities within the government-owned lots listed in the exhibit
21 annexed to paragraph (b) of this Section 2 and described in the
22 attachment entitled "Public Utility Agency of Guam Future Land Use
23 Requirements".

24 (ii) Upon completion of the exploratory drilling phase, and the
25 determination of viable locations for the development of water wells,
26 an area to comprise 0.06 acres, within the lots described and listed in the

1 said exhibit, shall be transferred to the jurisdiction and management of
2 PUAG.

3 (iii) Any development within a one-thousand- (1,000-) foot radius
4 of the sites designated as water well sites, pursuant to the provisions of
5 this Section 2, shall comply with the provisions of the Guam
6 Environmental Protection Agency's Wellhead Protection Program, or
7 any other applicable land use law.

8 (iv) PUAG is authorized to conduct exploratory well drilling
9 activities within any government property for the purpose of
10 identifying viable water well sites, the identification of which shall
11 subordinate any other uses.

12 (e) Lot No. 3470, located in Sinajaña, consisting of 117.94 acres, is
13 hereby reserved to the government of Guam to provide for Guam's health
14 care needs.

15 **Section 3. Conditions of compliance.** The conditions described in this
16 Section 3 shall apply to any government entity that has reserved land for
17 public purposes:

18 (a) The Department is hereby authorized to allow temporary use of the
19 government real property set out in the exhibit annexed to paragraph (b) of
20 Section 2 of this Act so long as such temporary use does not impede, delay or
21 in any way interfere with the entity's use of the reserved land.

22 (b) Any government entity reserving land under said paragraph (b)
23 shall develop a conceptual plan depicting the property's development within
24 one (1) year from the adoption of the Land Use Masterplan and a supporting
25 financial or funding program within three (3) years therefrom. Before the
26 end of the fourth (4th) year from the adoption of the Land Use Masterplan,

1 the Governor shall, in a comprehensively integrated government-wide
2 masterplan, transmit to the Legislature the compiled long-term program
3 containing the government's overall long-term facilities requirement for
4 approval and adoption by statute. Failure of the Governor to meet the
5 conditions hereby established within the allotted time frame shall cause the
6 lands reserved in said paragraph (b) to revert to the Chamorro Homelands.

7 (c) The Departments of Parks and Recreation and of Agriculture, in
8 conjunction with applicable Federal agencies, shall develop a comprehensive
9 integrated masterplan that clearly identifies, designates and establishes any
10 proposed park, conservation area, wildlife refuge, historic site and natural
11 preserves on government (Federal and local) lands within three (3) years
12 from the date of enactment of this Act for review and concurrence by the
13 Chamorro Land Trust Commission and subsequent submission to the
14 Legislature for adoption by statute, except for parks established under the
15 Subdivision Law. Any Federal or local plan which incorporates present or
16 future Chamorro Homelands or government reserved lands identified in said
17 paragraph (b) of Section 2 of this Act as part of one (1) of its parks,
18 conservation areas, wildlife refuges, or historic or natural preserves shall
19 require the approval of the Chamorro Land Trust Commission and of the
20 Legislature by statute.

21 (d) Any government of Guam agency reserving lands for use under
22 Section 2 of this Act, with the intention of commercially leasing said lands to
23 private interests, may initiate or continue actions to facilitate the commercial
24 leasing of said lands, when it is deemed to be in the public interest; provided,
25 that the revenues realized therefrom shall accrue to the Chamorro Land
26 Trust Commission, and that the lease rates shall reflect fair market values.

1 Final approval for the leasing of any lands identified in Section 2 of this Act
2 shall require the concurrence of the Legislature by statute.

3 **Section 4.** Subparagraph (d) of §75107 of Chapter 75, Title 21, Guam
4 Code Annotated, is hereby amended to read as follows:

5 "(d) Upon direction by statute from the Legislature, the
6 Commission shall release to the department any unleased available
7 land designated for a public purpose. Such land will no longer be
8 considered to be Chamorro Homelands."

9 **Section 5.** Subparagraph (a) of §75104 of Chapter 75, Title 21, Guam
10 Code Annotated, is hereby amended to read as follows:

11 "(a) All government lands excluding (1) all lands dedicated to a specific
12 public use by law, and (2) all lands reserved in accordance with §60105 of this
13 Title which reservations are submitted to and concurred in by the Legislature
14 within ninety (90) days of the enactment of this Chapter, are hereby
15 designated as available lands."

16 **Section 6.** §75105 of Chapter 75, Title 21, Guam Code Annotated, is
17 hereby amended by adding a new subsection (g) to read as follows:

18 "(g) The Commission shall utilize Lot No. 382-R1, Inarajan, containing
19 an area of 304.76 acres and being Chamorro Homelands, only for affordable
20 housing."

21 **Section 7. Adjustment of land areas and property exchanges for the**
22 **Ordot landfill.** The Legislature finds that the value of the private properties
23 surrounding the Ordot landfill have been diminished by the noxious nature of
24 the landfill, and thus the exchanges of properties at the Ordot landfill as
25 authorized by the exhibit annexed to Section 2(b) of this Act shall not require
26 that each be on a value-for-value basis, and the Department is hereby

1 directed to adjust the respective areas of the properties to be exchanged to
2 equitably treat the private property owners whose land values were
3 adversely affected by the landfill.

4 **Section 8. Caveat re possible reversion of Chamorro homelands to the**
5 **United States.** The Department shall within ninety (90) days from the date of
6 enactment of this Act, identify all those parcels of government land, whether
7 Chamorro Homelands or reserved for government use, which are possibly
8 subject to reversion to the United States of America because of alleged failure
9 to comply with the conditions of the grant of such lands to the government of
10 Guam. (Document 25219, Land Transfer from the United States of America
11 to the Government of Guam, dated March 30, 1953.) When such lands are so
12 identified, any documents transferring them to the Chamorro Land Trust
13 Commission or to any other agency given jurisdiction over them shall contain
14 a reference to such possibility of reversion. The Legislature finds that forty
15 (40) years have passed since the grant to the government of Guam of such
16 formerly Federal lands, that a number of programs providing government
17 land to Guam's residents who lost land as a result of Federal land takings
18 have been implemented over the years, and that no action has been taken by
19 the United States of America to find that the conditions of the grant have not
20 been met. The Legislature therefore further finds that the reversion of such
21 land to the United States is no longer possible. Accordingly, when the
22 Department completes its identification of the lands possibly subject to such
23 reversion, it shall so notify the Governor of Guam, who shall then issue his
24 proclamation and declaration to the effect that the government of Guam has
25 concluded that no possibility of reversion of such lands to the United States of
26 America still exists.

1 **Section 9. Inarajan lot transfers.** The land exchanges for the Inarajan
2 seashore as authorized by the exhibit annexed to Section 2(b) of this Act are in
3 compliance with the provisions of Public Law 17-49. Attached to this Act is a
4 schedule setting out the lot numbers of the private lands which are to be
5 exchanged under such public law. Such list is attached to identify the lands of
6 those who are authorized to make such exchanges, but because of the passage
7 of time, it might well be that the names of persons who should be authorized
8 under such public law to make such exchanges have been inadvertently
9 overlooked, in which case the Department, after investigating the individual
10 claim of any such person not so listed and being satisfied that such person
11 should have been listed, shall add the name of such person to the approved
12 list. Additionally, any person listed who has already made an exchange shall
13 not be deemed eligible for an additional exchange. Finally, a number of years
14 having passed since the enactment of the public law, the persons listed for a
15 land exchange may, if they so elect, exchange their properties for available
16 government land in a municipality other than Inarajan.

EXHIBIT to Section 2(b)
GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Department of Education	Astumbo Elementary School	Dededo	10122-R18	424	35
2		Astumbo Middle School	Dededo	10122-R18	424	35
3		Middle School	Chalan Pago	3470	117.94	35
4		Elementary School	Inarajan	380	138.8	35
5		Middle School	Merizo	523	828.71	35
6		Elementary School	Agat	480	202.45	35
7		Central High School	Agana Heights	3463	38.83	38.83
8	Guam Memorial Hospital Authority	Acute Care Hospital	Sinajaña	3470	117.94	35
9		Long Term Care Facility	Inarajan	380	138.8	5
10	Department of Mental Health & Substance Abuse	Adult Residential Treatment Facility	Chalan Pago	3470	117.94	5

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1		Children's Residential Treatment Facility	Chalan Pago	3470	117.94	10
2		Crisis Center	Chalan Pago	3470	117.94	2
3	Department of Public Health and Social Services	Homeless Shelter	Chalan Pago	3470	117.94	2
4		Children's Foster Home	Chalan Pago	3470	117.94	2
5		Public Health Facility	Chalan Pago	3470	117.94	4
6		Senior Nursing Home	Dededo	10122-R18	424	7
7		Satellite Office	Agat	252-1	15.6	1
8		Tano Manamko	Dededo	10122-R18	424	5
9		Elderly Facility	Inarajan	Tract 3621	6	3
10		Trankilidat II	Dededo	10122-R18	424	6
11	Civil Defense	Alternate Emergency Operating Center	Umatac	508-R1	870.23	1

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Guam Housing Corporation	Housing Units	Mangilao	5402-R5NEW-R1	255.32	250
2	Guam Fire Department	Fire Station Relocation	Inarajan	Tract 3621	6	2
3		Fire Station Relocation	Agat	266-1-R1	77	2
4		Fire Station	Chalan Pago	3318	12.90	2
5	Guam Police Department	Police Station	Inarajan	Tract 3621	6	2
6		Police Station	Agat	266-1-R1	77	2
7		Sagan Policia	Yigo	7054-4	3.5	2
8		Sagan Policia	Chalan Pago	3318	12.90	2
9	Public Utility Agency of Guam	Reservoir	Dededo	5380-R2	16.29	.5
10		Sewer Treatment Plant	Chalan Pago	3420	12.31	12.31
11		Sewer Pump Station	Dededo	10171	96.47	3
12		Sewer Pump Station	Chalan Pago	3471	.69	.69

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Public Utility Agency of Guam (cont'd)	Reservoir	Agat	473	54.46	.5
2		Reservoir	Yigo	7116-1-R2	12.44	.5
3		Reservoir	Asan	469-R1	71.07	1
4		Reservoir	Inarajan	Est-324	476.5	1
5		Reservoir	Yofia	400-1-R1	479.97	1
6		Reservoir	Talofofo	421	79.63	.5
7		Reservoir	Asan	495	63.71	1
8		Water Dam	Merizo	523	828.71	130
9		Sewer Treatment Plant	Mangilao	5403	117.94	29
10		Booster Pump Station	Inarajan	1361-1-B-R1	.55	.25
11		Reservoir	Yigo	7150-R4NEW-2	5.73	1
12		Reservoir	Asan	300-D	.14	.14
13		Reservoir	Agaña	2062-PART-2	1.65	.5

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Public Utility Agency of Guam (cont'd)	Reservoir	Agat	439-R1	287.27	.5
2		Reservoir	Agat	350-R4	146.68	.5
3		Reservoir	Yofia	153	22.63	1
4		Booster Pump Station	Yofia	166-REM	5.09	.25
5	University of Guam/Department of Agriculture/Department of Parks and Recreation	Booster Pump & Reservoir	Umatac	275	842.68	1
6		Booster Pump Station	Piti	286	152.49	.23
7		Marine Lab Expansion, Conservation Reserve & Prehistoric Site	Mangilao	5397	161.68	161.68
8		Aquarium	Yofia	198	110.66	110.66
9	Department of Public Works	Rock Quarry	Dededo	10120-R16	535.81	60
10		Rock Quarry	Inarajan	382-R1	304.76	10
11		Bypass Route 16/Airport Road	Barrigada	5230	9.40	9.40
12		Bypass Route 16/Airport Road	Barrigada	5380-1	1.77	1.77

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Department of Public Works (cont'd)	Bypass Route 16/Land Exchange	Barrigada	162	5.04	2.61
2		Inarajan Village Bypass	Inarajan	8	13.2	13.2
3		Umatac Village Bypass	Umatac	269/Tract 3241	3.3/3.3	3.3/3.3
4		Merizo Village Bypass	Merizo	505	18.4	18.4
5		Solid Waste Transfer Station	Merizo	478	4.8	4.8
6		Highway Maintenance Satellite Station	Chalan Pago	3319	7.8	1
7		Satellite Bus Station	Barrigada	5382	2	2
8		Satellite Bus Station	Yigo	7054-1	2	2
9		Satellite Bus Station	Agat	480	2	2
10		Solid Waste Transfer Station	Yigo	7116-1-R2	13	4
11	Guam Contractors License Board	Office	Yofia	198	110.66	0
12	Guam Energy Office	Energy House	Mangilao	5412	98.7	2
13	Guam Museum Board	Museum	Agaña	2062 Part I	38	6

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Guam Territorial Library	Library	Dededo	10148	120.84	.3
2		Library	Barrigada	2323-2-R3	20.80	.3
3		Library	Chalan Pago	3318	12.9	.3
4		Library	Piti	189	17.95	.3
5		Library	Inarajan	380	138.8	.3
6	Department of Land Management	Veterans of Foreign Wars Memorial	Agat	266-1-1	2.72	2.72
7		Land Exchange for Lot No. 104-B11	Inarajan	131	4.42	2
8		Cultural Center	Agat	480	202.45	20
9		Cultural Center	Dededo	10120-R16	535.81	20
10		Land Exchange for Lots Nos. 189-1NEW-4 and 189-1NEW-R6	Agat	189-B-R2	.62	.62
11		Land Exchange for Lots Nos. 189-1NEW-4 and 189-1NEW-R6	Agat	189-B-1	.62	.62
12		Land Exchange for Lot No. 1266-2-REMNEWNEW	Agaña	1-1	.34	.06

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Department of Land Management (cont'd)	Land Exchange for Lot No. 268	Merizo	513	.61	.61
2		Land Exchange for Lot No. 5149-2-1	Dededo	5380-2	5	5
3		Land Exchange with Jose C. Lujan	Dededo	10119-10-1	3.4	3.4
4		Guam Veterans Memorial Center	Santa Rita	289	620	10
5		Senior Citizens Center	Chalan Pago	3318	12.9	4
6		Land Exchange	Dededo	10120-R16	535	70
7		Land Exchange Seashore	Inarajan	380	138.80	30
8		U.S. Postal Service (pursuant to Public Law 21-108)	Dededo	5, 6, and 7 Tract 107C	4.5	4.5
9		U.S. Postal Service (pursuant to Public Law 21-108)	Agat	480	202.45	4.5
10		UOG Post Office	Mangilao	2288-1-1-1	.23	.06
11		Temporary Post Office	Tamuning	5173 NEW-2-R1	6.33	.06
12		Southern Sports Complex	Agat	477	26.5	26.5

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Department of Agriculture	Conservation & Natural Preserve			3,449	0
2	Department of Parks and Recreation	Parks, Conservation & Natural Preserve			4,794	0
3		Speedway Park	Santa Rita	289	620	50
4	Guam Economic Development Authority	Hospital Point Development	Tamuning	5173-1-R2-NEW	53	0
5	Guam Airport Authority	Water Reservoir	Barrigada	5382	42.04	1
6	Guam Power Authority	Consolidate Operations	Mangilao	5412	98.7	15
7	Guam Telephone Authority	Motor pool	Chalan Pago	3319	7.8	1
8		Mt. Sasalaguan Cellular Repeater	Inarajan	508-1	.52	.52
9		Agat/Umatat/Merizo Cellular Repeater	Umatat	269	104.33	.23
10		Inarajan Cellular Repeater	Inarajan	323-REM	374.40	.23
11		Remote Switch	Barrigada	5402-R5	272.50	.25
12		Remote Switch	Dededo	10119-13NEW	1	.25
13		Remote Switch	Chalan Pago	3395-2NEW	1	.25

GOVERNMENT OF GUAM RESERVED LANDS LIST

	DEPARTMENT/AGENCY	PROPOSED FACILITY	VILLAGE	LOT NO.	TOTAL ACRES	COMMITTEE RESERVE
1	Mayors' Council				107	0
2	LEGISLATIVE BRANCH	Off-Site Parking Lot	Agaña	87-5-R1	14.5	4
3	EXECUTIVE BRANCH	Government of Guam Southern Public Service Center	Merizo	141-1	13	13
4	JUDICIARY BRANCH	Lower Court	Agat	480	202.45	2
5		Lower Court	Dededo	10119-11	4	2

**Attachment to Section 2(d) of Bill No. 483
PUBLIC UTILITY AGENCY OF GUAM
FUTURE LAND USE REQUIREMENTS**

	LAND USAGE	LOT NO.	DLM NO. OF ACRES	PUAG NO. OF ACRES	MUNICIPALITY/ VILLAGE
1	Well	3323-1	0.06	0.06	M10/Sinajaña
2	Well	10125-2	0.06	0.06	M05/Dededo
3	Well	10129-1	0.06	0.06	M05/Dededo
4	Well	10125-1-1	0.06	0.06	M05/Dededo
5	Well	10120-3	0.06	0.06	M05/Dededo
6	Well	10125-3	0.06	0.06	M05/Dededo
7	Well	10120-7	0.06	0.06	M05/Dededo
8	Well	7116-1-2-1	0.06	0.06	M13/Yigo
9	Well	10120-R16	0.06	0.06	M05/Dededo
10	Well	7116-3	0.06	0.06	M13/Yigo
11	Wells	7055	29.16	29.16	M13/Yigo
12	Well	10140-R1	0.06	0.06	M05/Dededo
13	Well	5380-R2	0.06	0.06	M04/Barrigada
14	Well	286	0.50	0.50	M09/Piti
15	Well	7116-1-1	0.56	0.56	M13/Yigo
16	Well	5369-1-7	0.06	0.06	M04/Barrigada
17	Well	10122-R18	0.50	0.50	M05/Dededo
18	Well	7116-5	0.06	0.06	M13/Yigo
19	Well	7116-1-2-R2	0.06	0.06	M13/Yigo
20	SUBTOTAL WELLS:		31.62	31.62	

SCHEDULE TO SECTION 9 OF BILL NO. 483

	LOT NO.	LOT NO.	LOT NO.
1.	88, Block 9	25. 3434 (partial taking)	49. 5 (Tract No. 198)
2.	88-1	26. 3390-2NEW-1	50. 6 (Tract No. 198)
3.	89	27. 3390-2NEW-2	51. 33 (Tract No. 198)
4.	90	28. 3390-2NEW-R2	52. 34 (Tract No. 198)
5.	91	29. 3390-1	53. 35 (Tract No. 198)
6.	92	30. 3284-R1	54. 36 (Tract No. 198)
7.	93	31. 3283 (partial taking)	55. 37 (Tract No. 198)
8.	94	32. 3282-1	56. 38 (Tract No. 198)
9.	94	33. 3282-2	57. 39 (Tract No. 198)
10.	95, Block 10	34. 3282-3	58. 450-R4 (partial taking)
11.	96, Block 10	35. 3282-4	
12.	97, Block 11	36. 3282-5	
13.	98	37. 3282-6	
14.	99	38. 3282-7	
15.	101	39. 3282-8	
16.	102	40. 3282-9	
17.	103	41. 3282-R10	
18.	104	42. 3282-10R/W	
19.	105, Block 11	43. 3280-2	
20.	107	44. 1 (Tract No. 198)	
21.	108	45. 2-1 (Tract No. 198)	
22.	109	46. R1 (Tract No. 198)	
23.	111-1	47. 3 (Tract No. 198)	
24.	3390-R2	48. 4 (Tract No. 198)	



CARL T.C. GUTIERREZ
GOVERNOR OF GUAM

SEP 30 1997

The Honorable Antonio R. Unpingco
Speaker
Twenty-Fourth Guam Legislature
Guam Legislature Temporary Building
155 Hesler Street
Agana, Guam 96910

Dear Speaker Unpingco:

Enclosed please find a copy of Bill No. 263 (COR), "AN ACT TO ADD A NEW §7109 AND §7109(a) TO CHAPTER 7, DIVISION 2 OF TITLE 17 OF THE GUAM CODE ANNOTATED, RELATIVE TO CAPACITY LIMITS ON NEW SCHOOLS.", which I have signed into law today as Public Law No. 24-73.

This legislation would limit the size of schools that are constructed in the future to sizes that would foster close relationships between students and between students and teachers, thus increasing personal attention to students and encouraging better performance.

Very truly yours,


Carl T. C. Gutierrez
Governor of Guam

Attachment

cc: The Honorable Joanne M. S. Brown
Legislative Secretary

Office of the Speaker
ANTONIO R. UNPINGCO
Date: 093097
Time: 1300
Rec'd by: [Signature]
Print Name: Charlene Deena

TWENTY-FOURTH GUAM LEGISLATURE
1997 (FIRST) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO THE GOVERNOR

This is to certify that Bill No. 263 (COR), "AN ACT TO ADD A NEW §7109 AND §7109(a) TO CHAPTER 7, DIVISION 2 OF TITLE 17 OF THE GUAM CODE ANNOTATED, RELATIVE TO CAPACITY LIMITS ON NEW SCHOOLS," was on the 12th day of September, 1997, duly and regularly passed.



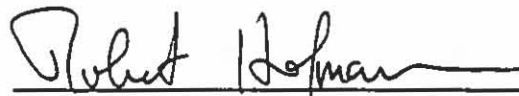
ANTHONY C. BLAZ
Acting Speaker

Attested:



JOANNE M.S. BROWN
Senator and Legislative Secretary

This Act was received by the Governor this 23rd day of September, 1997, at
11:30 o'clock A.M.



Assistant Staff Officer
Governor's Office

APPROVED:



CARL T. C. GUTIERREZ
Governor of Guam

Date: 9-30-97

Public Law No. 24-73

TWENTY-FOURTH GUAM LEGISLATURE
1997 (FIRST) Regular Session

Bill No. 263 (COR)
As amended on the Floor.

Introduced by:

L. F. Kasperbauer
J. C. Salas
F. B. Aguon, Jr.
J. M.S. Brown
E. J. Cruz
T. C. Ada
E. Barrett-Anderson
A. C. Blaz
Felix P. Camacho
Francisco P. Camacho
M. C. Charfauros
W. B.S.M. Flores
Mark Forbes
A. C. Lamorena, V
C. A. Leon Guerrero
L. Leon Guerrero
V. C. Pangelinan
A. L.G. Santos
F. E. Santos
A. R. Unpingco
J. Won Pat-Borja

AN ACT TO ADD A NEW §7109 AND §7109(a) TO
CHAPTER 7, DIVISION 2 OF TITLE 17 OF THE
GUAM CODE ANNOTATED, RELATIVE TO
CAPCITY LIMITS ON NEW SCHOOLS.

1 BE IT ENACTED BY THE PEOPLE OF THE TERRITORY OF GUAM:

1 **Section 1. Legislative Findings.** The Guam Legislature finds that the
2 quality of education diminishes as a school grows in size. Large schools are
3 more difficult to manage and students do not receive the attention necessary
4 for optimum academic achievement. The Guam Legislature further finds that
5 a larger number of smaller schools strategically located throughout the
6 community can better serve the educational needs of Guam's school children
7 through (1) greater personalized attention, (2) easier management of student
8 discipline, (3) greater flexibility in situations requiring parental involvement
9 and (4) a reduction of the layers of school administration within each school.

10 **Section 2.** Sections 7109 and 7109(a) are hereby added to Chapter 7,
11 Division 2 of Title 17 of the Guam Code Annotated to read as follows:

12 **"Section 7109. Limitations on Capacity Levels for the**
13 **Construction of New Public Schools.** All public schools built on Guam
14 shall be designed and constructed for student enrollment capacity limits
15 as follows:

- 16 (a) Elementary Schools: five hundred fifty (550) students,
17 (b) Middle Schools: seven hundred (700) students,
18 (c) High Schools: one thousand two hundred (1,200) students,
19 and

20 **Section 7109. (a) Effective Date.** The school capacity limitations
21 of §7109 of this Chapter shall apply only to school projects initiated after
22 the effective date of this Act."

DOE Ten Year Capital Facilities Plan

New Elementary School

Type	Size	Amount	Net SF
Classrooms	900	5	4500
Classrooms	1150	9	10350
Classrooms	1250	17	21250
Multipurpose	1250	6	7500
Special Ed	1400	1	1400
Special Ed	810	3	2430
Itinerant	330	1	330
Administrative	3600	1	3600
Faculty Center	840	2	1680
Cafetorium	5500	1	5500
Custodial	330	1	330
Library	6000	1	6000
Computer	900	1	900
Subtotal			65770
Staff and Visitor Parking	24,500 70 stalls		\$100,000
Play Area Grades 1-2	40,000		\$120,000
Kindergarten	5000		\$15,000
Play Area Grades 3-5	72,000		\$200,000
Subtotal	117,000		
Construction cost @ \$170 sq.ft.		\$11,180,900	\$11,615,900
Design @ 8 per cent			\$12,545,172

DOE Ten Year Capital Facilities Plan

New Middle School

	Size	Amount	Net SF	
General Classrooms	900	24	21600	
Science Classrooms	1600	6	9600	
Special Ed Resource	810	6	4860	
Special Classroom	900	3	2700	
Special Ed Contained	1850	1	1850	
Itinerant Special Ed	330	1	330	
Band	3580	1	3580	
Arts & Crafts	1920	1	1920	
Home Economics	1900	1	1900	
Industrial Arts Combin	3390	1	3390	
Choir Room	2200	1	2200	
Music Common areas	400	1	400	
Library/media center	7100	1	7100	
Administration center	5000	1	5000	
Cafetorium	6500	1	6500	
Kitchen	2800	1	2800	
Lab/Computer room	1800	1	1800	
Custodial	660	1	660	
Faculty Center	3500	1	3500	
Subtotal			81690	
Staff Parking (120 stal	42000	1	42000	
Visitor Parking (20)	7000	1	7000	
PE Locker Shower	6200	1		\$300,000
Volleyball courts		3		\$300,000
Basketball courts		3		\$300,000
Public restrooms				\$40,000
Restrooms				\$70,000
Field Equip storage				\$75,000
Softball Field				\$75,000
Construction cost			\$13,887,300	\$15,047,300
Design				\$16,251,084

Capital Improvement Projects

June, 1999

Prepared by Earth Tech

DOE Ten Year Capital Facilities Plan

New High School

	Size	Amount	Net SF	
Academy	900	37	33300	
Science	2120	3	6360	
Biology	1940	2	3880	
Language	900	5	4500	
Lab	890	1	890	
Art	2500	2	5000	
Band	3670	1	3670	
Choral	1770	1	1770	
Music common	670	1	670	
Special ed	810	8	6480	
Special ed self	1880	1	1880	
Itinerant	330	1	330	
Library Media	8600	1	8600	
Computer Resource	1800	1	1800	
Administrative	5800	1	5800	
Dining	7600	1	7600	
Kitchen	3400	1	3400	
Student Center			0	
Faculty	840	3	2520	
ROTC	1000	1	1000	
Maintenance	1000	1	1000	
Custodial	400	1	400	
Gym	17700	1	17700	
Locker/Shower	8600	1	8600	
PE Locker	6400	1	6400	
Football field faciliti	3200	1	3200	
Weight rooms	1200	1	1200	
PE Class	900	1	900	
Training room	900	1	900	
Concession stand	400	1	400	
Restrooms	400	1	400	
Athletic Office	350	1	350	
PE office	250	1	250	
Subtotal			141150	
Basketball courts		3		\$300,000
Tennis courts		4		\$400,000
Baseball field		1		\$100,000
Softball field		1		\$100,000
Combined football, track,socce		1		\$200,000
Staff Parking(170)	55000	1		\$200,000
Visitor Park (30)	10500	1		\$50,000
Student Park (400)	120000	1		\$450,000
Construction cost @\$170 per sq. ft.		\$	23,995,500	\$25,795,500
Design cost (8 per cent)				\$27,859,140
Contingency 15%			\$	32,038,011

Capital Improvement Projects

June, 1999

Prepared by Earth Tech

APPENDIX E



Modernizing America's Schools For The 21st Century

School modernization is urgently needed across the nation to accommodate increasing enrollments, to repair crumbling schools, to allow for smaller class sizes, and to ensure that all schools are accessible and well-equipped for the 21st century.

- ☐ Today, a record 52.7 million children are enrolled in elementary and secondary schools, and this number will climb to 54.3 million by 2008.
- ☐ The average public school in America is 42 years old, and school buildings begin rapid deterioration after 40 years, according to NCES data released in January. In addition, 30 percent of all public schools are in the "oldest condition" -- built before 1970 and never renovated or renovated before 1980.
- ☐ The oldest schools are also lagging behind other schools in the push to connect to the Internet. While almost 60 percent of schools built since 1985 were connected to the Internet in 1995, only 42 percent of schools in the oldest condition were connected to the Internet.

The President's FY2000 budget includes two proposals to help modernize America's schools:

☐ **\$25 BILLION IN BONDS FOR SCHOOL CONSTRUCTION**

This proposal provides Federal tax credits to pay the interest on nearly \$25 billion in bonds to build and renovate up to 6,000 public schools. Two types of bonds are being proposed: School Modernization Bonds (\$22.4 billion) and Qualified Zone Academy Bonds (\$2.4 billion). The tax credits on these bonds will cost the Treasury \$3.7 billion over 5 years.

School Modernization Bonds: \$22 billion in School Modernization Bonds would be available over two years (\$11 billion in 2000 and \$11 billion in 2001) for construction and renovation of public school facilities. Federal tax credits will pay the interest on these bonds. \$11 billion in bonds would be available to 100 school districts serving the largest number of low-income children. \$11 billion in bonds would be available to States. States will have the flexibility to distribute bonds to districts according to their own assessment of need across the State.

To qualify for the bonds, States and districts would submit to the Secretary of Education: (1) a new or recent study of the construction and repair needs in the jurisdiction, (2) a description of how the bond funds will be used for the purposes intended by this proposal; and, for States only, (3) a description of how highest

priority will be given to localities with greatest needs and how special consideration will be given to rural and high-growth areas.

Qualified Zone Academy Bonds (QZABs): Created in 1997, the QZAB statute provides tax credits to pay interest on bonds for a variety of educational expenses (including building renovation) related to public school-business partnerships in Empowerment Zones and low-income areas. The Administration's proposal would make available to States \$2.4 billion in QZABs (\$1 billion in 2000 and \$1.4 billion in 2001), and it would expand QZABs to cover new school construction.

New Native American School component: The Administration's proposal also includes \$400 million in School Modernization Bonds for Native American schools (\$200 million in 2000, \$200 million in 2001). The Secretary of Interior would make bonds available to tribal governments for construction and repair of BIA-funded schools.

□ \$10 MILLION TO DESIGN SCHOOLS AS CENTERS OF COMMUNITY

Involving teachers, parents, students and community groups in the planning and design of new schools can spark innovation and can produce multiple benefits such as financial savings through cost sharing and maximum use of the school facility as the center of community. This \$10 million proposal would provide competitive grants to support community partnerships with local school boards to encourage broader citizen engagement in developing a school system master plan or an individual school site space and design plan.

~~###~~

[Return to School Construction and Design]



Last Updated – April 3, 1999 (pjk)



Provide Tax Credits For Holders of Qualified School Modernization Bonds and Qualified Zone Academy Bonds

Current Law

Under current law, State and local governments fund public school construction by issuing bonds the interest on which generally is exempt from Federal income tax. In addition, State and local governments can issue "qualified zone academy bonds" to fund the improvement of certain eligible public schools. An eligible holder of a qualified zone academy bond receives annual Federal income tax credits. These annual credits compensate the holder for lending money and, therefore, are treated like taxable interest payments for Federal tax purposes. Eligible holders are banks, insurance companies, and corporations actively engaged in the business of lending money. The "credit rate" on a qualified zone academy bond is used to determine the amount of the annual tax credit and currently is set by regulations at 110 percent of the applicable federal rate (AFR) for the month in which the bond is issued. The maximum term of a qualified zone academy bond issued during any month is determined by reference to the "adjusted" AFR for the month in which the bond is issued.

A total of \$400 million of qualified zone academy bonds may be issued in each of 1998 and 1999. The annual cap is allocated among the States in proportion to their respective populations of individuals with incomes below the poverty line. Unused authority to issue qualified zone academy bonds may be carried forward to subsequent years.

There are a number of requirements that must be met for a bond to be treated as a qualified zone academy bond. First, the bond must be issued pursuant to an allocation of bond authority from the issuer's State educational agency. Second, at least 95 percent of the bond proceeds must be used for an eligible purpose at a qualified zone academy. Eligible purposes include renovating school facilities, acquiring equipment, developing course materials, or training teachers. A qualified zone academy is a public school (or an academic program within a public school) that is designed in cooperation with business and is either (1) located in an empowerment zone or enterprise community, or (2) attended by students at least 35 percent of whom are estimated to be eligible for free or reduced-cost lunches under the National School Lunch Act. Third, private business entities must have promised to contribute to the qualified zone academy certain property or services with a present value equal to at least 10 percent of the bond proceeds.

Reasons for Change

Aging school buildings, new educational technologies, growing enrollments, the need for smaller class sizes, and changing demographics have created a need to renovate older school buildings and to build new ones. Many school systems have insufficient fiscal capacity to finance needed renovation and new construction. The proposal would leverage Federal support to spur new State and local investment in public schools. Minor changes in the structure of qualified zone academy bonds will allow them to be marketed more easily.

Proposal

The proposal would authorize the issuance of two types of bonds; qualified school modernization bonds and qualified zone academy bonds. These bonds would be issued as "tax credit bonds," that is, they would provide the holder a Federal income tax credit in lieu of an interest payment. As described elsewhere, "Better America Bonds" are also proposed using the same tax credit bond format. The common features of tax credit bonds will speed the development of efficient primary and secondary markets for all three types of bonds.

Qualified school modernization bonds

State and local governments would be able to issue "qualified school modernization bonds" in the form of tax credit bonds to fund the construction, rehabilitation or repair of public schools. \$11 billion of qualified school modernization bonds would be allocated among States and certain school districts in each of 2000 and 2001. Half of this annual cap would be allocated among the 100 school districts with the largest number of children living in poverty and up to 25 additional school districts that the Secretary of Education determines are in particular need of assistance. The other half of the cap would be allocated among States and Puerto Rico. A small portion of the total cap would be set aside for each U.S. possession (other than Puerto Rico) based on its share of the total U.S. poverty population. In addition, \$200 million in each year would be allocated by the Secretary of the Interior for the construction, rehabilitation, and repair of the Bureau of Indian Affairs-funded elementary and secondary schools. The allocation among qualifying school districts and among States would be based on the amounts of federal assistance received under the Basic Grant Formula for Title I of the Elementary and Secondary Education Act of 1965. This assistance is based primarily upon the number of low-income children residing in the district, with an adjustment for differences in per-pupil expenditures. States could use any appropriate mechanism for distributing their allocation among school districts, not necessarily the Title I formula. Allocated amounts unissued in the year of allocation could be issued up until the end of the third following year. A qualifying school district could transfer any unused portion of its allocation to the State in which it is located at any time prior to that date.

Under the proposal, a bond would be treated as a qualified school modernization bond if three requirements are met. First, the Department of Education must approve the school modernization plan of the State or eligible school district. The plan must (1) demonstrate that a comprehensive survey has been undertaken of the construction and renovation needs in the jurisdiction, and

(2) describe how the jurisdiction will ensure that bond proceeds are used for the purposes of this proposal. Second, the issuing government must receive a bond allocation for a school modernization bond. Third, 95 percent or more of the bond proceeds must be used to construct, rehabilitate, or repair elementary and secondary public school facilities. Modernization plans for Bureau of Indian Affairs-funded schools would be approved by the Department of the Interior. The term construction includes land upon which a constructed school facility is located. Unlike qualified zone academy bonds, qualified school modernization bonds would not be conditioned on contributions from private businesses.

Qualified zone academy bonds.

The proposal would provide authority for \$1 billion in 2000 and \$1.4 billion in 2001 of qualified zone academy bonds. The list of permissible uses of proceeds of qualified zone academy bonds would be expanded to include school construction. In addition, the proposal would make several changes to the existing qualified zone academy bond statute applicable to bonds issued after the effective date to conform to the structure of tax credit bonds described below.

Rules applicable to tax credit bonds generally.

The holder of a tax credit bond would receive annual Federal income tax credits equal to the applicable credit rate multiplied by the amount held on its anniversary date. Because the annual credits compensate the holder for lending money, they would be treated as payments of interest for Federal income tax purposes and, accordingly, would be included in the holder's gross income. The credit rate would be set equal to a measure of the yield on outstanding corporate bonds, specified in Treasury regulations, for the business day prior to the date of issue. The maximum term of the bonds would be 15 years. Any taxpayer would be able to hold a tax credit bond and thereby claim the tax credit. Treasury would provide regulations regarding the treatment of credits that flow through from a mutual fund to the holder of mutual fund shares. Unused credits would not be carried backward but would be carried forward for 5 years. The proposal would grant regulatory authority to the Secretary to require information returns to be provided with respect to holders (including corporations) that are entitled to credits.

Under the proposal, at least 95 percent of the tax credit bond proceeds must be used for qualifying purposes. Any investment earnings (and earnings on those earnings) associated with unexpended proceeds during the three-year period following the date of issuance are treated as proceeds, i.e., they must also be used for qualifying purposes. As of the date of issue, issuers must reasonably expect that 95 percent of the proceeds will be expended for qualifying purposes within three years and that any property financed with bond proceeds will be used for a qualified purpose for at least a 15-year period after the date of issuance. During the three-year period, unexpended proceeds may only be invested in bank accounts or U.S. Treasury securities maturing in three years or less. Issuers must incur a binding obligation with a third party to expend at least 10 percent of the proceeds of the issue within 6 months of the issue date and allocate the bond sale proceeds to expenditures with due diligence. To the extent 95 percent of proceeds are not

expended by the end of the 3-year period for qualifying purposes, unexpended proceeds must be used to retire bonds within 90 days. If the issuer establishes a sinking fund to repay principal, sinking fund assets must be held in State and Local Government Securities (SLGS) issued by the Treasury. Property financed with the sale proceeds of qualified zone academy bonds or school modernization bonds must be owned by a State or local governmental unit or an agency thereof.

Bonds would cease to be qualified bonds and would accrue no further tax credits in the event that any of the tax-related requirements fail to be met. The issuer would be obligated to reimburse the Federal government (with interest) for any credits accruing three years prior to the date of non-compliance. If this obligation is not timely paid by the issuer, the Federal government has the right to recover the credit amount from the current holder of the bonds.

The proposal would be effective for bonds issued on or after January 1, 2000.

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[Return to School Construction and Design]



Last Updated -- March 23, 1999 (pjk)

Revised August 14, 1998

STATE OF FLORIDA STATE BOARD OF EDUCATION LOTTERY REVENUE BONDS

[Home](#)

Agency:

State Board of Education

Purpose:

The bonds are issued for the purpose of financing the cost of constructing, acquiring, remodeling, renovating and making major repairs to permanent classroom and other educational facilities in various school districts throughout the State of Florida. This financing program is expected to provide up to \$2.5 billion in financing for educational facilities for Florida public schools to relieve classroom overcrowding.

Security:

Pledged Revenues -

Lottery Historical Revenue

The bonds are payable from the first lottery revenues deposited into the Educational Enhancement Trust Fund in an amount currently limited to \$180 million in each fiscal year. Pursuant to Section 24.121(2), Florida Statutes, in each fiscal year at least 38% of the gross revenue from the sale of lottery tickets and other earned revenue excluding application processing fees (fees paid by lottery ticket retailers), is required to be deposited into the Educational Enhancement Trust Fund.

Lottery Distribution

Debt Service Coverage

Debt Service Reserve Fund -

Estimated Lottery Revenues

The bonds are also secured by a reserve account in an amount equal to the maximum annual debt service on the bonds. The reserve account is funded with a debt service reserve account surety bond.

National Statistics

Lien Status -

The bonds will have a first lien on the pledged lottery revenues.

Additional Bonds Test -

Additional bonds may be issued if the lottery revenues available to pay debt service exceed 300% of the maximum annual debt service for all bonds then outstanding and the additional bonds proposed to be issued.

Frequency:

Lottery Revenue Bonds are expected to be issued quarterly over the next 3-5 years based on anticipated cash flow needs

to fund construction.

Bond Ratings:	Moody's	A3
	Standard & Poor's	A+
<u>Rating Considerations</u>	Fitch IBCA	A

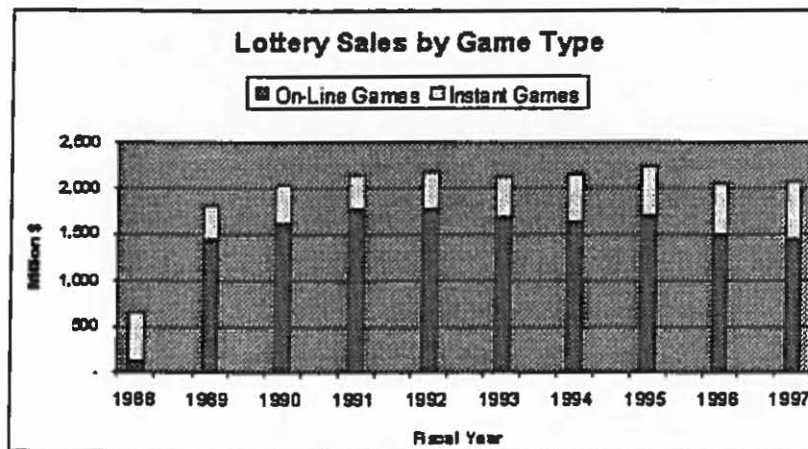
Home

State of Florida Lottery Revenue Bonds

Lottery Historical Revenue

Revenue Base

Lottery revenues have been generated through a variety of games, providing diversity to the revenue base which promotes the stability of total lottery revenue. Current lottery games are a mix of instant and on-line games. The Florida Lotto is the leading revenue producing game, accounting for 54% of on-line sales and 39% of combined sales in fiscal year 1997. The Department of Lottery has placed increased emphasis on instant ticket sales as a means to generate revenue growth, introducing 33 games in 1997 alone. Lottery revenues have exceeded \$2 billion for eight consecutive years with very little fluctuation under various economic conditions.



Home

Revised August 26, 1998

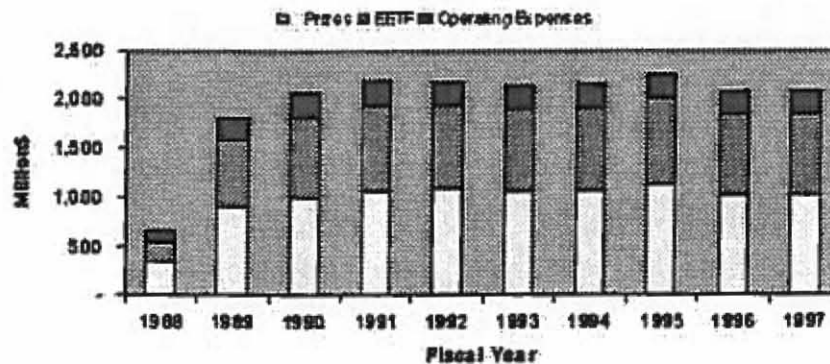
State of Florida

Lottery Revenue Statutory Required Distribution

(In Millions)

		38% Educational		Total
Fiscal	50%	Enhancement	12%	Lottery
Year	Prizes	Trust Fund	Operations	Revenue
1988	\$330.7	\$231.5	\$91.7	\$653.9
1989	899.7	693.8	208.3	1,801.9
1990	1,014.3	806.8	238.0	2,059.0
1991	1,061.0	876.6	250.3	2,188.0
1992	1,091.4	845.3	237.5	2,174.2
1993	1,056.4	850.1	237.7	2,144.1
1994	1,071.1	851.0	241.8	2,163.9
1995	1,128.4	870.4	250.1	2,248.8
1996	1,023.8	817.9	235.2	2,076.8
1997	1,027.5	818.4	240.2	2,086.1

Source: Department of the Lottery

Distribution of Florida Lottery Revenues:
Last Ten Years



Prepared for the
Department of Education
Project No. DOE RFP-002-97

**A REVIEW OF THE
GUAM DEPARTMENT OF EDUCATION
RESERVED SCHOOL PROPERTIES
FOR THE
TEN YEAR CAPITAL FACILITIES PLAN**

MARCH, 1999



A **tyco** INTERNATIONAL LTD. COMPANY

790 South Marine Drive, Suite 2 Tamuning, Guam 96911

Table of Content

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II. FACTORS THAT AFFECT SITE PLANNING	3
III. ASSESSMENT OF THE RESERVED SCHOOL PROPERTIES	5
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A REVIEW OF THE GUAM DEPARTMENT OF EDUCATION RESERVED SCHOOL PROPERTIES

EXECUTIVE SUMMARY

Site selection and site development patterns are important aspects to the overall success of an educational facility. With large capital investment at stake, it pays to have site selection criteria and site development guidelines for each type of school facility (elementary, middle and high school). As part of the Ten Year Capital Facilities Plan, site selection criteria for future school facilities were established.

DOE has eight parcels of land that have been earmarked for future school sites. In this report, we will review the properties in reserve vis a vis the established site development standards to determine whether these sites are suitable for development.

Based on our review, there are only three parcels of land under the reserve list that are suitable sites to develop new schools. They are: Dededo Lot 10122-R18, Asan Lot No. 462 and Lot Marbo Base Command "B"- 4. These sites are located in areas where growth is occurring close to the target school population it will serve. Lot 10122-R18 Dededo is located in the center of a Chamorro Land Trust Commission's large residential tract where over 1,800 new residents are expected to live in the near future. Nearby, additional private and government housing subdivisions are under construction. Lot Marbo Base Command "B" - 4 is located away from the main village centers of Yigo and Dededo with a middle and high school nearby to the lot. However, the property is suitable for development, has good access and infrastructure is available on site. The Government of Guam has invested time and money for architectural drawings and construction documents for a new elementary school in the Asan Lot No. 462. The site layout and site planning for the Asan school reflects good design practices and generally conforms to the Ten Year Capital Facilities Plan for an elementary site layout.

Lot 3470 - Chalan Pago, Lot 380 - Inarajan, Lot 523- Merizo, Lot 480 - Agat, and Lot 3463 - Agana Heights have limited or no access to each site. Permanent roads will need to be constructed to reach each site. There is no infrastructure to the sites. Power, water, and telephone services will have to be brought in which may extend for several miles to each site. The costs to bring in the infrastructure may be cost prohibitive. In addition, there are environmental constraints that will affect the costs of development such as wetland mitigation, grading and excavation costs and environment mitigation measures. These properties are located away from the population centers and students will have to be bused in. Based on these factors, these five sites are not suitable for development.

Reserved School Property Summary Sheet
Prepared for Guam Department of Education

Reserved Lots		Site Selection Factors				
Lot Number	Location	Size Minimum/Maximum	Proximity to Population	Main Access	Interior Roads	Adjacent Land Use
462	Asan	76,890 sq.meters or 19.2 acres	Nearby	Across War in Pacific Route 1	none	Residential/Park
480	Agat	35 acres of 202.45 total acres	Outside the area	Off Route 3 Oceanside Agat	none	Agric/Open/Public Use
525	Merizo	35 acres of 828.71 total acre	Outside the area	No access, unsurveyed property	none	Agric/Open/Public Use
380	Inarajan	35 arces of 138.8 total acres	Outside the area	Limited undeveloped dirt road	none	Open/Undeveloped
3470	Chalan Pago	35 acres of 117.94 total acres	Outside the area	Limited undeveloped dirt road	none	Residential/Open
3463	Agana Heights	38.83 acres	Outside the area	Limited undeveloped dirt road	none	Open Undeveloped
10122-18	Dededo	20.02 acres of a larger lot	Nearby	Limited undeveloped dirt road	Yseng song	Residential/Undeveloped Open
Marbo Base Command B-4	Yigo	80 acres	Nearby	Access off Marine Drive Yigo Fire Station	Infrastructure Access Road	Residential/Undeveloped Open

Reserved Lots		Site Selection Factors (continued)				
Lot Number	Location	Compatibility with Surroundings	Landscaping Buffers	Quiet	Available Utilities: Water/ Sewer/ Power/ Telephone	Topography: Flat/ Steep Slope
Lot No. 462	Asan	Yes	Yes	Yes	Utilities accessible	Flat
Lot No. 480	Agat	Undeveloped	Open	Yes	None	Hilly/Slope
Lot No. 525	Merizo	Undeveloped	Open	Yes	None	On Mountaintop
Lot No. 380	Inarajan	Undeveloped	Open	Yes	None	Steep/Slope/Ravines
Lot No.3470	Chalan Pago	Undeveloped	Open	Yes	None	Steep/Slope/Ravines
Lot No. 3463	Agana Heights	Undeveloped	Open	Yes	None	Steep/Slope/Ravines
Lot No.10122-18	Dededo	Yes	Yes	Yes	Utilities accessible	Flat
Lot Marbo Base Command B-4	Yigo	Yes	Yes	Yes	Utilities accessible	Flat

I. INTRODUCTION

Under Public Law 22-18: An Act to Reserve Government Real Estate Property for Future Use by the Three Branches of Government, the Guam Department of Education identified and reserved six properties for future school uses. They are: Lot 10122-R18 - Dededo, Lot 3470 - Chalan Pago, Lot 380 - Inarajan, Lot 523 - Merizo, Lot 480 - Agat, and Lot 3463 - Agana Heights. In addition to these parcels, two former military properties have been added to the reserved for school use list. Lot Marbo Base Command "B" - 4 in Yigo was transferred to the Government of Guam in 1992 and the Asan Lot No. 462 has a twenty-five year lease expiring in December 1999. These properties were designated as reserve for future school sites by the Government of Guam in an effort to comply with requirements of the law without determining the suitability of these properties for future schools. This report, part of the Ten Year Capital Facilities Plan, will determine the suitability of each lot as a potential new school site.

Site selection and site development patterns are important aspects to the overall success of an educational facility. With large capital investment at stake, it pays to have site selection criteria and site development guidelines for each type of school facility. The Ten Year Capital Facilities Plan Conceptual Layouts and Site Selection Report included site selection standards for future school facilities. Each individual parcel is assessed vis a vis the established site development standards to determine whether the reserved properties for new schools meet the established standards.

II. FACTORS THAT AFFECT SITE PLANNING

Whether a school facility will be used as an elementary, middle, or high school, various key factors affect it. The following is a brief summary of the factors affecting site planning.

Location:

A school site should be located near the population it serves, with proximity most important for elementary schools. Schools located near target populations make family participation in school activities easier and reduce transportation costs. If the proposed school site is adjacent to other public uses, then some of the school facilities can be used off-hours for other purposes. Examples include the parking lot, dining hall, auditorium, and athletic fields or playgrounds.

Access:

The size, location, condition and traffic levels of existing roadways or bus routes that service a particular site affect the school's layout and operations. Nearby traffic or noise may produce safety hazards or an undesirable environment for teaching. Elementary and middle schools, in particular, should have adequate road access but should not be located off or near major highways. Pedestrian access is also important. If local walkways

connect to the school's entry area and interior walkways, then students/parents can more easily walk to/from school.

Adjacent Land Use:

Schools should be compatible with surrounding uses. School traffic or outdoor activities can negatively impact dense residential neighborhoods. This is less a problem with elementary or middle schools than it is with high schools. If a high school is located next to a residential area, then it is important to locate a buffer area along that boundary in order to maintain privacy and reduce noise for local residents. Adjacent land use should also be compatible with educational needs. Avoid sites with adjacent uses that produce high levels of noise, traffic, or pollution. Most residential development, small scale commercial activity, public uses, and natural preserves are compatible neighbors.

Size of the Site:

The minimum site for elementary schools is 10 to 12 acres; for middle schools 15 to 18 acres; for high schools 30 to 45 acres. Sites at the low end of the range require two or more story structures. If a site contains steep land, natural vegetation to be retained, or areas difficult to develop for physical constraints, a large site is needed. In less developed areas, it may be necessary to control storm drainage by installing detention basins; this also increases land requirements. Large sites can be developed as a park/school combination. If so, include facilities used for other purposes. Finally, it is important that the site accommodate activities that require large areas: (1) athletic facilities and outdoor play areas; (2) off-street loading requirements, particularly student drop off/pickup areas, and (3) off-street parking.

Topography:

Nearly flat or mildly rolling land is easier to develop than a site with steep slopes. A minimum slope of 1 to 2% is required for good site drainage, and a slope of 2% to 5% provides good drainage and maximum development flexibility. Land with 10% slope can be graded for athletic fields and school facilities, but extensive grading affects costs and increases land requirements. Conversely, a site with slope variations and natural vegetation is more attractive than a nearly flat site.

Site Development Costs:

Steep topography and underdeveloped services (roads, utilities) increase site development costs. Depending on the services required, site development costs could vary from 8% to 12% of the entire building construction cost excluding land. If a schools site is small, and also has steep slopes, extensive grading and retaining wall construction will increase development costs. A small site also requires multi-story structures that may need elevators for ADA (American Disability Act) compliance and sprinkler systems for K-2 classrooms located above the ground floor.

Utilities:

Construction costs will be less if water, electrical power and storm/sanitary sewer lines are available near the school site. Check to determine if the line capacity is adequate to meet school needs. If on-site treatment fields for wastewater must be provided without cesspools, then more land is needed for leaching fields.

Soil Types:

Unless soil types are known, it is wise to take test borings to determine whether existing soils will drain properly or support building loads. Problem soils limit available building sites and produce additional excavation or other costs for a school construction project.

III. ASSESSMENT OF THE RESERVED SCHOOL PROPERTIES

Asan Lot No. 462

The total size of this lot is 76,890 square meters (19.2 acres). It is located directly across Route 1 from the War in the Pacific National Historical Park at Asan Point. The lot is part of a larger parcel under the jurisdiction of the Naval Government. A portion of the lot was set aside in 1974 for the construction of an elementary school. The Navy used the property for the Asan Naval Hospital Annex, a rifle firing range, a bowling alley, mess hall and barracks. A fuel tank farm once occupied a portion of the larger parcel. The Department of Education under the Government of Guam has a twenty-five year lease which expires December 14, 1999. DOE will need to extend the lease before it expires in 1999.

Site Conditions

The property is generally flat with some low lying areas or pockets of marsh or wetland vegetation toward the rear of the property where the surrounding hills transition to the flatter coastal strand. Part of the lot was used for the staging of debris after Typhoon Paka. Some of the debris is still strewn across the property. The balance of the property is covered with vegetation.

An Environmental Assessment completed in 1995 indicated that pedestrian surveys and subsurface trenching efforts designed to assess cultural, historic and biological features, did not yield evidence of hazardous waste material. However, as a precaution, a Phase I Hazardous Materials Assessment is recommended to develop an accurate understanding of the environmental condition of the property and the presence or absence of hazardous materials.

Surrounding Uses

Lot 462 is defined by Marine Drive Route 1, Guam Water Works' water pump station and the War in Pacific National Park to the north. Private parcels with residential units lie to the east, and the undeveloped slopes of the Asan cliff line and Nimitz Hill are to the

south. The remains of what is referred to as Asan Point Housing and the former Asan Tank Farm, still under Navy jurisdiction, are located to the west.

Development Studies

The Department of Public Works hired the firm of Martin Cristobal Laguana (MCL) to perform site planning and architectural drawings for an elementary school. The design and construction documents for which were completed in 1996. Due to the lack of funds, the school has yet to be built. We reviewed the architectural/construction documents, and found that MCL developed a site layout for an elementary school that will support a successful educational facility. The school layout meets the proposed Ten Year Capital Facilities Plan for conceptual layout alternatives for elementary schools.

Site Planning

There are many positive features that support the development of this site. The Asan property totals 19 acres, more than ample for the land requirements of an elementary school (minimum of 10-12 acres). It has a generally flat topography and good access from the main road off Route 1. The lot is undeveloped and is situated in the village of Asan. There is a large open park across the main highway. Utilities are found adjacent to the site and can be brought into the property at relatively low cost.

There are, however, several environmental features that will need potentially increase the development costs for this site. Wetlands are found in the site and a mitigation plan must be implemented. Past land uses require a Phase I Hazardous Material Assessment mitigation plan. Storm water drainage and coastal zone flooding are other environmental issues that must be addressed before construction.

Agat Lot No. 480

A total of twenty-five (25) acres have been set aside for the development of a school facility in southern Agat. The property is located on the ocean side of Route 2 across from the Guam Waterworks Authority water storage tank in Agat. It is about a half mile south of the Santa Ana Chapel and is reserved by the Government of Guam for DOE's use.

Site Conditions

We were not able to get access to the property to perform a comprehensive review of the lot. The property is part of an undulating hillside overlooking the Seventh Day Adventist Radio Tower network in the Taelayag area. Mountains and deep valleys surround the property. There are rivers and wetlands in the area. We did observe volcanic badlands with mounds and gullies formed through storm water erosion. Natural vegetation covers most of the landscape with the exception of those eroded areas.

Surrounding Land Uses

A solid waste transfer station operates at a higher elevation and south of the DOE site. The transfer station is incompatible to a school site. Across from the site is a newly installed GWA water storage tank. Down the slope and toward the ocean is a radio antenna station. The rest of the area is sparsely developed with single family homes in a rural density pattern. There were a couple of homes lining the access to the property that are occupied by squatters, according to a DOE official.

The property is located away from the village centers of the south and students will have to be bused in, at considerable transportation cost. The site will cost more to develop due to steep hilly slopes, poor soil conditions and drainage problems. Any wetlands destroyed will require a mitigation plan that will address the replacement of the wetlands. Extensive environmental approvals, i.e., from the Army Corps of Engineers and the local and federal Environmental Protection Agency, are needed prior to building off-site infrastructure improvements including roads and utilities. The costs to bring the infrastructure into the property will increase the total construction budget. Engineering design and on-site development costs will also be much higher due to steep slopes and poor soil conditions.

This lot will be too costly to develop and at this time we recommend that DOE not include this site for future development.

Merizo Lot No. 525

A total of 35 acres have been reserved for a future school within Lot No. 525 in the village of Merizo. A property map was not available at the time of the inspection; however, a DOE official was able to point out the general location of the property during the site visit. The property is part of a much larger parcel located on the slopes of the southern mountains above the Manell - Jaotan Point area.

Site Conditions

There is no access to the site. Observations made at a distance revealed an undeveloped hill side area. The terrain undulates and is covered with the natural vegetation commonly found atop underlying volcanic soil. Ravines and steep slopes are present in different locations throughout the southern mountain slopes. Rivers and wetlands are found in the surrounding area.

Surrounding Uses

The surrounding area is largely undeveloped except for some small farmlands. Merizo is made up homes in the village nestled along the coastline where flatter areas offer more suitable building conditions and available utilities.

The property has no access and a permanent roadway must be built to reach the site. There is no infrastructure servicing the area. Power, water, and telephone services will have to be brought in which may extend for several miles inland to reach the site. Based on the infrastructure alone, the cost will be prohibitive. In addition, there are environmental constraints that will affect the costs of development such as wetland mitigation, grading and excavation costs and environmental mitigation measures. The property is located away from the population centers and students will have to be bused in. Based on these factors, the site is unsuitable for development.

Inarajan Lot No. 380

The reserved school site is in the village of Inarajan located behind the existing Inarajan Middle School. The site comprises a portion of Lot No. 354-R4 measuring a total of 35 acres dedicated for a school use. Access to the site is limited to a dirt road that is passable only by four wheeled drive vehicles or by walking. This property is part of a 138 acres parcel identified for other government use and includes a long term care facility, and a public library.

Site Conditions

The site is currently undeveloped. The Laolao River runs through a portion of the property and much of the area is characterized by steep slopes, ravines, and natural features found in the interior undeveloped portions of southern Guam. Rivers and wetlands are found in the interior lands.

Surrounding Uses

Except for the middle school and a few single family residential units, the surrounding area is rural and undeveloped.

The property is located away from the village centers of the south and students will have to be bused in, at higher transportation costs. The site will cost more to develop due to steep hilly slopes, poor soil conditions and drainage problems. Any wetlands destroyed will require mitigation effort. Extensive environmental permitting approvals to include the Army Corps of Engineers and the local and federal Environmental Protection Agency are necessary for infrastructure improvements including roads and utilities. All in all, development costs will be high due to the steep topography and lack of infrastructure. For these reasons, DOE should not consider this property as a potential site for future schools.

Chalan Pago Lot No. 3470

Thirty-five acres of land has been reserved in Chalan Pago for the construction of a new school. The parcel is an unsurveyed portion of basic Lot No. 3470 which contains a total

of 117.9 acres. This large property borders the Asina River which runs along a ravine behind the Chalan Pago Community Center and the Jose U. Atoigue Ball Park.

Minimal access to the property is via Santa Cruz Drive from Route 4, proceeding southwest along a dirt road to the end of Chilenko Street. Several family homesteads are found along the dirt road and in the large property.

Site Conditions

The property is located deep in the hill side and valley of an undeveloped large tract. The tract appears to be comprised of steep slopes, ravine forest vegetation and undulating hills. Since not all of the property was visible to the assessment team, the area may be varied with rolling hills and valleys and wetlands.

Surrounding Uses

The property is bordered by residential development to the east. To the north there is light density residential and undeveloped areas. South of the property there is more undeveloped government land and to the west is undeveloped inland mountains with the Leo Palace access road in the distance.

This tract of land has been dedicated for other government uses including an Acute Care Hospital, Adult Residential Treatment Facility, Children's Residential Treatment Facility, Homeless Shelter, Children's Foster Home and a Public Health Facility. Plans to develop the property have been dropped by the Department of Mental Health and Social Services and the Guam Housing and Urban Renewal Agency due to the prohibitive development costs associated to bring in the infrastructure, roads, and environmental mitigation efforts. Similarly, these costs will have to be borne by DOE if it plans to develop these properties for a school. The property is not suitable for development due to high cost to develop on and off site infrastructure.

Agana Heights Lot. No.3463

Lot No. 3463 has been reserved in the village of Agana Heights for the development of a high school. Some 38.83 acres have been allocated to DOE out of a basic lot (Lot No. 3463) encompassing 157,134 square meters (39 acres). This property is located on a hill side behind Agana Heights in an area known as Paasan. North of the site is the Fonte River Valley. West of the site is Mount Macajna. A tower 34 KV power line easement bisects the northern portion of Lot No. 3463. The closest access to the site can be obtained through Chalan Macajna and a series of smaller streets.

Site Conditions

The proposed site is part of a hillside surrounded by rolling hills and valleys. The property appears to be covered by sword grass and other areas have erosion scars which expose volcanic soils. There is no access to the site.

Surrounding Uses

The site itself and much of the surrounding area is undeveloped and there is no infrastructure. Adjacent to the site are high voltage electrical lines and radio towers, located on the hilltop above and west of the site.

The site is not suitable for development and is far away from the village center and targeted population. The disadvantages of this site include difficult access and environmental constraints that will require major mitigation efforts and extensive permitting approval with local and federal agencies. Excavating and grading to bring in the infrastructure will also be cost prohibitive.

Dededo Lot No. 10122-18

A total of 70 acres have been reserved for two new schools in the village of Dededo. Lot No. 10122-18 is within a larger lot, Lot No. 10122-R18. These parcels are located north of the Guam International Country Club (Municipal Golf Course) and northeast of the government coral pit on Y-Sengsong Street. A 12 foot wide dirt access road ties the school site to Y-Sengsong Street. A property map indicates that a 50 foot easement has been reserved along the same alignment for future expansion. Bartolu Street frames the southern border of the basic lot.

Site Conditions

The site is mostly flat and is generally favorable for development. The area is rural, primarily farming activities and low density residential uses. This tract of land is slated for residential development under the Chamorro Land Trust Program. Efforts are underway to lease these lots to qualified Chamorros for residential and agricultural activities.

Surrounding Uses

Residential development around the property is more rural in flavor with many wood framed houses. The village of Dededo lies 2,000 feet to the south along Y-Sengsong Street. Dededo is the most populated village on Guam (almost half of the island's population live in the northern villages of Dededo, Yigo and Tamuning). New schools are needed to accommodate the population growth. The potential development of the Chamorro Land Trust properties will bring in new residents to the village of Dededo.

This lot is located in the area that will serve the growth expected to occur. There are many positive advantages of this property, especially its location. The surrounding neighborhood will attend this school site. The recently constructed Astumbo Elementary service the K-5 student population for the area. Accessibility to the site, a fairly flat topography and a large tract of land make this site a good potential for development.

Yigo Marbo Base Command B-4

Approximately eighty (80) acres have been reserved within the Marbo Base Command or "Andersen South" area of Yigo. The property is designated Lot Marbo Base Command "B"- 4 and is located at the entrance to the base across from the Yigo Fire Station. The lot is approximately two hundred (200) feet from Marine Drive which would serve as convenient access.

Site Conditions

The parcel is generally flat. Vegetation is comprised of tangantangan and other scrub material which typically flourishes in previously disturbed areas. Since the area is within a former military facility, there may be some environment-related survey and compliance requirements before actual development can begin. The site otherwise appears to be well suited for development.

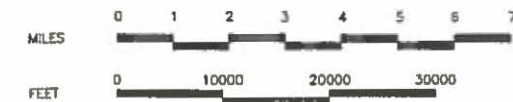
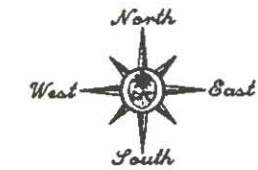
Surrounding Uses

Much of the area on the south side of Marine drive and within the military facility is currently undeveloped. North of Marine Drive, however, has some single family homes and commercial developed mixed together. Approximately a mile north is F.B. Leon Guererro Middle School and Simon Sanchez High School. GWA is constructing well sites in the property and will bring in water, and power service to accommodate the school.

The site is fairly close to two existing schools and may not currently warrant a new school to service the population in this area. However, the population projection indicates that the northern district will continue to grow and new schools will be needed to accommodate that growth.

The property could house a shared middle and high school facility. The acreage provides for that. The topography is fairly flat and is developable. Utilities will be brought in to the site by GWA. There is a sewer line located along Marine Drive Route 1 with a current capacity to meet the requirements of the school.

G U A M



LEGEND:

VILLAGE

- AGANA
- AGANA HEIGHTS
- AGAT
- ASAN-MAINA
- BARRIGADA
- CHALAN PAGO-ORDOT
- DEDEDO
- INARAJAN
- MANGILAO
- MERIZO
- MONGMONG-TOTO-MAITE
- PITI
- SANTA RITA
- SINAJANA
- TALOFOFO
- TAMUNING
- UMATAC
- YIGO
- YONA

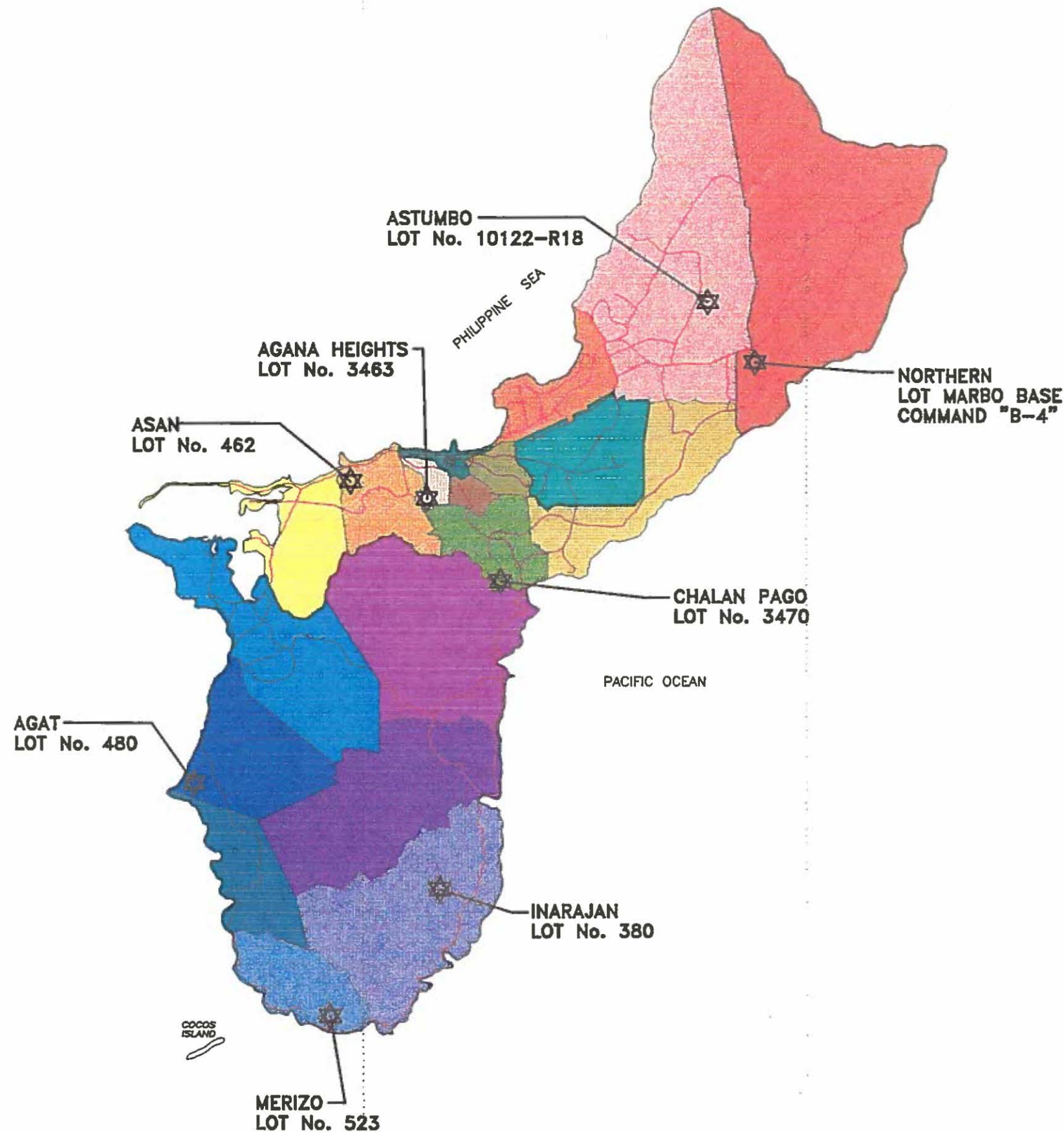


FIGURE 1

GUAM PUBLIC SCHOOLS SYSTEM

SOURCE: DEPARTMENT OF EDUCATION
DPW - DIVISION OF HIGHWAYS MAP - 1993 UPDATE

TEN YEAR CAPITAL FACILITIES PLAN

SCALE: AS SHOWN

A REVIEW OF DOE RESERVED SCHOOL PROPERTIES

ET PROJECT NO. 25381.01

PREPARED BY: ARA

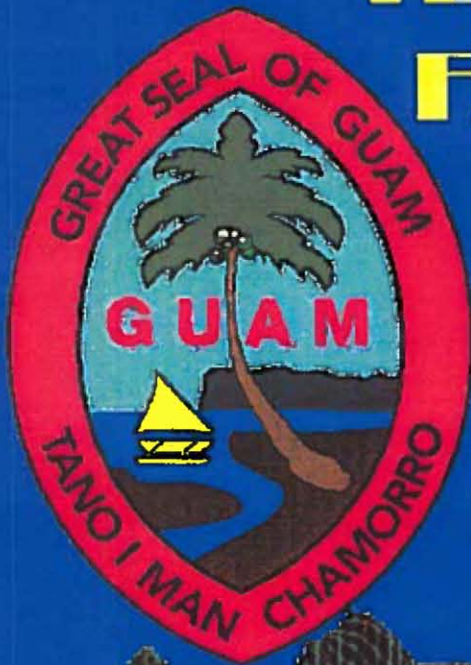
CHECKED BY: CAI

DATE: MARCH 1999

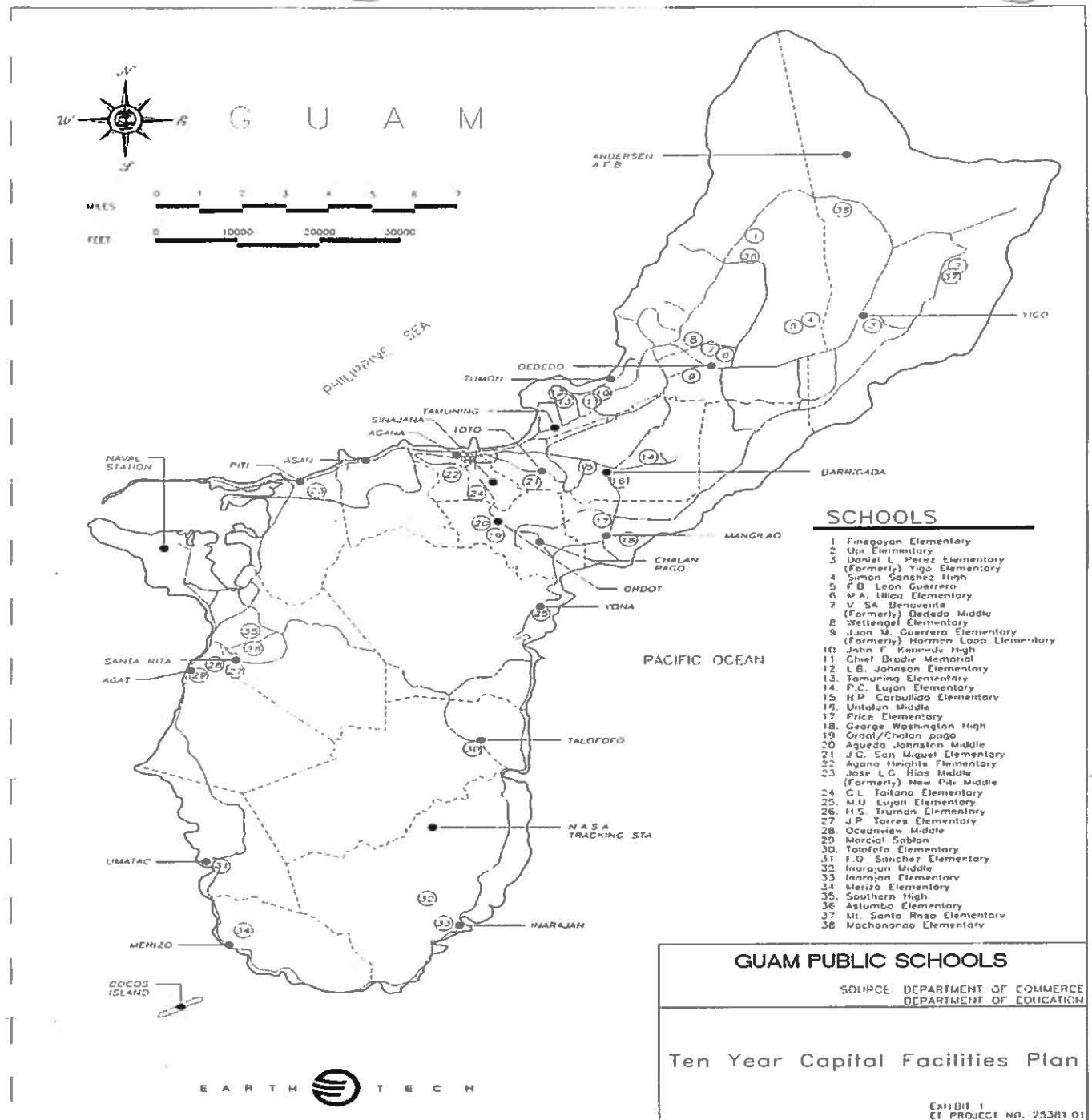
EARTH  TECH

790 SOUTH MARINE DRIVE
TAMUNING, GUAM 96931
PHONE: (671) 647-6083-5 FAX: (671) 647-6086

DEPARTMENT OF EDUCATION TEN YEAR CAPITAL FACILITIES PLAN



Existing Education Sites DOE



FUTURE EDUCATION SITES

Lot 462, Opop, Asan

Lot 480, Talaifak, Agat

Lot 523, Merizo

Lot 380, Inarajan

Lot 3470, Ordot-Chalan Pago

Lot 3463, Pa'asan, Agana Heights (Pa'asan)

Lot 10122-R18, Isengsong, Dededo

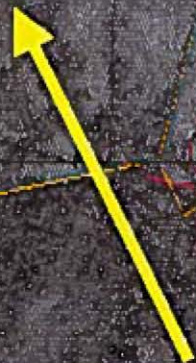
AAFB-South, Yigo



War In the Pacific
Memorial Park

Lot 462

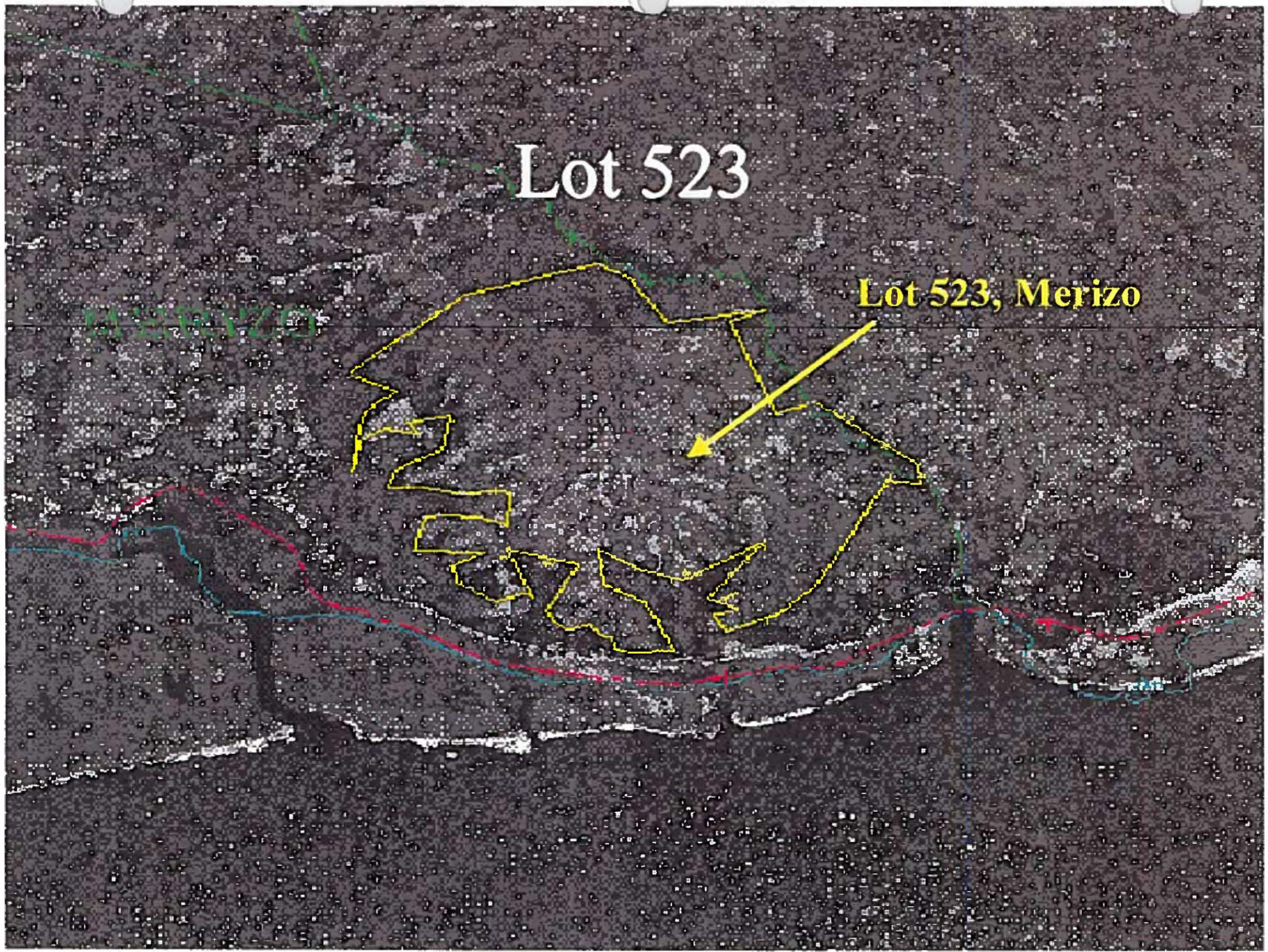
Lot 462, Asan



Lot 523

Lot 523, Merizo

MERIZO

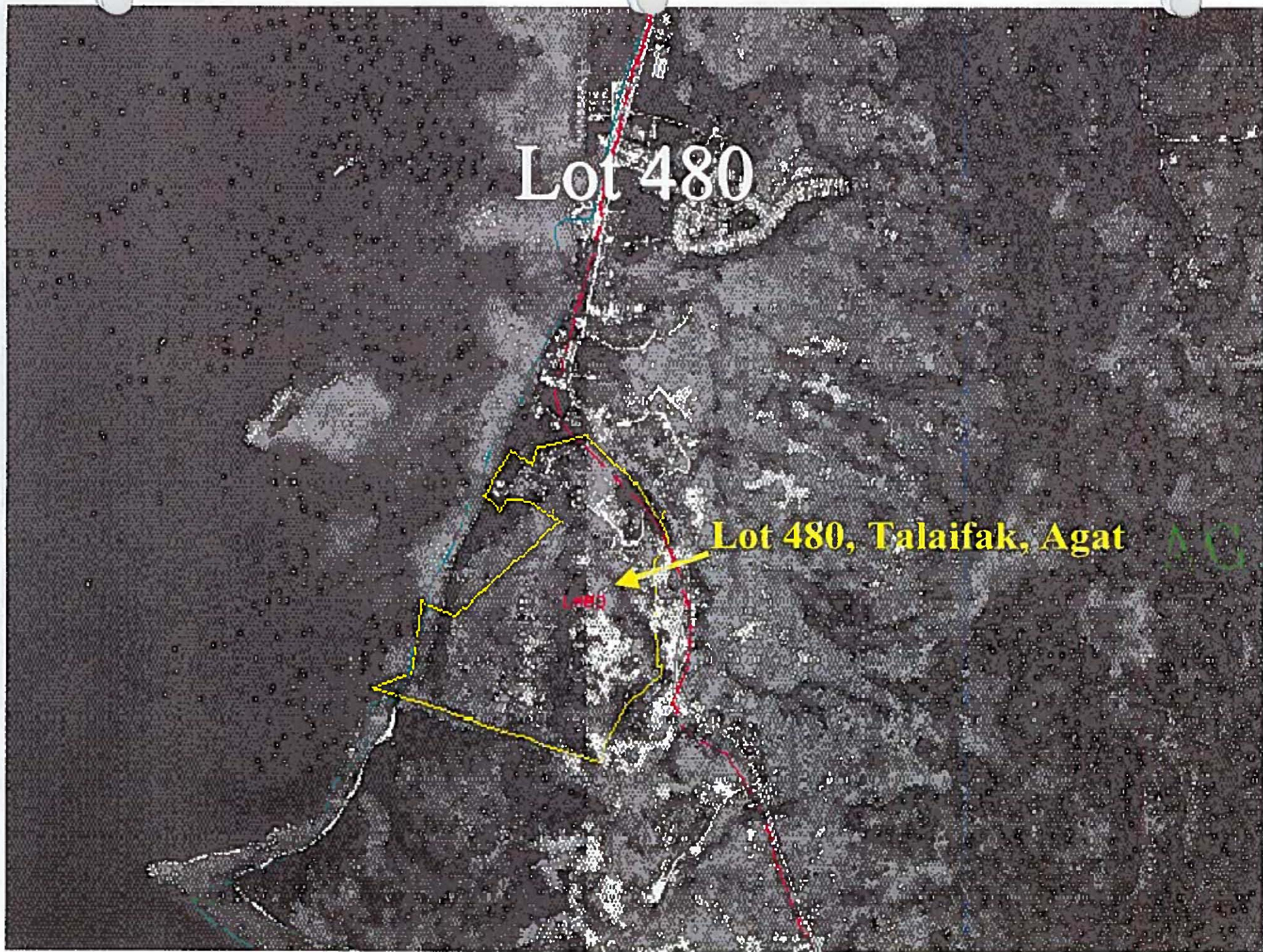


Lot 480

Lot 480, Talaifak, Agat

Lot 480

AG



Lot 380

Lot 380, Inarajan



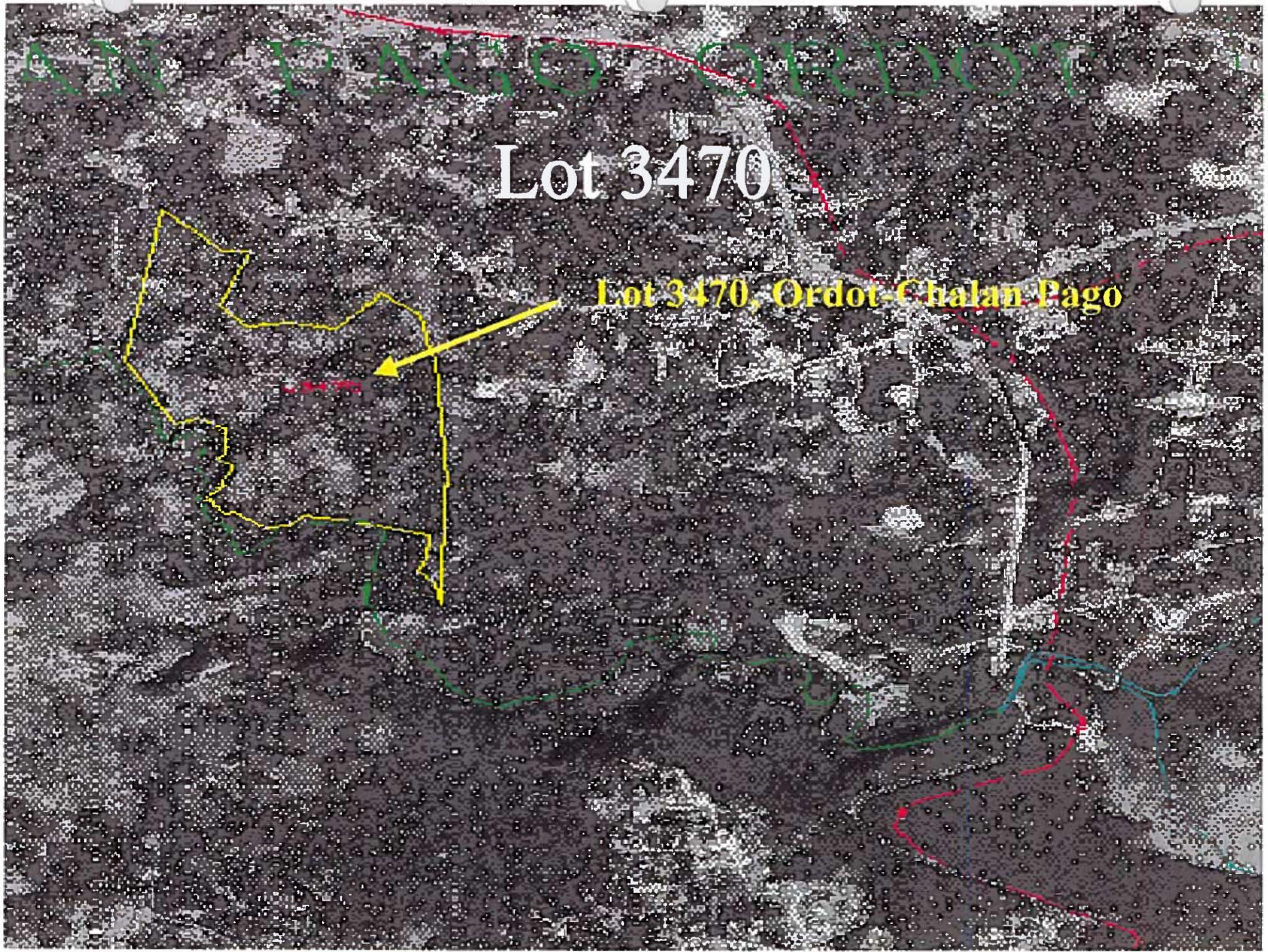
INARAJAN

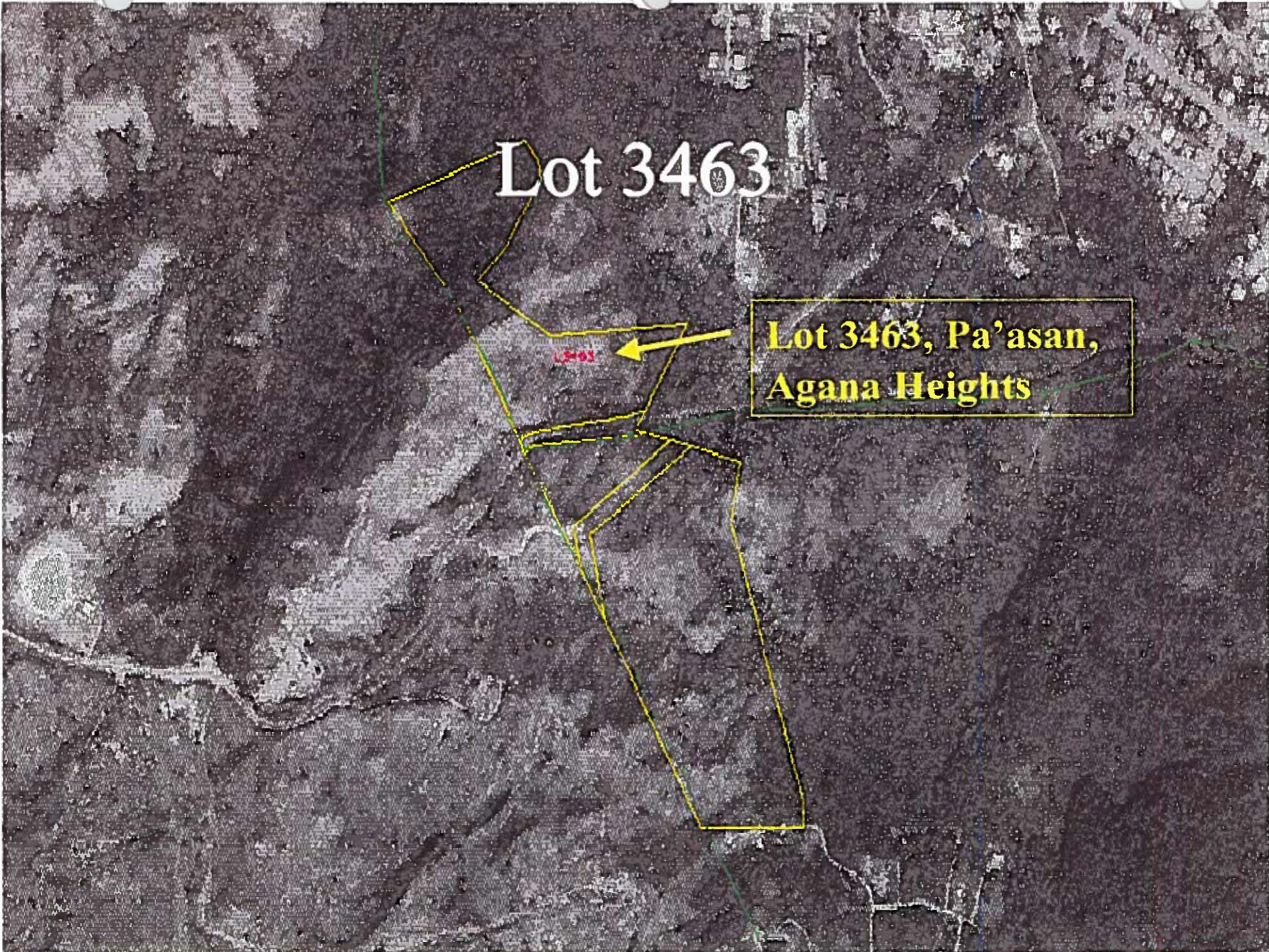
Lot 380

AN PAGO ORDOT

Lot 3470

Lot 3470, Ordot-Chalan Pago

An aerial photograph of a rural area with a yellow boundary line outlining a specific plot of land. A yellow arrow points from the text 'Lot 3470, Ordot-Chalan Pago' to this plot. The background is a grainy, black-and-white aerial view showing fields, roads, and some structures. Other colored lines (red, green, blue) are visible on the map, likely representing different land parcels or boundaries.

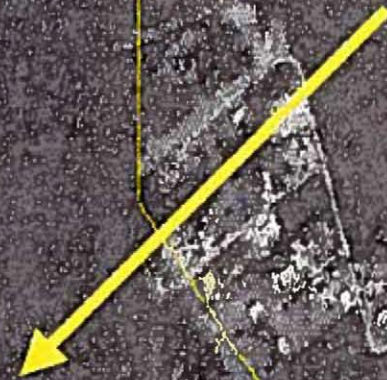
An aerial photograph of a rugged, mountainous terrain. A specific area is outlined with a yellow dashed line. Within this outlined area, the text 'LS-03' is printed in red. A yellow arrow points from a text box on the right towards this red label. The text 'Lot 3463' is written in large white letters at the top of the outlined area.

Lot 3463

**Lot 3463, Pa'asan,
Agana Heights**

Lot 10122-R18

Lot 10122-R18,
Dededo





Simon Sanchez High School & F.B.
Leon Guerrero Elementary School

This is an aerial photograph of a large, mostly undeveloped land area. A prominent blue line, likely a road or boundary, runs diagonally from the upper left towards the center. A red dashed line follows a similar path but is slightly offset. A yellow arrow points to a specific area in the lower center. In the upper left, there are some buildings and a small cluster of trees. The overall terrain appears to be a mix of open fields and some sparse vegetation.

Lot AAFB-South

Vigo Fire Station

Lot AAFB-South

80 Acres

**DEPARTMENT OF EDUCATION**

P.O. Box DE
Agaña, Guam 96932
Tel: (671) 475-0457
Fax: (671) 472-5003



Michael J. Reidy
Director

SEP 20 1999

COPY

Honorable Carl T.C. Gutierrez
Governor of Guam
P.O. Box 2950
Hagatna, Guam 96910

Re: **EXTENSION OF LEASE AGREEMENT
LOT 462, ASAN**

Dear Governor,

A twenty-five (25) year lease agreement with the Federal Government for property in Asan (Lot 462) will expire on December 14, 1999. Immediate action must be taken to secure the continuance of the lease agreement's original intent for the educational use of subject property (see attachment).

As you may be aware, there are several factors that can be attributed to the fact that a school has yet to be built at this site. Environmental concerns and funding non-availability stand out to be the most critical issues for the school construction delay.

However, due to the continued efforts of GEPA, the private sector, and our DOE staff, most of the obstacles to the construction of a school have been overcome over the past few years. An environmental impact assessment was completed by W. B. Flores & Associates and approved by EPA subject to certain conditions.

In addition, a design for an elementary school was completed by M.C.L. & Associates in 1996. This design has been certified to conform to our standards for school construction established in the recently completed 10 Year Capital Facilities Plan for D.O.E.

In this same plan, Lot 462, Asan is described as one of the most suitable sites for new school construction, and our 10 year plan strongly recommends an elementary school be built to accommodate the projected population growth in this area.

In addressing the funding need for construction, I recommend that the funds appropriated by Public Law 24-18, which designates impact of compacts for free association monies be used exclusively for school construction be encumbered for this purpose.

Moreover, a concerted effort must be made with Bureau of Planning and the U.S. Naval Forces Marianas offices for the negotiation of the lease extension.

In closing, I respectfully request your support in mobilizing the necessary resources to make the construction of Asan Elementary School a reality.

MICHAEL J. REIDY
Director of Education

Attachment(s)

cc: Director, Bureau of Planning

COMMONWEALTH NOW!



**AGREEMENT OF LEASE
between the
UNITED STATES OF AMERICA
and
THE GOVERNMENT OF GUAM
TERRITORY OF GUAM**

THIS NEGOTIATED AGREEMENT, made and entered into between the UNITED STATES OF AMERICA (hereinafter called the Government) represented by the Contracting Officer executing this Lease, and the Government of Guam, an unincorporated Territory of the United States of America (hereinafter called the Lessee).

WITNESSETH THAT:

WHEREAS, the Government owns and the Department of the Navy (hereinafter called the Department) has custody, administration, control and jurisdiction of certain property known as Former Asan Naval Hospital Annex, Guam, M. I.; and

WHEREAS, the Secretary of the Navy (hereinafter called the Secretary) has determined that a portion of the said Navy property (hereinafter called the Land) is not excess property, as defined in the Act of Congress of June 30, 1949, as amended, (40 U. S. Code S472) and is not for the time needed for public use; and

WHEREAS, it has been determined that it will be in the public interest to lease the land to the Lessee upon the terms and conditions hereinafter set forth; and

WHEREAS, use of the Land by the Lessee will effectuate the purposes of Public Law 815, 81st Congress, as amended (64 Stat. 967; 20 USC 251-255, 271-280); and

WHEREAS, this Lease is made under the authority of the Act of Congress contained in 10 U. S. Code S2667 (70A Stat. 150), and is not subject to approval of the Armed Services Committee of Congress required under the Act of Congress contained in 10 U. S. Code S2662 (70A Stat. 147, 148);

NOW, THEREFORE, in consideration of the premises and of the terms, covenants and conditions hereinafter set forth, the parties hereto do hereby agree as follows:

ARTICLE 1. LEASED PREMISES. The Government does hereby lease, rent and demise to the Lessee, and the Lessee does hereby hire and rent from the Government for the exclusive use and operation of a public school by the Department of Education of the Government of Guam, the property delineated and described on Exhibit "A" attached hereto and made a part hereof, and containing an area of Nineteen (19) acres, more or less.

ARTICLE 2. TERM. The term of this Lease shall be for a period of twenty-five (25) years commencing as of the 15th day of December 1974, and ending on the 14th day of December 1999.

ARTICLE 3. USE. The Land shall be used by the Lessee for the construction, maintenance and operation thereon of public school facilities with Federal financial aid provided under Public Laws 815 and 874, 81st Congress, as amended. Such use shall include any incidental uses that arise out of or are related to the education of children. PROVIDED, HOWEVER, the operation of all school facilities on the Land shall be conducted without regard to racial or color differences, and any form of segregation or discrimination on the basis of race or color in the operation of any of said facilities shall be deemed good and sufficient grounds upon which to effect a termination of this Lease.

ARTICLE 4. RENT. The Lessee shall pay to the Government as rent for use of the Land the sum of One Dollar (\$1.00) for the term, receipt of which is hereby acknowledged.

ARTICLE 5. RULES AND REGULATIONS. Use and occupancy of the Land shall be subject to such rules and regulations as the Commanding Officer of the United States Naval Station, Guam, may, from time to time, reasonably prescribe for military requirements or for safety and security purposes consistent with the use of the Land for school purposes.

ARTICLE 6. TAXATION. In the event, as a result of any future Act of Congress subjecting Government-owned property to taxation, taxes, assessments, or similar charges are imposed by State, Territorial or local authorities upon the Land (other than upon the Lessee's possessory interest therein) the Lessee shall pay the same when due and payable.

ARTICLE 7. UTILITIES AND SERVICES.

(a) If and to the extent that facilities for the production and/or distribution of any utilities and services are maintained, operated and available in the vicinity of the Land, the Government may furnish to the Lessee such utilities and services that may be required for the Lessee's operations hereunder, the cost of which shall be reimbursed to the Government by the Lessee in accordance with applicable laws and regulations. In this connection, the Government reserves the right to require the Lessee, at its sole cost and expense, to install meters to measure the amounts of utilities or services used, or, in event the Government installs such meters, the Lessee agrees to bear the cost of installation as well as the removal costs involved upon termination or expiration of this lease.

(b) Nothing contained herein shall obligate the Government to furnish any utilities and/or services, and the Lessee hereby releases the Government of and from any and all claims, liability, actions, and causes of action of any nature whatsoever that might arise out of or be attributable to any failure to furnish, or any interruption in, the furnishing of any such utilities or services including, but not limited to: Fire Protection and Inspection, Police Protection, Water, Power, and Sewer.

ARTICLE 8. INSTALLATION OF IMPROVEMENTS - RESTORATION AND REMOVAL. The Lessee shall have the right hereunder to make and install such permanent improvements as are required to effectuate the purposes of this Lease as set forth in Article 3 hereof, which shall include but not be limited to, permanent buildings, sidewalks, roadways, utilities lines and the like. The Lessee and the Government shall come into agreement on the plans and specifications of such improvements before the commencement of any construction on the Land. Any and all such improvements which have been made or installed by the Lessee hereunder, shall remain the property of the Lessee and together with the Land hereunder shall be maintained by the Lessee in a condition and state of repair satisfactory to the Government. Prior to the expiration of the term of this Lease, or within a reasonable time after termination under Article 9 of this Lease, where sufficient advance notice thereof has not been given, Lessee may at its option remove all but not part of the improvements installed on the Land, in which event, Lessee,

if and to the extent required and directed by the Government, shall restore the Land to the same or as good condition as existed prior to the beginning of the term of this Lease. In the event the Lessee does not elect to remove the improvements, they shall be deemed to have been abandoned by the Lessee, and may be used or disposed of by the Government in any manner whatsoever without any liability or obligation on the part of the Government to account to the Lessee therefor. Lessee shall not do or suffer anything to be done on the Land which might subject it to any liens or rights in rem, and shall promptly discharge or cause to be discharged any such lien or right in rem, of any kind, other than one in favor of the Government, which shall at any time arise or exist during the term of this Lease.

ARTICLE 9. TERMINATION. This Lease may be terminated by the Government at any time prior to the expiration of the term hereof:

- (a) During a National Emergency declared by the President or the Congress.
- (b) In the event that for any reason the Land ceases to be used by the Lessee and the Department of Education of the Government of Guam for the education of children, including children of civilian and military personnel employed by the Government.
- (c) In the event of breach by the Lessee of the conditions set out in Article 3 hereof relative to operation of school facilities on a segregated basis.

ARTICLE 10. NON-LIABILITY OF GOVERNMENT. The Lessee shall indemnify and save harmless the Government from liability for death or injury to third persons and for loss of or damage to property of third persons arising out of the use of the property by the Lessee.

ARTICLE 11. GENERAL PROVISIONS.

(a) Failure of Government to Insist on Compliance.

The failure of the Government to insist, in any one or more instances, upon performance of any of the terms, covenants or conditions of this Lease shall not be construed as a waiver or relinquishment of the Government's right to the future performance of any such terms, covenants or conditions and the Lessee's obligations in respect to such future performance shall continue in full force and effect, and the receipt and acceptance of rent shall not be deemed to be a waiver of any breach or default by Lessee of any provision of

~~this Lease nor shall~~ it invalidate or impair the efficacy of any termination or notice of termination hereunder unless expressly so agreed in writing by the Department.

(b) Transfer of Contract.

Except as herein provided, neither this Lease nor any interest herein shall be transferred or assigned by the Lessee, either voluntarily or by operation of law, nor shall any item of the facilities or part hereof be subleased or otherwise made available by the Lessee to any third party or parties without the written consent of the Department.

(c) Disputes.

Except as otherwise provided in this Lease, any dispute concerning a question of fact which is not disposed of by agreement shall be decided by the Commander, Naval Facilities Engineering Command, who shall reduce his decision to writing and mail or furnish a copy thereof to the Lessee. Within thirty (30) days from the receipt of such copy, Lessee may appeal by mailing or otherwise furnishing to the Commander, Naval Facilities Engineering Command, via the Officer in Charge of this Contract, a written appeal addressed to the Secretary of the Navy, and the decision of the Secretary or his duly authorized representative for the hearing of such appeals shall, unless determined by a court of competent jurisdiction to have been fraudulent or capricious or arbitrary or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence, be final and conclusive: provided, that, if no such appeal is taken the decision of the Commander, Naval Facilities Engineering Command shall be final and conclusive. In connection with any appeal proceeding under this clause, Lessee shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, Lessee shall proceed diligently with the performance of its obligations under this Lease and in accordance with the Commander, Naval Facilities Engineering Command decision. The term "Commander, Naval Facilities Engineering Command", as used herein, shall include his duly appointed successor or his representative specifically designated for this purpose.

(d) Definition of "Department".

"Department", as used in this Lease, shall mean the Secretary of the Navy, the Commander, Naval Facilities Engineering Command, the Officer in Charge of this Lease, and such other duly authorized representative or representatives as the Secretary or the Commander, Naval Facilities Engineering Command may designate from time to time.

(e) Notices.

No notice, order, direction, determination, requirement, consent or approval under this Lease shall be of any effect unless in writing.

ARTICLE 12. SURVIVAL. This Lease shall be binding upon the Lessee, its successors and permitted assigns.

ARTICLE 13. ADMINISTRATION. The administration of this Lease will be under the general direction of the Commander, Naval Facilities Engineering Command, known as the "Contracting Officer" who hereby designates the Officer in Charge of Construction, Naval Facilities Engineering Command Contracts, Marianas, Officer in Charge of this Contract, who shall, under the direction of the Contracting Officer, have complete charge of the administration of this Lease and shall exercise full supervision and general direction of this Lease, so far as it affects the interest of the Department.

ARTICLE 14. GRATUITIES.

(a) The Government may, by written notice to the Lessee, terminate the rights of the Lessee under this Lease if it is found, after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Lessee, or any agent or representative of the Lessee, to any officer or employee of the Government with a view toward securing this Lease or securing favorable treatment with respect to the awarding or amending the same, or the making of any determination with respect thereto: Provided, that the existence of the facts upon which the Secretary or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event this Lease is terminated as provided in paragraph (a) hereof, the Government shall be entitled (1) to pursue the same remedies against the Lessee as it could pursue in the event of a breach of the Lease by the

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Lessee, and it is a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Secretary or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Lessee in providing any such gratuities to any such officer or employee.

(c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Lease.

ARTICLE 15. No member of or Delegate to Congress, or Resident Commissioner, shall be admitted to any share or part of this Lease or to any benefit that may arise therefrom: provided, that this Condition 15 shall not be construed to extend to this Lease if made with a corporation for its general benefit.

ARTICLE 16. The Lessee warrants that no person or agency has been employed or retained to solicit or secure this Lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial agencies maintained by the Lessee for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this Lease without liability or in its discretion to require the Lessee to pay, in addition to the rentals or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

IN WITNESS WHEREOF, the parties hereto have, on the respective dates set forth below, duly executed this Agreement of Lease.

UNITED STATES OF AMERICA

DATE

12/31/74

BY

H. T. Mooney

H. T. MOONEY, CAPT, (CEC), USN
Officer in Charge of Construction
Naval Facilities Engineering Command
Contracts, Marianas

GOVERNMENT OF GUAM

DATE

DEC 27 1974

BY

[Signature]
GOVERNOR OF GUAM