

# Annual Report

SUPERINTENDENT OF PUBLIC WORKS



TERRITORY OF HAWAII

JUNE 30, 1950

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
869 Punchbowl Street  
Honolulu, Hawaii 96813

DIR-P  
File Rev



TERRITORY OF HAWAII  
DEPARTMENT OF PUBLIC WORKS  
June 30, 1950

Honorable Ingram M. Stainback  
Governor of Hawaii  
Honolulu, Hawaii

Dear Sir:

Public works activities, conducted at a record rate throughout the Territory, took up much of the slack in the construction industry caused by the great reduction in military and private construction. Without this large public works program, unemployment would have been even more critical than it was.

Actual bid lettings during the fiscal year totaled less than those of the previous year, although they were more than twice as great as those of any year in Territorial history. The volume of construction work, including projects delayed by the 1949 waterfront strike, was in excess of \$1,000,000 per month.

During the first eleven months of the fiscal year, payments to contractors totaled:	
Highways .....	\$ 6,799,398.05
Buildings & flood control .....	4,248,193.89
Airports .....	526,030.90
Total .....	\$11,573,622.84

This meant, in terms of employment, 2,650,000 man-hours of direct labor during the eleven-month period. It also meant the accomplishment of many miles of highways and many necessary airports, buildings and flood control projects. Indirect labor—at the crushing plants, the planing mills, the hollow-tile and pavement plants, and in the wall-board industry, to name a few—was also helped by this program.

New work placed under contract during the 1950 fiscal year was divided as follows:

TYPE	NO. OF CONTRACTS	CONTRACT AMOUNTS
Buildings and flood control .....	31	\$ 2,723,314.03
Federal-aid highways .....	28	7,113,099.56
Airports .....	8	701,619.83
Total .....	67	\$10,538,033.42

Additional highway projects would have been under contract except that right-of-way litigation held them up. At the end of the fiscal year, the Territory Highway Department had complete plans for eight projects, with an estimated total cost of \$5,000,000, all delayed by lack of right-of-way. The key suit, in which the constitutionality of the Territorial eminent domain statutes was challenged, was being considered by the Territorial Supreme Court as the fiscal year ended.

In the Territorial Highway Department, annual costs for administration, operation and maintenance were \$931,490.36, compared to \$915,121.04 for the fiscal year 1949. In the general public works field these costs were \$697,908.52 for 1950 and \$834,000.08 for 1949. Increased costs in highway activities were due to increased mileages completed and placed in the system during the year. The drop in public works expenditures is due, in part, to completion of certain special projects as well as the transfer of some custodial and operational services to another agency.

Besides the regular housekeeping of all internal improvements of the Territory, the Department of Public Works performed special services for 20 other governmental departments.

Respectfully,

*Don Belt*  
Superintendent of Public Works



# Annual Report

## SUPERINTENDENT OF PUBLIC WORKS

### TABLE OF CONTENTS

	<i>Page</i>
Letter of Transmittal .....	Inside Cover
New Construction, 1949-1950 .....	2, 3
Projects Under Way, Oahu .....	4, 5
Projects Under Way, Hawaii and Maui .....	6, 7
Projects Under Way, Kauai .....	8
Work Completed .....	9, 10
Eruption of Mauna Loa .....	11
Summary, Completed Projects .....	12
Projects on the Drawing Boards .....	13, 14
Highway Maintenance .....	15
Chart, Highway Expenditures .....	16
Highway Mileage, Constructed and Under Construction .....	16
Traffic Congestion .....	17
Population Growth vs Vehicle Registration .....	18
Division Reports .....	19, 20
Chart, Public Works Expenditures .....	21
Contracts Awarded .....	21, 22, 23, 32
Car Ownership and Highway Construction Cost .....	24, 25
The Hamakua Highway .....	26, 27
Financial Report, Highways .....	28
Financial Report, Public Works .....	29
Financial Report, Radio Board .....	29
Organization Chart .....	30
Administrative Staff .....	31

*Front Cover Photo:* Front cover shows construction activity on new segment of Kalaniana'ole Highway between Kailua-Waimanalo junction and Castle Ranch Office at Kaneohe cut-off. View is from rear of the ranch office looking mauka toward famed Nuuanu Pali.

Fiscal Year Ending  
JUNE 30, 1950

HONOLULU, OAHU, T. H.

# PHOTOGRAPHIC STORY OF NEW

## DOLLAR VOLUME OF CONTRACTS

During the fiscal year 1950, a record number of public works and highway projects were placed under contract for a total dollar volume of \$10,538,033.42. While this amount is less than that of the previous year, the number of projects undertaken exceeds the individual totals of previous fiscal years. Were it not for litigation involving the Territory's eminent domain statutes, the total dollar volume of new contracts awarded would have reached an estimated total of \$15,000,000.

### PUBLIC BUILDINGS:

A total of 30 new contracts for the construction of public buildings and other installations were awarded during the year. This total includes contracts for engineering and architectural services. The 30 contracts amounted to a sum of \$2,604,661.78. The breakdown of contracts awarded, by islands, is Oahu 19; Kauai, 6; Hawaii, 4 and Maui, 1.

### FLOOD CONTROL

In flood control activity, one contract was awarded for a project cost of \$118,652.25. This was for the construction of a retaining wall and groins, widening and deepening of Waimea River on Kauai.



OAHU—LEAHI NURSES QUARTERS & STAFF DINING BLDG.  
Contract Cost, \$254,379



KAUAI—WAIMEA RIVER WIDENING & DEEPENING  
Contract Cost \$118,652

# 67 Public Works and Highway Projects

# CONSTRUCTION IN 1949-1950

AWARDED TOTALED \$10,540,000

## HIGHWAYS

The number of contracts awarded for highway improvements on all islands totaled 28. Included in the total are contracts for engineering and landscape architectural services. The contract prices of the 28 projects amounted to \$7,113,099.56, exclusive of right-of-way costs.

The breakdown of highway projects placed under contract is as follows: Oahu, 17; Hawaii, 9; Maui, 1 and Kauai, 1.

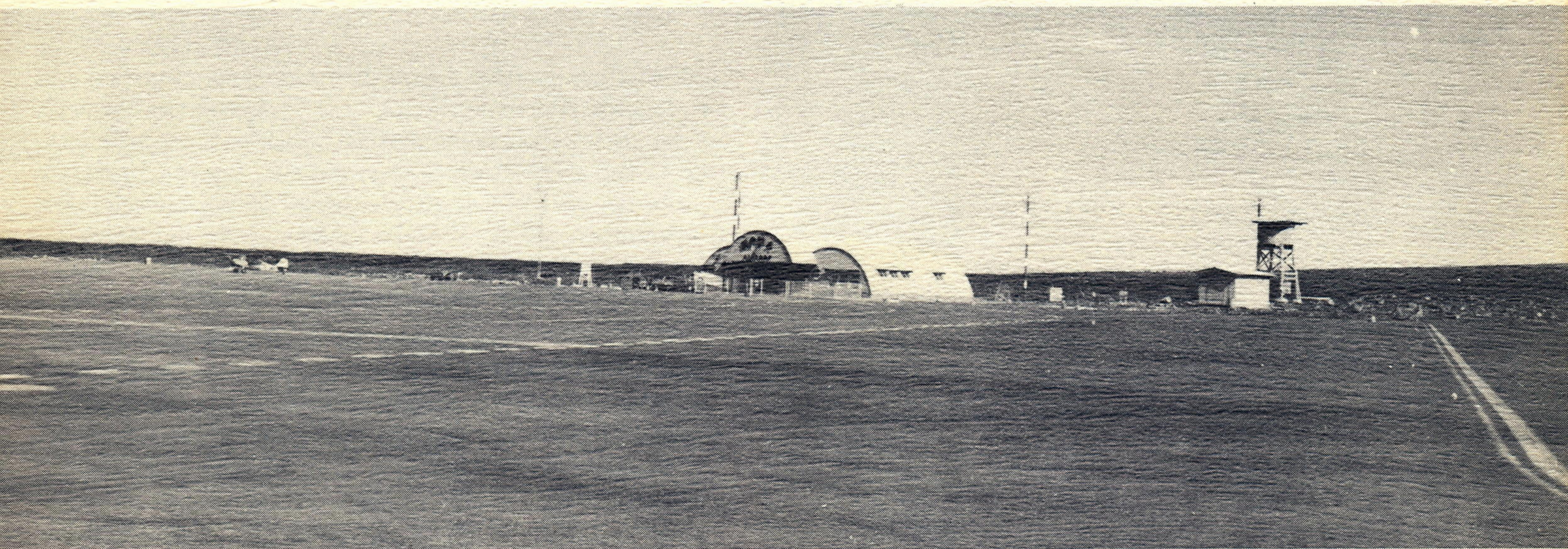
Highway expenditures for the Island of Hawaii alone (\$3,208,528) equalled almost 50 per cent of the total expenditure for highway construction in the fiscal year. This is due largely to the increased construction activity on the Hamakua section of the Hawaii Belt Road now under construction between Hilo and Honokaa.

## AIRPORTS

Construction and engineering costs for the Hawaii Aeronautics Commission during the fiscal year amounted to \$701,619.83. Contracts awarded numbered 8. Four of the contracts awarded were for the Lihue airport on Kauai; two for the Kona Airport on Hawaii; one for Maui's Hana Airport and one for the Honolulu Airport.



MAUI—LAHAINA-WAILUKU ROAD  
Contract Cost, \$888,374



HAWAII—KONA AIRPORT, PAVING AND FENCING  
Two Contracts Totaling \$150,641

**Placed Under Contract in Fiscal Year**

# PROJECTS UNDER WAY

## Kauai

Projects currently under way on Kauai total \$1,312,622.46 in contract dollars. These projects include widening and resurfacing of the Kauai Belt Road from Koloa Junction to Lihue. Contract cost, \$285,549.11. Contract cost of the Lihue Airport project, which involves additional paving in areas other than the runways, is \$264,073.35. Placed under construction in the latter part of the fiscal year was the main hospital building of Samuel Mahelona Memorial Hospital for tubercular patients at a contract cost of \$763,000. Pictured on this page are photos of the work currently under way on Kauai.

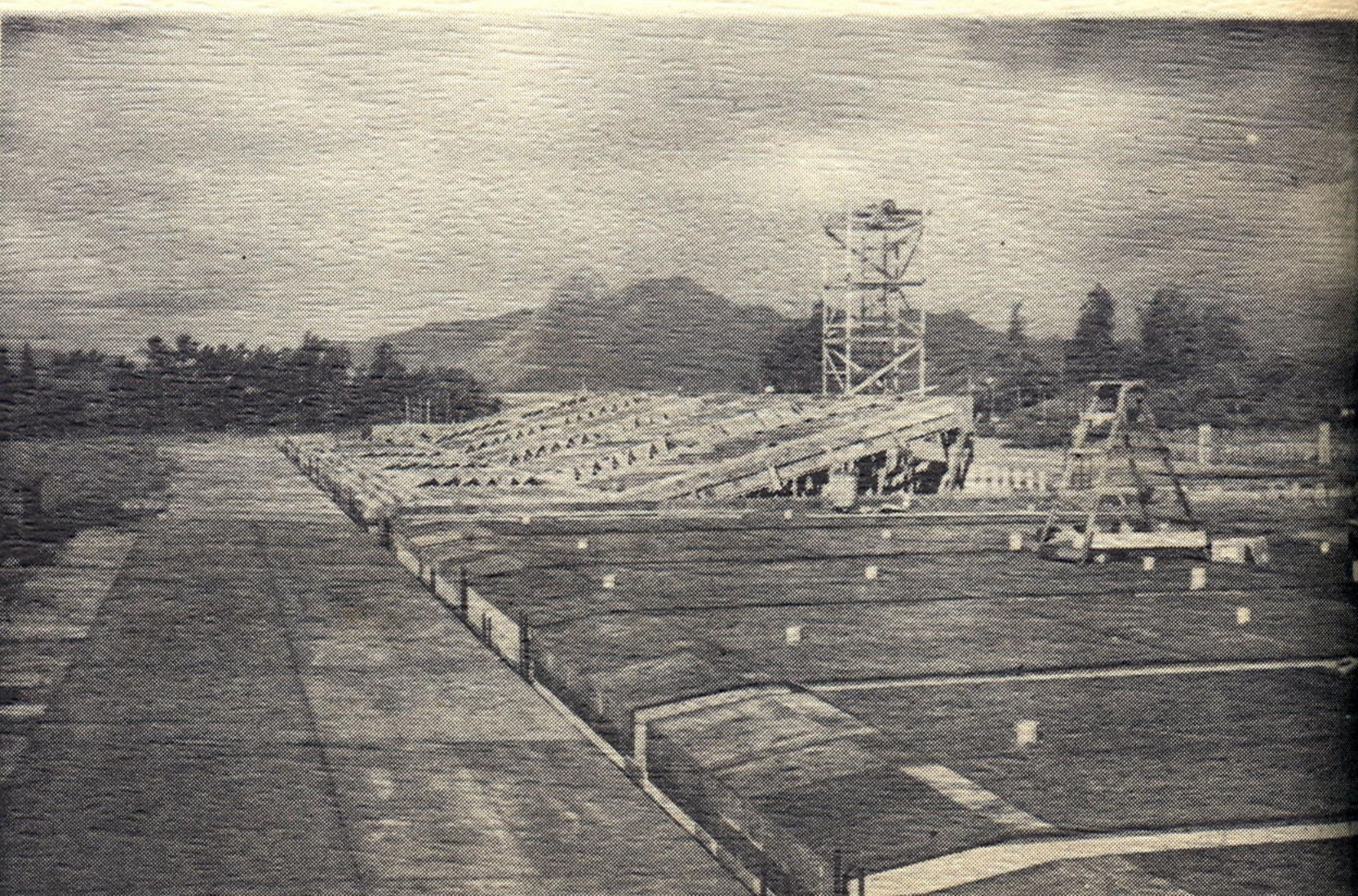
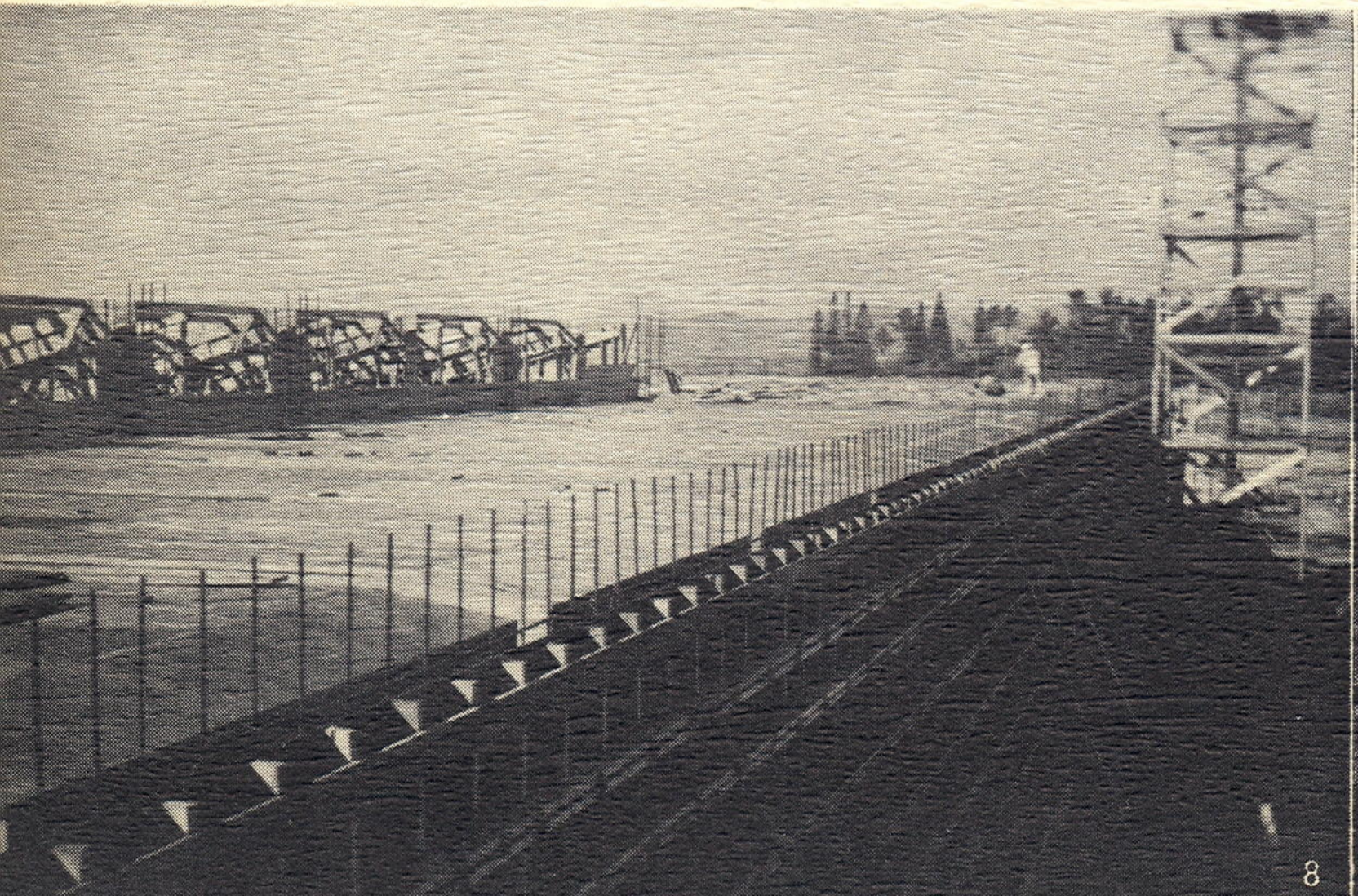


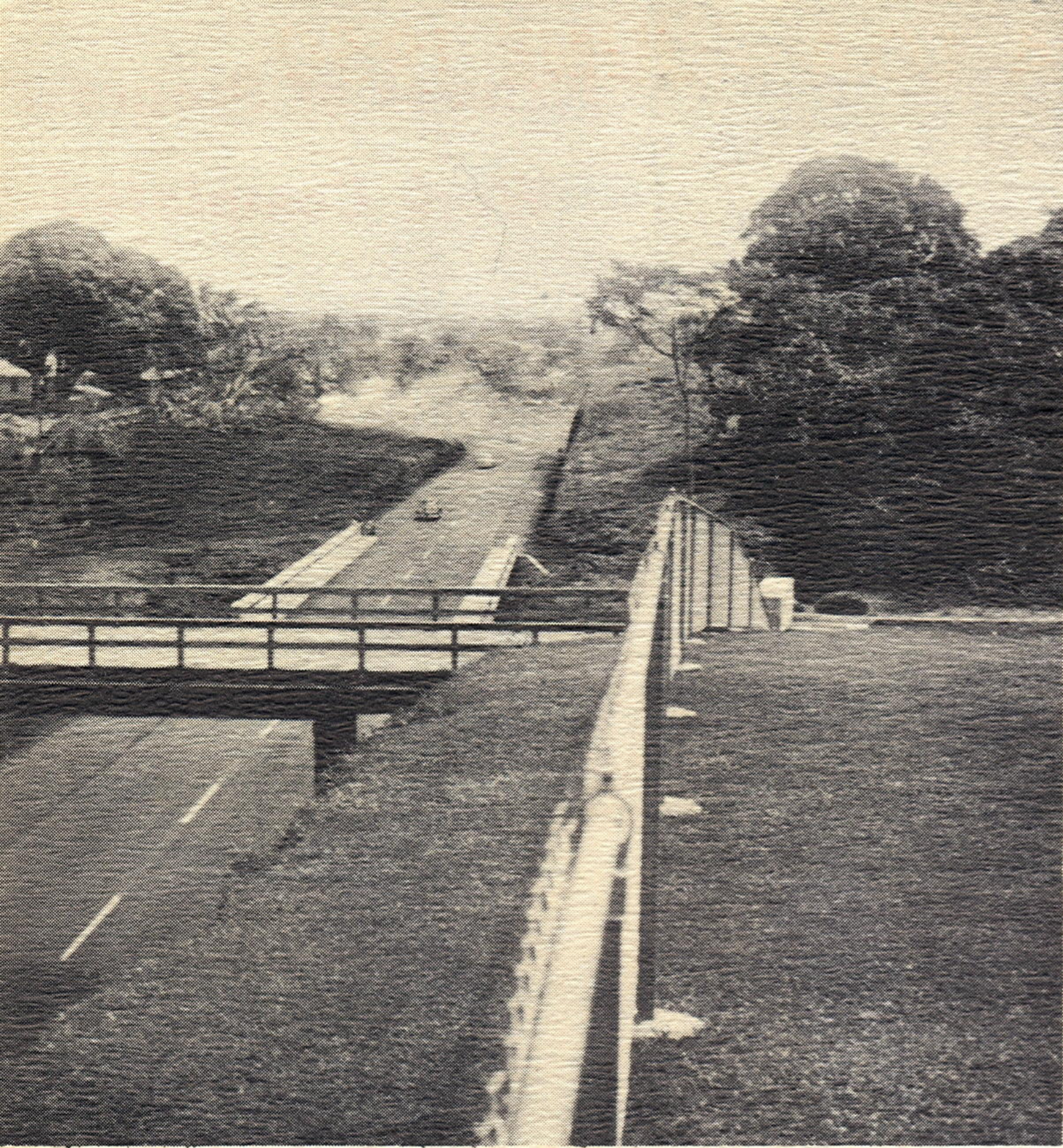
Resurfacing and widening Kauai Belt Road between Koloa junction and Lihue.



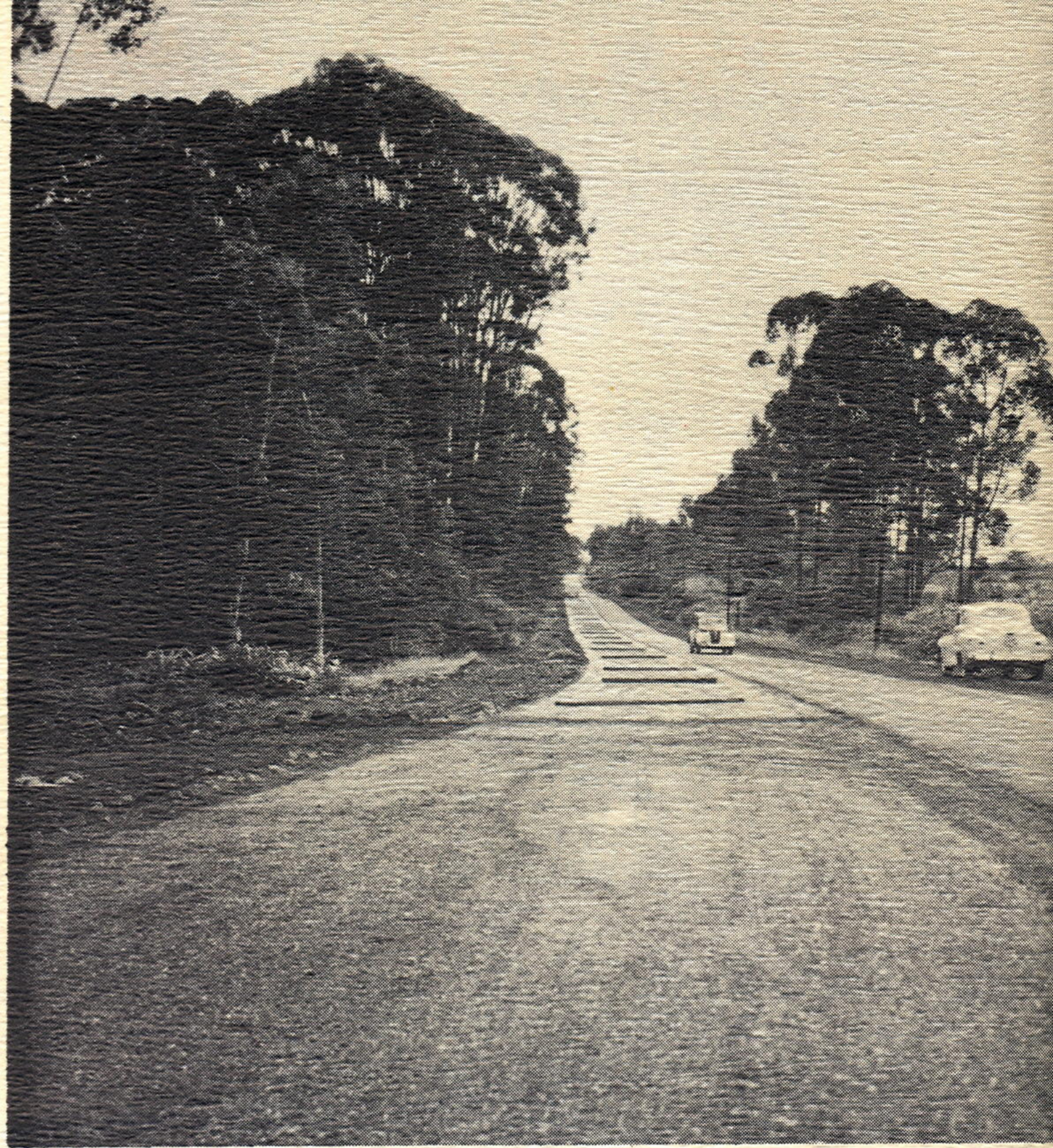
Pictures above show construction under way at the Lihue Airport. Top photo shows coarse rock ready for oiling on new taxiway. Picture below, finished grade, parking apron. Runway is completed. Passenger terminal building was completed in December, 1949. Other improvements planned include a freight terminal building and lighting system.

Pictures below at left and right are of the Samuel Mahelona Memorial Hospital now under construction at Kapaa, Kauai. Left photo shows courtyard wall form work at the ward section. Right photo shows form work for roof slab of the ward section. Contract cost of the hospital is \$693,000 and estimated date of completion is July, 1951.





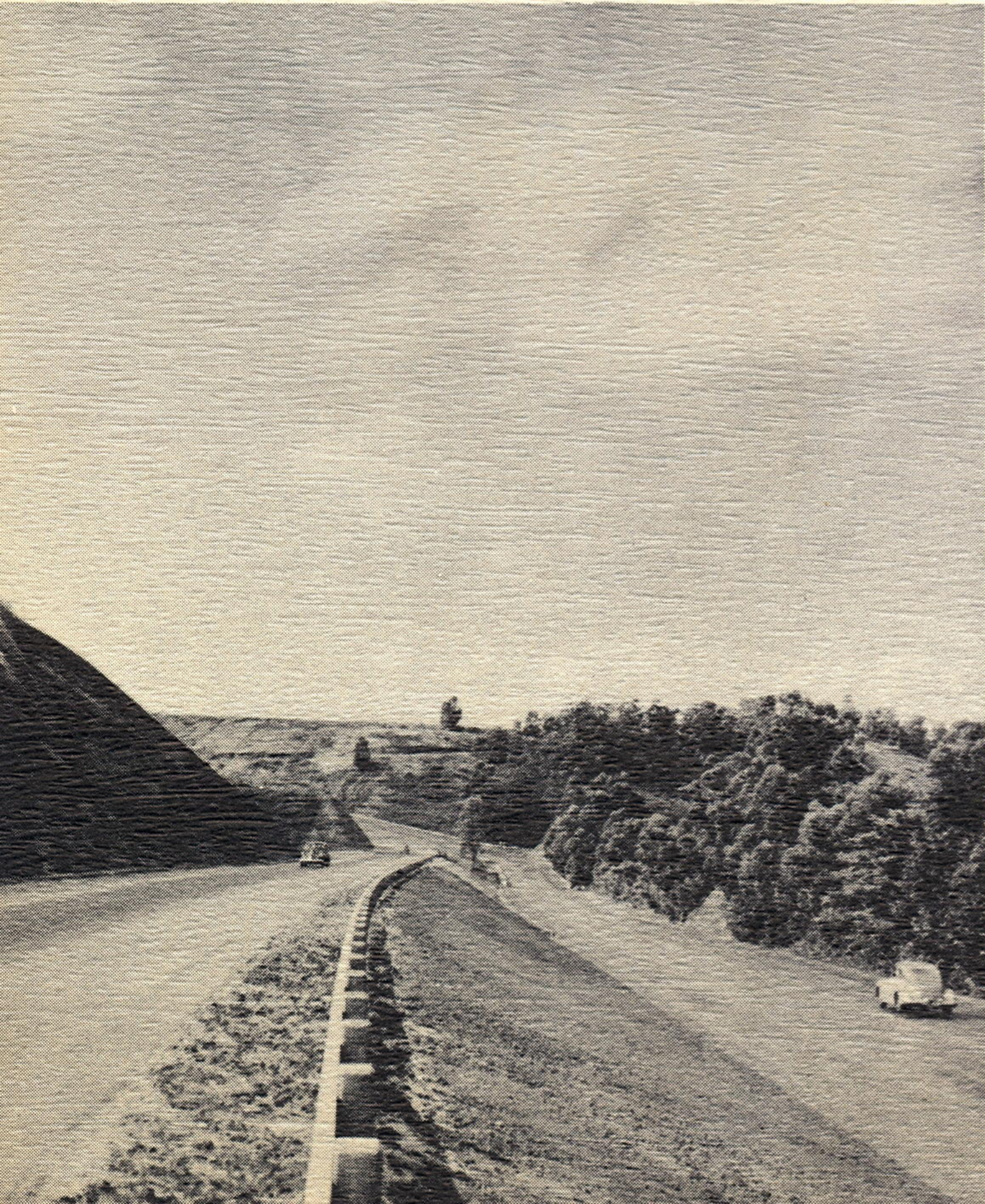
Recently completed segment of Hamakua Highway, Hawaii. This project between Wailuku river and Alae Cemetery, was completed in March, 1950.



Volcano Road, Hawaii island. Project involved all new construction and improvement was between Olaa and Mt. View. Photo shows road at edge of Mt. View town just before completion.

## PICTURES of PROGRESS - WORK COMPLETED

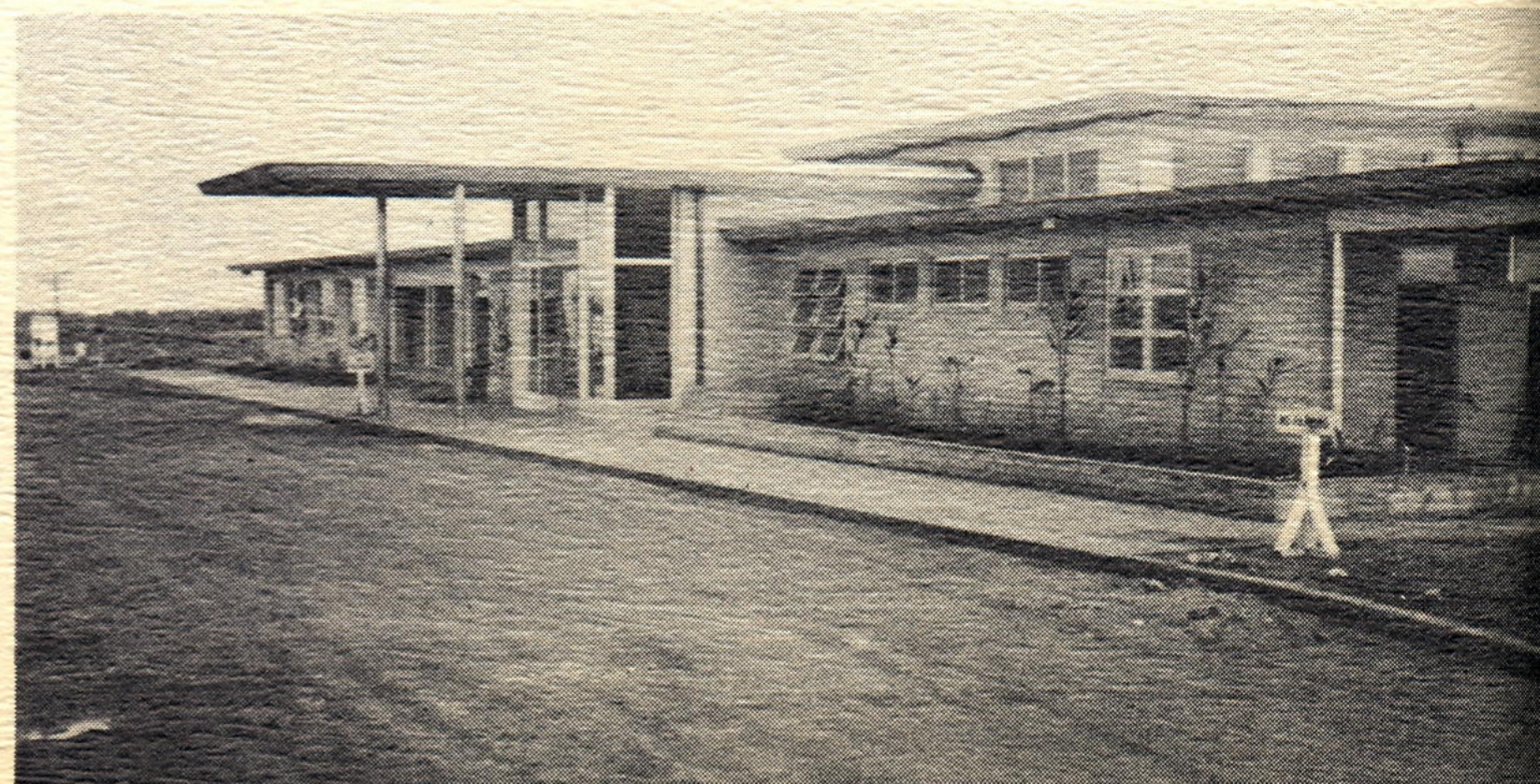
Waikakalaua section, Kamehameha Highway, Oahu. This section of Kamehameha Highway, between Kipapa airfield and 0.3 mile northerly of Waikakalaua gulch, is now a four-lane divided highway.



Completed runway, Lihue Airport. Runway is 3,750 feet long. Project's cost including parking apron was \$384,395.



Below, passenger terminal building at Lihue Airport.



# DIVISION REPORTS

## GENERAL ORGANIZATION

The Superintendent of Public Works, who is also by law the Territorial Highway Engineer, is the executive officer of both the public works and highway departments. With the help of the assistant superintendent of public works, he has general charge of all activities relating to the construction of Territorial public buildings, highways, airports and flood control. The head of the department also has full responsibility for the operation and maintenance of most territorial owned buildings, parks and grounds. In addition, the Superintendent of Public Works is also chairman of the Board of Harbor Commissioners and chairman of the Territorial Radio Board.

A district engineer, assisted by a limited staff, represents the Superintendent of Public Works in each of the outside counties, Hawaii, Maui and Kauai. The district engineers handle the business of the public works and highway departments in cooperation with the division heads of the Oahu staff. The work in the City and County of Honolulu is handled directly by the general staff with one district maintenance engineer and three section engineers operating under the central office.

## ARCHITECTURAL SERVICES

Architectural services necessary preparatory to the execution of authorized public works projects are supervised by the department's architect. Since the facilities of the department's architectural division are limited, a goodly number of architectural services on major projects are obtained through contracts with local architectural firms. General supervisory and administrative functions arising out of such contracts with the architectural firms are performed by the department's architect. Supervisory and inspectional services for all projects under construction and repairs and maintenance to territorial buildings are handled by the Building Structural Engineer.

During the fiscal year there was \$2,932,000 worth of work in the working drawing stage, most of which was being executed by architectural firms preparatory to construction contracts. During the same period, there was approximately \$8,788,000 worth of work under construction by contract.

## HIGHWAY PLANNING SURVEY

Work of the highway planning division is basically in the collection and interpretation of traffic information which is necessary for the preliminary location and tentative design of proposed new highways throughout the Territory. During the fiscal year, much of this work has been centered in the collection of data required in the planning of the proposed Mauka and Makai arterial highways for Honolulu. These proposed arterials, based upon studies made over a period of years, are believed to be a solution to Honolulu's critical traffic congestion problem.

A parking survey of Honolulu's central business district is a project of the division nearing completion and the significant data gathered are to be published soon. A report on the origin-destination surveys conducted in Hilo in 1946, 1948 and 1949 is also nearing completion. Population data, rate of growth of the city, and current land use trends have been studied in conjunction with plans for Hilo's

waterfront highway and the new Volcano Road.

Traffic census reports for all islands were published during the year. All traffic data collected since 1938 are analyzed in these reports to show the trends of traffic change. An annual series of truck weight studies has been made to provide road-use information for future planning. The weighing stations provide an opportunity to curb the practice of overloading freight vehicles.

A territory-wide road inventory is also under preparation by this division. Beside checking on the conditions of roads and the number of miles in the federal aid system on all islands, the inventory personnel are compiling data on safety features, sharpness of curves, steepness of grades and riding qualities. The inventory will serve as a guide in the programming of future highway improvements.

## HIGHWAY DESIGN

This Division is charged with the programming of Federal Aid highway projects to comply with requirements for use of funds available from both the Federal and Territorial governments.

Regular Federal Aid funds are divided into three categories, namely: primary, secondary and urban. Territorial funds for the purpose of matching these federal funds are obtained from the Territorial Fuel Tax. This fuel tax is pro-rated after the deduction of bond charges, administration and maintenance in accordance with collections by counties. In addition, there are some special funds appropriated by Federal, Territorial, and County governments which must also be fitted into the overall highway program. These programs are prepared well in advance so that upon their approval the highway design division may proceed with the preparation of plans and specifications for various projects. In order that there may be a continuous flow of construction it is necessary that the design division keep the plans and specifications moving at all times. Long range plans must be made so that individual projects will fit into future construction activities.

Special attention has been given to the design of bridges, traffic lights, street lights and landscaping with a specialist in each branch in charge of the design work involved under the overall direction of the highway design engineer.

## LAND ACQUISITION

The primary function of the Land Acquisition Division is to acquire by purchase or condemnation all lands necessary for the construction of public highways, airports, and other public improvement projects which come within the functional jurisdiction of the public works department. This division also aids the Board of Harbor Commissioners, Department of Public Institutions and other Territorial departments and agencies in the acquisition of properties for their specific uses and purposes.

To protect the interest of the Department of Public Works and Territorial Highway Department, this division is charged with the study and investigation of each and every application for Land Court Title. Where such study and investigation reveal that the applicant encroaches on Territorial highways, drainage systems, access rights, free flowage of water, or high water mark along the shoreline, a report



of such findings is transmitted to the Attorney General's Office for final disposition.

Releases of lien for the Kewalo sanitation and Waikiki reclamation projects are also prepared by this division.

During the past fiscal year, 20 land court applications were investigated and report of findings made to the Attorney General. Also, several land court subdivision maps and petitions were prepared. Several new highway projects were initiated and completed or are in various stages of completion, and projects started during previous fiscal periods were completed.

Projects completed during the last fiscal year involved a total of 625 parcels of land containing a total area of 193.66 acres, more or less, appraised at a value of \$2,055,806.91, including damages to improvements, and owned separately or jointly by 274 individuals or companies. These projects involved a study of 113 original land titles necessitating a search and copying of 2835 instruments totaling 5638 pages.

#### HIGHWAY RESEARCH LABORATORY

Testing of natural materials such as soil, cinders, sand and rock at new road sites is a primary function of the laboratory. The results of such tests are employed by the design and construction engineers in order that the best of the natural materials may be used to insure the construction of highways that will last. Tests are also made for materials on jobs under contract to be sure that qualities indicated in specifications are carried out.

The facilities of the laboratory are also utilized for the testing of materials for public works, airport and harbor construction and maintenance programs. During the fiscal year, the testing laboratory's activities were expanded to include testing of concrete and concrete materials. Due to lack of facilities, all such work was previously done at the University of Hawaii's laboratory. Because of the heavy use made of the University's facilities by student and outside groups, this arrangement was inadequate.

To overcome this handicap, a small manually operated hydraulic compression machine was purchased and installed and the concrete testing program as a result has been accelerated.

A problem that has come up recently in connection with asphalt pavement is the problem of hydrophilic aggregates; i.e. aggregates that lose their asphalt coating in the presence of water. As long as aggregates were obtained from sources known to be good on the basis of experience, the problem was more or less academic. However, as highway work extends beyond the limits of economical haul from established quarries and also as these sources are depleted, the problem of hydrophilic aggregates will become more and more important.

#### LANDSCAPING

Landscaping is ever an important adjunct of highway construction. Efficiently planned landscaping projects not only remove the scars of construction but also add materially to the scenic assets along the highways of a community. In line with this program of attractive highway landscaping, the department during the year awarded two contracts to landscape architects totalling \$20,000 for the development of schemes to beautify the highways that are under construction.

#### AIRPORTS

Acting in the capacity of construction agency for the Hawaii Aeronautics Commission, the department designed and supervised construction which contributed towards developing existing airfields of the territorial airport system. The construction of the passenger terminal building at Lihue Airport gave to the people of Kauai a terminal of modern architecture and facilities to accommodate the growing schedules of air travel. Paving of the taxi strip parallel to the existing runway, enlarging the existing plane parking apron, developing the auto parking area, and relocating Ahukini roadway, all of which are adding to the development of the recently opened airport, are now under contract.

Upon completion of the paving of Hana Airport, which is now in progress, the remote section about Hana, Maui, will be conveniently opened to the public. The opening of this airport is expected to be advantageous and a boost to the territory's tourist trade.

On the island of Hawaii, work is now underway at Kona Airport to lengthen the existing runway and enlarge the terminal pavement area. A field survey to obtain design data for the proposed new Kamuela Airport is also being prosecuted.

#### RADIO BOARD

The control and elimination of noises from power lines and other electrical apparatus which interfere with radio broadcasting and reception is another responsibility of the Superintendent of Public Works in his capacity as executive officer of the Radio Board.

With the aid of an inspectional staff, regular inspections are made on each of the islands for the detection and elimination of disturbances which impair the quality of radio reception. Some of the electrically operated machines and devices which have been found to be common sources of radio interferences are adding machines, air compressors, saws, air conditioning motors, vacuum cleaners, washing machines, x-ray and diathermy machines and sewing machines. Other common causes of interference result from loose wire connections, defective motors, high tension lines on ground, defective house wiring, electric drills, broken guy wires, et cetera.

The following statistics, covering all islands, reflect the work handled by the inspectional staff.

Interferences apprehended .....	620
Notices served .....	245
Complaints checked .....	684
General inspections made .....	4,849

#### EXPLOSIVES AND COMBUSTIBLES

In accordance with Chapter 88, Revised Laws of Hawaii 1945, this department continued with responsibilities in maintaining adequate safeguards in the use, storage and handling of explosives and combustibles. This required the issuance of 43 powdermen's licenses to qualified persons and approval of 97 fuel tank installation permits, after inspection was made by this department and representatives of the fire department. The territory realized \$3,376.99 in revenue from fuel tank installation permits and from fees charged for the storage of explosives.

**DEPARTMENT OF PUBLIC WORKS  
SUMMARY FINANCIAL REPORT  
PUBLIC WORKS—ALL FUNDS  
Fiscal Years 1948, 1949 and 1950**

	1948	1949	1950	Total
Balance All Funds, July 1, 1947 .....				\$ 873,358.27
<b>Receipts</b>				
Territorial Appropriations .....	\$12,395,080.28	\$1,420,163.20	\$5,814,126.00	
Territorial Insurance Fund Allotments .....	13,538.00	4,500.00	—	
County Contributions .....	—	252,000.00	—	
Federal Grants .....	—	—	212,150.00	
Other Receipts .....	224,850.76	379,573.99	244,354.38	
<b>Total Receipts .....</b>	<b>\$12,633,469.04</b>	<b>\$2,056,237.19</b>	<b>\$6,270,630.38</b>	<b>\$20,960,336.61</b>
<b>Total Funds Available .....</b>				<b>\$21,833,694.88</b>
<b>Disbursements</b>				
Administration .....	50,561.97	51,481.34	53,178.79	
Land Acquisition .....	284,173.51	644,538.96	497,506.34	
Design and Construction .....	1,687,779.28	6,488,947.99	4,381,079.80	
Operation and Maintenance .....	503,765.00	782,519.54	644,729.73	
<b>Total Disbursements .....</b>	<b>\$ 2,490,279.76</b>	<b>\$7,967,487.83</b>	<b>\$5,576,494.66</b>	<b>\$16,034,262.25</b>
Total Fund Lapsed & Transfers .....	48,774.00	48,636.98	65,993.65	163,405.53
<b>Balance All Funds, June 30, 1950 .....</b>				<b>\$ 5,636,027.10</b>

**DEPARTMENT OF PUBLIC WORKS  
SUMMARY FINANCIAL REPORT  
RADIO BOARD  
Fiscal Years 1948, 1949 and 1950**

	1948	1949	1950	Total
Balance at July 1, 1947 .....				
<b>Receipts</b>				
Territorial Appropriation .....	\$54,825.00	—	\$64,602.00	
<b>Total Receipts .....</b>	<b>\$54,825.00</b>	<b>—</b>	<b>\$64,602.00</b>	<b>\$119,427.00</b>
<b>Total Available Funds .....</b>				<b>\$119,427.00</b>
<b>Disbursements</b>				
Administration .....	5,184.96	4,571.41	3,528.79	
Operation and Maintenance .....	22,818.21	20,356.65	22,965.16	
<b>Total Disbursements .....</b>	<b>\$28,003.17</b>	<b>\$24,928.06</b>	<b>\$26,493.95</b>	<b>\$ 79,425.18</b>
Total Fund Lapsed .....	—	1,893.77	8,101.05	9,994.82
<b>Balance June 30, 1950 .....</b>				<b>\$ 30,007.00</b>

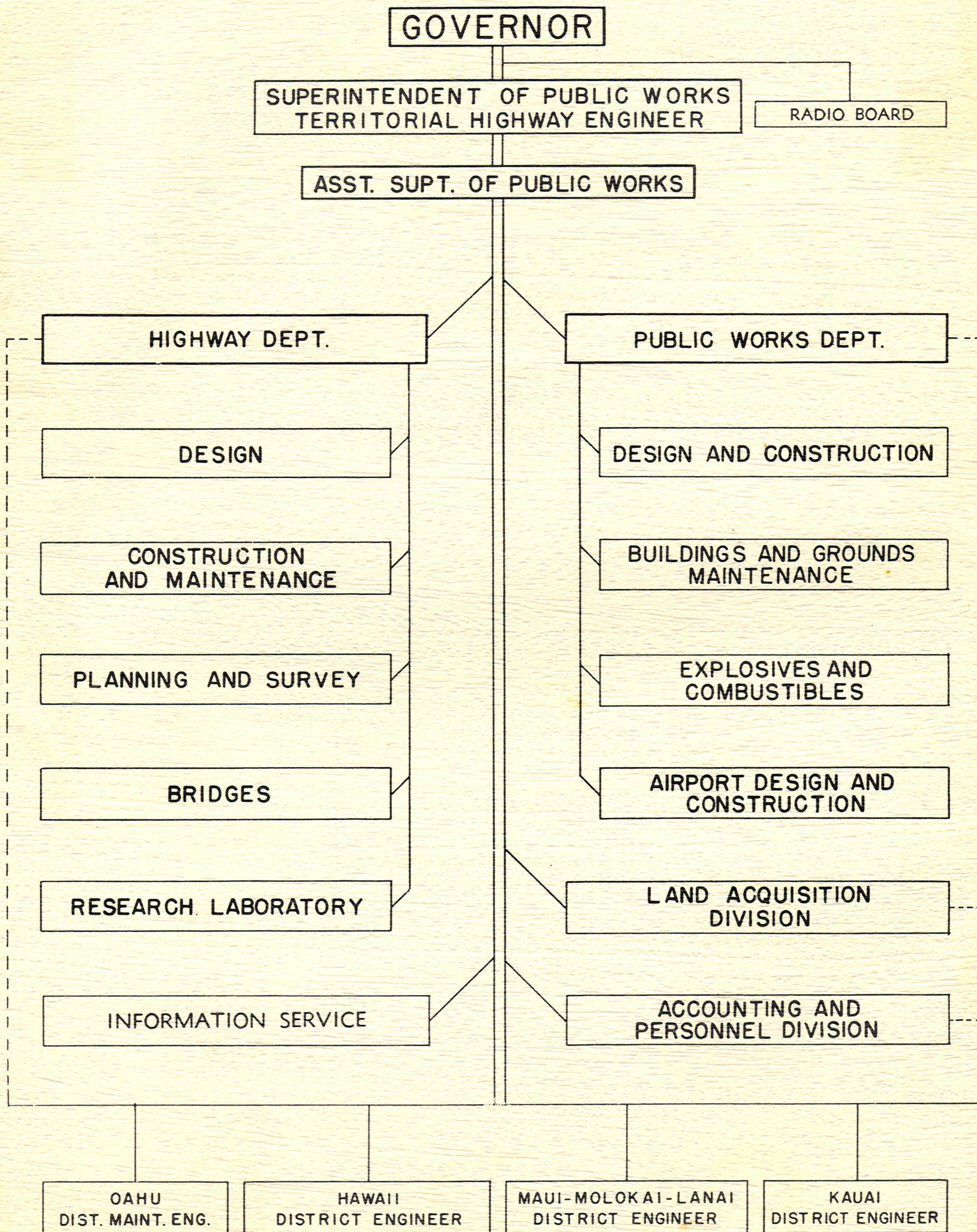
**STATEMENT SHOWING SERVICES RENDERED TO OTHER DEPARTMENTS  
PAYABLE OUT OF FUNDS UNDER THEIR CONTROL  
Fiscal Year 1950**

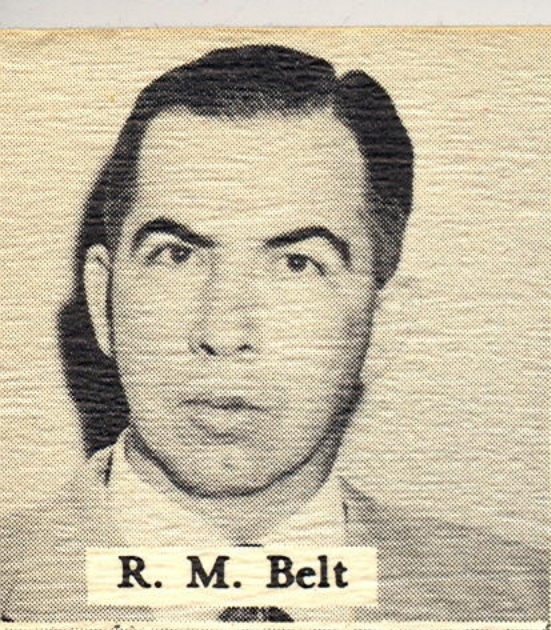
Department	Design and Construction	Operation and Maintenance	Total
Board of Agriculture .....	\$ 1,393.64	\$ 22.03	\$ 1,415.67
Kamehameha Day Celebration Committee .....	251.21		251.21
First Circuit Court .....		466.33	466.33
Office of the Governor .....		116.80	116.80
Board of Harbor Commissioners .....	4,619.20	4,924.08	9,543.28
Hawaii Aeronautics Commission .....	747,456.46		747,456.46
Hawaii National Guard .....		221.17	221.17
Department of Health .....		6,015.49	6,015.49
Department of Institutions .....	9,642.89	3,361.04	13,003.93
Department of Public Instruction .....	9,022.15	362.50	9,384.65
Bureau of Unemployment Compensation .....		2,720.25	2,720.25
County of Maui .....	117.80		117.80
Secretary of Hawaii .....		7,565.40	7,565.40
Tax Commission .....		1,615.98	1,615.98
Treasurer's Office .....		15.63	15.63
University of Hawaii .....	1,624.76		1,624.76
U. S. Weather Bureau .....	25.19		25.19
Department of Public Welfare .....		2,276.28	2,276.28
Kauai County Library .....	6,436.40		6,436.40
Hawaii County Library .....	53,870.60		53,870.60
<b>Total .....</b>	<b>\$834,460.30</b>	<b>\$29,682.98</b>	<b>\$864,143.28</b>

TERRITORY OF HAWAII  
DEPARTMENT OF PUBLIC WORKS

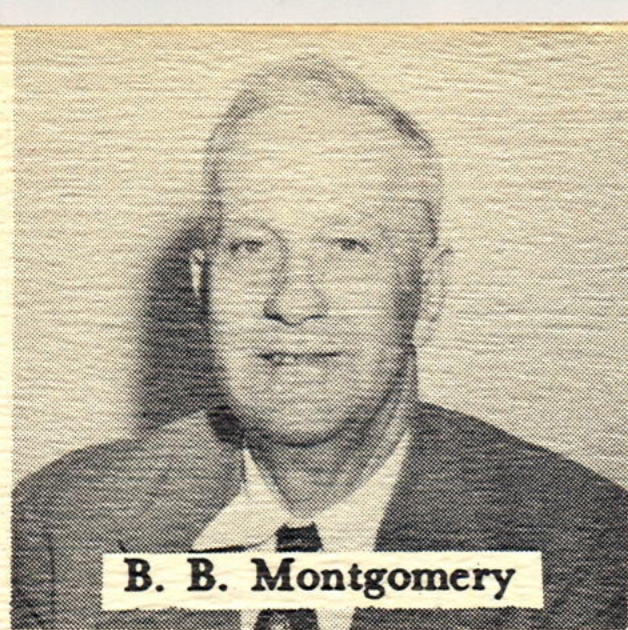
# ORGANIZATION CHART

JUNE 30, 1950

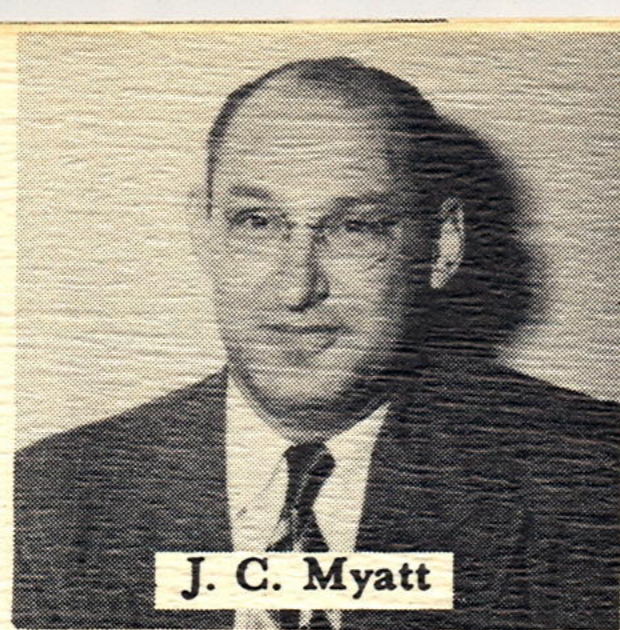




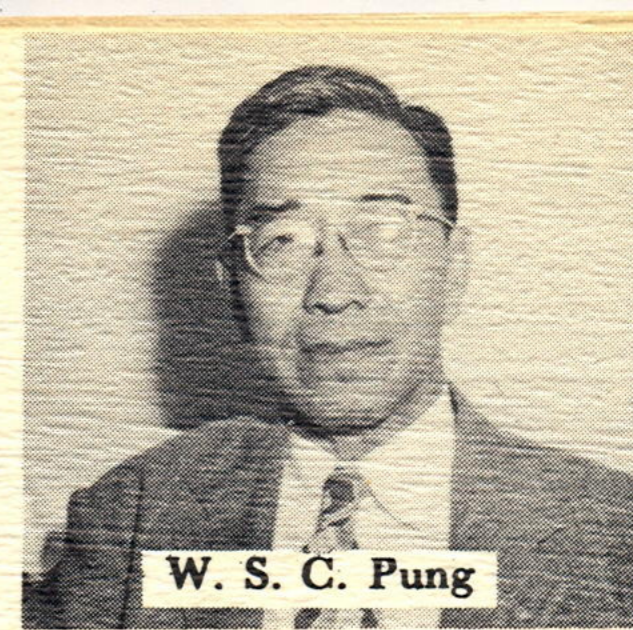
R. M. Belt



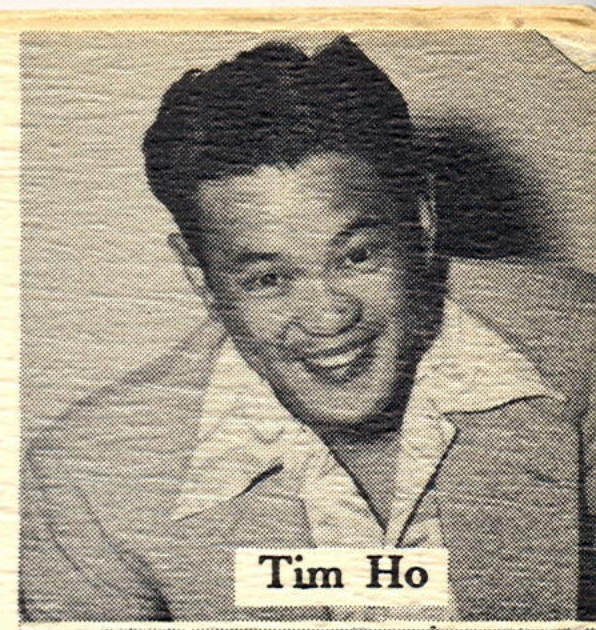
B. B. Montgomery



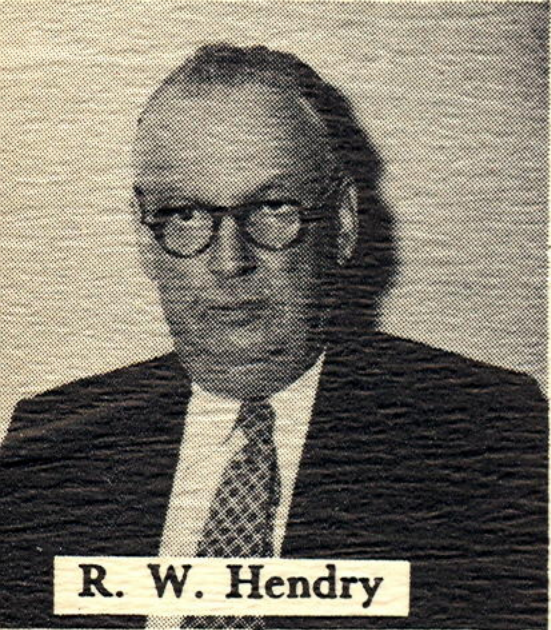
J. C. Myatt



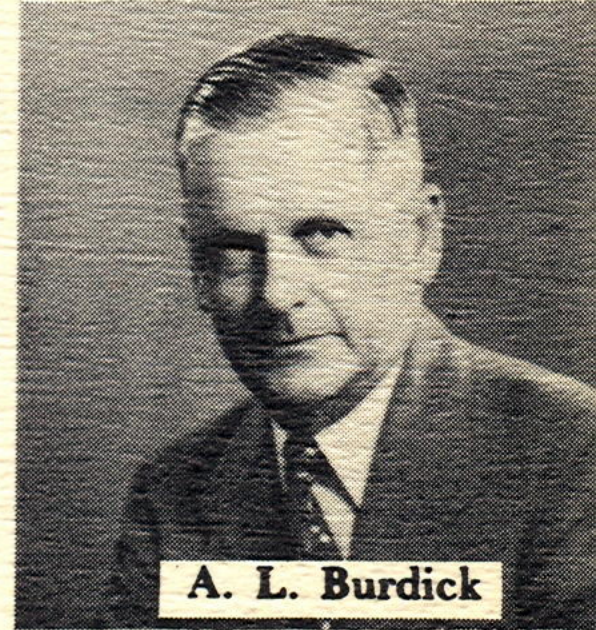
W. S. C. Pung



Tim Ho



R. W. Hendry



A. L. Burdick

# TERRITORY OF HAWAII DEPARTMENT OF PUBLIC WORKS ADMINISTRATIVE STAFF

June 30, 1950

## EXECUTIVE DEPARTMENT

*Superintendent of Public Works and Territorial Highway Engineer* ..... Robert M. Belt  
*Assistant Superintendent of Public Works* ..... Bert B. Montgomery

## DISTRICT ENGINEERS

*Island of Hawaii* ..... Edward S. Kaaua  
*Islands of Maui, Molokai & Lanai* ..... A. L. Burdick  
*Island of Kauai* ..... Fred L. Schumacher

## HIGHWAY DEPARTMENT

### DESIGN

*Highway Design Engineer* ..... John C. Myatt

### CONSTRUCTION AND MAINTENANCE

*Highway Construction and Maintenance Engineer* ..... Robert W. Hendry  
*Maintenance Engineer (Oahu)* ..... Edward C. Chester  
*Resident & Project Engineer, Hamakua Highway* ..... Erwin F. Morrison

### PLANNING AND SURVEY

*Highway Planning Survey Director* ..... Melvin E. Lepine

### BRIDGES

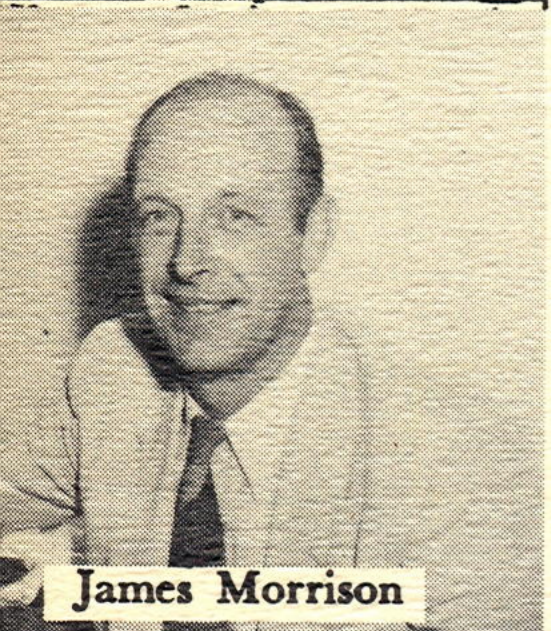
*Bridge Design Engineer* ..... William R. Bartels

### RESEARCH LABORATORY

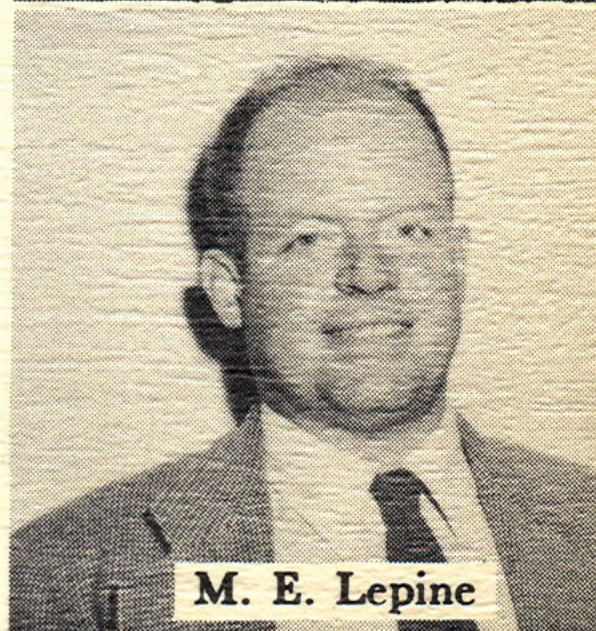
*Testing Engineer* ..... K. Bert Hirashima

### INFORMATION SERVICE

*Information Specialist* ..... George N. West



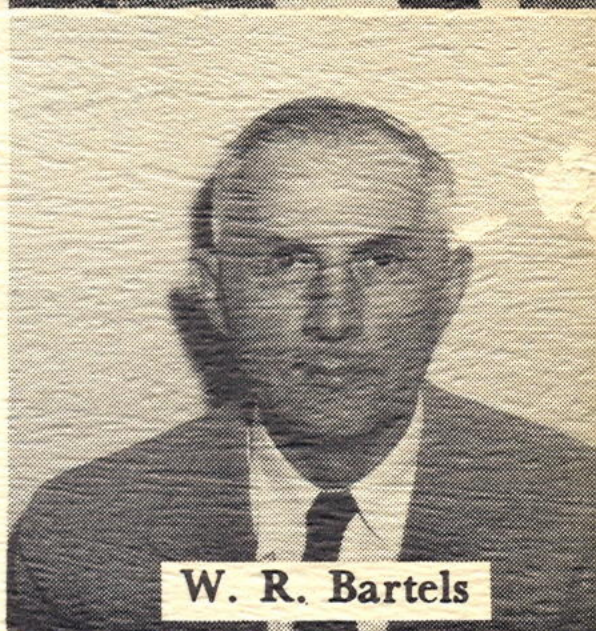
James Morrison



M. E. Lepine



E. S. Kaaua



W. R. Bartels

## DEPARTMENT OF PUBLIC WORKS DESIGN AND CONSTRUCTION

*Architect* ..... James Morrison  
*Building Structural Engineer* ..... William S. C. Pung

### BUILDINGS AND GROUNDS MAINTENANCE DISTRICT ENGINEERS

### EXPLOSIVES AND COMBUSTIBLES DISTRICT ENGINEERS

*Inspector (Oahu)* ..... Frank H. Webster

### AIRPORT DESIGN AND CONSTRUCTION

*Airport Engineer* ..... Tim Ho

### LAND ACQUISITION DIVISION

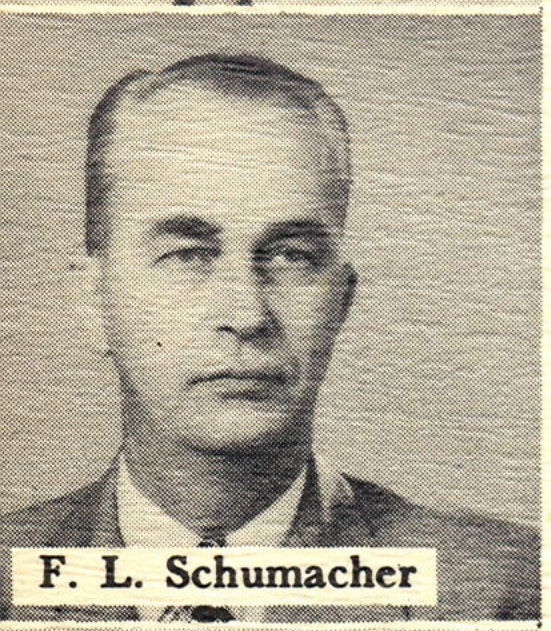
*Cadastral Engineer & Rights-of-Way Agent (Acting)* ..... Lum Hing

### ACCOUNTING AND PERSONNEL DIVISION

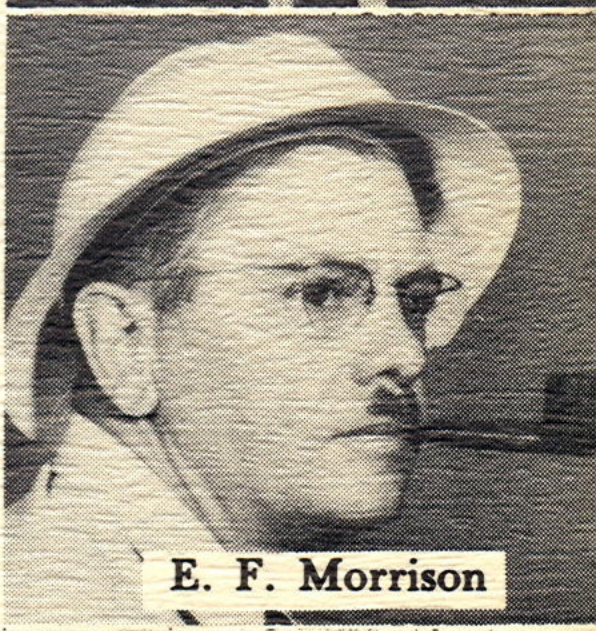
*Finance Executive* ..... Randolph M. Lee

### RADIO CONTROL

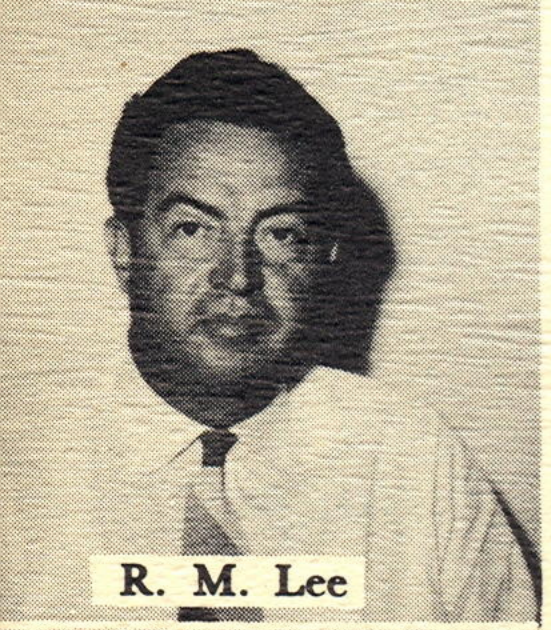
*Radio Engineer (Acting)* ..... Seraphine Morgado



F. L. Schumacher



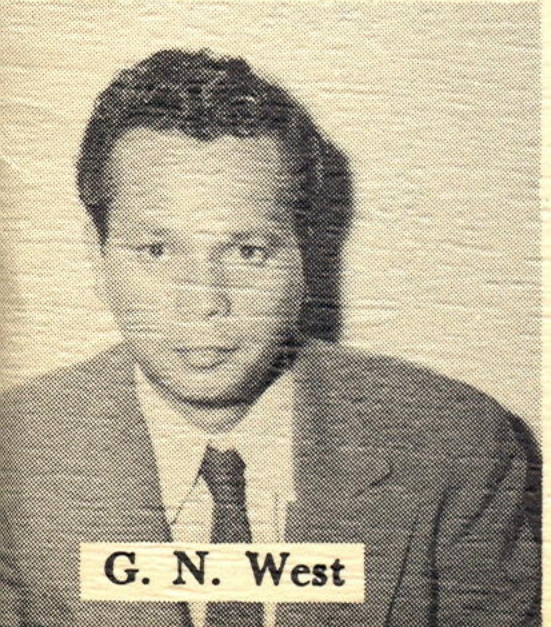
E. F. Morrison



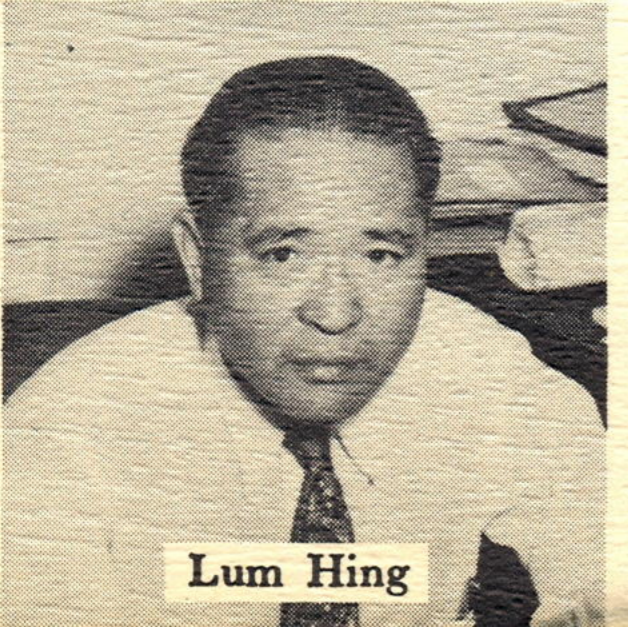
R. M. Lee



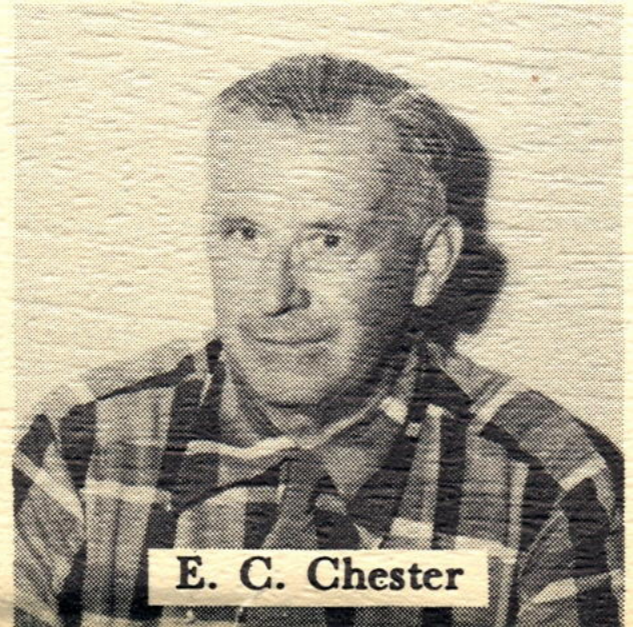
K. B. Hirashima



G. N. West



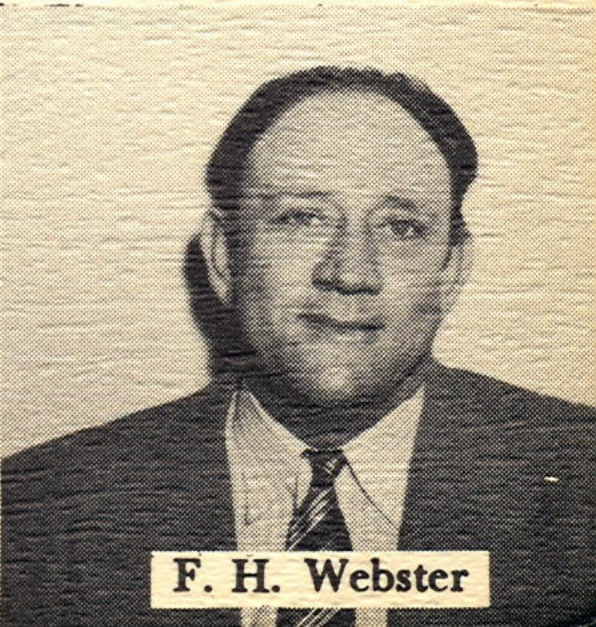
Lum Hing



E. C. Chester



S. Morgado



F. H. Webster

(Continued from Page 23)

ENGINEERING AND ARCHITECTURAL SERVICES (Continued)

Location	Type of Work	Contractor	Amount
Waipahu, Oahu	Architectural and engineering services for Waipahu Library	Ernest Hara, Ray Aka-gi, Thomas Nishida, Kenji Onodera, Yoshio Kunimoto	7,670.00
Waikiki-Kapahulu, Honolulu, Oahu	Architectural and engineering services for Waikiki-Kapahulu Library	Cyril W. Lemmon and Douglas W. Freeth	9,300.00
Maui Vocational School	Architectural and engineering services for an administration building	Fisk, Johnson, Perkins and Preis	16,500.00
Honolulu Vocational School	Architectural and engineering services for a classroom and cafeteria building	Bruce Price Harden	6,600.00
Honolulu	Preparation of plans and specification for a new executive legislative building	James C. Simms, Wm. Dickey Merrill, Kenneth W. Roehrig, Vladimir N. Ossipoff & A. W. Heen	30,000.00
Puumaile Hospital, Hilo, Hawaii	Architectural and engineering services for doctor's residence	Merrill, Simms and Roehrig	1,440.00
Samuel Mahelona Hospital	Architectural and engineering services for doctor's residence	Merrill, Simms and Roehrig	1,440.00
Samuel Mahelona Hospital	Electrical engineering service	Martin and Curley	1,532.00
Waikiki Aquarium	Architectural and engineering services, new Waikiki Aquarium	Hart Wood and Edwin A. Weed, A.I.A.	19,200.00
University of Hawaii	Architectural and engineering services for the construction of a women's dormitory	Edwin L. Bauer, Howard L. Cook, George I. Wimberly & Richard Windisch	20,400.00
Total .....			\$ 127,212.00

STATEMENT OF CONTRACTS AWARDED  
AIRPORTS

Lihue Airport	Construction of a terminal building	Veteran Home Builder	\$ 91,128.00
Lihue Airport	Installation of water system	David K. Kapohaki-mohewa	27,330.00
Kona Airport	Fencing of Kona Airport	Jas. W. Glover, Ltd.	9,970.75
Hana Airport	Paving of Hana Airport	Hawaiian Dredging Co.	161,447.00
Lihue Airport	Additional Paving Work	Waimea Quarry	264,073.35
Kona Airport	Additional Paving Work	J. M. Tanaka	140,670.73
Total .....			\$ 694,619.83

ENGINEERING AND ARCHITECTURAL SERVICES

Lihue Airport	Electrical engineering service for night lighting system of runways	Martin and Curley	\$ 3,000.00
Honolulu Airport	Design of an extension to the terminal building and Lei Vendor's Stand	E. L. Bauer and Wimberly and Cook	4,000.00
Total .....			\$ 7,000.00
GRAND TOTAL .....			\$10,538,033.42