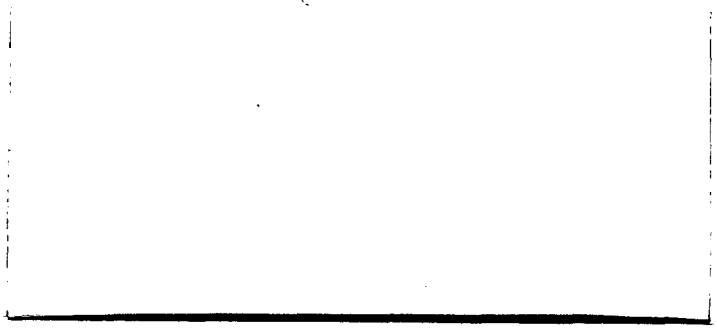
American Samoa: Coastal Zone Management Plan



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MASTER PLAN FOR DEVELOPMENT

OF THE PORT OF PAGO PAGO

AMERICAN SAMOA

by
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MASTER PLAN FOR DEVELOPMENT OF THE PORT AT PAGO PAGO

A report to the Director of Economic Development, American Samoa Government on Land Use and Port Operations

1. INTRODUCTION

1.1 This report was commissioned by the American Samoa Government. It should be considered supplementary to my report of June 1982 undertaken for the United Nations Development Advisory Team (UNDAT) at the Government's request.

While the previous report is still relevant there have been some significant changes in requests for accommodation within the port area and these are now dealt with in a great deal more detail than was possible in the 1982 study.

1.2 Construction of the new main wharf has made considerable progress during the last twelve months and the present schedule envisages completion by January 1984. There is a suggestion that it may be curtailed at the western end by approximately 90 feet, making the final length 1026 feet. This would be unfortunate. It is hoped that ways and means will be found to complete the structure as designed thus retaining useful storage space and direct access from the cargo wharf to the main container wharf.

2. PORT LAND USE SUBMISSIONS

2.1 My brief has been specifically related to land use at the port. An endeavour has therefore been made to ascertain the true requirements of all those in both the public and private sectors who consider it essential or effective to be located adjacent to the wharves and who seek priority treatment in allocations of suitable space in the limited area available. Synopses of their submissions follow.

2.1.1 Casamar Incorporated - Mr. Ben Ichiyasu made a strong representation on behalf of the tuna purse seine vessel owners whose principal requirements were summarised as follows:-

(a) 20,000 sq. ft. at dockside for servicing of nets;

(b) 16,000 sq. ft. for repair of nets and installation of 5000 ton freezer;

(c) 18,000 sq. ft. for office and warehouse complex;

(d) 57,600 sq. ft. to be leased on long term basis (30 years) for service buildings, staff accommodation and facilities.

Mr. Ichiyasu observed that provision of suitable facilities at Pago Pago would be of considerable economic benefit to American Samoa. He would estimate that on the proposed premise that 40 purse seine vessels* working out of Pago Pago and using it as a supply base, the fleet would spend approximately US$56 million annually.

After a meeting with the Port Director on May 12, 1983 Mr. Ichiyasu made a written proposal for Casamar Inc. to lease 13,200 sq. ft. inside the present transit warehouse building for thirty years; the wooden Customs building (2400 sq. ft.) for 20 years and an adjacent 7200 sq. ft. open asphalted area for 20 years. All of these areas would be used for servicing the requirements of the purse seine fleet.

Subsequently, Captain Avey Gonsalves, master and owner of the tuna vessel "Pacific Princess" urged urgent consideration be given to the space needs of the tuna purse seine vessels. He strongly supported the proposals put forward by Casamar Inc., a company well known to and well regarded by tuna vessel owners and operators who would certainly find the facilities envisaged by Casamar Inc. a very useful amenity.

2.1.2 Mother Pearl of the Pacific Inc. - Pat R. Letuli informed me that this company deals with all supplies for the purse seine vessels including salt. This salt must be kept in sealed containers until delivered to the vessel. They are required to maintain a stockpile of 30 to 50 container loads within the wharf area at all times.

2.1.3 Van Camp Canneries - Mr. Rob Shaffer stated that the number of purse seine vessels based in Pago Pago had increased from 2 to 15 in eighteen months and a further 25 would like to come. He estimated that the total tuna trade would be likely to reach 100,000 tons per annum shipped in 5,000 containers.

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* See also last para. of 2.1.5

2.1.4 Star-Kist Foods Inc. - Gregory H. Deering stated that incoming containers for his company's various factory requirements, including tinplate, totalled 70 per month. Exports were 220-300 containers per month. Purse seine vessels operating with Star-Kist presently ranged between 15 and 20 but it was expected that in the not-too-distant future there would be 40. In addition, they had 40 long-line vessels, Van Camp had 20 and all of these averaged a cycle of 2.5 trips per year. (Note: In the "Samoa News" of May 20th 1983, it was reported that Star-Kist Inc. had proposed to expand its operation in American Samoa by 50 per cent at a cost of US$5,000,000 which would make it the third largest tuna cannery in the world. Negotiations at present under way with the Government.)

2.1.5 Marine Resources Department - Director Henry Sesepasara together with Star-Kist's Director of Government Relations, Anthony V. Nizetich made a joint submission. Marine Resources Department required 300 lineal feet of breastwork west of the present fish market with a draft alongside of 15 feet. They would need buildings adjacent to provide for a fish receiving and distributing depot, a cold store and a ship's chandlery. Later on they would require space to handle fish receiving, processing, freezing and packaging for the export market.

It was submitted that in order to ensure sufficient space in the area, adjacent leases should not be renewed until it was clear that they would not inhibit development of the fresh-fish industry.

Mr. Nizetich was firmly of the opinion that a further 30 to 40 purse seine vessels would soon be working permanently out of Pago Pago. Berthage for at least three 260 ft. long vessels of 20 ft. draft alongside and stacked three abreast was needed with generous areas at the berthage face for net maintenance and warehousing.

2.1.6 Pacific Resources Inc. (PRI) - Manager Mr. Rusty Betham and Assistant Manager, Mr. Abe Malae, described operations of the oil storage depot in Utulei Bay and the oil wharf. Underground receiving and refuelling lines connected the oil wharf and the storage depot. They would instal three service outlets at the new wharf. The space available at the present refuelling berths is sufficient for only meters and control valves. They would need at the new wharf some space for storage of hoses on trailers and possibly a towing tractor.

They have had some problems in landing small quantities of products in drums carried as deck cargo. However, when the new wharf was operational, ships would not protrude beyond the ends of the face and this should resolve most, if not all, of their problems.

2.1.7 Peter Reid Stevedoring Inc. - President Senator Peter Reid, General Manager Tony Faumuina, and Operations Manager Ernest Reid, submitted that their company handled nearly all imports and exports of the Star-Kist and Van Camp canneries, together with a fair proportion of the general trade through the port. The visit of the M.V. "Polynesia" on 16th and 17th May 1983 was quoted as a typical example:-

Discharged	200	FCLs for Canneries*
	40	Miscellaneous FCLs
	48	Miscellaneous LCLs**
Total:	288	containers
Loaded	253	containers from canneries
	6	miscellaneous containers
Total:	259	containers

They expressed their concern about storage space on the wharves for these inward containers and a similar quantity awaiting export. However, as far as I could ascertain this operation went quite smoothly even with the limited space available.

They generally agreed that a system of centralised control of container traffic was desirable.

They would require garage and service facilities in the wharf area for all their mobile plant which would include 3 x 25 ton, 1 x 15 ton, 12 x 5 ton and 2 x 3 ton fork-lift vehicles, and four tractors.

They also clean, wash and dry out containers and suggested that facilities to carry out these processes on about six containers at a time would be ample.

Minor repairs to containers are required from time to time but these could be done at any convenient location outside the wharf area. Badly damaged containers are shipped out to Honolulu or San Diego for repair and they could not see any requirement for major repair facilities in Pago Pago.

2.1.8 Kneubuhl Marine Services Corporation - Manager B.F. Kneubuhl Jnr. and Operations Supervisor Eugene Anderson, stated that as general stevedoring and shipping agents they require space for a depot with garage space. They operate 2 x 25 ton forklifts, 7 x 10 ton forklifts and 10 trailers. They have some reefer plugs and maintain a standby generator alongside in case of power failures (which are a relatively frequent occurrence). They would be pleased to see a proper system of reefer plugs and standby plant installed by the Port.

2.1.9 Government Office of Tourism - It was reported that the "Oriana" visited Pago Pago on May 13th berthing at the present wharf without incident. There were 1500 passengers aboard.

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* FCL = full container load

** LCL = less than container load i.e. containing freight for more than one consignee. Most of these would be devanned on the wharf.

The Office of Tourism would like to berth such cruise ships near the eastern end of the new container wharf which would be more attractive environmentally for the visitors and give ready access to the area outside the Convention Centre adjacent to the Rainmaker Hotel. Here there is adequate space for parking buses and taxis. They would like to have public toilets available as well as sockets let into the sealed surface behind the wharf to facilitate the erection of temporary shelters for stall holders. They also suggested a lane leading south to the main road where portable stalls could be located. They also sought a small lock-up storage room for miscellaneous gear.

2.1.10 U.S. Government Meat Inspector - A small meat inspection depot was established within the transit warehouse to standards of construction approved by the U.S. Government.

It is extremely important that this depot meet high standards of hygiene at all times in order to ensure continuation of supply of meat from Australia and New Zealand who are the major suppliers.

2.1.11 Smaller commercial and pleasure craft servicing - Mr. Joseph Misa'alefua of Specialised Marine asked for waterfront space for the establishment of a servicing facility, marina and ramp for smaller commercial vessels and pleasure craft. This would include servicing of ancillary vessels of the purse seine fleet, cannery and privately-owned fishing vessels for which, at present, waterfront facilities are non-existent thus adding considerably to the costs of maintenance of small vessels as well as much inconvenience. Mr. Misa'alefua would be prepared to lease an area of up to 10,000 sq. ft. and construct necessary buildings at his own expense.

A Mr. Silila Patane, tug master, also proposed that waterfront space should be made available for a sailmaker's loft and for the general manufacture and supply of marine canvas goods. A building of approximately 2400 sq. ft. would be required.

2.1.12 Bulk Cement - Some thought has been given to the possibility of establishing a bulk cement receiving depot and bagging plant. Bulk cement carriers discharge at the rate of approximately 30 tons per hour. Length of underground pipeline is, within reason, not a major consideration. A depot area of approximately 15,000 sq. ft. would be required. However, N.Z. Cement Holdings Ltd, a major supplier of cement to the South Pacific area, have examined the cement trade and see very little future for a bulk terminal at Pago Pago where a total consumption of 40,000 to 50,000 tons per annum discharged from a 3000-ton carrier at lease once a month would be needed to make it viable. In view of the very unlikely possibility of landing cement in bulk, no site provision has been made on the plan. Space could be found near the western end of the cargo wharf if necessary.

2.1.13 Coal - A recent study on the use of coal for electric power generation in American Samoa (I.Y. Borg, October 1982) concluded that the use of coal could be the best and cheapest interim-term solution to Tutuila's power generation problems. It is considered that a thermal power station of about 15 megawatts could handle the base load, leaving existing diesel generators for peak loading. This would use approximately 50,000 tons of coal per annum.

Doubts have been expressed about where this coal could be landed. However the quantity is not great by harbour standards and could easily be handled over the existing wharves and moved by road transport to the power station.

2.1.14 Transit Warehouse - There were several submissions put forward regarding the need for additional transit warehouse space to cater for non-containerised cargo, motor vehicles and transhipment consignments, as well as for goods being devanned from LCLs. This was stressed at a meeting of port users on May 19th, 1983, when it was also pointed out that motor vehicles required covered lock-up storage because of the prevalence of vandalism; it was, however, agreed that the proposed provision of high security fencing around the port area would alleviate this to a certain extent.

2.1.15 Parks and Reserves - The Director of Parks and Recreation, Mr. Fuga Tolani Teleso, expressed general agreement with the planned takeover of the Training Centre for port administration offices and indicated that he could arrange financial support for the re-location of this school.

He has proposals for the construction of a new three-storey building (300 ft x 35 ft) on the south side of the main road opposite the new wharf area, with off-street parking towards the entrance to the Governor's residence. The proposal includes a realignment of the main road and some transplanting of existing palm trees.

3. PLANNING RECOMMENDATIONS

3.1 General

Having considered the requests for accommodation within the port area, one is forced to the conclusion that they cannot all be accommodated within the limited space available.

The new wharf, which is costing some $5.5 million, was designed to handle the present and projected cargo trade of the port and accordingly this must be given priority in the design of a land use programme.

It is acknowledged, however, that certain ancillary services are an essential part of the whole operation and should be provided for insofar as it is practicable to do so.

It should also be appreciated that the form and nature of trade cargoes are not decided by the port administration which must, however, do its best to contend with sizes and types of ships using the port and with the form in which cargo is presented for import and export.

Fortunately, the revolution in cargo handling which has taken place over the last 10 to 15 years has resulted in the firm indication that the major proportion of all goods will be shipped in containers and that planning can be confidently oriented to their continued use for the forseeable future.

A draft master plan was shown and explained in considerable detail by myself and the Port Engineer to a meeting of port users convened on May 19th, 1983. In attendance at this meeting, chaired by the Port Director, Mr. Maiava Oliver Hunkin, were:-

Eugene Anderson	KMSC
Mark Cameron	(Vince Halek) Purse Seiner Services
Dyke Coleman	Governor's Office
John Faumuina Jnr	Development Planning Office
Tagisia Faumuina	Poly Shipping
Avey Gonsalves	Pacific Princess
George Lokan	Samoan Maritime
Abe Malae	SPRI (Oil)
Ray Marsack	UNDAT (observer)
Mike Morse	USCG Liaison Officer
John Reid	Harbourmaster
Morgens Ring	Marine Railway
Soon Jee Cho	Van Camp
Jo'oso'o Tuiolemotu	Immigration Division

There was considerable and animated discussion of the plan. I felt that consensus was reached on all the major points and the detailed recommendations which follow are based on this premise.

The recommendations are made not in order of priority but, for ease of identification in relation to the plans attached as Appendix C (three sheets), on a geographical basis from East to West. A suggested action priority list is attached as Appendix A.

3.2 Security

All cargo working and associated operations are within the Customs area and the whole complex should be surrounded by a substantial security fence. Gates can be provided at suitable places but all should be kept locked except when required for immediate needs. One entrance only should be available for general traffic and this would be under the control of security guards who would check all movements of personnel, vehicles and cargo.

This main entrance has been shown on the plan at about the middle of the container wharf. A street re-alignment has been planned to facilitate the merging of vehicles with main road traffic.

3.3. Oil Wharf

It seems clear that the existing oil wharf will be adequate for the forseeable future provided much-needed maintenance to the surface and fittings is carried out fairly promptly.

3.4 Tourist Facilities

The suggested requirements of the Government office of Tourism are set out in para. 2.1.9. The encouragement of cruise vessels certainly calls for attractive facilities for passengers ashore and this should receive immediate consideration. However, the suggestions made cover infrastructure which should not, for obvious reasons, be located within the port and Customs security area and would not therefore seem to be the responsibility of the Port Administration. It is recommended therefore that once the eastern boundary of the Port Administration security area has been delineated, the Government Office of Tourism should approach the relevant authority for provision of the suggested facilities.

The master plan shows access-ways for passengers to and from the security area.

3.5 Transit Warehouse

A recommended new transit warehouse is shown on Sheet 1 of Appendix C (see para 2.1.14). This building is 190 feet long by 85 feet wide with a clear height of 25 feet. There should be two doorways on the northern side each 30 feet wide and to full height. Present buildings in this area to be demolished.

3.6 Administration Blocks

As indicated in my previous report, a re-location of administrative offices is an essential pre-requisite of the new layout. It is recommended that the Port Director, Port Engineer and general administrative staff, and Customs, be based in the existing Betty Kendall Johnston E.C.E. Training Centre. This is an attractive structure with adequate off-street parking. I believe it has been acknowledged by the school Staff that their continued use of the complex would not be compatible with conditions created by port operations and therefore a change of location would not be strenuously resisted.

A new building ideally located close to the main entrance to the security area should house the Harbourmaster, Pier Superintendent and other port staff and shipping agencies.

This building would also incorporate the control tower detailed in paragraph 3.7. Estimated space requirements for administrative, port and customs staff are shown in Appendix B.

3.7 Container Terminal

The prime use of the new breastwork wharf is for container traffic and the master plan has been drawn up accordingly. This allows for -

607 standard 20-foot I.S.O. containers - stacked two-high
62 20-foot reefer containers - single units

Larger container terminals would use straddle trucks to move containers but Pago Pago is likely to continue to use fork-lift trucks: using forks, top lifts or side frames, as required.

Fairly wide access lanes are needed with this handling system and some block-stacking is inevitable if the use of the space available is to be maximised. This will result in some double-handling if a particular container is required but only to a very minor extent as there are relatively few consignees.

It is nevertheless essential that a proper system of control for placement of containers be instituted immediately the new wharf facilities become available and it is strongly recommended that:-

(a) An observation tower be erected on top of the new administration block (see para 3.6) giving an overview of the whole terminal, eye level being at least 35 feet above ground;

(b) There be radio links from the tower to fork-lift drivers;

(c) There be a display board in the tower with card slots or similar provision for identification of every individual container space within the terminal;

(d) The installation of a pneumatic tube system (Lamason type) for rapid transfer of cargo documents between the main gate and the control tower;

(e) The provision in the tower of desks and equipment for staff working on records of container movements;

(f) The provision of desks in the tower for representatives of shipping agents involved with container movements;

(g) Space in the tower should also be provided for the use of the Harbourmaster for overview of vessels within the harbour thus facilitating movement clearances; for the Pier Superintendent and for an overview duty security guard.

3.8 Parks and Reserves

The site of the proposed new building and car park on the southern side of the main road is, of course, outside the dock area proper (see para 2.1.15). It is, however, strongly recommended that this development be reconsidered very carefully. Any major realignment of the road to provide extra space for the project would almost certainly eliminate the proposed green strip on the northern side and any further encroachment on the new wharf area must be resisted in the interests of providing as much container stacking space as possible.

3.9 Wharf Traffic

A scheme for the merging of wharf traffic through the main entry with main road traffic is shown on the plan. It has been designed to cause the least possible interference with existing conditions.

3.10 Container Cleaning Area

A container wash and dry-out area has been included at the south-western corner of the container area. This would cater for three containers at a time.

3.11 Present Transit Warehouse Area

More room in this building will of course be available when the present administration offices are moved to their new location. It is recommended that:-

(a) The meat inspection depot (para 2.1.10), being conveniently located, remain where it is : provision to be made for three reefer plugs to be provided on the adjacent outside wall for reefers under inspection.

(b) Provision be made in this building for cold storage space required by the Department of Agriculture.

(c) Sympathetic consideration be given to the granting of a short-term lease to Casamar Incorporated to enable temporary facilities to be established to service the purse-seiner fleet (see paras 2.1.1 and 3.16).

3.12 Stevedoring Complexes

It is recommended that the areas presently occupied by the Meadowgold building and the Fire Station be made available for leasing to Peter Reid Stevedoring Inc. and Kneubuhl Marine Services Corporation. This would of course necessitate the demolition of existing buildings. It was suggested that the Fire Station could conveniently be located in the old tennis court area and this would cause no problems of road alignment.

3.13 Inter-Island Service Wharf - M.V. "Queen Salamasina" maintains an important link between Pago Pago and Apia on a regular schedule. It must therefore be provided with a regular berth (see Sheet 2, Appendic C).

The present mooring system is not very satisfactory, and a modification has been shown on the plan for the vessel to be berthed alongside, and for the landing to be ramped down at the eastern end so that the vessel's stern ramp does not lie at a steep gradient as it does at present, particularly under minimum freeboard and low tide conditions.

A passenger and customs building has been shown together with a circuit road access which should mitigate the present real problem of traffic congestion at this dock.

An alternative and perhaps more desirable arrangement would be for the inter-island berth to be established further west, opposite Burns Philp South Sea Co. Ltd and this has been shown on Sheet 3, Appendix C. This would allow more space and relieve traffic congestion in the central area.

This provides for 100 lineal feet of berthage angled at about 45 degrees to the foreshore and dredged to a depth of 12 feet alongside. This would incorporate a stern ramp at a grade of 1 in 12 down to a level of 4.5 feet above high water mark. A Customs and passenger shelter within a security area and a public access road are also shown. Any additional shipping office or warehouse facilities could be sited alongside on land leased for these purposes. All the foreshore land in this area is government-owned.

This alternative would certainly be more costly. Remoteness from the general port security area could also be a problem.

3.14 Marine Resources Department

At a meeting convened by the Director of Public Works it was agreed that the requirements of this department (see para 2.1.5) would be met by a breastwork wharf with 220 lineal feet of berthage with a depth alongside of 12 feet at low water. This is shown on the plan to the west of the present location of the inter-island ferry wharf (see Sheet 2, Appendix C).

The ultimate use of this wharf could not be accurately defined at this stage but if its alignment is about 30 feet seaward of the present retaining wall and an extension thereto, there should be adequate space for a fish processing, packaging and freezing plant and a cold store. This would of course necessitate removal of buildings which would be in the way of the new development.

The design of this wharf can be decided only after a soil survey of the area is carried out. It would seem however, from information gained in test piling in both this location and at the new container wharf, that a pile-supported structure would be both expensive and unnecessary.

A single tie-back retaining wall should be quite satisfactory. Preferably this should be built of sheet piling, but, depending on flexural resistance and adequate toe pressure being developed, it might be feasible to use the hollow circular piles already on hand with pre-cast concrete panels driven between.

The structure would then be held together by a cast-in-situ concrete beam extending from just above low-water mark to deck level. This would also act as a dock facing, and anchorage could no doubt be developed by a reinforced concrete deck slab.

3.15 Malaloa Fish Pier

The Malaloa fish pier is used as a quarantine berth for overseas yachts and also for mooring of small boats.

The quarantine berth can remain but the shelter area is not well placed as it faces into the prevailing wind and acts as a trap for all types of flotsam and rubbish.

It is therefore recommended that this area be partly filled in and developed for use as a boat repair yard (see para. 2.1.11).

Provision has been made in the plan for:-

(a) a 60-ton capacity slipway (marine railway)
(b) a 30-ton synchrolift platform
(c) a ramp for small boats and trailer boats.

Immediately west of the fish pier, provision has been made for 96 floating-type marina berths for pleasure craft. This could readily be further extended according to demand.

Toilet and shower facilities should be installed as soon as feasible and a service area made available for leasing to businesses related to the supply of services and equipment for small boats such as motors, spares, sails, canvas goods and general ships' chandlery.

Such infrastructure would not only provide a much-needed service for small boats but it would also make an attractive waterfront area out of what is at present rather an eyesore.

3.16 Purse-Seine Facilities

Strong representations have been made from many quarters on the need to make adequate provision for present and increasing numbers of purse-seiners wishing to base at Pago Pago.

However, beyond a recommendation for token and temporary space to be allocated for net repairs (para 3.11(c)) it has not been possible to make any leasehold space available near the cargo wharves.

It is not legally possible to allocate or reserve berthage at any general cargo wharf. Ships working cargo must be berthed in strict order of arrival at the port and they can be asked to move only when discharge or loading has been completed.

The purse-seiners are not classed as cargo carriers and although they can be assured of wharf space whenever this is available, there simply is not room to grant them berthage on a permanent basis at the main dock complex.

A proposal has therefore been shown on the plan to locate purse-seiner facilities at the extreme western end of the harbour.

This would entail the reclamation of some 4 acres and the provision of 720 lineal feet of berthage which could be specifically allocated for the use of the purse-seine fleet.

It is envisaged that land fill would be obtained by dredging of navigable areas alongside. This could be carried out by a small suction cutter dredge which could be acquired by the Port Administration and used also for general purpose dredging in other parts of the harbour.

It seems fairly certain that purse-seine vessel operators are genuinely interested in using Pago Pago as a base on a long term basis. The new marine railway on the northern side of the harbour, and capable of handling vessels of 3000 tons displacement, is well under way and will be able to provide adequate overhaul and repair facilities.

The capital cost of the proposed reclamation and berthage is likely to be considerable. But it also seems likely that arrangements could well be made for the proposed lessees to find that capital or underwrite the loan monies required. The whole work could then be done without cost to government and would create a valuable asset for the future. In short it would apear to be a viable commercial proposition which would also have a healthy impact on the general economy (see para. 2.1.1).

3.16.1 It is recommended that:-

(a) existing plans of the area be updated immediately;

(b) a detailed hydrographic survey be undertaken covering the area from the present docks to the western end of the harbour to ascertain whether any shoals need to be removed and that cut and fill requirements for the proposed reclamation are approximately equal.

A detailed scheme can then be designed to suit the topographical conditions.

It will be noted that an additional area of about one acre has been allocated for filling against the existing reclamation at the western end. This could be the most convenient area to be adjusted to balance cut and fill requirements. It would be a good site for a launching ramp and parking lot for vehicles and boat trailers while the embayment thus created would considerably improve aesthetically the adjacent areas and seafront.

4. PORT ADMINISTRATION

4.1 Although the question of port administration is not covered by my terms of reference, I feel some observations may be useful in the light of the very much larger and more complex organisation which would result if the proposed master plan is accepted and implemented.

4.2 During the course of my investigations and discussion of the many submissions received I came to the conclusion that the administration of the port should be undertaken by a properly constituted and autonomous Port Authority.

4.3 I suggest that this Authority should consist of six commissioners, nominated by the Governor and confirmed by the legislature, being:-

(a) President and Port Director - representing Government
(b) Vice President - representing Government
(c) one commissioner - representing overseas shipping
(d) one commissioner - representing local shipping
(e) one commissioner - representing importers and exporters
(f) one commissioner - representing port land users

4.4 The Port Authority should be charged with the responsibility for efficient management of all harbour water areas and defined foreshore land and all port activities including:-

(a) Pilotage and services of shipping;

(b) Engineering design, construction and maintenance of all facilities;

(c) Cargo and container movements and stevedoring services;

(d) Customs and port security services;

(e) Financial aspects to ensure that the port operates on an economic and self-sustaining commercially-viable basis.

4.5 It is important that the Authority be autonomous and that its decisions receive the full support of government and legislature in order that it may operate confidently and without political interference.

4.6 I can see no reason why the Port, operated by a competent Authority, cannot be a completely viable commercial enterprise and thus operated at no recurring cost to Government.

5. ACKNOWLEDGEMENTS

This report was compiled as a result of numerous meetings and interviews but it would be invidious to try and name those who assisted me. I should, however, like to acknowledge with thanks the support given by the Divisions of Economic Development, Port Administration, and Public Works: and in particular the immediate response by the United Nations Development Advisory Team (UNDAT) in Suva, in sending Mr. R. O. Marsack to Pago Pago to assemble and edit the report.

D. Calwell

Appendix A

Suggested Action Priority List

1. Cancel or defer existing contracts for toilets.
2. Take over of school building and library service - decision (para 3.6)
3. Survey of Upper Harbour (para 3.16)
4. Preliminary drawings of administration building, car park main entrance, reefer plugs and emergency generator (para 3.7)
5. Surfacing of container yard
6. Leases of Casamar - short term (para 3.11 (c))
7. Leases to Casamar and Purse Seiners - upper harbour - long term including design of upper harbour development (para 3.16)
8. Container wash (para 3.10)
9. Removal of Meadowgold Building and Fire Station (para 3.12)
10. Contract for administration building, car park and entrance
11. Contract for reefer plugs (para 3.7)
12. Contract for Security fence (para 3.2)
13. Overhaul meat inspection department and install reefer plugs (para 3.11)
14. Leases for stevedores (para 3.12)
15. Toilets at Malaloa fish pier (para 3.15)
16. Inter-island wharf - m.v. "Queen Salamasina" (para 3.13)
17. Marine resources wharf (para 3.14)
18. Floating marina berths and associated leases (para 3.15)
19. Leases of minor spaces in transit warehouse (para 3.11)
20. Boat repair and haul out area (para 3.15)
21. Transit warehouse on Library Service site (3.5)
22. Repair and improve wharves at Harbour Service area.

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Appendix B

Estimated Administrative Offices Requirement

1. Main Administrative Block

Director's Office

Room	Occupant	Persons	
1	Director of Port Administration	1	
2	Deputy Director and Secretary	2	
3	Engineer	1	
4	Drawing Office	1	(8)
5	Spare Office	1	
6	Reception Secretaries	2	
7	Records Room	-	
8	Conference Room	-	

Accountant's Office

9	Administrative Officer	1	
10	Accountants and Cashiers	6	(7)
11	Records Room and Safe	-	

Customs Division

1	Chief Customs Officer	1	
2	Assistant Customs Officer	1	(14)
3	Inspectors and Reception	12	

2. Container Yard Administration Block

Pier Superintendent and Security

1	Pier Superintendent	1	
2	Assistant Pier Superintendent	1	
3	Chief Security Officers	2	
4	Security Staff Locker Room	7	(15)
5	Maintenance Officer	1	
6	Cleaners	3	

Harbour Division

1	Harbourmaster	1	
2	Pilot Training Officer and Chartroom	1	(3)
3	Reception	1	

General Amenities

Staff lounge and cafeteria
Recreation area
Men's and women's toilets

Observation and control tower

Controller and assistants	3	
Stevedore representatives	2	
Shipping Agents	1	(7)
Harbour watchman	1	