

140
MINISTRY OF PLANNING, PERSONNEL,
ESTABLISHMENT & TRAINING
DOCUMENTATION CENTRE

USA 7200

7-11-94
15-11-94

TOURISM DEVELOPMENT PLAN FOR SOUFRIERE, SAINT LUCIA

Prepared by Division III, Department of Regional Development
Organization of American States
April, 1985

MINISTRY OF PERSONNEL ESTABLISHMENT & TRAINING	
DOCUMENTATION CENTRE	
DATE	January 20, 1991
SOURCE	CPV Collect 64
COST	—
DOCUMENT NUMBER	MFN 528
CLASS NUMBER	09.04.051C

NATIONAL DOCUMENTATION
CENTRE

DATE BORROWED

March 6, 1996

TOURIST
SOI

Prepared by Division
Organization of American States
April, 1985

ment

09.04.051C

CONTENTS

INTRODUCTION

Executive Summary

- Chapter 1. Actual Tourism in Soufriere
 - A. Tourism activities
 (functioning of tourism industry)
 - B. Demand
 - C. Supply (attractions, facilities
 and infrastructure)
 - D. Problems and issues
 - E. National policies

- Chapter 2. Objectives and Strategies for Soufriere

- Chapter 3. Master Plan
 - A. General strategy
 - B. Sub-projects (site, goals,
 description, works and cost estimates,
 income projections)
 - 1. Pitons
 - 2. Sulphur Springs
 - 3. Soufriere Town
 - 4. Diamond Mineral Baths
 and Botanical Gardens
 - 5. Rain Forest Trail
 and Overlooks
 - 6. Historic Sites
 - 7. Lodging Development

- Chapter 4. Community Tourism Program
- A. Community (small scale) enterprise
 - B. Executive management support
 - C. Tourism education program
- Chapter 5. Financial Assessment
- A. Income
 - B. Costs
 - C. Profitability analysis
- Chapter 6. Training and Technical Assistance Requirements.
- Chapter 7. Economic Evaluation

Annexes:

- I. Interpretation Plan
- II. Infrastructure and Physical
 and Environmental Aspects
- III. Photos
- IV. . Town Preservation Projects: Models
 (in translation)
- V. Reproductions of Gingerbread Houses

LIST OF MAPS AND PLANS

A. Maps

1. Study Area
2. Actual Situation
3. Beaches Accesses
4. Soufriere Town: Tourism Functioning
5. Planning Concepts Outline, 1983 CPU
6. Waterfront Traffic Organization Scheme
7. Historic Architecture Walk
8. Soufriere Bay, Present Land Use
9. Coastal Processes
10. Coastal Processes
11. Sulphur Springs Road

B. Plans

1.0 Waterfront/Mall

1.1 Waterfront/Mall Stalls, Bench

1.2 Bandstand Street Lights

1.3 Entrance Gate

1.4 Changing Facilities

2. Sulphur Springs Visitor Interpretation Center

3. Soufriere Estate Museum

**4. Pitons National Park and Sulphur Springs
Conservation Area**

5. Sulphur Springs

6. Signs

7. Trails

8. Rain Forest

9. Soufriere Estate - Diamond Baths

10. Malgretoute Pitons Park

11. Soufriere Pier Design

12. Seawall

INTRODUCTION

This Study was prepared at the request of the Government of St. Lucia under the National Program of Technical Cooperation for 1984-85, the project titled "Tourism Development Projects - Project Formulation, Implementation and Evaluation", and in accord with discussions in the Ministry of Tourism and the National Trust in February, 1984.

The official counterpart agencies to the OAS for this project are the Ministry of Tourism and the National Trust.

It was recognized that the Pitons and the Sulphur Springs represent St. Lucia's principle non-beach attraction to visitors. However, fewer visitors seemed to be going to those attractions, spending little time there, and the Soufriere townspeople complained of small benefit from tourism. Measures to induce more tourism to Soufriere had reportedly not yielded the desired result. The area of Soufriere was given priority in the OAS NPTC project, "Tourism Development Projects", immediately behind Pigeon Island.

The present Study attempts a comprehensive approach in planning for the development of tourism to Soufriere. Planning departs from an analysis of how the tourism trade actually functions, the visitor demand potential, the facilities and services now offered, and the Government's national development policies. The objectives set for the project include an attitude of mutual respect between Soufriere residents (including the young boys) and visitors, development of the natural attractions for visitor appreciation in a manner which protects and conserves them, an expansion of tourism to the area (day-tour as well as stay-over), and through tourism, more employment, income and net foreign exchange earnings. The Study adopted a strategy of a more broad front approach to planning, considering the close interrelation and cause-effect connections within the area.

The Study groups the development measures into seven subprojects: Pitons National Park, Sulphur Springs, Soufriere Town, Diamond Baths/Garden, Rain Forest Walk and Overlooks, Historic and Archeological Sites, and Lodging.

The first six deal with tourism attractions and the infrastructure necessary to the success of those attractions. The sixth, Historic and Archeological Sites, involves research principally, and would yield no income in the immediate term of the project. The investments would be from the private sector, as would those in lodging. Therefore, those subprojects, as well as those measures of the other, i.e., first five, subprojects indicated for the long term were not included in the bundle of investments and programs tentatively grouped for financial assessment as a discrete project. However, each of the subprojects was also evaluated, but under the assumption that the entire plan would be implemented. This enables identification of the more and the less financially profitable parts of the project. Also, the project was assessed minus the Diamond Bath/Garden subproject and minus the Estate Historic Museum (Soufriere Estate Sugar Factory), both privately owned by the same family, but integral parts of the roster of tourism attractions of Soufriere approximately ready for development.

The combined costs and income of developing those two properties together ^{were} ~~was~~ also analyzed. An economic evaluation was made of the overall plan. The data and assumptions used in forming the subprojects was entered into an IBM XT computer, to facilitate the revision and/or modification of the project, in the OAS or in St. Lucia. It must be emphasized that this is a preliminary plan aimed at assisting St. Lucian authorities select and implement specific limited projects, appreciating the implications and function of that action on the overall context of tourism in Soufriere..

Annexed to the Study are photos, plans and maps, as well as an interpretation plan prepared by OAS consultant Mr. Glen Franklin Kaye, an analysis of the main infrastructure needs prepared by OAS consultant Mr. Paul Hipolyte. Models of inventories of historic sectors of towns are in translation and will be provided as Annex IV. Examples of "gingerbread houses" from the French colonial period in Haiti provided by OAS consultant Mrs. Lucila Oliver are annexed as well (Annex V). Mrs. Oliver, a tourism physical planner and architect, prepared the Soufriere Town subproject, and contributed to the development of the other subprojects contained in Chapter III. She also prepared the description of present tourism and supply, Chapter I. C.; and an initial draft on problems and

issues, national policies and objectives, and strategies for Soufriere, Chapter I. D. and E., and Chapter II. OAS consultant Mr. Ron Cooksy, landscape architect, prepared the preliminary plans for the Pitons National Park and the Diamond Bath/Garden and contributed to the landscape planning analysis and park development aspects of the other subprojects. Each consultant contributed planning ideas and concepts throughout the field work of the study.

OAS staff member Mr. Thomas Riegert coordinated the study, and also served as Tourism Economist and project evaluator. Mr. Riegert amalgamated the inputs of the consultants and framed the several development proposals and plans into an overall plan and assessed the parts of the plan in subproject and project form, and private sector form, and in financial and in economic terms.

Mr. Robert Devaux was the counterpart official for the St. Lucia National Trust, and Mr. Allen Chastanet the Liaison Official of the Government. The Study was immeasurably assisted by a number of other people in St. Lucia, from both the private and public sector via information or consultation. Needless to say, omissions or failings in this draft are solely the responsibility of the OAS.

The help of the following in the public sector is noted:

The Honorable Mr. George Mallet,
Minister of Tourism;

The Honorable Mr. Leonard Riviere,
Attorney General;

Mr. Julian Hunte,
Chairman, St. Lucia National Trust;

Mr. Clem Bobb,
Development Control Authority;

Mr. Mervyn Williams,
Chief Town Planner;

Mr. Gilbert Charles,
Director, Forestry Division,
Ministry of Agriculture;

Ms. Lucia Isidore,
Director, Southern Region,
Ministry of Community Development;

Mr. Christopher Alcinder,
Chairman, Soufriere Town Council;

Miss Letitia Gidharry,
Tourist Board Staff in Soufriere.

Information and advice came from hoteliers, tour operators, international tour representatives, taxi drivers, restaurateurs, yachtsmen, builders and engineers, and others, especially those resident or having businesses in Soufriere. The private sector members of Soufriere's Tourism Committee were particularly helpful. Special thanks to the five 1984 secondary school leavers who assisted in taking the sample survey of visitors to the Sulphur Springs. Those from the private sector are not listed, as inevitably some would be omitted.

EXECUTIVE SUMMARY

I. Present Situation

The Soufriere area is the main non-beach attraction for tourism in St. Lucia. It forms a part of the Island's tourism draw, though a good distance from the main resort areas. The majority of the visitors to Soufriere are tourists lodged in beach areas from Marigot Bay north to Cap Estate, who arrive by one of the romantic-style sailing ships or cabin cruisers. The visitors generally spend between one and two hours in Soufriere, contributing little to the local tourism trade. Most are even fed lunch on their boat. *

Most visitors to Soufriere are on organized tours; some tours are to Soufriere only, others go around the Island. Soufriere is also the terminal side of the Rain Forest tours, so that flow also passes through. Those tourists, plus the few on their own, generally have lunch in Soufriere, generating some restaurant business. The same is true of the cruise passengers who board their vehicles or boats in Castries Harbor and visit Soufriere by minibus or boat. They are in the area 2 to 4 hours, and have lunch locally. There are a few air excursionists, and their activity in Soufriere is essentially the same as that of the cruise passengers. The few yachtsmen who moor in Soufriere Bay one or two nights have a more leisurely stay, usually patronizing the local restaurants for dinner and drinks.

Local taxi drivers drive the sea arrivals from the pier to the Sulphur Springs and other places. Local youths have attempted to carve out some share of the tourist expenditure by aggressively offering their services as guides and selling sulphurous rocks. Stay-over tourism is limited to two small hotels, several villas and a few small guest houses. Thus, Soufriere tourism activity consists typically of boat or bus tours through the Town to the Sulphur Springs, with the bus tours stopping for lunch. The tourism trade in Soufriere consists primarily of tour operators from Castries, taxis, a few restaurants, two small hotels, and the local impromptu guides. X

The demand for visiting Soufriere is greatly affected by the tourism demand for St. Lucia. The latter consists of air tourists and excursionists, cruise passengers, and yachtsmen. The tourist demand for the Caribbean, including St. Lucia, has been a function of a number of variables, but all can be broadly grouped into two types. The first are those affecting conditions in the tourist generating country, primarily income and motivation. The second are those affecting conditions in the destination countries, primarily price and the product offered in the travel market. These variables are in turn affected by what is going on in the economy, society, and life style in the countries of generation and destination. The main generating countries for St. Lucia are the U.S., Canada, the U.K. and the rest of Europe, and the Caribbean. National income and production in the U.S. has recovered strongly from the 1981-82 recession, GNP expanding an average of 6.3% per year in 1983 and 1984. The U.S. economy is expected to grow at an average annual rate of 4% during the next several years. In turn, the booming import demand of the U.S. has helped the European and Canadian economies to recover. Though the unusual strength of the U.S. dollar vis-a-vis the European currencies has induced record U.S.-to-Europe tourism and constrained Europe to the U.S. tourism, U.S. tourism to the Caribbean has been borne up by the record personal income levels in the U.S.

Based largely on the probable behavior of demand influences in the generator countries, and the comparative characteristics of St. Lucia and the Caribbean (noting especially the flows captured in the recent past), and assuming that the socio-political climate for tourism will not deteriorate, that there is a "passive" expansion in supply, and that St. Lucia's price competitiveness within the Caribbean be maintained, then the total number of tourist arrivals is expected to grow at a rate of between 4% and 7% over the next several years.

It needs to be noted, however, that in the High Season (Winter) there already exists a supply constraint upon the larger hotels, given their pricing policies. To realize the necessary investment in hotels, yet hold the cap on prices, the new initiatives will have to be more cost-saving in physical items as well as in commissions, marketing, labor, promotion and management.

The number of cruise passengers to St. Lucia has rebounded somewhat in 1983 and 1984, and is expected to reach the average 1976-80 level, i.e., around 60,000, by 1989. That increase would reflect an average annual rate of 9%.


The realization of the Point Seraphin project (cruise ship dock), as well as the tourism attraction developments of Pigeon Island and Soufriere, would constitute a basic improvement in St. Lucia as a port of call, and that would result in perhaps 80,000 cruise passengers by 1989, i.e., an average annual growth of 15.5%.

The completion of the new marina at Rodney Bay should help St. Lucia recapture and expand on the yacht calls made in the late 1970's. 3,200 were registered in 1978; 3,900 are projected for 1989.

This Study estimated that approximately 30% of tourists to St. Lucia and 25% of cruise passengers presently visit Soufriere. Based on a canvas of the trade, a sample survey of visitors to Soufriere, and direct observation, it was estimated that a project to develop and facilitate the area's tourism attractions could cause the above ratios to increase to 40% and 60% respectively.

A tourism development project would also foment growth in the number of direct Soufriere (stay over) tourists to 4,400 by 1989 (depending on investment in lodging).

The main tourism attractions of Soufriere are the Sulphur Springs and the Pitons. Secondary attractions are Anse Chastanet Beach, the Diamond baths and Soufriere Town. The Pitons are a natural attraction whose view alone merits a trip from any place in St. Lucia to Soufriere. If facilities are developed in a protected national park environment, the Pitons could provide St. Lucia a non-beach attraction comparable with any in the Caribbean. The Sulphur Springs is presently the main sightseeing goal of Soufriere visitors. It could become a must in every St. Lucia visitor's vacation. St. Lucia's better beaches are along the northwest coast; the better beaches around Soufriere are Anse Chastanet, which also features the Island's best scuba diving, Anse Mamin, Anse Cochon,



Malgretoute and Jalousie. Generally, four wheel drive vehicles are required to reach the beaches.

The attraction of Soufriere resides primarily in its setting along the Bay with a view of Petit Piton, the fishermen, and the Town's old French colonial flavor. The town has declined economically and socially over recent decades. Communications are difficult, educational opportunities below those of Castries, and more enterprising families have moved. Youths pressing their guide services upon the visitors create an uneasy atmosphere, at least to the perception of a one-time visitor. There are at least four mineral springs near Soufriere. There are baths at one, Diamond Baths, offered to the public. There is no spa in Soufriere. The rain forest walk has a justified reputation for rich variety of rain forest growth and rare fauna. Old sugar estates, the childhood home of Josephine Bonaparte, and what appears to be a major Amerindian archeological site are among other fascinating attractions of Soufriere. Lodging in Soufriere is limited to the beach resort Anse Chastanet with 21 rooms, Dasheen with 8 rooms and 7 villas, detached villas, and a few guest houses. The Still Restaurant can seat up to 300. The Humingbird restaurant also has 2 lodging rooms and moorings for 10 yachts. Taxis and minibuses are usually available. The Tourist Board has an office on the Waterfront.

The main issues confronting Soufriere's tourism development include the socio-economic decline of the Town, its isolation, the migration of the more educated residents, and a lack of public courtesy from a few idle boys. Another key issue is that of reconciling the possible development of geothermal energy and tourism. Not only the decision on whether a geothermal electricity plant is constructed, but also the choice of where could profoundly alter the prospects for tourism. An electrical plant at the site of the Sulphur Springs would deflate tourist interest; cooling the boiling, steaming, hissing cauldrons would also deflate tourist interest. A third issue is the desperate need for a pier for tourism, and also the need for a pier for freight shipment. The use of a given space for loading and off-loading cargo is not compatible with its use for embarking and disembarking tourists.

Also an issue is how to best improve transportation to the area. Marine coastal transport could be developed, a new pier is needed anyway. Government intends to improve the West Coast Road, but the extent of improvements is still to be decided, and the decision will affect the entire west coast.

Zoning is a crucial issue, especially of the forest preserve and the proposed national park, and Soufriere Town. Most decisive is the proposal to build a villa resort complex between the Pitons.

The issue of how more Soufriere people can gain from tourism has led to the proposal to support guest houses development. However, concerns about guest house efforts include the adequacy of the demand, maintainance of minimum standards, and economic profitability vis-a-vis alternative forms of lodging.

The extent to which Soufriere should be developed as a destination i.e., a lodging center, versus development primarily as a day-tour attraction (as now) is an issue with across the board planning implications. It is a national policy of the Government to promote the growth of tourism to St. Lucia. Government recognizes that the development of the Island's natural and historic attractions for visitor appreciation must ensure their conservation. Government fosters greater participation of St. Lucians in the tourism industry. The St. Lucia National Plan Development Strategy (1977) stated that "through the combined actions of Government, the National Trust, and the St. Lucia Tourism Board, programs for the conservation and enhancement of the Island's natural and man-made attractions will be instigated, with facilities for visitors...".

II. Project Objectives and Strategies

Instrumental among the project's objectives is a mutual attitude of respectful friendliness between Soufriere residents (including the young boys) and visitors. Other key objectives include: more employment and income; development and protection of the natural and cultural attractions; optimal land use through concentration and channeling of

tourism activity; more and improved tourism services; more local firms and residents providing tourism services; minimal negative impact of tourism on the Soufriere community; and better recreational facilities.

Since sustained attainment of any of the above objectives depends at least in part on the realization of most of the others, a basic strategy is to undertake the tourism development of Soufriere on a broad front. The effort must integrate not only attractions development and conservation, but also improvement in infrastructure, facilities and the community's conditions as well. The protection of the scenic beauty is so essential that it needs repeated emphasis. Therefore, although more tourism facilities are to be constructed in the Soufriere area as the demand warrants, they are to be in amount and location consistent with the protection of the scenic beauty.

Soufriere will continue to be an attraction of St. Lucia, with more "tour-visitors" (lodged in the primary resort beaches elsewhere) than visitors lodged in Soufriere. Another key strategy of this project is that development of tourism stress the uniqueness of Soufriere. This lies primarily in the Pitons, the Sulphur Springs and Soufriere Town.

It is a general strategy of the project that development efforts must be worked out in close consultation with the Soufriere Town Council, its Tourism Committee, and other local groups interested in the betterment of Soufriere. Also, local recreational facilities are to be developed simultaneously with facilities for visitors.

III. Master Plan and the Project

The tourism Master Plan for the Soufriere area rests on the development of the Pitons into a National Park and Marine Park, the Sulphur Springs into a Conservation Area, and Soufriere Town as a cultural attraction. Soufriere Town is to have an appealing Waterfront in an environment preserving its old French character, a historic architecture walk (through the old quarter of town), and an Estate Historic museum. Other attractions to be developed are: a botanical garden, the Rain Forest Trail and various scenic overlooks, beaches, and historic and archeological sites around Soufriere.

Physical infrastructure planned to support these attractions include construction of a pier to meet primarily passenger transport needs, coastal passenger ferry service (provided by the private sector), upgrading of the Sulphur Spring road, the Fond St. Jacques-Quillesse Reserve road, and the spur thereof to Mt. Casteau, the Malgretoute and the L'Ivrogne roads, the installation of a town sewage system, and shore improvements in Town. Human infrastructure would be helped by a Tourism Community Participation Program, aimed at assisting Soufriere people start or improve businesses serving tourism, as well as a tourism awareness educational module for the primary schools. The area will continue to function primarily as a day-tour attraction to St. Lucia visitors from north coast beach resort lodging and cruise ships and yachts. Local lodging for stay-over visitors would be expanded by eventually 300 rooms, * including beach resort, guest house, villa, and spa resort rooms. The actual offer is about 50 rooms. New lodging construction would be phased as demand justifies. The total of 700 beds, which is believed to accord with the project's objectives, is well above the parameter set for Soufriere in the National Plan for Development Strategy, i.e., an eventual ceiling on lodging of 500 beds. Investment in lodging, a province of the private sector, would have a higher labor/capital ratio than investment in tourism attraction development. Along with the development of the visitor-directed attractions and facilities, recreational facilities must be developed. Primarily these are to be public beach and park facilities at Malgretoute and Soufriere Waterfront.

The Plan includes seven parts or sub-projects, and measures are designated for an initial phase, i.e., "immediate term", or later phase, i.e., "long term". They relate to the Pitons National Park, the Sulphur Springs, Soufriere Town, Diamond Baths and Garden, the Rain Forest walk and overlooks in the area, Historic and Archeological Sites, and Lodging investments.

The first five sub-projects have been formed into a proposed development project (hereafter called "the project"). The project consists essentially of measures to develop the tourism attractions, incorporating directly supportive infrastructure. The project is predominantly of public sector investments, though the Diamond

Baths/Garden and the Estate Historic Museum and the houses along the historic architecture walk are integral parts of the project. The Diamond Baths/Garden and Estate Historic Museum are physically contiguous and owned by the same family, and therefore logically to be developed in the context of Soufriere's tourism development. The properties identified in the Historic and Archeological Sites subproject and the lodging proposed would be private, and largely for the long term, and not included in the financial evaluation of the measures designated as "the project".

The Pitons Park is to be developed in the immediate term via legislation and strict zoning regulation, upgrading of the Malgretoute road, parking, beach changing facilities and restrooms, picnic facilities and trails at Malgretoute, and picnicking restrooms, camping facilities and trails at Jalousie Beach, and an interpretation program. In the long term, detailed development planning is to continue, especially for a Marine Park and tentatively the road to L'Ivrogne, parking, and trails from L'Ivrogne are to be developed.

The Pitons Park (initial phase only) cost is illustratively estimated at EC\$1.0 million, more than half of which is due to the necessary upgrading of the Malgretoute Road. A justifiable entrance fee of EC\$4. is proposed, which would more than cover operating costs. (The pattern of improvements and control of natural scenic attractions, upon which a commensurate entrance fee is levied, is the general approach of the Plan.) The project is to make the visitor's experience more enjoyable and comprehensible, and recoup the cost from the visitor. The entrance fee is waived for St. Lucian groups (school, church, service, etc.) when arranged in advance.

Evaluating the Pitons Park in isolation, and including the cost of financing, the subproject would probably not be feasible, as its financial return is estimated at between -2% and 5%. However, it is an integral part of the project.

The Sulphur Springs subproject in the immediate term consists of upgrading the access road, parking, an entrance barrier, a visitor center, and boardwalks with handrails over the sulphur rock ground terminating in

viewing platforms at the major chaldrons, and a trail to the top of Mt. Sout. The two existing kiosks would be used for selling film, postcards, soft-drinks, etc. via a private concessionaire. These are the measures included in the project. The financial cost has been illustratively estimated at EC\$1.0 million. An entrance fee of EC\$5.00 would be charged to visitors (exempting St. Lucian group visitors arranged in advance). Under these projected costs and income, the Sulphur Springs subproject, evaluated in isolation, would yield an ample financial return, between 22% and 30%. Thus, this subproject is a considerable prop to the project's profitability.

In the long term, the possibilities of an extension of the conservation area, the construction of more trails, a more comprehensive interpretation program, and development of a spa with overnight accommodations would be analyzed in a detailed management and development plan.

The Soufriere Town subproject costs (immediate term) comprise about 40% of the project investment costs. ^{The subproject} It includes the remodeling of the Waterfront with a pedestrian promenade along a rebuilt sea wall, and a small mall, preferably in the vacant lots between Bridge St. and Mason St. The promenade would have a floor of concrete slabs, benches, street lights, tree landscaping, a bandstand and vendor stalls, all designed to match the style of the public fixtures existing in the old sector of town. Pedestrians only would be permitted on Mason St. (the Waterfront) between the gasoline station and the meat market, except during limited hours for deliveries. The Mall would have a restaurant/cafe/pub and shops, and possibly guest house rooms on the upper floor of the Mall.

A parking lot for vehicles from outside Soufriere would be just north of the Soufriere River. Local taxis and donkey carts would provide service from the Waterfront.

The construction cost of the Waterfront/Mall is roughly estimated at EC\$670,000. These works, together with the construction of a new pier (preliminarily estimated at about EC\$570,000 (including contingency and administration and supervision costs), would present a much more

attractive town face to visitors arriving by sea. They would also provide a focus for leisure activities in a clean, shaded, panoramic and safe atmosphere.

The preservation and beautification of the facades of some 50 old houses in the old sector of Soufriere (Clarke Street from the pier to the Church and South) together with preservation and beautification of sidewalks, street lighting, and signing would be the main elements for the offering to visitors of a historic architecture walk in the old part of town. The cost of these works is roughly estimated at EC\$604,000 of which EC\$400,000 would be from the private sector. A self-guided booklet would be prepared at a cost of EC\$14,000. The total cost of the project is roughly estimated at EC\$262,000.

The Estate Historic Museum is to be created by preserving the historic sugar mill and the plantation building on Soufriere Estate and adapting them to use as a historic museum. The mill's original stone wall will be bared, the fish-scale tile roofs replaced, the floor leveled, decayed wood replaced, and the mezzanine rebuilt. The exhibition space is to be in three areas, the first for displays characteristic of the estate factory, the second for St. Lucia's history, and the third an art gallery, placed in the rebuilt mezzanine. A snack bar and restrooms, office and storage area would be built on the foundations of appended buildings. The illustrative estimate of building conservation costs and museum development are EC\$123,000 and EC\$226,000, not providing for administration nor contingencies.

A sea wall would be constructed along the Waterfront/Mall and along Coin de L'Anse. Changing room/restroom facilities equal to those in the Pitons National Park at Malgretoute would be constructed above the Soufriere Beach. The cost of the beach facilities is roughly estimated at EC\$109,000, that of the research described in Annex II at EC\$20,000, and the sea wall at EC\$123,000.

A town sewage system would be installed at an estimated cost of EC\$588,000, not including contingency or administration provisions.

The sources of income to the Soufriere Town Subproject include:

- a pier user fee of EC\$60. to EC\$100. per day per vessel, depending on length;
- lease fees for the restaurant/pub, shops, guest house rooms, vendor stalls, parking lot and snack bar ranging from 4% to 10% of total sales;
- a beach changing facilities admission fee of EC\$0.25;
- an annual sewage charge of EC\$15., initially, per connection, increasing in successive years to eventually cover operating costs; and
- a fee for entrance to the Estate Historic Museum, set initially at EC\$4.00.

The costs and income thus far identified for the Soufriere Town subproject when evaluated in isolation, result in a financial rate of return of between 1% and 6%. It is, however, necessary to the success of the overall project.

The Diamond Baths/Garden subproject would concentrate on developing the garden in the immediate term, inventorying and cataloging existing plants, and planting intensively about 3 acres of plants. It would include trails, benches, an interpretive program, a formal Herb Garden and parking and restrooms. The total cost would be EC\$222,000. An entrance fee of EC\$3 would be charged. The subproject would be a private sector investment, which, before taxes, considered in isolation, would yield a return of between 21% and 29%. In the long term the development of a spa based on the mineral springs is projected.

The visitor's experience of the Rain Forest of Quillesse Reserve, a unique natural resource, would be improved by upgrading the Fond St. Jacques-Forest Guest House road, and the Desraches spur road, the installation of gateways, parking, restrooms, benches, trails/boardwalk, a promontory and viewfinder at Desraches, and an interpretation program. The cost is illustratively estimated at EC\$2.4 million not including contingency or administration provisions. Nearly EC\$2.3 million of that cost is for road upgrading. The road would bring the potential for economic benefit to other sectors, especially to agriculture. Despite a

hefty entrance fee of EC\$20 to the Rain Forest Walk, and an entrance fee of EC\$5 to Desraches on Mt. Casteau, the financial evaluation of this subproject in isolation is only between 4% and 10%.

Twelve rooms are to be added to the beach hotel capacity in Soufriere, via expansion of the Anse Chastanet, and twenty additional rooms of guest house and twenty rooms of villa lodging are to be added in the immediate term. Guest house and villa reservation and management are to be assisted by a central lodging ^{reser} ~~observ~~ation and management system. Research on the historic sites of Malmaison and Belfond, privately owned, is programmed.

IV. Financial and Economic Evaluation

The project and program investments planned for the immediate term to develop Soufriere via tourism would yield a financial rate of return of between 8% and 14%, varying with the low and high forecast of visitor demand for St. Lucia. (Notice a single estimate was used for the proportion of each of the several types of St. Lucia visitors visiting Soufriere.) A larger portion of the planned development was included in the immediate term (initial phase) than originally thought, because this study revealed a greater vulnerability of limited and especially of isolated investments and measures, and the decisive influence of the overall milieu or atmosphere of Soufriere, on tourism, resulting in the need for an upturn in the socio-economic conditions of the town for almost any tourism endeavor to succeed.

The sensitivity analysis of the project using the low forecast of demand showed that when all costs are increased by 10%, and all income by 10%, the financial rate of return drops to 1.3%, using the low forecast of demand, and 8%, using the high forecast of demand.

Evaluating the project from the standpoint of the public sector only, i.e., omitting the costs and income of the privately owned Estate Historic Museum and the Diamond Baths/Garden, the financial rate of return, would be between 5% and 12%. The financial rate of return to the private sector parts of the project, before taxes, would be between 31% and 38%. These

figures indicate the relative benefit/cost ratios of the public and private sectors in tourism in Soufriere when taxes and fiscal impact are omitted; they reflect the weight of the infrastructure cost on the public sector, and the need for equalization either through taxation of profits or other measures.

The economic rate of return, excluding the economic ^{transactions} of the project activity of non-lodging tourism firms for which insufficient cost data was available, and also excluding externalities of other sectors, especially agriculture, was between 15% and 18%. The project is markedly more profitable to the economy than financially. The project appears to merit serious consideration on the basis of its positive impact on the nation's balance of payments and employment. Net cumulative foreign exchange earnings after five operating years would total around EC\$20 million, not including the non-lodging tourism firm earnings. The project, without the Lodging Subproject transactions, would generate a total of between EC\$3.5 million and EC\$5.0 million after five years of operation.

The project is illustratively estimated to create a total of 137 jobs in the first year of operation. Sixty-five would be in the project without the Lodging Subproject, and 72 in the Lodging Subproject. Nearly half (67%) of the total jobs would be for unskilled workers. About 255 man/year of employment would be generated in the construction phase of the project, about 190 for unskilled workers.

V. Technical Assistance and Training

The technical assistance needed for the implementation of this project is primarily in a) research on the natural and historical attractions and in elaborating texts and construction specifications for the interpretation programs, and b) forming and operating the executor entities of the private sector to provide the planned tourism services, and of the public sector to maintain and operate the public scenic attractions. Training will be required primarily in a) visitor control, management and guide service at natural and cultural attractions, b) the tourism community participation program.

CHAPTER I
TOURISM IN SOUFRIERE

A. Actual Tourism Activities (Functioning of Tourism Industry)

The Soufriere area, (see Map 1)* which includes the Pitons, the Sulphur Springs and Diamond Baths, is the main non-beach attraction for tourism in St. Lucia. It is not a resort area itself, but forms part of the island's tourism draw, and receives a flow of visitors, primarily by boat but also by road. The majority of visitors are tourists who travel to Soufriere by one of the romantic-style sailing ships, Unicorn or Buccaneer, or other motor craft (at least one way). The visitors generally spend between one and two hours in Soufriere, and contribute very little to the local tourism trade or the tourism economy. Most are fed lunch on their boat. They are lodged along the beach resort areas from Marigot Bay northward to Cap Estate.

Those tourists who come by road also generally come via organized tours, whether to Soufriere only, or to other places around the Island including Soufriere. Soufriere is also the terminal side of the Rain Forest Tour, so that flow of visitors also passes through Soufriere. These tourists, and the minor number of tourists who travel on their own, generally have lunch in Soufriere, generating some restaurant business.

The same is true of the cruise passengers who board their vehicles or boats in Castries Harbor and visit Soufriere by minibus or boat. They are in the area from 2 to 4 hours, having lunch locally. There are a few air excursionists and their activity in Soufriere is essentially the same as the cruise passengers. The few yachtsmen who moor in Soufriere one or two nights have a more leisurely stay, usually patronizing the local restaurants in the evening for dinner, and for drinks during the day.

* Maps and Plans are at the end of the text.

Local taxi drivers drive the sea arrivals from the pier to the Sulphur Springs and other places. Local youths, including Rastafarians, have attempted to carve out some share of the tourist expenditure by aggressively offering their services as guides and selling sulphurous rocks. Tourism directly to Soufriere is limited.

Thus, the actual Soufriere tourism activity is typically a boat or bus tour from the northwest beach area through the town to the Sulphur Springs, with the bus tours stopping for lunch. The tourism trade in Soufriere consists primarily of tour operators from Castries, taxis and a few restaurants, with some youths selling guide service and rocks (see Map 4).

B. Demand

Demand for visiting Soufriere will be greatly affected by the demand for St. Lucia.

1. Demand for St. Lucia

The demand for St. Lucia (i.e., the "tourism flow" to St. Lucia) is measured by 1) the number of stay-over visitors or "tourists" times the average length of their stay, 2) the number of cruise passenger arrivals, and the number of yachtsmen times the average length of their stay.

a) Tourist or stay-over demand

Tourist (or "stay-over") demand for St. Lucia or for any Caribbean destination has been a function of a number of variables, but all can be broadly grouped into two types: the first are those affecting conditions in the tourist generating country, primarily income and motivation; the second are those affecting conditions in the destination country, primarily price and the product it offers the travel market. These variables are in turn affected by what's going on in the economy, society, and life style in the countries of generation and destination, as well as in competitor countries.

The main generating countries or regions important for St. Lucia are the U.S., Canada, Europe (grouping the U.K., Germany, and the other European countries), the Caribbean (mainly the CARICOM countries), and the Rest of the World, as a basket category.

The Pre-investment Study of the Development of Pigeon Island National Park, Chapter III, Analyzed the demand for St. Lucia, projecting a high and low range for the number of tourist arrivals. The number of actual arrivals in 1983 and 1984 was near the mid-point of the high and low projections:

	Projected Low	Actual Number	Projected High
1983	73	78	82
1984	79	87	92

The approach used has thus far yielded reasonable results and, therefore, the method of analysis is retained and the projection is updated.

i) U.S.

Over the long term, national production in the industrialized countries, which is the same thing as national income, has been highly correlated with the amount of expenditures by residents of these countries travelling abroad. This is the income factor. National production (GDP) in the U.S. grew by 4.3% during the 1960's and by 3.0% in the 1970's.

By the close of 1982, the U.S. economy emerged from a severe recession in much better condition. Production increased in 1983 and 1984 at an average annual rate of 6.3% for the two-year period. Productivity has increased constantly since the recession. The government has officially projected a rate of growth of 4% in 1985, as well as in 1986 and 1987.

Although economic projections have not been very accurate recently, the government's projections have been supported by some leading economists. In any event, approximating that projection, growth of real income in the U.S. would be above the average rate of the 1970's, accompanied by a more stable international trade and monetary situation and a much lower rate of inflation. The growth of income and leisure time in the U.S. over the next few years implies a continued expansion in the number of residents seeking vacations. The unusual strength of the U.S. dollar over the past two years sent record numbers of tourists to Europe as well as increased numbers to the Caribbean. The decline in interest rates in the U.S. as well as the modulation in output in the U.S., and a better performance by the European economies, should attenuate the U.S. - Europe flows. Beach-destination type (a-la-Caribbean) vacations should continue to increase in number. The relative attractiveness and convenience of St. Lucia to the U.S. - to - Caribbean tourism market, including such factors as hotels and other lodging, air access, infrastructure and social atmosphere, have not fundamentally altered over the past year. The demand of U.S. residents for St. Lucia should grow by between 4% and 7%. Supply has become a constraint, at least in the winter season. Continued "passive growth in supply"^{1/} will be a requisite for the above projected growth in numbers of U.S. resident arrivals to occur. Investment in lodging facilities in St. Lucia in the 1980's has been minimal, and has not significantly increased capacity nor markedly upgraded the category of lodging for the Island on the whole. The same might be said, however, for the Caribbean generally. The total lodging capacity in 1985 reportedly is less than in 1980, and despite some upgrading and expansion much of the lodging properties are from the 1960's and 1970's. However, since other supply factors alter according to their own set of dynamics, variations in them may not be proportional nor symmetrical. For example, gradual marginal improvement in lodging availability could trigger a lump improvement in air access, which could in turn, induce a more sizeable increase in lodging supply.

^{1/} Growth just commensurate with the secular rate of growth in demand, and just following, not leading, it.

ii) Canada

Canadian national income also is projected to grow at an average of about 4% over the next several years, and in fact, grew 4.6% (real terms) in 1984. Total Canadian tourism to the Caribbean has grown at an average rate of 4% over the past 10 years. The growth in numbers of Canadian arrivals to St. Lucia is projected at between 4% and 8%, as in the Pigeon Island Study.

iii) Europe

National production in the U.K. grew by 2.6% in 1984, by 2.2% in France, and by only 0.6% in Germany. However the currencies of those countries vis-a-vis the U.S. dollar fell by much more than the modest growth in production. For example the British pound fell by 21% from December 1983 to December 1984.

The European demand for the Caribbean changed only slightly in the past year (since the preparation of the Pigeon Island Study).

The number of U.K. arrivals to St. Lucia increased by 8% in 1984 and the number of German arrivals grew by 2%, while those from the rest of Europe fell by 6%. Overall, the number of arrivals from Europe grew by 5%; in 1983 it grew by 9%. The actual growth rate was below the 10% to 15% rate predicted for 1983 and 1984 in the Pigeon Island Study.

The growth in European tourist arrivals in the Caribbean and especially in St. Lucia, despite sluggish growth and more expensive dollars, was effected by the apparent cap hotels and the rest of the tourism industry have had to place on prices in dollars in order to retain their European package business. Demand is more sensitive to price in times of stagnant or falling income. European demand is especially sensitive to price in the Caribbean because of the availability of substitutes elsewhere, such as Africa, Indian Ocean, South Asia, etc.

St. Lucia has done as well as it has in retaining the European market over the 1981-84 period, in large measure due to willingness to negotiate low prices with the tour operators. Nonetheless, the impression is that St. Lucian hotels in general are not in an equilibrium cost-price position. In the long term, some improvement in their cost structures, or some shift in European demand preferences will be needed to regain the growth rate which the European market showed in the 1970's. The prospect for economic growth in Europe over the 1985-89 period ranges from 2.5% to 4.3%^{1/}. The economic recovery which boomed in North America in 1983 and in 1984, is gaining strength in Europe. It simply has been slower there than in the U.S. Since oil prices and inflation have stayed low in 1984, and the rate of interest in the U.S. dropped and production in the U.S. and Europe are equalizing, the European currencies should gradually gain strength relative to the dollar during 1985-89, increasing demand for the dollar-block Caribbean. The increase in European arrivals in St. Lucia over the 1985-89 period should fall within the 5%-9% range predicted in the Pigeon Island Study.

iv) Caribbean

As noted in the Pigeon Island Study, the Caribbean tourism market has a significant component of business, family and officialy motivated travel. All such motivations are a function directly or indirectly of the performance of the economies of the Caribbean. The number of *Caribbean* arrivals to St. Lucia increased by 7% in 1983, and by the same proportion in 1984. This flow is projected to grow by between 3% and 6% during 1985-89. ✓

v) Rest of World

Arrivals from the rest of the world are still expected to increase on average from between 2% and 5% per year.

^{1/} See, for example, the World Bank - World Development Report, 1984

Accepting the total number of arrivals as still the prime parameter, for planning the development of the sector and even of individual areas, the differing comportment of the various national markets remains very significant for the analysis of demand. (See demand for Soufriere)

TABLE 1
TOURIST (STAY-OVER) ARRIVALS
(in 000's)

	<u>Projected</u> <u>Low</u>	<u>Actual</u>	<u>Projected</u> <u>High</u>
1977		66	
1978		74	
1979		86*	
1980		81	
1981		70	
1982		72	
1983		79	
1984		87	
1985	88		91
1986	92		97
1987	96		104
1988	99		111
1989	103		119

Sources: Actual data: TOURIST BOARD AND STATISTICAL DEPARTMENT

* - Estimated

Summarizing, the actual total numbers of tourist arrivals during 1983 and 1984 coincide closely with the projections made in the Pigeon Island Study, though arrivals from some individual markets were more or less than expected. The same study is therefore applied here, updating only the bases and the rates of growth for the main markets. It needs to be

emphasized, however, that in the high season (winter) there already exists a supply constraint upon the large hotels, given their pricing policies. The closing of the Halcyon Days Hotel, though this hotel was from the lower portion of the price spectrum, has only partially been offset by the availability of additional villas on the Island. Over the winter season not much further growth in demand can be accommodated. Based largely on the probable behavior of demand influences in the generator countries and the comparative characteristics of St. Lucia and the Caribbean, and relative flows in the recent past, other things equal, and respecting St. Lucia, assuming only that the socio-political climate for tourism will not deteriorate, and that there is a "passive" expansion in supply, and a commensurate expansion in infrastructure, then the total number of arrivals is expected to grow at between 4% and 7% over the next five years. A further caveat on this outlook is that St. Lucia's price competitiveness within the Caribbean be retained. Given a less than sanguine profitability experience recently, in order to realize more investment and yet hold the cap on prices, the new initiatives in hotels will have to be more cost-saving both in physical items as well as items such as commissions, marketing, labor, promotion and management.

The base taken for projection purposes is 85,000 tourist arrivals in 1984^{1/}; thus, between 103,000 and 119,000 tourist arrivals are projected for 1989. This projection falls within that made in the Pigeon Island Study, i.e., it presents a narrower range, reflecting more confidence in the analysis.

A further indication of tourism demand for St. Lucia is the demand for lodging. Room nights sold and room occupancy are shown in Table 2.

^{1/} The actual number of arrivals in 1984 was 87,000.

TABLE 2
HOTEL ROOM/NIGHTS SOLD AND OCCUPANCY RATE, YEAR AND MONTH

	1980		1983		1984	
	Rm/Nights (000's)	Occupancy (%)	Rm/Nights (000's)	Occupancy (%)	Rm/Nights (000's)	Occupancy (%)
Jan.	28	87	22	63	29	80
Feb.	27	88	22	77	27	82
March	22	76	20	65	28	75
April	23	63	19	60	25	72
May	20	63	15	47	19	65
June	17	57	12	42	12	41
July	19	60		42		51
Aug.	8	30		47		62
Sept.	15	48		48		52
Oct.	14	45		52		70
Nov.	21	65		69		76
Dec.	21	64		65		65
TOTAL	235	62%		56%		66%

Sources: St. Lucia Hotel Association

b) Cruise Ship Passengers

St. Lucia is now largely by-passed by the cruise ship lines in the Caribbean. In 1978 the Island received 76,000 cruise ship passengers, but by 1981 the figure was only 19,000. In 1983, 33,000 cruise ship passengers alighted from 68 ships. In 1984 39,000 passengers alighted from 100 ship calls. The Cunard Line, which brings St. Lucia far more passengers than any other, does so in an exchange operation with La Toc Hotel, which belongs to its sister company, Trusthouse Forte. Only one tour is offered to the Cunard Line's passengers and that goes only to the North and around Castries. La

To guests go aboard the ship, while passengers visit the hotel and beach. The Cunard vessels call at St. Lucia Summer and Winter, as does now the luxury liner-yacht, the "Sea Goddess". Apart from the above arrangement, cruise ship lines are interested in St. Lucia mostly because of its spectacular views (Pitons) and the scenic beauty especially of the lush vegetation, sea and mountains. St. Lucia port tending facilities, access, shopping and reception by the local people are areas where St. Lucia does not compare well with some other Caribbean ports of call. Also, Costa Lines have scheduled St. Lucia into their cruises of the ship "Daphne". Sixteen sailings of the 400-berth vessel have been advertised for 1985. In October 1984, the small, ultra-luxury cruise-yacht, "Sea Goddess", began calling in St. Lucia every other Monday, landing passengers in Marigot Bay and boarding them in Soufriere, avoiding Castries completely. The "Sea Goddess" has a capacity of 120 passengers.

The cruise ship passenger line industry is normally a very competitive industry. In 1984 it is even more competitive than ever, since the industry has overbuilt/retitted and has excess capacity. That means the lines are keenly evaluating their ports of call. Innovative attractions, development programmes, top rate facilities and a united human effort will be needed to draw in more cruise lines and induce longer stays. What St. Lucia has of interest to cruise lines is dramatic, exotic tropical scenery. This has to be sold to the lines. However, simply distributing brochures will not suffice to induce cruise lines into St. Lucia. The view of the Pitons in Soufriere is the quintessential exotic, tropical scene. Paradoxically, past social friction has occurred in Soufriere, primarily. Soufriere has both attracted and rebuffed visitors.

The execution of the Pigeon Island Project, as well as an integrated tourism project in Soufriere and developments proposed elsewhere on the Island should add to St. Lucia's appeal to the cruise passengers. The project to construct a dock just for cruise ships at Point Seraphin is still being pursued by Government and would improve the dock facilities as well as provide for better shopping.

Without these improvements in attractions and facilities it appears improbable that the number of cruise passengers landing in St. Lucia will

exceed the average attained during the 1976-80 period, i.e., around 60, 000. If it reaches that level by 1989, the rate of growth will have been 9%.

On the other hand, realization of the Soufriere project as well as Point Seraphine and others would constitute a basic improvement in St. Lucia as a port of call, and that would likely attract other cruise lines and result in a significantly increased annual cruise passenger flow, perhaps 80,000. This could be termed a high case estimate, and would reflect a rate of growth of 15.5%.

c) Yachtsmen

The number of yacht calls in recent years and the projection of calls over the next 5 years is shown in Table 3.

TABLE 3
YACHT CALLS TO ST. LUCIA

<u>Year</u>	<u>No. of Yacht Calls</u> (000's)
1975	1.4
1976	1.9
1977	2.6
1978	3.2
1979	2.8
1980	2.5
1981	1.3
1982	1.1
1983	1.0
1984	0.9 e
1985	1.4
1986	3.0
1987	3.3
1988	3.6
1989	3.9

Source: Actual data: Statistical Department

e - estimated

Although the number of yacht calls at St. Lucia has shown a declining trend since 1978, two factors indicate a dramatic reversal in that trend beginning in 1985. First, a marina is under construction at Rodney Bay, which reportedly would add 65 slips to the marina facilities. The new marina would result in some consolidation of berths. The number of slips at Rodney Bay, Vigie Harbor, and Marigot Bay would, therefore, total 105, an increase of about 40%. Secondly, The Moorings, a yacht chartering company with yachts and a main base on Tortola and a base in St. Lucia, has contracted to acquire more yachts.

At present there is no marina in the Soufriere area. However, after the hurricane season there are typically from 3 to 5 yachts moored each night in front of Soufriere, and there appear to be several moored off Jalousie Beach between the Pitons each night. Generally, these craft stay only 1 or 2 nights in the Soufriere area.

In 1981, when the St. Lucia Tourism Development Plan was prepared, the average length of stay of yachts per call in St. Lucia was reportedly 14 days. However, data from the Port Authority for the years 1975-80 indicate an average length of stay of about 9 days only.

d) Saint Lucia Tourists' Activity

i) Length of stay

The length of stay of tourists in St. Lucia was found to average 8.6 days in 1979. However, many of the guests in the leading hotels go to St. Lucia on package tours. This is especially true of the European and Canadian tourists. The European and Canadian tours tend to be either of two or three weeks duration, although a number of tourists stay four weeks. The U.S. package tours tend to be of only one week duration. At least one major European tour operator offered three weeks in St. Lucia at the price of two in the Summer of 1983. Some tours combine St. Lucia as a destination with another island, for example, Guadeloupe. In any event, after several days of staying in the hotel and lying on the beach, most of the tourists want to take a tour to see what's worth seeing. The

European and Canadian tourist, i.e., the tourist staying at least two weeks, has ample time and interest to get about and see the island. The one week tourist, normally from the U.S., limits his tours.

ii) Attitude and preference

Travel agents assess the tourism attractiveness of St. Lucia via written comments submitted to the Tourist Board following familiarization trips. The analysis of 153 travel agents' commentaries in 1980 indicated that although the scenic beauty of St. Lucia and its relatively unspoiled state were very attractive, full advantage was not being taken of the attractions, nor was there enough to do in the evenings. This was one of the factors which prompted the Government to have the OAS prepare a Tourism Attractions Project, including the development of Pigeon Island. Comments of 50 travel agents were collected in 1983, and they indicated the same basic reaction to St. Lucia as those polled in 1980. St. Lucia's main attraction is the nature and landscape of the island; 54% of the travel agents said that that was among St. Lucia's leading strong points. The St. Lucian people were indicated among the Island's strong points by 46%. Beaches were stated to be among St. Lucia's strong points by 38%. Among the negative factors, travel agents cited in first place poor air access (32%), and secondly, the lack of entertainment or cultural events (24%).

iii) Present offering of activity tours

There are seven established St. Lucian (local) tour operators^{1/}. They generally provide airport hotel transfer and "representation" services as well as operate tours within or from St. Lucia. Representation services are provided to the international tour operators, primarily those who do not maintain a representative in St. Lucia. Among the international tour operators bringing clients to St. Lucia in 1984 were TUI, Touropa, Jet Reisen, Jahn Reisen, Kreutzer, Meyer's Weltreisen, and Nova Reisen, all German; Thomson, Lawson International Travel (LITS),

^{1/} Local tour operators are also referred to as "ground handlers".

Hayes and Jarvis, Rankin Kuhn, Pegasus Holidays, Thomas Cook, Wings, and Speedbird, all of the U.K.; Carousel, Paramount, Fiesta Wayfarer, Carnival Holidays, and Chieftan Holidays, Canadian; Travel Impressions, Caribbean Holidays, and Liberty Travel, U.S.; and Kuoni and Air Tours Suisse, Swiss; and Jumbo Tours of Sweden. In effect, the tour operator-serviced portion of the tourist flow to St. Lucia is primarily European and Canadian, while a smaller portion of U.S. tourists to St. Lucia travel on a package. According to a visitor expenditure and motivation survey carried out in 1977 and 1978, 63% of all visitors surveyed had travelled to St. Lucia via a pre-paid package arrangement. It appears that that proportion has increased during 1982, 1983 and 1984, probably in part because of the economy possible via package vacations and the recession of 1982, followed in 1983 and 1984 by the extraordinary relative strength of the U.S. dollar. Once in St. Lucia, tourists, both tour package and individual tourists, are offered a menu of tours within and from St. Lucia.

Table 4 summarizes the basic types of St. Lucia tours and their popularity. Every operator has variants of these, which are presented here as general types of tours. The table is illustrative, but presents the regularly offered types of tours. Other tours can be tailor made. Some operators, such as M and C and Carib Touring, offer tours designed especially for cruise passengers. Barnard Travel also handles cruise passengers.

TABLE 4

TYPES OF TOURS OFFERED IN ST. LUCIA

Name of Tour	Points Visited	Weekly Frequency	Time Elapsed	Lunch Incl.	Cost in \$U.S.	Per cent Taking Tour	Reaction to Tour
Island	Morne, Banana Plantation, Marigot Bay Soufriere	4	Full day	Yes	28-35	75-80%	Never fully positive, road bad, guides don't explain fully.
Northern	Morne, Pigeon Island Cap Estate	3	Half day	No	16-16.50	5%-10%	British usually interested in historic sites.
Cruise to Soufriere	Unicorn/Buccaneer or similar boats, Soufriere	7	Full day	Yes	34-38	30%-100%	Like it, except harassment
Soufriere Land and Sea	Morne, Banana Plantation Soufriere, boat trip	6	Full day	Yes	28-38	50-50%	Less demanding, liked it, except harassment.
Rain Forest	Rain Forest trail, Soufriere	3	Full day	Yes	35-40	100-50%	Too long for cruise passengers, some others expected more.
Fishing		On request	Half day	No	180 per trip up to 8 persons.	Very few	Seldom catch fish, not pleased.
Fly/Sail Grenadines		5	Full day	Yes	145	50-30%	Love it, gives tourists what they wanted from the Caribbean.
Fly Dominica	Dominica	3	Full day	Yes	110-160	0%-2%	Not very popular.
Fly Martinique	Martinique	3	Full day	Yes	105-110	50-20%	Reasonably positive, pleased.
Sail to Martinique	Martinique	on request	Two days	Yes	100	Very few	Pleased
Pigeon Island	Picnic or beach barbeque	2	Half day	Yes	22-42	Uncertain	British especially interested in historic site
Marigot evening cruise	Marigot Bay by boat	3	Evenings	(dinner)	36-38	Uncertain	
Marigot Bay	Morne, Banana Plantation Marigot Bay and shopping.	4	Half day	No	12.50-22	50-10%	Fairly good.

SOURCE: Information from the 4 larger of the 6 St. Lucia Tour Operators.

As seen in the table, the tour taken by the greatest number of visitors is the coastal cruise to Soufriere, via the Unicorn, Buccaneer, or other ship. However, the reaction of tourists to Soufriere is not totally positive. The tour reportedly evoking totally positive reactions is that to the Grenadines. According to the St. Lucian tour operators interviewed, a great majority of their clients visit Soufriere via one tour or another, i.e., the cruise to Soufriere (Unicorn, Buccaneer, or other boat) or the Land-Sea Safari, or the Island tours, or on their own via a rented vehicle.

According to two major international tour operators, the average number of St. Lucia tours taken per client in 1984 was about 1.0, down from the pre-1982 recession average of 3 tours per client. Another tour operator estimated the proportion of tours taken to total number of clients at 0.8. Thus, although actual data on the number taking St. Lucia tours is not available, aggregating rough estimates of the St. Lucian tour operators indicates the number was likely to have been about 25,000 tourists (stay-over visitors) and most of the 32,000 excursionists (primarily of cruise passengers).

Thus, the proportion of tourists (stay-over visitors) taking a tour within or from St. Lucia to total tourists to St. Lucia would have been about 1/3 in 1983. This appears to be a minimum figure, based on conversations with international tour operators. (The proportion that tourists taking a tour would have been to the number of hotel guests is about 44%; however, some persons, though perhaps a minority, lodging not in hotels, might also take a tour. This ratio is therefore not as useful a parameter as the former ratio.) The tour-taking excursionists (cruise passengers) would have been about 95% of all excursionists in 1983.

2. Demand for Soufriere

a) Ratio of Soufriere Visitors to St. Lucia Visitors

In Section 1.d above, it was reported that the St. Lucia tour operators estimate that nearly all of their tourist (not excursionist)

clients go through Soufriere, either by coastal cruise, by one of the bus tours, or by renting cars and going on their own to Soufriere. The international package tour operators confirm that virtually all their clients who take a tour go through Soufriere, and almost all clients take at least one tour. It was estimated also that about 1/3 of all tourists (stay-over visitors) tour in or from St. Lucia. Therefore it is estimated roughly that at least 30% of all tourists to St. Lucia go through Soufriere.

It was also estimated that 95% of all cruise passengers landing in St. Lucia take a tour. However, most of these are from the Cunard Cruise Line, which pulled out of St. Lucia entirely in 1981 for more than a year. Its ships are now calling again at St. Lucia, but offer the passengers only the North Island Tour (includes Pigeon Island). Cunard is intent on giving its passengers as much exposure to its La Toc Hotel as possible, and virtually occludes them from other tours, such as that to Soufriere. Only about 5% of the Cunard Line cruise passengers have been taking a tour to Soufriere. The proportion of cruise line passengers of the other line taking a tour through Soufriere is much higher than that of Cunard, and is roughly estimated at 75%. Considering all cruise passengers, the proportion going to Soufriere is estimated illustratively at about 1/4.

b) Numbers of visitors

Applying the foregoing proportion to the number of tourists and excursionists arriving in 1983 and estimated for 1984, the number of visitors to Soufriere would have been as shown in Table 5.

TABLE 5
ILLUSTRATIVE ESTIMATE OF NUMBER OF VISITORS TO SOUFRIERE
(000's)

	<u>1983</u>	<u>1984</u>
St. Lucia Tourists (stay-over)		
a) to St. Lucia	79	85 ^{1/}
b) to Soufriere	24	26
(b/a = 0.30)		
Excursionists		
c) Cruise pass to St. Lucia	33	39
d) Cruise pass to Soufriere	8	9
(d/c = 0.25)		
Air excursionists and yachtsmen	3	3
Direct Soufriere Tourists ^{2/}	<u>1</u>	<u>1</u>
TOTAL	36	39

1/ Actual figure was 87,000.

2/ Lodge in Soufriere area.

The proportions of tourists and cruise passengers going to Soufriere found to exist in 1984 reflect the circumstances of 1984. The cruise ship situation is an exceptionally volatile one: both the base phenomenon of cruise ship passengers landing in St. Lucia, and the secondary phenomenon of visiting Soufriere, are conditioned by various factors exogenous to the project, such as: the decision of other lines to call at St. Lucia, the marketing strategy of Cunard/Trust House Forte to give Cunard passengers maximum exposure to the La Toc Hotel, effectively limiting the number taking tours to Soufriere, the possible sale of La Toc, the extension of the season into the Summer by some line presently calling in St. Lucia in winter only, the realization of the projected

cruise ship port at Point Seraphin, etc. Thus, the cruise passenger segment of demand in 1986 or 1988 could be much more or less of the total demand.

In addition to the tourists (stay-over) and cruise passengers who visit Soufriere, there are three categories of Soufriere visitors, who in 1984 probably accounted for around 10% of the total number: (1) air excursionists to St. Lucia from other Caribbean Islands (for the day only), who take a special tour including Soufriere; (2) yachtsmen who generally anchor in Soufriere Bay or off Jalousie Beach for one to two nights; and (3) tourists lodging in Soufriere (i.e., Anse Chastanet, Dasheen, villas and cottages). The estimated numbers of these are shown also in Table 5.

There are a few actual but incomplete data giving clues to the number of visitors to Soufriere in 1984, apart from interviews of the trade.

i) The Tourist Board office in Soufriere records the number of visitors arriving by two ships, the Unicorn and the Buccaneer. (Other vessels also bring visitors to Soufriere, from Castries, from Rodney Bay, as well as from Martinique. Since October, 1984, the luxury yacht/liner, Sea Goddess, comes to St. Lucia and picks up passengers from Soufriere. Data of Buccaneer/Unicorn arrivals during the second half of 1984 are shown in Table 6.

ii) The Division of Forestry maintains records of the number of visitors guided on the Rain Forest Walk. The total number taking the Forestry Service guided walk in 1984 was 1,016. However, 1984 represented a truncated year, since the mini-hurricane "Claus" rendered the access road even less transitable than it had been. Most taxi van owners no longer travel that road.

TABLE 6
UNICORN/BUCCANEER ARRIVALS IN SOUFRIERE

			<u>St. Lucia Tourist Arrivals:</u>
			<u>Proportion of Ave. Month (1981)</u>
1984	July	917	90%
	August	1,464	96%
	Sept.	1,043	64%
	Oct.	1,431	87%
	Nov.	1,284	114%
	Dec.	<u>1,470</u>	142%
		7,609	

Source: Soufriere Office of Tourist Board

NOTE: Figures include Castries-resident passengers on the Buccaneer on alternate Sundays during the Low Season. Such cruises are offered by the Buccaneer as a public relations measure.

A third item of data is a sample survey, executed at the Sulphur Springs by the Study Team during December 11 through 20, 1984. 600 visitors were given questionnaire forms, and 385 valid forms were returned. The forms were given to all visitors on entering the Sulphur Springs area; it was a self-administered survey. 62% of the visitors cooperated in the survey and if the total number of visitors was 39,000, the survey's valid responses were 1% of the universe.

The tabulation of the complete survey is shown in Table 18. The survey was taken during the last week of the Low Season and the first week of the High Season. The characteristics of the sample are considered projectable to the universe of Soufriere visitors if the last week of the Low Season is considered as representative of the Low Season and the first week of the High Season as representative of the High Season. The uncontrolled factor affecting the representativeness of the sample, however, was the proportion of visitors who did not cooperate with the survey. On the other hand, the proportion who did may be greater than noted above (63%), since some couples jointly completed a single questionnaire, returning only the one survey form. This was

evident on returns where the two coincided in all of their answers, except in cases where their age brackets differed. It is impossible to determine exactly ex-post the extent to which the survey returns were party returns, but to the extent they were, the proportion of respondents to all visitors is higher. It may be as much as 3/4, s. Further, the last two questions of the survey, on country of residence and on age were not only informational but also control questions. They indicate that the distribution of the sample corresponds approximately with that of the universe of tourists to St. Lucia, as far as country of residence is concerned, except that among the survey respondents Canadians were a higher proportion and Caribbean nationals a lower proportion than among visitors to St. Lucia.

TABLE 7
COMPARISON OF "COUNTRY OF RESIDENCE" AND "AGE" CHARACTERISTICS
OBTAINED IN SOUFRIERE SURVEY WITH THOSE IN DATA ON ST. LUCIA TOURISTS

Country	I. <u>Country of Residence</u>		II. <u>Age Bracket</u>		
	Survey Responses	Visitors to St. Lucia	Age	Survey Response	Visitors to St. Lucia
U.S.	42%	43%	20-30	40%	23%
U.K.	22%	20%	31-40	23%	23%
Germany	8%	6%	41-50	22%	17%
Canada	20%	12%	51-60	9%	17%
Other Europe	5%	3%	over 60	6%	10%
Caribbean	2%	N.A.			
Other	0.3%	N.A.			

Source: 1) Survey data, OAS Study.

- 2) Visitors to St. Lucia data: a) Statistical Department for information on tourists; b) CTCRC Caribbean Cruise Industry Study for Information on Cruise Passengers in the Caribbean. That is, an average of the distribution among tourist (Statistical Department) and among cruise passengers (CTCRC Cruise Study) weighted according to their proportion of Soufriere visitors in 1983 was used.

Comparison of the age of survey respondents with that of the age of visitors to St. Lucia (weighting both tourists and cruise passengers) shows clearly that Soufriere respondents were younger - there was a much greater proportion within the 20-30 year class and markedly fewer in the 51-60 year and the over 60-year classes than the weighted average of tourist and cruise passenger visitors to St. Lucia.

c) Pattern of Soufriere visits

The pattern of visits to Soufriere was determined by direct observation, by interview with the trade, and by the sample survey described above. Nearly all visitors to Soufriere visit the Sulphur Springs. The great majority of visitors to Soufriere were on a conducted tour. According to the sample survey, this proportion was 86%^{1/}.

The average stay of visitors in Soufriere surveyed was 1.7 hours. According to the sample survey 31% of all visitors were visiting just Soufriere on that tour. The main places visited in Soufriere were as shown in Table 8.

TABLE 8

<u>Places visited</u> <u>in Soufriere</u>	<u>Proportion of</u> <u>Soufriere Visitors</u> ^{2/}
Sulphur Springs	100%
Diamond Baths	16%
Beaches or Reefs	25%
Dasheen, or other overlook	33%
Archeological site	2%
Other	5%

Obviously, 100% of the respondents visited the Sulphur Spring, since the survey was taken there. Virtually all those going to Soufriere visit

^{1/} The survey was taken continuously between 10:00 AM and 4:00 PM from December 10 through 20. These are the hours when all groups visit the Sulphur Springs. However, a few non-group visit it before or after these hours.

^{2/} Proportion of valid response to the survey question.

the Sulphur Spring, but don't purposefully visit other places. The next most frequented place (or places), the Dasheen or other overlook, was visited by only a third of those validly responding. Since the Dasheen caters lunch to tour groups, lunching at Dasheen's restaurant as well as the magnificent view are the motivations for going there during a Soufriere visit. That is, for its sightseeing value even the Dasheen is not drawing that many people. Only a quarter of the visitors include the beach in their Soufriere visit, whether for swimming, snorkeling or scuba diving.

Nearly one-sixth (16%) visited the Diamond baths. Only slightly fewer, 14% of those surveyed, actually used the mineral bath. There may have been some respondents who misinterpreted the question about use of the mineral bath, since only a few more indicated having visited the Baths than indicated having used the baths. We know this is not the case, because far fewer of those visiting actually use the baths.

The majority of validly responding visitors to the Sulphur Springs (more than 58%) indicated they would be willing to pay an entrance fee if it improved the conditions of "lack of protective railings about the boiling craters" and "the local youth pressing their guide services or selling sulphurous rocks". While a few commented that the spring area should be left as it is, more complained of the difficulty of walking in the area and the danger about the craters. There was only one explicit objection to charging an entrance fee.

The activity preferences of the Soufriere visitor and his reaction to the main proposals for the tourism development of Soufriere are reflected in Tables 9 through 15.

TABLE 9
VISITORS LIKED BEST ABOUT THEIR VISIT TO SOUFRIERE

View of Pitons	73%
Sulphur Springs	60%
Tropical flowers, plants, trees	37%
Trip down	24%
Mineral baths	20%
Soufriere (town)	18%
Other	8%

Table 9 reports the valid responses to the question of what visitors liked best about their visit to Soufriere. Evidently, many visitors checked more than one answer. The view of the Pitons, a unique phenomenon, was most often cited.

TABLE 10
VISITORS LIKED LEAST ABOUT THEIR VISIT TO SOUFRIERE

No answer or liked everything	60%
Harassment	15%
Smell of sulphur	14%
Roads	5%
Heat	3%
Lack of boardwalk, difficulty in walking about the Sulphur Springs	2%
Town of Soufriere	2%

About 60% of those surveyed either liked everything about their visit or did not dislike anything strongly enough to declare it. It should be noted that this question, contrary to other questions, was not provided with a check-off answer; respondents were required to specify what they "liked least" (read "disliked") about their visit.

Most of the returns in the "No answer" or "liked everything" category were returns with no answer. However, several specifically stated that they liked everything about the visit.

On the other hand, if the "No answer" returns are categorized as invalid, a different picture emerges (Table 11).

TABLE 11
TABULATION OF WHAT VISITORS LIKED LEAST, EXCLUDING "NO ANSWER" RETURN

Harassment	32%
Smell of sulphur	31%
Roads	10%
Heat	6%
Lack of boardwalks, difficulty in walking	5%
Town of Soufriere	4%

(Note that in tabulating all other questions, the returns in blank were classed as invalid answers.)

The percentages in the above distribution can at least be regarded as ordinal numbers, and it can be concluded that somewhere between a sixth and a third of the respondents expressly disliked harassment by the youth, and only slightly fewer were put off by the sulphur smell.

Other information, particularly interviews with local and international tour operators, indicate that the proportion of visitors "put off" by harassment from the youth seeking to act as guides or sell sulphur rocks is closer to 1/3 than to 1/6. Perhaps even one third is an under-estimate. Harassment and uneasiness from the "rastas" were often mentioned in those interviews.

The fact that 58% of the respondents said they would be willing to pay an entrance fee to improve conditions at the Sulphur Springs has already been noted.

TABLE 12

INTEREST IN PROPOSED PARKS AND TRAILS

Proportion of visitors who would visit National Parks and Hiking Trails
near Soufriere

Very probably	40%
Probably	18%
Possibly	28%
Probably not	5%
Don't Know	9%

Well over half of the visitors to Soufriere responding in the survey would "very probably" or "probably" visit park facilities and trails near the Pitons, the Diamond Stream falls and Mt. Desraches. Only 5% said they "probably (would) not". Those who said that "possibly" they would visit those places represent a "swing element" or possible demand, with the eventual decision at least partly dependent on the type and quality of the development of the Park and trails, as well as of the supporting facilities and conditions in and around Soufriere, and the manner in which it is promoted.

The interest in a Plantation Historical Museum created in the remains of old plantation buildings was shown to be at very nearly the same level as interest in the proposed parks and trails. Well over half would "probably" visit, and 28% "possibly" would visit. Once again, the inducement of that large group of "possibles" could be greatly influenced by the quality of the museum and its promotion, as well as the conditions of the Soufriere area.

TABLE 13

INTEREST IN AN ESTATE (PLANTATION) HISTORICAL MUSEUM

Proportion of visitors who would find it interesting.

Very probably	39%
Probably	19%
Possibly	28%
Probably not	7%
Don't know	7%

The question of interest in a Botanical Garden also introduced a new element, the willingness of the visitor to prolong his visit to Soufriere in order to see the Botanical Garden.

TABLE 14

INTEREST IN A BOTANICAL GARDEN

Proportion of visitors who would prolong their visit to Soufriere to visit a Botanical Garden

Very probably	34%
Probably	15%
Possibly	30%
Probably not	10%
Don't know	11%

Whether it is because of the mention of the prolongation of the visit or not, the proportion indicating they would very probably or probably prolong their visit for a Botanical Garden is only 50%, as compared with 58% of those interested in the Parks and Trails and the Plantation Historical Museum.

Table 15 shows the proportion of Soufriere visitors interested in spending 1 to 3 days of a future vacation in Soufriere, given the development of parks, trails, the Sulphur Springs, a historical museum and a botanical garden. The proportion of those who "very probably" or "probably" would do so is less than a third, while those who state they "probably would not" rises to nearly one fourth. The "swing element of opinion, as evidence by the "possibles", is also in this case large, and the "don't knows" are nearly one sixth of the total.

TABLE 15

INTERESTED IN SPENDING 1 TO 3 DAYS OF A FUTURE VACATION IN
SOUFRIERE IF BETTER DEVELOPED FOR VISITORS

Very probably	21%
Probably	10%
Possibly	29%
Probably not	24%
Don't know	16%

d) Projection of Demand for Soufriere

The visitor flow to St. Lucia was analyzed and projected in part 1. above. The visitor flow to Soufriere was analyzed and the ratios of the St. Lucia visitor components to Soufriere visitor components estimated in a) and b) above.

The appropriate ratios are fitted on to the projections of flows of visitors to St. Lucia, (see Table 16) then the probable impact of the project as indicated in section c) above is considered in making a projection of demand for Soufriere with the project (Tables 16 and 17).

TABLE 16

ILLUSTRATIVE FUTURE VISITOR DEMAND FOR SOUFRIERE WITHOUT THE PROJECT
(LOW CASE)

	(1)	(2)	(3)	(4)	(5)
YEAR	No. of Tourists Visitors to Soufriere	Cruise Passenger Visitors to Soufriere	Air excursion- ists and yachtsmen	Direct Soufriere Tourists	TOTAL
1984	26	9	3	1	39
1985	26	10	5	1	42
1986	28	11	6	1	46
1987	29	12	6	2	49
1988	30	13	7	2	52
1989	31	14	7	2	54

Source: Columns (1) and (2): Table 5, Low Case projection.

Notes: Column (3), air excursionists projected at an annual rate of growth of 4%, and yachtsmen projected in accordance with Table , yacht calls to St. Lucia. Column (4) is based on an estimated average annual rate of growth of 10%.

TABLE 17
ILLUSTRATIVE FUTURE VISITOR DEMAND FOR SOUFRIERE WITH THE PROJECT

	(1)	(2)	(3)	(4)	(5)
YEAR	No. of Tourists Visitors to Soufriere	Cruise Passenger Visitors to Soufriere	Air excursion- ists and yachtsmen	Direct Soufriere Tourists	TOTAL
(000's)					
<u>Low case of Tourist Projection</u>					
1984	26	9	3	1	39
1985	26	10	5	1	42
1986	37	26	6	2	71
1987	38	29	6	2	75
1988	40	31	7	3	81
1989	41	34	7	4	86
<u>High case of Tourist Projection</u>					
1984	26	9	3	1	39
1985	26	10	5	1	42
1986	39	29	6	2	76
1987	42	35	7	2	86
1988	44	41	8	3	90
1989	48	48	8	4	108

NOTES: Column (1) assumes the proportion of tourists to St. Lucia visiting Soufriere to increase from 0.3 to 0.4 in both low and high case demand. Column (2) assumes the proportion of cruise passengers visiting Soufriere to increase from 0.25 to 0.6 in both low and high case demand. Column (3) assumes no change in estimate from that without project. Column (4) assumes a rate of expansion in direct Soufriere tourists to increase from 10% to 33%.

TABLE 18
TABULATION OF SOUFRIERE SURVEY

Question	Responses		Distribution of Responses									
	Total	Invalid	Valid									
1. Conducted tour	385	3	382	Yes	No							
				327	55							
2. Time in Soufriere	385	34	351	Total hours	Average hours							
				589	1.7							
3. Places seen	385	30	355	Other places	Just Soufriere							
				245	110							
4. Places seen in Soufriere	385	20	365	Sulphur Spr.	Diamond Bath	Beaches	Dashen	Arch. Sites	Others			
				385	57	93	122	9	19			
5. Liked best	385	7	378	Pitons	Tropical Flora	Min. Bath	Trip down	Sulphur Spr.	Soufriere	Other		
				277	140	75	91	226	69	7		
6. Least	385	0	385	Harassment	Smell	Roads	Heat	Soufriere	Walkways			
				57	54	18	11	7	9			
7. Entrance fee	385	25	360	Yes	No							
				210	150							
8. Use the baths	385	29	356	Yes	No							
				52	304							
9. Park visits	385	21	364	Very Probably	Probably	Possibly	Probably not	Don't Know				
				144	67	102	20	31				
10. Museums	385	18	367	142	69	104	27	25				
11. Gardens	385	20	365	123	55	109	37	41				
12. Vacations	385	24	361	76	36	105	86	58				
13. Country of residence	385	13	372	U.S.	U.K.	Germany	Canada	Other Eur.	Caribbean	Other		
				158	81	31	72	20	9	1		
14. Age	385	13	372	20-30 years	31-40 years	41-50 years	51-60 years	Over 60 years				
				148	87	82	32	23				

* Survey returns with no answers to this question were not categorized as invalid, for this question no answer was interpreted to mean the respondent had all aspects of his visit.

C. Supply

Map 2 shows the actual attractions, facilities and roads in Soufriere.

1. Attractions

Presently, the main attractions for tourism are the Sulphur Springs and the Pitons. Secondary attractions are Anse Chastanet Beach, the Diamond Baths, and Soufriere Town.

Table 19 summarizes the state of development of each attraction, its condition, the tourism activity taking place there now, and ideas for developing its full potential. In ranking the attractiveness of the resources, a one (1) has been given to an attraction capable of inducing a visit to Soufriere; a two (2) has been given to an attraction that is generally visited, once the visitor is in Soufriere anyway. Table 20 lists historic sites in the Soufriere area.

The potential for the development of the listed attractions is high. Once the Pitons, the Sulphur Springs, the Rain Forest, and Desraches with their nature trails, the beaches, Soufriere Town and the mineral baths, as well as certain of the old estates are developed, the collective sightseeing value of Soufriere will be indeed high. Also, the theme of Josephine Bonaparte's childhood in St. Lucia is an attraction that could be developed, and the Belfond Archaeological site seems to be a major Amerindian settlement that, once studied and protected from vandalism, could be added to the tourism supply of attractions.

The Pitons are a natural attraction whose view alone merits a trip from any place in St. Lucia to Soufriere. If land and marine recreational activities are developed in a protected National Park environment, the breathtaking views, lush vegetation and coral reefs, the Pitons could become an attraction comparable with any other in the Caribbean, justifying a tourist's overseas trip. They could provide St. Lucia an even more exciting advantage vis-a-vis other Caribbean destinations.

The Sulphur Springs is at the moment the main sightseeing goal of Soufriere visitors. If properly developed, it could become a must in every St. Lucia visitor's vacation. The visit should remain brief in time, due to the adverse reaction of many tourists to the smell of sulphur.

Beaches: The Soufriere area has not been a main beach destination up to the present. The only beach resort is Anse Chastanet Hotel, which is also the main diving resort in the country (See photographs F1-F12 in Annex III). Beaches are shown on Map 2.

Beaches north of Soufriere are:

<u>Beach</u>	<u>Description</u>	<u>Photos</u>
Anse Chastanet	very nice beach, already developed	
Anse Mamin	very nice sandy beach, about 100m. long	F-1
Anse Jambon		F-2
Anse Mahaut	pebble and sand	F-3
Anse La Liberté	pebble and sand	F4-6
Town of Canaries	no beach	
Jambette Point	Chef Harry's place	
Anse La Verduyre		F-9
Anse Cochon	very clear water, approx. 150 m. long	F-10

Anse Galet

Anse La Raye

charming fishing town with F-11-12
a long, sandy beach along
the town's frontage

Trou L'Orange

charming, small beach by
Anse La Raye, north side

Beaches at Soufriere:

Beach from the Tanks
to the North

long and sandy, some
pebble stretches

Beach near

Trou au Diable

very small

Beaches South of Soufriere

Malgretout

nice, long, sand and
pebble beach at the North
side of Petit Piton;
continues to the north
in several stretches of beach

Jalousie

beautiful beach at the foot
of Petit Piton

The better beaches in the area seem to be: Anse Chastanet (already developed), Anse Mamin, and Anse Cochon to the North, and Malgretoute and Jalousie to the South. Also, the small beach near Trou au Diable is of developable quality.

Malgretoute Beach is a pebble-sand one, close to the town and accessible by road. These circumstances make it very appropriate for recreation, and it is already being used by the local population. Soufriere Town beach is also very good and would be fit for recreation if present pollution of the bay waters were stopped via construction of a sewage system.

Connecting roads are in bad condition, requiring four wheel drive vehicles in most cases.

Soufriere is not viewed today as a beach destination, mainly because of the remorseless sand mining which has left its beach with pebble surfaces mixed with sand. However, if the sand mining could be completely stopped, so that the sea could replace the sand to some extent, a beach quite adequate for domestic recreation and local tourism could result. The reconstitution of the Soufriere beach would certainly support and enhance the improved image the present project aims at giving the town.

Soufriere Town: The attraction of Soufriere lies in its magnificent setting along the bay with a view of Petit Piton, the fishermen's activities and its old French colonial flavour.

Formerly the French colonial capital, and known as the breadbasket of St. Lucia because of its abundant agricultural production, Soufriere has declined economically and socially over recent decades. Communications have been difficult, educational opportunities have fallen behind those of Castries, employment has been declining and the more enterprising families have moved to Castries. The Rastoterians in and near Soufriere as well as the local youth pressing the visitors to accept their guide services have generated both an uncertain and uneasy atmosphere, at least to the perception of the one-time visitor.

Mineral Baths: At least four mineral springs are scattered in the area: at Diamond, Cresslands, Malgretoute, and Vantine Falls (Sulphur

Springs). The only spring under commercial exploitation, though on a small local scale, is Diamond Baths. Most tourists visit it only to sight-see and walk in the garden, and, perhaps for lack of time on their tour, do not use the baths.

The several springs each seem to have a slightly different chemical composition.

The hot spring waters at Sulphur Springs are strong, acidic and sulfate-rich with generally low chlorite. Acid-sulfate waters are mixtures of rising steam and gases that condense in the near-surface environment. Oxidation of hydrogen sulfide to sulfuric acid creates the acidic conditions. The acid waters may mix with near-surface ground water to produce hybrid compositions^{1/}.

Whatever the chemical analysis of these springs, at least since the time of King Louis XVI when he ordered construction of baths there, people have reportedly found alleviation of various ailments from them^{2/}.

Childhood home of Josephine Bonaparte: Josephine Bonaparte, Empress of France, was born as Marie-Josephine Rose Tascher de la Pagerie. According to information in the archives of the National Trust, there are several indications of the birth of Josephine at Morne Paix-Bouche on 23 June 1763, where she might have lived until 1771 when her family took her to Martinique for baptism, her father having been selected for the important office of Intendent of Martinique.

^{1/} Los Alamos National Laboratory, Los Alamos, New Mexico, 87545.
"Evaluation of the St. Lucia Geothermal Resource". Summary Report.

^{2/} A more detailed geological description of the thermal springs is presented in Annex I, Interpretative Plans.

One of the documents consulted^{3/} says "An old notarial act dated September 20th, 1777, shows that the father of the future Empress was then co-proprietor of an estate on the slopes of Morne Paix-Bouche in St. Lucia. It was a coffee estate, named la Gauzette". He is listed as "Gaspard Joseph Tasher de la Pagerie, ecuyer, Capitaine de Dragons, habitant à Paix-Bouche, Quartier de Carenage de cette isle (St. Lucia)". The document also says "Incidentally, the Tascher de la Pagerie is said to have owned a property near Soufriere named La Malmaison". The same name was given to Josephine's residence in France.

Also there is a letter from the Parish Priest of Gros Islet, Dom Deviot, published in the last century in several newspapers, in which the author "praised Bonaparte for ending the religious persecution" and in this context stated that Madame Bonaparte was born in the outskirts of his parish.

The traditional oral stories of some St. Lucian families also relate to Josephine's childhood in the island.

Further research should be undertaken on this issue, since the available material seems sufficiently credible to indicate tourism attraction potential for Josephine's father's estate in St. Lucia and her probable birth and childhood in the Island.

3/ Was the Empress Josephine Born in St. Lucia? National Trust Archives.

TABLE 19

TOURISM ATTRACTIONS

Existing Attractions	State of Development	Situation	Tourism Activity	Development at Full Potential	Relative Ranking of Attractiveness
The Pitons	Road to Malgretoute damaged. A few villas in the area, plus tree agriculture. No road access to Jalousie.	National Park proposed. Resort project under study for 100 cottages in Jalousie area. Proposal for Marina and off-shore Casino at Malgretoute. Some erosion seen at Dasheen. Geriatric hospital at Malgretoute.	Viewed from the Dasheen. Climbing of the Pitons. Recreational use of Malgretoute Beach. Visitors to Jalousie area from the sea.	National and Marine Park, with development area at Malgretoute for hotels and recreation.	1
Sulphur Springs	Access hampered, institutional guides lacking.	Lack of safety for visitors. Road damaged at entrance. No interpretive concept. Guides untrained, individual	Mainly visited by those on daily tours.	Conservation area under the National Trust Preservation Management program. Interpretive Trails/Boardwalks. Pedestrian access. Interpretive visitors center.	1
Anse Chastanet	21 room beach resort hotel.	Project of expansion Anse Chastanet hotel; 12 rooms plus more in near future.	Stay-overs. Daily tours. Recreation diving.	As projected	1
Diamond Baths	Local baths and gardens.	Nice gardens. Private and public baths. Small scale operation.	Visit to the gardens and Falls.	Botanical Gardens, Spa or Health Club.	gardens 2; baths n/d.
Soufriere	Few houses remodeled. Pier damaged. Unappealing waterfront. Unappealing shops. Young people around the pier molest tourists. Lack of sewage system. Road to Malgretoute damaged.		Little tourism activity. Tours do not stop in town.	Waterfront mall with tourism activities. Preservation area and historic/architectural walk. Estate Museum. Guest houses, pier and road to Malgretoute improved. Positive community attitude towards tourism. Sewage system and other utilities.	1

TABLE 19
TOURISM ATTRACTIONS (Cont.)

Existing Attractions	State of Development	Situation	Tourism Activity	Development at Full Potential	Relative Ranking of Attractiveness
Beaches	Only Chastanet developed.	Water polluted at Soufriere Bay. Unspoiled elsewhere along coastal line.	Recreation at Malgretoute and Soufriere Town. Tourism and recreation at Anse Chastanet.	Medium size resorts. Recreational facilities at Malgretoute and Soufriere Town. Restricted use at Jalouisie (National and Marine Park).	1
Reefs; Anse Chastanet Pitons	Anse Chastanet diving operation.	Unspoiled.	Diving.	Underwater trails at National and Marine Park.	1
Forests; Dearaches	4-wheel drive access.	Unspoiled.	No tourism activity.	Scenic overlooks. Nature trail.	2
Forests; Rain Forest	4-wheel drive access. Interpretive center decayed.	Difficult access from Soufriere (West) approach; access from the East easier.	Some tourist activity.	Trail. Interpretive and management program.	1
Mineral baths at Cresslanda Malgretoute Vantine Falls	Vantine Falls in area of Sulphur Springs; Malgretoute has access, though difficult; Cresslanda 4-wheel drive access.	Not exploited.	No mineral bath or spa at present. French 18th century baths at Vantine.	Spas, health club	n/d
Old Estates	Not even in concept stage yet.	For vacation rental or agricultural production.	The Still Restaurant	Museum. Medium size resorts. Spas or health clubs. Visit to a working estate.	2
Josephine Bonaparte	Little known of Josephine's childhood in St. Lucia.	Estate house. Malmison survives in its foundation only.	No tourism activity.	Museum. Performances. Josephine's clothes or implements, Booklet.	2
Belfond	Easily accessible.	Starting archeological work. Private property.	No tourism activity. Only necessary visitors should be allowed during development.	Presumably very extensive and exceptional archeological site of Amerindian culture. Archeological tours.	1

TABLE 20

HISTORIC SITES - SOUFRIERE

TYPE	NAME	DESCRIPTION	CONDITION
1. Ancient and Historic Monuments	Soufriere Estate	Little shrine of the Blessed Virgin	Good
2. Archeological Sites	Beltond	Extensive major settlement presumably related to religious and astronomic practices.	Archological works to start in 1985.
	Gros Piton	Square cavity hewn in a rock and scattered rock basins.	Needs exploration
	Stonefield	Carved stone with three human images looking as a family. A second stone also carved.	Good. Needs interpretation.
	Wingsville	Close to an area where fine specimens of stone and heads have been found.	Needs exploration
3. Caves, Tunnels and Holes	Amerindian Cave	South East side of Petit Piton, probably used for Amerindians	
4. Cemeteries of historical value	Cemetery	One of the oldest continuously used cemeteries in St. Lucia. First burial in 1745.	Needs weeds removed and tombs of outstanding St. Lucians highlighted.
5. Estate buildings	Anse Mamin	Masonry foundations visible.	
	Diamond Estate	House dates from mid-18th century.	
	La Perle Estate	Mid-18th century.	
	Malmaison Estate	Remains of the Estate house of the Tascher de la Pagerie family, parents of Empress Josephine, are still visible.	
	Palmiste Estate	Mid-18th century.	
	Rabot Estate	Ruins of building probably destroyed during the French Revolution 1795	
	Ruby Estate	Group of stone building some with claytiles roof. 18th century ?	Good
	Union Vale Estate	Old frame building still used. Rebuilt over ancient foundations probably destroyed in 1795. Many old out buildings, an 18th century stable in excellent condition.	Good

TABLE 20
HISTORIC SITES - SOUFRIERE (Cont.)

TYPE	NAME	DESCRIPTION	CONDITION
6. Forts, batteries and redoubts	Morne Coubaril	1762 or later a fort was built on this hill overlooking Soufriere Bay.	
	Rachette Point	On Le Fort de Latour's map 1787 the site is shown as Old Fort. That would make it French dated 1762.	Wretched. A piggery is at the site.
7. Miscellaneous Historic	Diamond Baths	Sulphur Baths near lower Diamond Falls, built by Baron de Laborie in 1785 and financed by Louis XVI. Partially restored.	Good
	Sulphur Mine	Remains of sulphur mining operations dating from 1836.	Need repairs and interpretation.
	Stonefield	There was a lime oil processing factory at the early part of this century. Old factory building and pieces of machinery still on the estate.	
	Soufriere town square	Probably dates from 1745 when the town was established.	Good
8. Public Parks	Anse Chastanet	Restored version of an animal operated sugar mill removed from Rouarné.	
	Anse Main	Aqueduct and masonry ruins of a large sugar factory built in 1795.	
	Diamond Estate	Pre-1745 estate. Ruins of an early windmill. A sugar factory of much later date can also be seen there.	
	Fond qensalibres	Ruins	
	La Perle Estate	Foundation of an old sugar factory	
	Palmiste Estate	Foundation of an old sugar factory	Chicken coop.
	Soufriere Estate	18th century mill re-built after 1780 hurricane. Destroyed by the "Brigandet 1795. Rebuilt in 1796. Some minor repairs and a major alteration after 1838. Aqueduct and stone building, mill.	
9. Sugar mills and factories			

Sources: Robert J. Devaux, field review and Saint Lucia Historic Sites, St. Lucia National Trust, 1975; OAS Mission

2. Facilities and Services

Lodging and restaurants in the Soufriere area are very limited in quantity, although there are two good quality resorts: Anse Chastanet - 21 rooms with beach and diving facilities; and Dasheen - 8 rooms and 7 villas - a mountain resort overlooking the Pitons. The Hummingbird Yacht Club at the north end of Soufriere Bay has two rooms, and can offer mooring for up to ten yachts. All three have good medium-size, appealing restaurants. There is also The Still, a large restaurant that seats 200 and can extend to 300, in the old estate style.

In town there is a non-recorded hotel with 8 rooms, and a guest house with three rooms, as well as other non-recorded guest houses. These facilities are appropriate for a lower income market.

A third category of lodging is represented by villas for rent in the surroundings of Soufriere, several in the coastal area. They total around seven villas with 30 rooms.

Tourism shopping is quite poor in Soufriere Town. There are neither tourist agencies nor airline offices.

Taxis and mini-buses are usually available for tourism transportation; guides are individuals not well trained, nor uniformed.

3. Accessibility

Hewanorra International Airport receives intercontinental flights of wide-bodied aircraft. The road from the airport to Soufriere was put in good condition in 1983. The distance is 17 miles.

Vigie Airport at Castries receives inter-island flights. The trip from Castries to Soufriere takes 1 hour and 20 minutes, traveling 26 miles over the picturesque West Coast road. The road is an old one, and in poor condition. Improvement works are supposed to start by 1986. In spite of its discomforts, tourists are impressed by its exceptional scenic qualities.

The East Coast route to Soufriere takes 1 hour 40 minutes -57 miles- on a wider and safer road, but with more intense traffic from Hewanorra to Castries and some stretches with pot-holes.

There are no directional signs on these routes or other secondary roads. This is a problem for the tourists who rent cars, both for safety and accessibility.

The pier at Soufriere is still being used by some craft in spite of the damage caused by the last sea storm. It needs urgently to be repaired and enlarged.

4. Development Projects in Process or Proposed

Several projects in process or proposed in the Soufriere area will affect tourism's potential. They will be mentioned in order of their possible impact.

a) Geothermal Plant

The first important aspect of this project for tourism planning is where it would be located. The visual impact of a power generating plant athwart the natural phenomenon of volcanic cauldrons would be one of deflation of the visitor's experience, i.e., the natural atmosphere would be replaced by an industrial one. The "Evaluation of the St. Lucia Geothermal Resource" Summary Report, Los Alamos National Laboratory, Los Alamos, New Mexico, August, 1984, says:

"We recommend that the first three production wells should be drilled in 1) the Belfond area, 2) Sulphur Springs, south of the surface manifestations and 3) the Etangs area, south of the road."

"Diamond Springs and Bell Plain are also recommended for exploration to help delineate the size of the Gualibou geothermal reservoir."

The location least damaging to the tourism potential of Soufriere would be the Etangs area. The Los Alamos report did not contain any environmental impact study.

The second aspect is, what technology would be applied? Reportedly, one possible technology of the project would result in a cessation of boiling and smoking in the cauldrons.

A third aspect, one which would be positive for the development of tourism is a cheaper and more reliable source of electric power.

b) Tourism complex at Jalousie Beach

A project labelled "Tourist Complex" C/49/82 is included among the "Policies and Major Approved Developments" listed in a C.P.U. document of August, 1983. The OAS Mission has not been able to review the project. The Mission was informed that a private entrepreneur has the intention of developing about 100 cottages around Jalousie Beach and the slopes behind it.

However, another document of Government entitled "The Policy on Development at the Pitons", May, 1982 (see below), refers to the Pitons as "a protected area for open space conservation" and outlines the use of adjoining land. The area of the Jalousie Tourism Complex is in a zone in which "only limited development, particularly temporary structures, will be permitted. Human activities in this zone will be restricted". It also says "the development of man-made structures at Jalousie will be discouraged. Exceptions will be developments in keeping with the Land Use and Development Plan".

c. Marina at Malgretoute

A project labelled Marina C/331/82 was listed in the same C.P.U. document, "Policies and Major Approved Developments" cited above. The mission has been informed that a private entrepreneur has been studying a project consisting of a marina, an offshore casino and lodging. At the

present time there is no action or recent news from the possible investors.

The document "Policy on Development at the Pitons" defines "a zone of intense human activity concentrated in the Malgretoute area. This zone is to act as a 'honey pot' to draw large numbers of visitors away from the more fragile zones".

d. Expansion of Anse Chastenet Hotel

In 1985 construction will begin on 12 additional rooms at the hotel, and the management has plans for further development.

e. Guest Houses

Several persons in public and private activity in Soufriere are discussing ways to encourage and organize residents to rent rooms and sell services to tourists.

D. Main issues and problems

1. One of the most fundamental issues to be faced in planning the tourism development of Soufriere is whether it is possible to turn around the socio-economic decline of the town. Can it be done soon enough to give the tourism development proposals of this project a reasonable chance to succeed? In recent years Soufriere has suffered general economic and social decline and isolation from the Castries northwest and Vieux Fort south. Access from the rest of the country is in some ways worse than before the construction of roads, which have proven costly and difficult to maintain, but have justified the demise of coastal marine transport. Some of Soufriere's more educated families, which provided community leadership and examples of civic responsibility, have migrated from Soufriere. Discipline and public courtesy of at least a few idle boys and young men have been lacking. There is reportedly a drug problem in Soufriere.

The rise of tourism brought into this situation a stream of vacationing, mostly white, foreign visitors, walking the town streets with money in their pockets. The interaction was less than harmonious; Castries' tour operators reacted by curtailing their tours in Soufriere, hurrying their clients to the Sulphur Springs, in some cases to a restaurant for lunch, and then back to bus or boat. A turn around in the socio-economic climate of Soufriere is essential.

2. Should tourism be the economic and developmental bell-weather of Soufriere? Soufriere was known as the breadbasket of St. Lucia, but agricultural production has declined in recent years, and agricultural land in close to town is increasingly given to residential construction. The coconut oil processing plant is still the town's largest single employer, yet the capacity for expansion of the copra raw material input, at least locally, appears limited. Other vegetable oils are being imported and processed. Sectoral priority has significant implications in regard to infrastructure and other investments. One decision needed now is on the replacement of the pier. The tourism activity of Soufriere desperately needs a new pier, since the majority of visitors arrive by boat and the pier remnant where the boats presently arrive is in precarious shape, even for the coastal sailing vessels. Cruise ships cannot, of course, use it. A commercial pier also appears needed, and a commercial pier north of the Soufriere River is proposed. The tourism flow should not be expected to use such a pier, because the cargo loading and off-loading would be detrimental to tourism. It must be clearly understood that the use of a given physical space for cargo operations is not compatible with its use for embarking and disembarking tourists. Also, maintaining the location of the pier in its historic place, adjacent to and as an integral part of the waterfront, is important. The construction of two piers may be an eventual solution. The cargo pier could be north of the Soufriere River. If necessary, the playing field could be re-located near the River and the oil processing plant.

Another aspect of this issue is the reconciliation of different project proposals, each with advantageous and disadvantageous implications for the several productive sectors. The prime example is

the proposed geothermal plant. Not only the decision on whether it is to be constructed, but that on the location as well as the technology employed will have basic effects on this tourism development project and even the actual tourism trade.

Decisions on road construction also will have varying effects on tourism's development and that of other economic activity.

3. What part should the private sector and what part should the public sector play in developing Soufriere's tourism? It is unquestioned that the necessary business knowledge and the flexibility to undertake and operate enterprises in tourism are more likely found in the private sector. On the other hand, some of the assets of the tourism business are inalienably public, and life in the town, the life of the towns people, unavoidably affects the success of tourism. Although the profit motive provides the needed direct incentive, does responsibility to the community at large and to posterity as well as the continued success of the operation require that, allowing for a fair return, tourism in Soufriere be under public sector scrutiny to monitor the public interest?

4. What should be the Government's transportation plan for the West Coast? Should the West Coast Road be re-constructed, or re-surfaced and improved in certain stretches, or simply (and least costly) re-surfaced? Should a new pier be constructed in Soufriere, and should scheduled marine coastal transportation (passenger only, or passenger and cargo?) re-installed?

5. Is land use control to be strictly enforced to attain planning objectives for the area? Zoning control is basic to the development of the proposed Pitons National Park and the Sulphur Springs Conservation Area, as well as the town of Soufriere.

6. Will the Soufriere community and the tourism trade (tour operators and visitors) accept more traffic regulation in the waterfront area (i.e., vehicle exclusion from the waterfront during certain hours, one-way traffic on certain streets, the use of donkey carts, etc.)?

7. Should the development of guest houses in Soufriere be assisted by Government? Is the development of villas for owner and visitor use a desirable planning objective?

8. Should cruise ships be induced to come directly to Soufriere, or enter Castries first? In selling an island as a port of call to a cruise line, one has to offer that which the line (indirectly, the passengers) want most. In that sense, this should be more a question of marketing research, than an "issue", i.e., a question on which a decision can be made from a range of alternatives, based on the exercise of will or policy. The same is true of the question of what is Soufriere's market. It is less a choice of will or policy than a question for empirical determination.

9. Should foreign investment in tourism in Soufriere be regulated? Should this issue be distinct in any way from the issue of foreign investment anywhere else in St. Lucia?

10. Should Soufriere be developed further as a tour (i.e., a day or half-day visit) destination, or as a resort destination (with visitors overnighiting)? Should sizable lodging be constructed in the Soufriere area, or in other areas, with visitors coming to Soufriere for the day only? There are other issues, of course, nor were these necessarily posed originally by the OAS mission. The C.P.U. paper "Issues Report for the Development of Soufriere" lists some of these issues. However, they are dealt with as policies and so are noted below in E. National Policy.

E. National Policy and Objectives

Several documents declare national policy and objectives affecting tourism's development. To ensure the Soufriere project is in the context of national policy, the following were reviewed:

- 1) St. Lucia National Plan Development Strategy, April, 1977.
- 2) Tourism Sector Development Plan. September, 1981. OAS,
(compiled from Government sources).

- 3) Draft Outline of the National Physical Plan. CPU, 1984.
- 4) The Policy on Development at the Pitons, Soufriere.
- 5) An Issues Report on the Development of Soufriere. CPB

The documents are not easily synthesized, but three themes appear commonly:

- government is committed to considerable growth in the tourism industry;
- government recognized^s that the Island's unspoiled beaches, coastal waters, spectacular natural scenery, tropical flora, and historic ruins constitute St. Lucia's attraction to visitors, and therefore, development of these attractions for visitor appreciation must ensure their conservation;
- government fosters greater participation of St. Lucians in the tourism industry. (Some have translated the last policy into a preference for small hotels and guest houses. As was pointed out in the OAS Tourism Sector Development Plan, local ownership of villas prefers ~~an~~ easier vehicle for St. Lucian participation in the tourism trade than guest houses.)

1. St. Lucia National Plan Development Strategy, April, 1977

Under its policy of promoting tourism growth, the National Plan Development Strategy of 1977 set an eventual target of 500 beds for Soufriere. 36 beds existed at the time. For Castries and Vieux Fort the targets were 6,000 and 1,500 beds from 1,406 and 568 existing beds. A total of 8,000 beds was considered full utilization of the tourism resources of the Island within its socio-economic limits.

Among the specific objectives of the Plan, the following are of particular importance in developing Soufriere:

- "optimization of land use through concentration of tourist activity in selected areas of the island;
- identification, development and protection of environmental attractions;

- the development of local support services and an inclination on the part of tourists to visit commercial centres and to move freely through the island in witness of all St. Lucia has to offer."

The Plan stated that "through the combined actions of Government, the National Trust, and the St. Lucia Tourism Board, programs for the conservation and enhancement of the island's natural and man-made attractions will be instigated, with facilities for visitors in the form of car parks and other conveniences".

2. Tourism Sector Development Plan, September, 1981. OAS.

The Tourism Sector Development Plan projected a 5-year planning horizon. The policy context contained the three themes noted above. It also recognized the social strain that can accompany tourism growth, and stressed the importance of education and awareness training of St. Lucians on the nature and potential of the tourism industry. The strategy projected increase in higher-priced hotel capacity, in order to set high standards and quality norms, as well as increase in villas, in order to facilitate wider participation in the industry by local residents. Guest houses were not stressed because of their poor financial performance. In the Soufriere area, development was to be centered about the natural attractions, with 47 villas constructed within a spa hotel resort.

3. Draft Outline of the National Physical Plan^{1/}. CPU.
1984.

The objectives in this draft relating to land use strategy of special import for Soufriere are:

- protection and conservation of all areas deemed critical to soil and water conservation. Marine species reproduction, and preservation of natural scenic beauty;
- protection of all prime agricultural lands from non-agricultural uses;

^{1/} Being a draft paper, only the pages of this document referring to tourism have been made available to the OAS mission.

- protection and preservation of the nation's cultural heritage as represented by sites, artifacts and buildings of historical archeological, cultural or architectural value;
- minimal negative social, economic or environmental impacts on established communities from the process of development;
- high quality living environment for all settlement areas in terms of minimum congestion, optimum open space for active and passive recreation, an appropriate scale of development, public safety, etc.

In the designation of land use, the tourism industry is an alternative use of some agricultural lands near Soufriere and the coast line. If properly managed, the economic benefits of tourism exploitation are generally higher than those rendered by agricultural use. Nonetheless, Soufriere is not seen as an area for the development of tourism accommodation. It is said that the North-west, and as the industry and its performance improve, also the Vieux Fort area, should fill this role.

The Pitons are one of the eight areas of the country destined for "active conservation". The Piton amphitheatre from Gros Piton to Anse Monier is marked as an area of "Outstanding Landscape Quality", for which special policies are required for its preservation and enhancement. Anse Monier is identified as a Marine Reserve.

4. Policy on Development at the Pitons, Soufriere Environmental Planning Section, CPU, May 1982.

This document states that:

"The Development Control Authority has agreed in principle to the declaration of the entire area of the Pitons as a Protected Area for open space/conservation".

The area, to be named "The Pitons Natural Monument and Marine Park", extends from the Malgretoute Ridge south to Anse L'Ivrogne. Human activity is to be restricted, and only temporary structures permitted. Development is to be concentrated at Malgretoute. No motorable road

would be permitted into Jalousie Estate. As noted elsewhere in this study, the proposed Tourist Complex at Jalousie Beach is not easily reconciled with the objective of conserving the Island's prime natural attractions.

An outline of planning concepts for Soufriere drawn up in the CPU in 1983 is shown as Map 5.

CHAPTER II
PROJECT OBJECTIVES AND STRATEGIES

A. Objectives

Keeping in mind the present situation of tourism in Soufriere, as well as the National Policies and objectives as set out in Chapter I, the objectives of the tourism development of Soufriere are listed.

1. An attitude of mutual respectful and friendliness between Soufriere residents (including the young boys) and visitors.
2. Understanding by the community of the commercial workings of tourism and its importance to business in Soufriere.
3. More employment and income.
4. Development and protection/conservation of the environmental (natural) attractions and cultural heritage.
5. More local residents and firms providing tourism services.
6. The local supply of all visitor consumed fresh vegetables, fruit, and fish.
7. More and improved tourism services and activities.
8. Better recreation activities;
9. Optimal land use through concentration and channeling of tourism activity.
10. Minimal negative impact of tourism on the Soufriere community, and potable water, efficient sewers, waste removal and electrical power.

There is an approximate order in the above objectives, in the sense that some are intermediary or prerequisite to others. For example, a sustained increase in employment and income (implicitly from more tourism expenditure), will require a respectful, friendly atmosphere in town, as well as developed and permanently conserved, protected natural and cultural attractions. On the other hand, the reverse could also be argued, i.e., a friendly atmosphere depends on more employment and income.

Ultimately, the continuing attainment of any of the objectives depends on at least the partial realization of most or all of the others. The implication for strategy, therefore, is that a broad front approach, nearly a simultaneous approach, is preferable. To stress the priority of objectives, then to address them sequentially, would be more doubtful of success.

B. Strategies

1. The first strategy is to undertake the tourism development of Soufriere on a broad front, realizing the interdependence of the objectives pursued. The effort must be thoughtfully planned and integrate efforts not only of attraction development and protection/conservation but also of infrastructure, facility and social and community improvement as well. Experience in Soufriere has repeatedly demonstrated that isolated measures, however laudable their intentions, and even when well conceived in themselves, have failed eventually because nothing was done to address neighboring conditions or fundamental and contributing problems.

2. Closely allied to the strategy of planning for the development of the area in a functionally comprehensive manner, is that to plan tourism development for the geographic area of Soufriere, encompassing attraction and facility development within a radius that can be visited by a manageable day tour from Castries. (The day tour visitors are and for the foreseeable future will continue to be much more numerous than visitors lodging in Soufriere.)

3. Development of tourism should stress the uniqueness of Soufriere. This lies primarily in a) the Pitons, b) the Sulphur Springs, and c) the Soufriere Town. Also unique to Soufriere but not of the same level of significance or not yet fully evaluated are the Belfond Amerindian site and such historical attractions as the site of Malmaison, childhood home of Josephine Bonaparte.

4. Soufriere tourism development plans, individual projects, and even limited remodeling or expansion cannot be successfully undertaken over the opposition of the community. Therefore, development efforts must be worked out in close consultation with the Town Council, its Tourism Committee and other local groups interested in the betterment of Soufriere. This strategy means that, along with the measures for physical and commercial development, and the conservation of the natural and cultural resources, the development of Soufriere should include balanced and goal-directed programs for social and civic improvement.

5. A corollary strategy to the foregoing is to prepare specific curricula for the primary schools and adult education on tourism and its impact on Soufriere.

6. More tourism facilities are to be constructed in the Soufriere area, limited by demand, of course, but also limited in amount and location by the requirement to protect the scenic beauty of Soufriere.

7. In general, Soufriere will continue to be an attraction of St. Lucia, with visitors day touring from lodging on the primary resort beaches elsewhere.

8. The protection of the scenic beauty is so essential to future tourism that it needs to be an individually expressed and emphasized strategy.

9. Lodging in the Soufriere area should be developed:

- a) near to suitable beaches in the area, (such lodging will be limited as the beaches are limited, but being in the Soufriere area they have their particular attraction);
- b) in guest houses in town (also limited);
- c) estate house rentals and scenic view villas (these also will be limited); and
- d) lodging for a resort spa or spas, making use of mineral springs.

10. Develop local recreational facilities (sited on the water) simultaneously with facilities for visitors.

CHAPTER III
MASTER PLAN

A. General Scheme

Soufriere is to develop for tourism and resident use the Pitons in a National Park and Marine Park, the Sulphur Springs as a National Conservation Area, and Soufriere town as a cultural attraction. Soufriere Town is to have an appealing waterfront in an environment preserving its old port character, a historic architectural walk, and an Estate Museum. Other attractions to be developed are: botanical gardens, the Rain Forest Trail, beaches, and historic and archeological sites. The uniqueness of Soufriere Town must be stressed in terms of its picturesque setting and history. The town should be upgraded by:

- a) Controlling the harassment of tourists by a relatively small group of boys (most of the town's people are as gentle and warm as are the rest of the St. Lucians, a characteristic which is one of the country's tourism assets);
- b) building an appealing waterfront to create a focus of tourism activity;
- c) preserving and revitalizing the historic and picturesque area;
- d) promoting lodging in town;
- e) improving the utilities;

The area will continue to function primarily as a day tour attraction to St. Lucia visitors from beach resort lodging elsewhere or cruise ships and yachts. Local lodging facilities for stay-over visitors will be developed along four different select and limited lines.

1. Area Beach Resorts

They would be in the luxury category, and in size limited by the carrying capacity of the beach (maximum should be not more than one person per 10 m²). They would, therefore, be of small to medium size. The

buildings design criteria cannot be prescribed in general, but rather have to be promulgated in particular for each beach, because of the variation in shape, backdrop, landscape and other individual characteristics.

2. Villas

Villas have been and are being built, both newly and out of renovated estate houses, when well-sited with a mountain or sea view. These are to be developed on a controlled basis which permits enjoyment of the views, but in locations, number and architecture which do not detract from the scenic surroundings. Some villas are being built by St. Lucians resident in Castries and abroad for weekend and vacation use.

The investment in villas would induce a return, if only periodic, of migrated Soufrieriens and also introduce wealthier, more enterprising Castries or foreign residents into the affairs of Soufriere. This could contribute to turning around the socio-economic and cultural decline of Soufriere (nations and cities are, of course, what their people make of them). The active encouragement of villas constitutes one of the main hopes for re-vitalizing Soufriere to the extent that the villas would be St. Lucian-owned and used for tourism accommodation, they would serve to increase local participation in the tourism industry.

3. Guest Houses

The guest house lodging mode permits direct participation of certain Soufriere house owners with suitable rooms to participate directly in tourism. Anything beyond an occasional and particular type of demand such as ex-Peace Corps or student types (or those on a long-term arrangement, getting beyond the definition of tourist), would require the fundamental turn-around in the atmosphere of the town mentioned above. A feeling of security and acceptance would have to be much more readily perceived by the stranger, especially lady visitors. Further, the operational aspects of guest houses, in terms of physical standards of rooms, sanitary facilities, food, etc., and the reservation system would need to be on a

tully professional basis. These requirements might best be met via a separate central corporation, a town lodging management and reservation corporation to handle villas and guest houses.

4. Spa

Spa lodging accommodation should be developed as part and parcel of spa development. The spas would be the core of a health resort. Possibly they could be combined with the beach resort. They must be able to tap the thermal mineral springs, aimed at sufferers of various health problems, primarily arthritis, but also such ubiquitous problems as over-weight, under-weight, body building, herb and other special diets and beauty enhancement. The further development of spa resorts, as of the other lodging modes, would require more detailed demand research. However, the ultra-luxury spa market, which focusses on health and beauty in combination, has shown phenomenal growth in North America in the past five years. Guest prices of health and beauty spas in North America typically range from US\$1,400 to \$2,500 per person per week. The spa development might best be in conjunction with select tour operators selling the Caribbean trip and registration for stay in the spa as a package, and/or in conjunction with mechanical spas/health clubs of metropolitan areas.

The above modes of lodging would offer a range in price and style for the different types of visitors. The maximum amount of lodging to plan for the Soufriere area is difficult to fix as a global figure. One approach is to estimate the optimum for each of the four modes outlined above and sum the four capacities. That is, the beach resort lodging optimum capacity fixed by beach availability and its physical as well as social carrying capacity, the villas, by the criteria of not detracting from the scenic beauty, the guest houses by the number of suitable houses and enterprising owners and so on. In any event, the sum of the various modes should not exceed greatly the ceiling indicated in the April 1977 National Plan of 500 beds (250 rooms). There are approximately 50 rooms in the various modes presently. The optimum total may even be less than that 5-fold increase, and any increase should be phased to permit time for the socio-cultural adjustments resulting from resident/tourist interaction to be made.

The growth in accommodation, i.e., the growth in stay-over facilities in Soufriere as a destination, is particularly important to the realization of Soufriere's economic objectives. More employment and income will come directly to Soufriere through St. Lucia visitors lodging and dining in Soufriere and environs. However, due to the necessary limits on lodging in the Soufriere area, the imposition of entrance fees and the development of other services primarily for day tourists in Soufriere must be exploited as well.

Along with the development of the visitor-directed attractions and facilities, recreational facilities must be developed. Primarily these are to be public beach and park facilities at Soufriere Waterfront and at Malgretoute. The beach lands need to be zoned to control their access and adjacent uses more closely. The mining of sand will not be permitted. The beaches from Malgretoute northward are long enough to be zoned for different uses though they are separated from the road by a steep slope. These measures are to be coordinated with the Parks and Beaches Commission.

For the tourism and the recreational measures to succeed, improvement of both physical and human infrastructure is needed. Obviously, a sewage and solid waste, as well as an adequate sanitary water system is required. Water is not now an obvious limitation. Urban sewage and waste disposal systems will be put in, and the level of pollution in the beach waters monitored. A new pier is to be constructed, a rapid passenger ferry obtained for sailing regularly between Castries and Soufriere, and the roads within the Soufriere area and the Soufriere-Castries road improved. The ferry service would be competitive in time and material cost with the West Coast Road vehicular travel mode. Only a moderate investment would be required, and it would appear that the service could be profitably operated. It is needed for this project. The operation would be in combination with land transport at both piers.

The primary schools will teach a course on the tourism phenomenon, and an adult tourism awareness program carried out. Small business extension services in the tourism industry will be offered in Soufriere to

facilitate local participation in the trade. In these measures, the idea that people are the most important tourism attraction, essential for a visitor's experience to be pleasurable, will be stressed.

This general development scheme is to be effected via the projects and programs described below in B. (The concept of a project involves physical works, whereas programs principally refer to managerial, institutional, educational or other social action).

B. Projects and programs:

Table 2/ summarizes the sub-projects included in the project formulated here for Soufriere, their immediate and long term components, their cost, and whether Government or the private sector is seen as more responsible for the major part of the investment.

Each sub-project is organized in the form of component works and programs. The cost of construction of the buildings and related works have been estimated with the kind assistance of several St. Lucians in both Government and the private sector. A professional quantity surveyor was not available, however, and consequently the estimates are considered only very approximate.

1. Pitons National Park

a) Site

The southern most boundary would run up the south and east banks of the L'Ivrogne River to the saddle on the east-northeast side of Gros Piton. From the Saddle, the boundary would go east and north up a ridge to a high point at an elevation of 1663 feet (map referred DCS 8). From this point, the boundary would continue north-northeast along ridge lines westerly of Chateau Belair and Pond Dax to a peak midway between Dasheene and Chateau Belair. The boundary would follow down the north ridge, skirt

21 ✓

around Dasheene, down the drainage north of Petit Piton and encompass the hospital area of Malgretoute. The sites of the various facilities of this sub-project are generally indicated on Plan 4.

b) Goals

- i) To protect the scenic integrity of the Pitons and a minimum of visual backdrops (i.e., the land between them up to the ridge line), as a spectacular natural phenomenon and international tourist attraction;
- ii) to provide facilities for easier, more enjoyable visits;
- iii) to increase international and St. Lucian visits to the Pitons area, contributing to area's economic growth;
- iv) to protect the flora and fauna within the proposed park's confines;
- v) to interpret the natural features of the park to the public.

c) Sub-project description

In the immediate term, the project would consist of the legal/regulatory measures creating the park, and limited improvements in access and movement, and in facilities for day use and camping only. Public access to the area (without constructing a new road) would be by the existing road and the Malgretoute access on the north. Improvement of this road to a high standard is an immediate priority. Small parking areas are to be at the end of the access road and at Malgretoute Beach. Trails are to run along the Waterfront and on the Pitons, and lead to overlooks and points of interpretive interest. There is to be a trail terminus at Malgretoute. Picnicking is to be provided for at Malgretoute. Boat access, camping and picnicking areas should be developed in several areas along the shoreline. In the immediate stage of development, these facilities would be within the Queen's Chain position of the area. These facilities should be developed where safe moorings can be provided. Each individual camping or picnicking site should contain a picnic table and a low native stone grill (charcoal stove) or platform suitable for supporting a portable camp stove. Sanitary facilities are

planned for at Malgretoute and Jalousie Beach. Since it is not considered practical to develop a water supply for the small number of facilities at Jalousie Beach, it is necessary to consider "pit privies" in that area for the initial development stage.

In the long term, careful plans should be made for the creation of a Pitons National Marine Reserve, complementary to the Park. The upgrading of the southern access road to Union Vale and the construction of parking and a trail and trail terminus are measures for development of the Park in the long term. The phasing is planned primarily because the investment cost of the two access roads would be too much at the outset of the project. The only additional measure for the long term is continuing planning of the integrated management and development of the Park.

d) Works and cost estimates

The roughly estimated quantities and costs of the measures planned for the Pitons National Park are shown in Table 21.

The unit costs used in the following illustrative estimate are:

<u>road upgrading</u>	<u>EC\$55. per square yard</u>
/basework	(18.)
priming	(7.)
dressing	(5.)
overlay (macadam)/	(25.)
parking space, 12 ft x 15 ft asphalt bordering	EC\$1,000
picnic table and benches (greenhart)	700
public lavatory facilities (6) with septic tank	9,000
public restroom building	35,000
charcoal stoves	200 each
trails	6 per linear yard
beach shower facilities (6)	9,000
and lavatory facilities (6)	6,000
changing and restroom building	100,000
entrance barrier	3

To the physical construction and equipment cost there are added 10% for administration and supervision and 10% for contingency of quantity and price. No cost for the future development of the water supply in the park was included. This cost should be estimated and included in the long term phase.

TABLE 21
PITONS NATIONAL PARKS
ESTIMATED INVESTMENT COSTS (Illustrative)

	Immediate (EC\$ 000's)	Long Term
	6	5
Drafting legislation and regulations. Pitons Marine Park		
Road improvement: upgrade, widen and resurface access road		
Malgretoute 4,825 linear feet x 18 feet width = 162,000 square feet	541	1,320
L'Ivrogne 12,000 linear feet x 18 feet width = 216,000 square feet		
Parking		
Malgretoute - 20 cars, 200' x 40' = 8,000 square feet with wheel stops	20	
10 cars, 100' x 40' = 4,000 square feet	10	10
L'Ivrogne - 10 cars, 100' x 40' = 4,000 square feet		
Restrooms		
Malgretoute - w. six fixtures with septic system	42	
Jalousie/Palm Beach - w. four pit or chemical toilets	10	
Beach changing facilities and restrooms	109	
Malgretoute	15	
Camping Picnic Areas		
Trails		
Malgretoute - within picnic area	8	
- to waterfall	2	
- to Petit Piton (base)	3	
Jalousie/Palm Beach	20	20
L'Ivrogne	59	1
Interpretation program	3	3
Entrance barriers at Malgretoute and L'Ivrogne	848	1,359
TOTAL	85	136
Administration and supervision	85	136
Contingencies	85	136
Sub-project Total	1,018	1,631

e) Income

An entrance fee would be charged to park visitors; the fee is set arbitrarily at EC\$4.00. The sample survey of visitors to Soufriere indicated that 40% of those presently visiting Soufriere would "very probably" visit a proposed Pitons National Park. Another 18% "probably" would visit it, making a total of 58% of that sample who would "probably" or "very probably" visit such a park. Although the concept seems to strike a responsive chord among actual visitors, so that at least a drive to the park and a short trail hike would be popular, the compatibility of long hikes or picnicking with the constraints of day tours to Soufriere is questionable. For that reason the cost of entrance is set at, for developed country standards, a nominal level. It is estimated that 60% of future visitors to Soufriere would visit the Park.

2. Sulphur Springs Conservation Area

a) Site

In the immediate term, the area of this sub-project would include a portion of the access road, the springs, the slope immediately to the west of the springs (to preserve the scenic backdrop). A trail right-of-way to the summit of Mt. Souf also should be acquired for the initial development.

In the long term, the sub-project would include also Mt. Souf. A tentatively suggested boundary would encompass the springs, Mt. Souf, a major portion of the basin draining into the springs area, and a scenic corridor along the rivers below the access road to the vicinity of the waterfall above Diamond Baths. (See Plan 5.)

b) Goals

1) To conserve the sulphur springs, the bubbling, steaming and hissing cauldrons and pools that constitute the area's main visitor attraction;

- ii) to conserve the area immediately around the springs and Mt. Souf, which constitute the scenic backdrop to the springs;
- iii) to provide for safety and easier access and viewing of the springs;
- iv) to interpret and enhance the enjoyment of the natural phenomenon of the site.

c) Sub-project description

In the immediate term, the access road would be improved, parking constructed, an entrance wall and barrier installed, a visitor center constructed, boardwalks and viewing platforms built, and a trail up to the summit of Mt. Souf laid out, with view points at the top and along the route. Improvement of the access road from Soufriere Town to the juncture of the West Coast Road and the Sulphur Spring turn off road would consist of measures to increase visibility on sharp bends, and the installation of crash barriers along steep down-slopes. Improvement in the road stretch from the West Coast Road junction to the Sulphur Springs would include road widening to an 18 feet carriageway, straightening, and the rebuilding of the bridge damaged by the Hurricane Klaus. (See Annex II.)

Parking is to be provided for 8 vehicles, and an arch and gateway constructed at the entrance to the area. The walls at the gate should be stone faced. Paving should be of stone slabs with a rough surface.

The visitor center is to be located on a platform of ground just northeast of the dirt road. It will have the following architectural areas: reception area (information desk), display area and counter for the sale of publications and objects, restrooms, seating and rest areas, a viewing area overlooking the crater zone of the springs, an exhibit area, and a store room and work area. (See Plans 2 and 5.)

The boardwalks are to facilitate the visitors movement over the sulphur rock ground, terminating in viewing platforms at the major chaldrons. Handrails are to enhance the safety of the visitors. The trail to the summit of Mt. Souf is traced on Plan 5.

The existing two kiosks would be used to sell photos, soft-drinks and souvenirs.

In the long term, the broader boundaries of the Conservation area would protect the watershed and view of the springs and provide expanded potential for overnight accommodations (e.g., camping, hotels), health spa/mineral springs development, a more extensive trail system, and a more comprehensive interpretive program. One potential additional trail would lead down the stream below the springs to the vicinity of the Diamond Baths, providing excellent views of waterfalls and a dramatic visual transition from the starkness of the sulphur wounds to the lush vegetation of the Soufriere River Valley.

The foregoing possibilities are to be thoroughly analyzed in a comprehensive management and development plan, which is to envelope considerations of thermal energy, agricultural and transport developments in the area.

d) Works and cost estimates

The works and cost estimates are shown in Table 22.

TABLE 22
SULPHUR SPRINGS: ESTIMATED INVESTMENT COSTS

<u>Works</u>	<u>Costs</u> (EC\$ 000's)
Road	
Improvement of sightlines and provision of crash barriers	40
Widening, straightening and bridgework	166
Parking, EC\$1,000 per space x 8	8
Entrance	6
Visitor center	
Building	130
Landscaping, approx. 40,000 sq. feet	5
Equipment	20
Boardwalks with railing 433 line yards at EC\$600 per yard	260
Trails	
Mt. Souf access 15,500 linear feet at EC\$6 per linear yard	31
Interpretation program	<u>139</u>
Sub-project cost	EC\$ 805

To the above basic cost should be added 10% to cover professional fees incurred in the administration and management of the project and 10% of the basic cost to cover contingencies. The total cost would be EC\$966.000.

e) Income

The main source of income would be the entrance fee, set for planning purposes at EC\$5.00 per person. It is projected that virtually all

visitors to Soufriere will enter the Sulphur Springs Conservation area. St. Lucian groups from schools, churches, and civic or community organizations would be admitted free provided prior arrangement had been made.

Minor sources of income would be from the sale of cold drinks, film, souvenirs and post cards. It is assumed that these items would be sold via the actual kiosks, and that the kiosks would be used by concessionaires. The average purchase of visitors in general is estimated illustratively at EC\$2.00, the cost of sales at 85% of total sales, and the concession fee at 5%.

3. Soufriere Town

Map 4 shows the functioning of tourism activity proposed for Soufriere Town. The replacement of the pier and the return of a fast, comfortable ferry boat service from Castries are important to the success of this project. The ferry service should be provided by the private sector. It would be used mainly by visitors. It is not a part of the project investments at this stage.

The access roads to town from the North and the South (i.e., the West Coast Road), the secondary roads, and the streets between the roads and the pier and the Soufriere Estate should all be maintained clean, free of pot holes, be well lighted, and should bear street signs. Building permits along these streets and roads should be strictly required and regulated. Vehicles from outside of Soufriere should not be allowed to park in the Waterfront/Mall area. (See Map 4 and Map 7 for parking space.) Local vehicles could park on Mason Street and Baron Drive. Donkey carts could be used again as an authentic, historical and practical transportation system. They could park in the area next to Thelma's Grocery. (See Map 7 "Traffic Organization Scheme".)

The sector south of Clarke Street and also the north side of Clarke Street should be preserved. Within this sector priority should be given to establishing the historic architecture walk.

The old building sector of town, borders, landmarks, nodes or points of focus, and paths forming the historic architecture walk have been marked on Map 4.

The component parts of the Soufriere Town sub-project are:

- a) Waterfront/Mall
- b) Historic architectural walk
- c) Estate Historic Museum
- d) Community Tourism Participation Program
- e) Pier
- f) Sewage system
- g) Shore improvement and beach recreation

These are treated in turn.

- a) Waterfront/Mall

- i) Site

The Waterfront/Mall is planned for the area between Thelma's Grocery and the Meat Market (B./C. in Map 4 - Photographs in Annex III). The Waterfront extends to the Fishermen's area in the South, and the Beach at the North end of the Bay.

- ii) Goals

- To provide a major attraction in terms of urban landscape and focus of tourism activities;
 - to facilitate the arrival and departure of tourists from cruiseships, boats and buses;
 - to improve the area for social gatherings and business activities for the local people, as market place, conversational area, promenade;
 - to stress the old character of the town;
 - to protect the coastline from the sea.

iii) Description

The Waterfront component work includes the central Waterfront/Mall area and extensions. The central Waterfront/Mall area (see Plan 1, and Plans 1.1 to 1.4) includes Mason Street to the water and laterally from the pier/Clarke Street to the Meat Market, from the pier/Clarke Street to Thelma's Grocery, and Clarke Street from the Waterfront to the Square.

The extensions are from the fishermen's front south, the Sports field front and beach from Meat Market to the River, and the Beach from the River north to the end of the bay.

The focus of leisure activities and focus of a pedestrian promenade will be from Clarke Street to the Meat Market (B in Map 4). Vehicles will be permitted to make deliveries during certain hours only. In order to be appealing to tourists, the promenade will require:

(1) Special activities, such as at least one restaurant-cafe-pub, shopping areas, including a fruit and craft market, an area for music and seating, and walking areas. A guest house could be included, to set the image and standards for the guest houses program, and to add tourism movement to the area. The guest house or small hotel could be under joint management with the restaurant. All these activities should be integrated in a Mall connected to the pedestrian promenade.

(2) Cleanliness, shade, and safety. The area should be well maintained.

(3) Views as transparent as possible. The space from Mason Street to the sea should not be occupied by buildings of any kind. Several alternatives for the location of the Mall with a restaurant and connected facilities have been analyzed (see Plan 1.0). In order of suitability they are as follows:

(a) Three adjacent vacant lots, each privately owned, lying between Mason and Bridge Streets. It may not be easy to get three different owners together for an integrated project, but the increased value of the

property and the promotion of the area from the project, could arouse their interest and willingness to participate in the Town Development. This alternative was selected for the project plan because it would connect the space between the waterfront and congested Bridge Street, opening a view to the sea at the pedestrian level and creating a true core of leisure activity as well as a visual image of very high quality. It also would provide very well for the special activities and for safety and control.

(b) Land reclaimed from the sea, with a rebuilt protective wall. The disadvantage of much higher costs requires this alternative to be discarded.

(c) Relocation of the public buildings along Mason Street, i.e., the Police station and the Post Office, to other sites, and the use of those buildings for tourism activities. In such a case, the Mall would run north-south rather than east-west as in the Plan alternative. One of the disadvantages of this alternative would be the longer distance from the pier.

(d) Private buildings to be remodeled as restaurants and shops. This is presumed to be the least appealing solution, as it would lack an organizing focus.

Plan 1.0 shows the design proposal for the Waterfront/Mall. Stalls, bandstand, benches and lighting are designed at a detail scale.

Stalls: A shade gallery is proposed to locate the fruit market and a crafts market in a picturesque way, attractive to local buyers and tourists. The wooden structure is light, and does not interfere with the view of the sea. This fruit market could be placed near the filling station, and the craft stalls near Thelma's Grocery.

Bandstand: The bandstand will close the promenade, creating a focus of attraction. It adds to the old character of the Waterfront. The structure is light and the design rescues some elements of the local

architecture as the treillage and the balustrade. The structure and balustrade could be built of pipes and castiron or wood, the base of stone or cement. The interior of the roof could be faced with plywood or boards.

Benches: Wooden benches have been adapted to mate with the general idea of light elements. Also, they are more comfortable than stone or cement benches. Maintenance is required.

Lighting: Street lights maintain the design characteristics of lighting already existing in the town. Posts should be 4" x 4", on a cement base. Lamps are supported by tubes of 3/4" fixed to posts.

Gas Station: The building and its function as a gas station is obviously an intrusion in the central focus of tourism activity and in a pedestrian Mall. If permission to occupy this location as a gas station expires, it should not be renewed. The building itself could be beautified by painting it, landscaping around it, and remodeling it. It could be used as a restaurant or cafe. While it operates as a gas station, vehicles should enter and exit as shown in the Waterfront/Mall plan and circulation system scheme, thus limiting the pedestrian area to the north end of the building. Trees should be planted as shown in Plan 1.0.

From Clarke Street to Thelma's Grocery (C in Map 4) the following is planned:

- painting of traffic signs on the road,
- planting of two trees,
- removal of the existing wooden building, and the construction of a shelter for the craft artisans.

A less desirable alternative to the last measure would be the remodeling of the existing wooden structure for the sale of crafts, with windows on four sides with jalousies, and the addition of shelves and counters.

The block of Clark Street from the Waterfront to the Square would be included in the historic architectural walk. It is the main entrance to town and the main way to get in or out of the Waterfront area. From a visual standpoint, it is a spacial extension of the waterfront, closed by the square and the church at the rear part. Fortunately, the houses in this area have been well preserved and have an appropriate scale and unity. Also, the shops in the block and the food market keep it alive.

Additional conservation of the houses by more repairing and painting is recommended. This block should be treated as a pilot project to set the standard for the historic architecture walk. (See description below.)

For the area of the fishermen's sea front south (see Soufriere Bay and environs, F in Map 4) the following is planned:

- improvement of the road,
- parking spaces,
- a sea wall, and
- storage for boats.

For the area of the sports field sea front from the Meat Market to the river (D in Map 4), cleaning of the beach, and the river banks from the bridge to the sea is planned.

For the area of the beach from the river to the north end of the bay (E in Map 4), painting of the vegetable oil tanks in bright colours is planned. The road entrance near the river bordering the cemetery wall should be used as the parking area for tourism vehicles from outside Soufriere. There is good shade there from the palm trees, and only some cleaning and improvement of the ground surface would be required. Once the problem of pollution of the bay water is solved, the beach will be an excellent recreation area, from the Tanks to the Hummingbird Restaurant. The entrance area facing the West Coast Road access as well as the spring should be cleaned. Changing facilities should be provided. Plan 1.3/1.4 outlines a changing room building, and the component work is described below.

iv) Works and cost estimates

The works tentatively proposed and illustrative estimates of cost are shown in Table 23.

TABLE 23
SOUFRIERE TOWN
a) WATERFRONT/MALL

	Quantity	Cost Estimate (EC\$ 000's)
<u>Promenade</u>		
- Floor in concrete paving slabs 2'x2' and pebble joints 4" wide	1,400 m ²	170
- Wood iron benches, 6 feet long	16	7
- Street lights	17	7
- Row of trees	10	3
- Stalls	two sets	20
- Bandstand		<u>40</u>
Subtotal		247
<u>Mall</u>		
- Restaurant 250 seats covered area	460 m ²	186
uncovered area	100 m ²	12
- Shops	260 m ²	105
- Rooms, bath, floor	260 m ²	<u>105</u>
Subtotal		408
<u>Entrance to town</u>		
- Arcade, and take away "Texaco" sign	1	3
- Parking lot		<u>10</u>
Subtotal		13
TOTAL		668

Notes: 1) Equipment is not included in cost estimates.
2) The cost standard used for covered construction is EC\$ 405 per sq/mt.

These costs are all identified for the first or "immediate" phase of the project. All of these works will be needed to present the visitor with a Soufriere Town that will attract him. Therefore, massing them together is necessary. These costs are for physical structures. In addition, there would be a cost for administration and supervision, estimated at 10%, and an allowance of 10% for contingencies. The total cost of the Waterfront/Mall is illustratively estimated at EC\$ 802,000.

v) Income

The income identified for all components of the Soufriere Town Sub-project is dealt with in one section at the end of the sub-project's description, in section ^{h)} ~~h)~~.

b) Preservation of the Heritage area and Historic Architecture Walk

i) Site

Old sector of Town, from Clarke Street and Square to the south (see Map 4).

ii) Goals

To preserve and revitalize the old sector and buildings of interest in Soufriere Town.

To re-create the history and culture of the town, for the enjoyment of the towns people , and for sharing it with visitors.

To add a new, unique attraction to a visit to Soufriere.

To enhance the pride and self respect of the local people.

To promote interaction between visitors and residents.

To generate more revenue from tourism.

iii) Description

After the fire of 1955, only the sector south of the axis of the town, Clarke Street from the pier to the Church, remained. In their small but popular book St. Lucia - Tours and Tales, Harriet F. Durham and

Florence Lewisohn (Litho-Print. Inc., Wilmington, Delaware, 1971), write that "...a fire in 1955 destroyed half the buildings"... "On the right are the very old, wooden homes and shops, dating back to the French days, easily appreciated in the decorative carvings along roofs line and balustrades".

A preservation program for this sector should include:

- a detailed inventory of the townscape elements,
- a detailed inventory of the buildings in the preservation area,
- the precise delineation of the preservation area,
- a declaration of the heritage area,
- the freezing of building and of demolition permits,
- the control of remodeling permits,
- Government investments and promotion measures,
- loans to preserve buildings and upgrade housing, and
- revitalization program starting with the tourism historical and architectural walk. These measures are elaborated below.

Inventory of townscape elements: lighting, wires, posts, sidewalks and floors, signs, advertising, drinking fountains, etc., on streets, squares and open spaces.

The inventory is to register location, characteristics, size, state, the historical or artistic interest, and service value of these elements.

Inventory of buildings in preservation area: classify buildings according to:

- | | |
|---------------------------|--|
| a) Period | original, alterations. |
| b) Facade characteristics | dimensions, No. of stores, principal style features. |
| c) State | structure facade walls, carpentry, roof, finishing, interior, habitat condition. |
| d) Use | for each store possible re-use. |
| e) Evaluation for | historical value, architectural value, scenic value, economic value. |

FEASIBILITY STUDY: MONROSE/OLD LIBRARY BUILDING SOUFRIERE

REPORT OUTLINE

- 1. Introduction:**
 - 1.1 Background to study.
 - 1.2 Commissioning agents and status of SDF.
 - 1.3 Brief history of building.
Ownership.
 - 1.4 Site details.
 - 1.5 Present State of Building.
- 2. Context of Preservation:**
 - 2.1. Architectural Heritage
 - 2.2. Planned development in Soufriere.
 - 2.3 Tourism potential.
- 3. Potential Use if Renovated and Cost Implications:**
 - 3.1. Museum/ Study Centre
 - 3.2 Lending Library
 - 3.3 Offices
 - 3.4 Coffee Shop
 - 3.5 Retail outlet
 - 3.6 Combination/multiple usage
- 4. Options:**
 - 4.1. Financing options
 - 4.2. Strategies for acquisition.
- 5. Conclusions and Recommendations:**
 - 5.1 Establishment of Tourism Policy for Soufriere
 - 5.2 Establish conservation area with developmental plan.
 - 5.3 Development of community participation.

An inventory card and photographs should be made for each building. Annex IV includes two models of inventory cards used for town preservation projects elsewhere. They could help orient the design of an inventory card for Soufriere.

Annex V includes reproductions of "gingerbread houses" in Haïti, taken from Anghelen Arrington Philips, Gingerbread Houses, Haïti, Endangered Species, Imprimerie Henri Deschamps, Port-au-Prince, 1977. These houses were built in the late 19th century and the first two decades of our century. Their ornamental features are more elaborated than those of Soufriere's houses, but built in similar materials and shapes. The houses featured in the book could also be taken as a reference for remodeling projects in Soufriere.

Precise delineation of the preservation area: as a result of the analysis of the inventory, sectors of homogeneous characteristics may be identified. The sectors would be organized with the intention of getting from one place to another, and of linking the more valuable places.

Declaration of a heritage area: the declaration should be legislated, and the area placed under the responsibility of a Government agency that would act with the participation of a local council in formulating the strategies for the sector's preservation, revitalisation and renovation.

Freeze new construction permits: speculation must be stopped before it even starts. Once the inventory and precise delineation of the preservation area are completed, construction could be unfrozen and permits in non critical sectors, under control, could be granted.

Freeze demolition permits: some owners may hurry to demolish their properties. The state of the structure shown in the inventory, or in an exceptional expert assessment, if the owner claims his/her building to be in critical condition, will justify or inhibit demolition under severe legal sanctions.

Control remodeling permits: remodeling style must be carefully controlled for the facades. Interiors should also be controlled, to adjust to established building regulations.

A sample of the best buildings inventoried as well as of valuable buildings outside of Soufriere will be reproduced with details in photographs and drawings and made available to applicants, to help them recognize and rescue the best features of the gingerbread trimmed-houses as well as other styles.

A preservation programme has a good chance to succeed if it is envisaged as a partnership between the public and the private sectors.

Public investments will be necessary to take care of the townscape elements, and must be done in the immediate term, at least in one street, or square, to show tangible results.

Possible promotional measures to preserve structures and facades, to upgrade housing in the sector and, secondarily, to establish guest houses, include:

- analysis of possible tax incentives,
- a strong consciousness/education campaign for business owners and for the whole community,
- the formation of high school students into teams to help to clean and paint, as a service to the community, and as a means to involve young people in the project.

The revitalization program should start with the tourism historical and architectural walk. The historical and architectural walk requires a very high degree of community involvement. The community must preserve and improve their houses, maintain the cleanliness of the tour route, and interest the visitors without annoying them. Also, the community should participate in the research on history and architectural background of the various buildings to come up with stories of local facts, traditions and human life, to really catch the interest of the visitors. Old stories could be told in the square facing the old police station. The tour could be:

a) Self-guided. In this case, a well printed coloured booklet with the development of the tour route, photographs, drawings and text should be printed and sold to the visitors.

b) Guided. Guides should be trained and the walk should be sold as part of the Soufriere tour.

The distance to walk is 8 blocks, plus the entrance to the Catholic church, the Anglican church and the jail, if rehabilitated. The elapsed time during the tour should not be longer than 45 minutes.

It is strongly recommended that the project be initiated immediately with the remodelling of the first block of the walk, Clarke Street from the Waterfront to the Square, in order to set the pattern for remodeling and townscaping.

The government should execute the following measures:

- put the aerial wires under ground,
- install the type of street light, as is shown designed for the Waterfront.
- resurface the sidewalks with brick, stone, pebble or similar materials according to whatever design historic research indicates most authentic,
- design publicity signs to announce shops, and plaques to show historic sites.

The owners should upgrade and remodel their properties.

TABLE 24
PRESERVATION OF THE HERITAGE AREA
AND HISTORIC ARCHITECTURE WALK (See Map 4)

Walk	No. of Blocks	Highlights
1. Clarke Street from the pier to Bridge Street	1	Street, houses, shop
2. Square	2	Guillotine, first town and capital of the island
3. Church	-	Catholicism in St. Lucia, Church building
4. Bridge Street	2	Architectural interest of houses
5. Anglican Church	-	Anglicanism, Church building
6. Old Police Station	1	Old jail, charming open space with "plaza" scale, spring and bridge
7. Mason Street	2	Nice view to the sea at cross road, fishermen's area nearby. Pier square where Queen Elizabeth of England addressed the people. Houses. Thelma's Grocery
8. Waterfront Pier	2	Old port, vessels

iv) Works and cost estimates

An illustrative estimate of costs is given in Table 25.

TABLE 25
SOUFRIERE TOWN
PRESERVATION OF THE HERITAGE AREA AND HISTORIC ARCHITECTURE WALK
Works and Estimates of Costs

Works	Costs (EC\$ 000's)
Painting and repairing of houses facades (average EC\$10,000 per facade, 50 houses)	500
Signs painted on the road	4
Signs and plaques on historical sites and buildings, lights, sidewalks	100
Booklets (first 6,000)	14
Program	618
<hr/>	
-Continuing Preservation program (treated as an operating cost)	
-Community participation program (see Chapter IV)	
-Research on history and architecture program (treated as an operating cost)	
-Training program for guides (see Chapter VI)	

The signs and plaques are to be put up by the project, i.e., the public sector. Also, the preservation of the 50 houses, though to be accomplished by the owners, is to receive an incentive of public sector subsidy, taken here to constitute 20% of the estimated cost. The remainder is planned for private sector implementation. Adding 10% for administration and supervision, and 10% for contingencies results in a cost estimate of EC\$262.000. (Alternatively, the Historic Architecture Walk could be put in the long term, and not included in the financial evaluation of the Project.)

c) Soufriere Estate Museum

i) Site

Soufriere Estate, old sugar factory.

ii) Goals

- To give the tourist a general idea of the history and arts of St. Lucia, and of a plantation which made sugar, rum, lime oil and ice.
- To preserve an old estate building and surroundings.

iii) Description

The project consists in the remodeling of the building of the Estate Mill and the installation of a museum. Also it includes the improvement and visit to other buildings located between the entrance of the Estate and the sugar mill.

According to the owner's information, the factory was built before 1765, when most large estates had begun to cultivate sugar and had installed sugar mills. It was rebuilt after the hurricane of 1780. It was again destroyed during the Brigand war and reconstructed in 1796.

Although restoration is not intended, the factory will be adapted to museum functions, conserving as much as possible the building's original features, while maintaining the several modifications made through time to equip it for the various uses of the estate Mill. Those included sugar, rum, lime and finally ice.

Factory: The old stone walls should be bared by taking away the wall plaster inside and outside. Also, the actual roof of galvanized sheets could be covered with the clay fish-scale tiles which were characteristic of French colonial buildings in the Caribbean. Ruby Estate still has such roofs. The modern cement blocks inserted in walls, and damaged wood construction should be demolished and replaced with new wood construction

when convenient. Also, the brush in front of the building and of the Mill should be cleaned in order to allow a fuller view to those approaching the museum.

The floor inside the building should be leveled, and that outside made of stones or cement slabs with pebble joints.

The building is sufficient to permit the exhibition space to be organized into three major areas, as shown in Plan 3. The first is to be devoted to displays of the characteristic estate factory, including the mill and still; the second, on the ground floor, is planned to show St. Lucia's history; the third is to be for an art gallery in a re-built mezzanine.

It is recommended that visitors enter from the west side. This would allow them to appreciate the aqueduct and to gain an immediate understanding of the mill system, that could be demonstrated in the estate factory area.

The snack bar could be constructed upon the actual mill office and platform. The rest rooms would be placed in the adjoining area, where a chicken coop now stands. An office and storage room could also be built where the chicken coop stands, alongside the planned restrooms.

The building next to the gate building is used for lumber storage. In the future it could be used as an annex or expansion of the museum, for example, to house a natural history display. The goat stalls and the deposit and working area for coconut processing on the left hand as one enters the estate, are in bad shape and do not have any scenic or architectural value. The coconut drying huts are charming and should be shown as they are.

Facing the main building there are some concrete pig sties. They are ugly and of no functional value; it is recommended they be demolished, leaving only those walls supporting the potus with giant leaves.

The ground should be leveled to the border of the spring.

The Mill: The hydraulic system should be cleaned and repaired. A most interesting feature of the museum would be a working mill.

Parking: Tourism vehicles should park outside of the Estate gate, on the street, and visitors enter on foot.

Timing: The repairs to be made on the main building could be done in a short time (3 months).

The installation of the museum will require a difficult research and organizational effort. However, it is estimated that the entire project could be completed and open to the public in one year.

iv) Works and Estimated Costs

The planned works and illustrative estimates of costs are shown in Table 26.

TABLE 26
SOUFRIERE TOWN
ESTATE MUSEUM

Works	Cost Estimates (EC\$ 000's)
Vat storage, re-roof vat storage, porch, using fish scale tiles and boarding	12
Level mezzanine floor for vat storage install pilars around pots	6
Concrete slabs with stone joints in vat storage area	3
Roof of fish scale tiles	15
Level up floor	4
New mezzanine	15
Two stairs for mezzanine	2
Stairs main floor	1
Take off cement render (int. & ext.)	3
Window west wall (perspect)	3
Replace and repair wood carpentry	3
Construct snack bar, rest rooms and office	30
Electricity 13.000 watts (est. 5.500 watts for snack bar. 2.500 rest rooms, 5.000 watts for illumination	20
Benches, snack bar furniture	5
Names and signs at entrance to the Estate and west facade	<u>1</u>
Sub Total	123
Development of the museum, displays and exhibition: (immediate stage)	<u>226</u>
TOTAL	349

Adding a provision of 10% for administration and supervision and 10% for contingencies results in an estimate of EC\$419.000. Over the long term further development of displays and expansion of exhibits would incur additional costs estimated at about EC\$300,000, not including administration and contingencies provisions.

d) Community Tourism Participation Program

The features of this program are under elaboration within the Ministry of Community Development. They will be incorporated as soon as received.

e) Pier

Presented in Annex II the estimated construction costs are EC\$571.000 including provision for contingency, allowances and administration and supervision charges.

f) Sewage system

Presented in Annex II. The estimated costs are EC\$588.000. Administration and supervision is estimated at 10% of construction costs, and 10% is for contingency allowance. The illustrative estimate, therefore, is EC\$706.000.

g) Shore improvement and beach recreation facilities

The project incorporates facilities for two public beaches, at Malgretoute and Soufriere Town. That at Malgretoute was described above in the Pitons National Park Sub-project. That for the Soufriere Town involves four measures: the construction of beach changing and toilet facilities, effective elimination of sand mining, the construction of the sea wall, and research on means of nourishing the Soufriere Beach.

The beach changing/toilet facilities would be equipped as shown in Plan 1.4. The same facilities are to be in Malgretoute.

The elimination of sand mining is strongly prescribed in this study. Action is in the hands of Government.

The sea wall and needed research are described in Annex I. Research on the wave mechanics, the bay currents and the topography of the bay bottom are required, and are discussed in Annex I.

1) Works and estimated costs

The works and estimated costs are as in Table 27.

TABLE 27

Works	Estimated Costs (EC\$000's)
Changing facilities/toilets	109
Research	20
Sea wall	<u>123</u>
Sub Total	252
Administration and supervision	15
Contingencies	<u>15</u>
Total	282

h) Income

The sources of income to be generated in the Soufriere Town project are:

i) Pier - user fees (it is assumed that Soufriere would not serve as a national port of entry, but both national vessels and those of other registries stop in Soufriere, and more will after implementation of the project).

11) Waterfront/Mall - fees for the lease operation of a restaurant/pub and of guest rooms; fees for the lease of shop spaces; fees for the lease of stalls for the fruit and artisan markets; fees for leasing parking lots for out-of-Soufriere vehicles, Soufriere vehicles, and donkey carts.

111) Historic architecture walk - sales of walk brochures.

1v) Beach and recreation facilities - changing facilities user fees.

v) Soufriere Estate Museum - entrance charge (concession fees for snack bar).

These are considered tentatively below.

i) Pier

No fees are presently collected in Soufriere for use of the pier, since part of it has been lost and the remainder is extremely hazardous. The user fee suggested for the Soufriere pier is EC\$60.00 per vessel per day up to 40 ^{feet} sq. ft. in length, and EC\$100.00 per vessel per day for those vessels over 40 ^{feet} sq. ft. in length.

The foregoing fee level is suggested on two considerations. First, the auto-financing of the pier, and second, some contribution from the pier fee revenues toward the cost of the shore improvements, which would have no other source of capital financing or funding for maintenance.

Income from port fees are estimated at about EC\$80,000 per annum in the first year of the project, increasing with the expansion of the number of tourist arrivals and the implementation of the Soufriere project. The ratio of fee revenue to Soufriere visitors would slightly exceed 1. The number of Soufriere visitors is taken as a parameter of pier fee revenue.

ii) Waterfront/Mall

Income from the lease of the restaurant area is estimated in consideration of the probable gross sales of the proposed restaurant, and of the fact that the lessee would completely furnish and equip the restaurant. The lessee would receive the building, patio, and upstairs veranda, specifically designed for the restaurant/pub in a central location, in the context of a new, convenient, and charming waterfront redevelopment. Initially, gross sales might be around EC\$1,500.00 per day, if an average of 40 luncheon covers could be sold at an average of EC\$20.00, and an average of 100 drinks/snacks tabs could be realized averaging about EC\$7.00 each. Of the nearly EC\$0.55 million in annual gross sales indicated, a lease fee of about EC\$32,000.00 does not appear onerous for the restaurateur. That would be the equivalent of about 6% of gross sales initially, a proportion decreasing as sales increased, of course. In addition, the lease of the guest rooms above the shops would yield about EC\$33,000 in the first year, assuming a lease fee of 35% of the total sales. ✓

The lease of shop space is also income to the Mall. Considering the actual stagnation in commerce in Soufriere, the low rents of shops on Bridge Street, and the fact that very few visitors to Soufriere shop there, the venturesome aspect of the mall shops is evident, and, clearly, the lease fee must be promotionally low. For the first year, a monthly fee of EC\$2.00 per square foot is used. One of those two EC dollars would be used for common costs of mall maintenance. There are twelve shop areas, each of about 18 square meters or 197 square feet of gross leasable area (GLA). Therefore, the monthly payment of the shop lessee would be EC\$394.00, and income from all the shops, assuming 80% are leased in the first year, would be around EC\$45,400.00. Of that amount, then, EC\$22,700 would be for maintenance and operating costs of the Mall. The foregoing lease and common area fees would represent about 10% of gross sales in the first year, if the average visitor purchases in the mall shops would be around EC\$10.00, and purchases by residents is ignored.

The fee for leasing the Waterfront stalls must be of an even more promotional nature than that for the shops, since, for the most part, the vendors presently use the sidewalk, presumably at no cost. Some nominal charge must be made, however, to ensure the users' appreciation for the facilities and to maintain some similarity in treatment of stall and shop lessees. To some extent the two retailers may be in competition. The fee could be set initially at EC\$20.00 per month, which would be a little more than EC\$1.00 per market day. The total income from the stalls would be EC\$3,600.00 annually. Selling on the Waterfront/Mall could be restricted to stalls and shops. There should be more applicants for stall leases than available stalls. Stalls should be leased to people on a selective basis for one year only. If the merchandise offered in the stall is not of good quality or of interest to shoppers, the stall lease should not be renewed, but leased to another applicant.

The parking lot by the river for out-of-Soufriere vehicles and the plaza area of the Waterfront for parking Soufriere vehicles and donkey carts would be leased. Illustratively, a fee of EC\$9,000.00 per annum is used here for income from these parking areas.

iii) Sales of Brochures

The gross income from the sale of the brochure to guide visitors around the historic architecture walk is estimated at EC\$12,000; which assumes a price of EC\$2.00 and sales of 6,000 brochures in the first year.

iv) Beach and recreation facilities

The fee for use of the changing facilities by the Soufriere public must be affordable to most Soufriere residents of working age (15 and over), and yet generate enough income to at least cover maintenance and operating expenses. Essentially, Soufriere residents do without public changing facilities, to the extent they use the beach in front of and near to Soufriere. The fee for use of the changing facilities must initially be clearly below the satisfaction derived from using the facility.

If 40% of the national male population earned EC\$5,000 or more in 1983^{1/}, and the population of Soufriere earned similarly, and most are heads of households, a fee of EC\$0.25 or EC\$1.00 per family of four may be an acceptable price. If an average of 600 families (30% of the total) resident in Soufriere district use the beach facilities an average of 0.9 times per week, gross income from the beach changing facility would be EC\$28,100.00 annually.

v) Sewerage system

It is proposed that no connection charge be levied. After connection, assuming there are 1,000 families in the proposed sewerage system area, and 50% connect in the first year, 75% in the project's second year, and eventually 100% connect in the third year, if an annual user charge of EC\$15.00 is levied on each connection, the total income would be EC\$7,500.00 in the project's second year and EC\$11,300.00 in the project's third year and EC\$15,000.00 in the project's fourth year. In succeeding years the rates should be progressively increased, in line with the level of income of Soufriere, until user fees at least cover operating costs. Illustratively, these might be around EC\$30,000.00.

vi) Soufriere Estate Museum

The entrance fee for the Soufriere Estate Museum is set tentatively at EC\$3.00 for regular visitors and gratis for visits of St. Lucian institutional groups, such as those of schools, churches, athletic clubs, etc., arranged in advance. EC\$3.00 is a modest expenditure for the North American and European tourists, few would be discouraged by that price.

Based on the Soufriere visitor survey and tour operator interviews, with an entrance fee of EC\$3.00 it is estimated that at least 50% of future international Soufriere visitors would visit the estate historical museum. Within the tourist projections mall in Chapter II.B., even considering the peaking of visitors, no problem of carrying capacity is foreseeable for the museum.

¹ Based on extrapolation of data from the 1970 population census.

The snack bar would be operated by a concessionaire. It is planned that the concessionaire would be required to install his own equipment. Only drinks, light snacks, ice cream, etc. would be served. The average tab is expected to be around EC\$3.00, and about 85% of all visitors are expected to buy something in the snack bar. The concession fee is set at 6% of gross sales.

4. Diamond Mineral Baths and Botanical Gardens

a) Site

The site of this sub-project is the Diamond Estate and the Soufriere Estate. The latter is within easy walking distance of the Town center and both within easy donkey cart distance.

b) Goals

1) To develop the grounds surrounding the baths and falls of Diamond Estate and extending the Soufriere Estate into a more complete and attractive botanical garden;

11) to develop the mineral baths as a core feature of a health spa for visitors;

111) to use the baths and botanical gardens as tourism resources and to complement the remainder of Soufriere's tourism development.

c) Sub-project description

In the immediate term, the project would develop the botanical gardens. This attraction is already popular with the primary type of visitor flow Soufriere is receiving, day-touring visitors, who can enjoy the attraction by just walking by no change of cloths, no equipment, no prior preparation, etc., needed to enjoy it. It is already a delightful setting for the walk to the baths/falls.

The existing plants are to be inventoried and cataloged. They are to be the nucleus for an organized, expanded garden of fantastic color and variety.

The narrow corridor of actual plantings along the driveway up to the mineral baths is to be widened, and the large, relatively flat area south of the road to Soufriere and west of the driveway incorporated into the botanical garden. The recommended organization of the botanical garden is by point of origin, as set out in Annex I, Interpretation Program. A system of variable width walkways are to be constructed in a manner to allow the visitor to view as wide a variety of plants as close as possible. These are indicated on Plan 9. Several benches are situated within the garden. An additional feature is an herb garden, designed along fairly formal lines; it is to be just west of the north part of the botanical garden, i.e., the area closest to the Diamond Estate entrance (Plan 9). An airy, arched trellis type structure is planned to provide the gateway for a dramatic transition from an informal botanic garden to a tightly designed herb garden. A walkway through the entryway would pass between raised beds to a fountain in a pool at the center of the herbal garden. Herb beds would emanate radially from the pool/circular walk. An outer circular walkway would border the outer edge of the herb beds. An outer circle of specimen flowering small trees or large shrubs would complete the enclosure of the herb garden.

A small parking area donkey cart terminus is to be constructed at the Estate entry gate.

This sub-project is closely linked with two other sub-projects, that of the Estate Historical Museum and that for lodging. The Soufriere Estate and the Diamond Estate are held by the same family, the du Boulay family. A trail is planned to run from the botanical garden west to the Estate Historical Museum (See Plan 9). The trail would traverse the hillsides roughly paralleling the concrete aqueduct that is to provide water to the Museum's water wheel. The trail would provide excellent views across the Soufriere and Ruby River valleys. Overviews and close-ups of commercial plantations of various kinds of trees would be possible. On the Soufriere Estate grounds, self-guided tour trails would lead through groves of cocoa, coconut, lime, nutmeg, banana, and other trees.

In the long term, the mineral baths would be developed as part of the facilities for a health spa. The spa would be a "complete commitment spa" for clients/guests coming for a treatment or course. It is proposed that the Soufriere Estate House be remodeled and expanded to provide lodging facilities for the spa. Alternatively, lodging could be provided via the construction of new villas on the ridge just west of the actual mineral baths. Some of the spa luxury lodging projected in the long term in the lodging sub-project could include this sub-project.

d) Estimated works and costs

The estimated works and costs for the immediate term of this sub-project are shown in Table 22.

TABLE 22
DIAMOND BATHS AND BOTANICAL GARDEN
ILLUSTRATIVE ESTIMATES OF INVESTMENT COSTS (EC\$ 000's)

Botanical garden development	6
3 acres of intense planting	
Trails	
5500 linear feet	11
1 bridge, 20 ft x 4 ft;	
2 bridges, 8 ft x 4 ft	7
Herb garden	5
Restrooms	44
Trellis archway	1
Interpretive program	101
Parking	
6 cars or donkey carts	6
60 ft. x 20 ft = 1,200 sq. feet	
Benches: 12	<u>4</u>
Total	185
Administrative and supervisory costs	19
Contingencies	<u>19</u>
Subproject cost	222

e) Income

While actually at the Diamond Baths there are at least three revenue sources, the project only includes one, the entrance fee. In addition to the entrance fee the Diamond Baths currently receives money for use of the baths as well as the sale of lime squash. It is assumed that those activities will continue, but their expected gross income from lime squash and baths are expected only to cover their costs in the immediate term. In the long term these operations would be part of a spa resort operation, which is described in general terms in section 7 below.

A nominal charge of EC\$3.00 is proposed for entrance to the Diamond Estate, to enjoy the botanical gardens, (and have the convenience to use the baths, paying extra for the use) and view the Diamond Falls.

More than one third (34%) of the visitors to Soufriere surveyed in December 1984 indicated that they "very probably" would visit a Botanical Garden, and prolong their stay in Soufriere to do so. Another 15% said they "probably" would do so. Thus, nearly half of the sample of visitors indicated that they would visit a botanical garden in Soufriere, and would be willing to prolong their visit to do so. The Diamond Estate charges a EC\$2.00 entrance fee presently, but only about 16% of those surveyed said they visited it. For purposes of an illustrative indication of the project's feasibility, it is estimated that, given an entrance fee of EC\$3.00 per person, at least 40% of Soufriere visitors would visit the Diamond Baths/Botanical Garden after its development, provided that the Diamond Estate is promoted directly to St. Lucia tourists as well as to the tour operators. The constraint of tour operators' limitation on visitors' itinerary would be adjusted.

Income from the mineral baths, once a spa is opened is illustratively considered under section 7 below, Lodging.

5. Rain Forest Trail and Overlooks

a) Site

The Rain Forest Trail traverses the island divide in the southern third of the Island from the east end of Fond St. Jacques road in the Edmund Forest Reserve on the west side, to the west end of the Mahaud Road on the east side. The Desraches trail and Overlook, a component of this sub-project, lies 0.4 miles north of the road to the Rain Forest Trail above Fond St. Jacques. Six roadside overlooks, also part of this sub-project, are to be at Dasheen, Anse Chastanet and at four points on the West Coast Road overlooking Soufriere Bay. (See Plan 8.)

b) Goals

- i) To make visits to the Rain Forest Trail and the Desraches overlook safer and easier, primarily by improving access;
- ii) to make visits to the Rain Forest Trail and Desraches more enjoyable and informative;
- iii) to extend to the Desraches area at least equal conservation protection as that afforded the area of the Rain Forest Trail;
- iv) to enhance observation and enjoyment of the stunning scenery of Soufriere Town, the Pitons and Soufriere Bay.

c) Sub-project description

In the immediate term, the land for the Desraches overlook is to be acquired, probably by incorporation into the national forest preserve system. The land of the Rain Forest Trail proper already is proscribed and a management plan has been prepared for the area.

The existing road from Fond St. Jacques to the Forest Guest House, a distance of about 3.5 miles, and the spur toward Desraches, a distance of about 0.4 miles, are to be up-graded. Parking for 8 cars and vans is to be constructed in the vicinity of the Forest Guest House and a lot for 6 cars is to be constructed at Desraches (the terrain at both proposed parking places is fairly large and flat, and should pose no construction problems). Simple rest room facilities are to be installed next to the parking lot at the Forest Guest House. Benches (24) are to be sited at advantageous points along the Rain Forest Trail, and 2 benches are to be placed at Desraches. Parking for 4 cars, with wheel stops or continuous curbs, is to be constructed at the six roadside overlooks (i.e., four along the West Coast Road overlooking Soufriere Bay, at Dasheen, and at Anse Chastanet).

An interpretation program is to be implemented. On the promontory of Desraches a native rock wall is to be built to encircle the overlook, accessed by stone steps. A coin operated view-linder is to be installed. A 200 yard loop trail (or boardwalk) is to be built adjacent to the Desraches promontory. It will pass through many of the same tropical rain

forest species as the Quillesse Reserve Rain Forest Trail possesses, permitting an opportunity for an interpretation program on some of the same themes. As it is to be short and generally level, elder visitors, even wheelchair visitors, if daunted by the Rain Forest Trail, would be able to manage this trail loop.

In the long term, additional parking and restroom facilities will have to be constructed at the Forest Guest House, and additional parking at Desraches and the roadside overlooks.

Maintenance of the component parts of this subproject, especially of the trails, is of vital importance to its long term viability, and therefore warrants attention in this section. Certain areas of the trail will need to be re-aligned, re-graded or improved generally more often than others simply because of exposure, use pressure, and soil conditions. The trail is approximately 9.7 kms. in length. The trail will be used only if the trip continues to be enjoyable. A well maintained facility is vital to visitors satisfaction.

d) Works and estimated costs

Illustrative estimates of the works and approximate costs of the sub-project are shown in Table 23.

TABLE 23
RAIN FOREST TRAIL AND OVERLOOKS
WORKS AND COST ESTIMATES

<u>Works</u>	<u>Cost (EC\$ 000's)</u>
Incorporation of Desraches into the Forest Reserve System*	1
Road upgrading	
Fond St. Jacques - Forest Guest House 3.5 mi. 6,160 linear yards x 6 linear yards = 36,960 square yards	2,033
Desraches spur road, 0.4 mi. 704 linear yards x 6 linear yards = 4,224 square yards	232
Gateway and admission barrier	1
Parking	38
Rain Forest Trail 8	
Desraches 6	
Roadside overlooks 24	
Restroom facilities	5
Benches 26	6
Promontory	4
Trail/boardwalk 200 linear yards	11
Coin-operated viewfinder	7
Interpretation program	22
TOTAL	2,360
Parking space 1,000.00 per space 12 ft x 18 ft.	
Benches 234 each	
Trail/boardwalk 54 p. 1. yd.	
*the cost is for legal processing, and does not include any cost for land, as the land is said to be Crown land presently.	
To these construction costs is added 10% for administration and supervision, and 10% for contingency.	
Administration and supervision	236
Contingency	236
Subproject total	2,832

e) Income

The sources of income planned for the project are: a Rain Forest Trail use fee, a Desraches access fee and the proceeds from the coin-operated viewfinder. The Rain Forest publication would be distributed without charge to those using the Trail and, of course, paying the Trail fee.

The Trail fee is set at EC\$20.00 per person. Approximately 20% of all Soufriere visitors are expected to take the Rain Forest Trail walk. The fee for access to Desraches is set at EC\$5.00. About 40% of all Soufriere visitors are projected to visit the promontory and take the easy "mini rain forest walk". Most of those, for illustrative purposes 60%, are projected to use the coin operated viewfinder, which will require three coins of EC\$0.25 to operate.

6. Historic Sites

a) Site

Malmaison, childhood home of Josephine, Empress of the French and wife of Napoleon, lies about 300 meters west of the West Coast Road on a spur road which intersects at Quatre Chemins Junction.

A significant Amerindian archeological site lies at Belmond. Belmond is contiguous with a good secondary road that loops north from the West Coast Road about 5 miles south of Soufriere.

These are the two historical and archeological sites clearly with potential to be of international interest. There are other historical sites, such as the petroglyphs at Stonefield, but this sub-project is confined to Malmaison and Belmond.

b) Goals

- 1) To increase the attraction of visitors to Soufriere and St. Lucia;

ii) to conserve, protect and restore selected historical sites on a phased basis, as such measures can be taken with historical authenticity and a reasonable degree of auto-financing;

iii) to complement the other subprojects in the Soufriere Tourism Development Project;

iv) to enhance understanding and enjoyment of the historical and archeological sites.

c) Sub-project description

In the immediate term, both the Malmaison and Belfond sites are to be brought under the protection of national historic site legislation, by being declared national historic sites or of national interest. Optimally, the sites should be acquired by the National Trust. In lieu of that, or until it could be effected, an agreement or commitment of the property owners to at least permit the National Trust to comment on any plans they may develop for those sites is recommended.

A research project should be carried out on both sites, that on Malmaison would be both historical and archeological, that on Belfond archeological. Visits should be restricted during this period.

Limited, selective publicity should be given to these sites, first in historical-scientific literature, then extending to cultural travel literature. Initially, this should be low key, laying the foundation for awareness of the sites and their significance, and amplifying as the results of the research warrant.

Some artifacts or possessions, perhaps a portrait of Empress Josephine should be displayed in the Soufriere Estate Historical Museum. Some display of the Island's Amerindian societies and Belfond should also be in the Museum. Visitors relative interest in those displays should be carefully monitored.

In the long term, the Malmaison site could be developed in any of several ways; three alternatives are presented. These are not mutually exclusive, but could be realized as successive stages, as historic research and the visitor interest demonstrate feasibility:

Fence off the area of the site, clean it, conserve the ruined foundation, and set up a commemorative plaque.

Do the above, and additionally construct a small visitor center, which would contain historical displays of French colonial life and Josephine's life.

Do the above, and reconstruct the Malmaison estate house.

In the first alternative, the project would have no income source, and, of course, the costs would be minimal. In the second, the costs of a small visitor center would be off-set by the sale of brochures. In the third alternative a visitor entrance fee would be charged, with the aim of making the project auto-financing.

Beltond, in the long term should aim to provide for permanent convenient visitation and understanding of the stone structures. The main works involved would be steps and walkways, maintenance and an interpretation program.

d) Works and cost estimates

This section is limited to the immediate term. The proposed works and illustrative cost estimates are listed in Table 24.

TABLE 24
HISTORIC SITES
WORKS AND COST ESTIMATES

<u>WORKS</u>	<u>Cost (EC\$ 000's)</u>
Declaration of national historic places (regulation, legislation, processing)	1
Fencing, security control	2
Research	
Malmalson 4 man/months	26
Belfond 8 man/months	52
Publicity (initial)	<u>7</u>
Total	88
Administration and supervision (10%)	9
Contingency (10%)	<u>9</u>
Subproject total	106

e) Income

In the immediate term no source of income is identified for either of these historic sites. Income from an entrance, which could very feasibly be levied on both sites, suggests itself, once the sites are developed.

7. Lodging development:

a) Site

The sites for this subproject are several: beaches north of Soufriere, at Malgretoute and L'Ivrogne; Soufriere Town; sites near thermal springs; and sites in surrounding hillsides and estates.

b) Goals

1) Facilitate an expansion of destination tourism (stay over) to Soufriere;

11) diversify the lodging supply in terms of price level and type of accommodation;

- iii) provide guest houses for modest income visitors interested in getting to know Soufriere Town's people;
- iv) provide resort lodging for high income visitors looking for a vacation in an unspoiled area with beaches and scenic attractions; and
- v) revitalize Soufriere Town and preserve its historical patrimony.

c) Description

Experience indicates that European and North American tourists go to a Caribbean country primarily for sun and beach. Since the best St. Lucian beaches are not in the Soufriere area, that area will continue to be primarily a day tour destination. However, some relatively small developable beaches will be capitalized upon, resulting in more destination tourism to Soufriere.

In the immediate term, the 12 additional rooms of beach resort lodging proposed by Anse Chastanet (said already to have planning approval) would be constructed. In the long term an additional 108 rooms would be constructed, making a total of 120 additional rooms of beach lodging. In addition, the 80 rooms planned for spa resort development might also be situated on or sufficiently near one of the beaches within a pipeable distance from one of the thermal springs.

In the immediate term, 20 additional rooms of villa lodging, i.e., 8 to 10 villas would be constructed/remodeled. As described, these are to be owned preferably by Soufrierians or residents of Castries or abroad originally from Soufriere. They, like the guest house rooms, would be commercially operated via a centralized management-reservation corporation^{1/}. An additional 30 rooms, 12 to 15 villas, would be

^{1/} The advantages of a centralized lodging management-reservation service for Soufriere have been recognized and proposed by several leaders of Soufriere's tourism sector, particularly the owner of Anse Chastanet, who has managed several villas in the area. The advantages will have to be made evident to more villa and guest house owners, however.

constructed, or offered for rental from estate house remodeling, over the long term. Thus, villas would eventually provide 50 additional rooms. Owners of selected houses in town, with the assistance of the proposed management/reservation corporation and subsidized credit, would offer about 20 rooms of guest house lodging in the immediate term, and about 30 rooms more would be habilitated in the long term.

The spa resort rooms are planned for the long term, up to 80 rooms. These could also be located in the vicinity of beaches.

The total rooms planned for the immediate term would be more than the existing supply. The total additional rooms planned for the immediate and long term would be 300, and together with the existing rooms, would exceed the maximum foreseen in the 1977 National Plan Development Strategy. However, the beach area included in this project extends north beyond that indicated in the 1977 Strategy.

d) Works and cost estimates

Illustrative estimation of lodging costs per room

	<u>Physical^{1/}</u>	<u>Physical, plus pre-opening and admin. expenses</u>
Medium size beach resort,		
including equipment EC\$	38,400	46,100
Guest home improvement and		
equipment EC\$	5,400	5,900
Villa construction and estate		
remodeling and construction per room,		
total average cost per room EC\$	30,800	33,900
Spa resort EC\$	60,000	72,000

These cost estimates do not include the cost of the land, where such cost may be incurred.

^{1/} Includes 10% contingency allowance.

It should be noted that this plan does not include the proposal for 100 cottages in the Jalousie Beach area (labelled "Tourist Complex" C/49/82 on a C.P.U. document). That project is not totally consistent with the objectives and strategies framed for the Soufriere project. However, additional lodging of a beach resort and spa resort nature is planned for, which together totals 200 rooms for the entire Soufriere Project area. Hopefully, the investor/developer of the Jalousie cottages might be induced to consider the L'Ivrogne or Malgretoute areas as alternatives, leaving the area between the Pitons for the Pitons National Park. Maintaining the natural beauty of the Park as an attraction core appears to leave the rest of the area enhanced in value, and although the sale of lots or villas in the prime natural beauty site (between the Pitons) might be easier, the eventual net benefit for St. Lucia would seem to lie with zoning the Park free of lodging structures. It is difficult to see how any lodging complex could be put into that terrain without depreciation of its scenic beauty from either the ridge view or the sea view.

If the Government decides it must compromise on "Tourist Complex" C/49/82, a controlled development, built in phases to permit an assessment of the environmental and tourism impact of each phase, and with each phase balanced in itself, could be allowed. In this clearly second-best scenario, strict control of the trees cut down, of road construction, of electric and telephone wire installation, of sewage disposal, of construction materials used, of building height, siting and architecture would be imperative in order to contain or minimize the damage to the Park as a natural attraction and heritage. Style, good taste and environmental quality would be essential criteria for planning approval. Adherence to these criteria and controls must be demonstrated on a plan at a scale of 1:100 with technical specifications.

TABLE 25

SUBPROJECT 7 - LODGING DEVELOPMENT

Type of lodging	Location	Target		Cost. est. (EC\$ 000's)		Prerequisite Actions	Long Term (Responsibility) ¹
		No. of rooms					
		Immediate	Long term	Immediate	Long Term		
7.a) Beach	From Soufriere to Anse La Raye	12	58	553	2,674	Promote private investment (P/G)	Help private invest- (P/G)
	Malgretoute and/or L'Ivrogne		50		2,305	Set design criteria for (G) each case, under general principles	ors to maintain and improve access roads
7.b) Villas including estate houses	Soufriere surroundings	20	30	678	1,017	Advise Estate owners on (P/G) use type, size, and operation of developments	Fishermen sector and character of the town
						Set facilities and services (P/G) minimum standards.	
						Promote loans for investment (P/G) in improvement of houses for tourism lodging, with preference in the preservation area and waterfront.	Complete the waterfront (G) project
						Promote the construction of (G) the mall in the waterfront.	Complete sewage system(G) and other utilities in town
						Training program for guest (G) houses owners.	
						Tourism education program(G) for the community (see Chapter IV)	
7.c) Guest houses	Soufriere Town	20	30	118	177	Promote a private central (P) management and reservation corporation	Preservation of (P/G)
7.d) Spa resorts	Diamond, Cress-lands, Malgre-toute surroundings of those areas with pumped water	—	80		5,760	Market study in USA/Canada (P/G) Technical and managerial (P/G) study for selected markets	Development of spas, (P) if results of immediate actions are satisfactory

1/ G= government; P= private; P/G= private with government assistance

e) Income and operating costs

Lodging is to be installed in the Soufriere project area by the private sector. Of course, the private sector's investment decision will have to be based on its own profitability analysis. Yet the Government must anticipate tentatively that decision even on the basis of scant information in order to plan as best it can for the attractions, infrastructure, and other facility investments which presumably are to be undertaken by or subsidized by the public sector.

Investment cost estimates were made from unit cost information from local builders, architects and engineers. Estimates of income from lodging establishments are derived primarily from the prices of existing lodging in Soufriere, adapted to the concept projected in view of prices elsewhere in St. Lucia and the Caribbean. The operating cost estimates are based on data gathered in preparing the St. Lucia Tourism Sector Plan in 1981 and data on Caribbean hotels. This pro forma exercise is admittedly very approximate, but is justified not on its contribution to the project's financial evaluation, but on its economic evaluation.

The income and cost of lodging which is to be primarily for the private sector, are treated as external to the project and included only in the economic evaluation. The income and operating cost estimates for the four types of lodging planned are shown in Tables 26 through 29. All income is from the expenditures of clients of the lodging establishments, most of whom will be foreign visitors.

TABLE 26
ILLUSTRATIVE INCOME AND OPERATING EXPENSES
BEACH RESORT HOTELS

	<u>% of total revenue</u>	<u>US\$</u>	<u>EC\$</u>
<u>Revenue per available room/night</u>			
Room	48%	40.00	108.00
Food and beverage	46%	38.33	103.50
Other	6%	5.00	13.50
<u>Departmental Costs per Room</u>			
Rooms	26%*	10.40	28.08
Food and beverage	86%*	32.96	88.99
Other	80%*	4.00	10.80
TOTAL	56%	46.66	125.98
<u>Undistributed Operational Expenses</u>	28%	23.33	62.99
<u>Fixed charges</u>	8%	6.67	18.01
<u>Income before taxes</u>	10%	8.33	22.49

* = ratio of departmental, not total, revenue

Assumptions:

- Average per room occupancy = 1.8
- Rate of room occupancy = 70%
- Off season rates earn 50% of revenue
- 95% of expenditures by non-residents

Note: Income and cost/expenses take into account a 1981 survey by an OAS-St. Lucia Tourism Sector Plan Team and a Pannell Kerr Forster Comparative Tourism Pricing Study of November 1984 (based on 1982 data).

TABLE 27
INCOME AND OPERATING EXPENSES FOR VILLAS
(including remodelled estate houses)

	<u>% of total revenue</u>	<u>US\$</u>	<u>EC\$</u>
Revenue per available villa per week	100%	400.00	1080.00
Operating costs	34%	136.00	1378.00
Central Management	12%	48.00	130.00
Fixed charges	42.5%	170.00	459.00
Income before taxes	11.5%	46.00	113.00

Assumptions:

- Rates of occupancy = 50%
- Off season rates earn 25% of revenue
- 85% of income from expenditures of non-residents
- (plus the villas would be used by the owners 10% of the year.)

TABLE 28
ILLUSTRATIVE INCOME AND OPERATING EXPENSES
GUEST HOUSES PER ROOM

	<u>% of total revenue</u>	<u>US\$</u>	<u>EC\$</u>
Revenue per available room	100%	7.40	20.00
Operating costs	28%	2.07	5.60
Central Management	14%	1.04	2.80
Fixed charges	35%	2.59	7.00
Income before taxes	23%	1.70	4.60

Assumptions:

- Rates of occupancy = 40%
- Average per room occupancy = 1.4
- Off season rates earn 60% of revenue
- 60% of income from expenditures of non-residents

TABLE 29
ILLUSTRATIVE INCOME AND OPERATING EXPENSES

SPA RESORTS

	<u>% of total revenue</u>	<u>US\$</u>	<u>EC\$</u>
Revenue per available room	100%	200.00	540.00
Global packages only:			
Room			
Food and beverage			
Spa			
Other			
Labor costs	20%	40	108
Material supply costs	27%	54	146
Administrative and general costs	26%	52	140
Fixed charges	7%	14	38
Income before taxes	<u>20%</u>	<u>40</u>	<u>108</u>
	100	200	540

Assumptions:

- Restricted as to age and sex
- Sold only as part of a package
- Rate of occupancy = 70%
- Average per room occupancy = 1.5
- No seasonal variation in the price
- 100% of income from expenditures of non-residents.

CHAPTER V

FINANCIAL ASSESSMENT

A. Income

Financial income to the project by subproject is shown in Table . The main subproject income earners to the project are the Rain Forest Trail and the Sulphur Springs. Income to the Soufriere Town Subproject comes mainly from the Historical Museum and the Waterfront Mall.

Nearly 2/3's of the revenue projected from the Rain Forest Trail Subproject is from the fee proposed for entrance to the Quillesse Reserve Rain Forest Trail itself. Most of the remainder is projected to come from the entrance fee to Desraches (Mt. Casteau).

The charge for the Rain Forest Trail walk is the only fee which is more than nominal. It is justified by the fact that 85% of that level has been charged before the project. These and the admission charge to the Pitons, the Sulphur Springs, etc., are user fees, theoretically, though in practice most may be paid through tour operators.

More than 2/3's of the project's income is from user fees paid for entrance to a natural attraction. This has several important implications. The projection of income was made on the basis of the projection of foreign visitors to St. Lucia, and given the gratis admission of St. Lucian institutional groups arranged in advance, the great majority of income is to be foreign exchange earnings.

Also, more than 2/3's of the income is to go directly to the public entity or entities administering the national natural resource (park, forest preserve, sulphur springs, etc.).

Over 85% of the income identified in the subprojects is to go to the public sector (i.e., not to private persons or firms). The project is also evaluated excluding the privately-owned subprojects income. Further, the project's income is directly variable with the number of visitors to the project, giving it a dynamic character, but also

requiring close attention to the tourism market and a consciousness by all concerned of its close inter-relation with the St. Lucian tourism sector in general.

In order to realize the projected income, assuming the flow of tourism to St. Lucia doesn't falter, the only vital thing the executor agency has to do is: 1) maintain access control in order to collect the entrance fee, and 2) keep up the few physical infrastructure and interpretive facilities so the visitor can continue to enjoy the attraction; the main show is put on by mother nature, and she won't let the visitor down.

The income projected here is based on the realization of the initial (or immediate) stage of the project only. Similarly, operating costs refer to works effected in the immediate stage only, since a number of investment costs indicated for the long term could not be estimated even illustratively.

TABLE 30
INCOME BY SUBPROJECT IN FIRST OPERATING YEAR

<u>Subproject</u>	<u>EC\$ 000's</u>
Pitons National Park	128
Sulphur Springs Conservation Area	362
Soufriere Town	339
Pier	(80)
Waterfront/Mall	(102)
Historical Museum	(112)
Beach recreation	(28)
Sewage	(8)
Historic/Arch. Walk	(9)
Diamond Baths and Gardens ^{1/}	85
Rain Forest Trail and Overlooks	<u>439</u>
Project Total	1,353

^{1/} Private sector income

B. Costs

The total investment cost of the project in the initial (immediate) phase is roughly estimated at EC\$8.6 million. One third of that amount is for one subproject, that of Soufriere Town. The EC\$2.9 million estimated cost for the Soufriere Town Subproject does not include the cost of the Community Tourism Program, which is a form of essential human infrastructure of the whole project. Half of the estimated cost of the Soufriere Town subproject is for physical infrastructure, primarily a sewage system, a pier, and shore improvement. As discussed in Chapter II.A., Master Plan and elsewhere, isolated measures taken to develop the tourism sector in Soufriere have been largely disappointing because of the interrelation of problems and the complexity of cause and effect in Soufriere. A package of coordinated measures is planned for the initial stage, therefore, resulting in a relatively significant investment, relative to Soufriere alone. The second and third significant costs of the project are the Rain Forest Trail and Overlooks Sub-project and the Pitons Park/Marine Park Sub-project. Nearly all (96%) of the cost of the Rain Forest Sub-project is for road improvement. Similarly, more than 3/4 of the Pitons Park/Marine Park Sub-project cost is for road improvement. (See Table 31.)

Although the Diamond Baths and Gardens Sub-project, and the Estate Historic Museum of the Soufriere Town Sub-project were included as integral parts of the project, they are under private ownership, so that their investment is analyzed both as an integral part of the project and individually, and also the rest of the project is analyzed minus the private investment. The costs are summarized in Table 31. The table includes six subprojects. A seventh subproject attempts to plan for the development of lodging accommodation in the Soufriere area. Since the lodging is to be private enterprise and distinct from the tourism attraction and infrastructure development nature of the other subprojects, it is included only in the project's economic evaluation.

The cost of remodeling of house facades along the historic architecture walk would be subsidized by the public sector. It is assumed that the subsidy, whatever its detailed form, would amount to about 1/5 of the global cost. That 20% is charged to the project, the remainder would be left to the private sector, and is included in the economic evaluation.

The bases for the costs estimates are usually indicated in the sections of Chapter III dealing with the sub-projects. In general, the costs are very preliminary and serve to illustrate the magnitudes involved and enable arriving at an idea of project profitability. In some cases actually measured costs were obtained, however, they may have been combined with roughly estimated costs, so that the global costs acquire the confidence of the least certain component. The estimates of the cost of physical works was generally limited to a direct estimate of construction costs. This was assumed to be the case unless otherwise indicated. Therefore, unless voted to the contrary, an additional 10% was added onto the estimates obtained by the OAS mission, to cover the cost of administration and supervision, and another 10% of the base cost was added for price and quantity contingencies.

The estimates of investment cost in the long term are part of the planning for the area, but are not included in the profitability assessment.

It was assumed that where articles could be bought or made in St. Lucia, they would be. Some estimates obtained initially on the basis of foreign costs, were later modified when it was judged the item could be made in St. Lucia at a significantly lower cost. The cost advantage generally stems from lower labor costs.

Obviously, operating costs as well as income are limited to that consequent from the immediate (initial) phase investments.

The maintainance costs of most of the park works, structures and facilities were estimated at 10% of the investment cost, plus staff costs. The maintainance of the road improvements are a significant part

of the project's operating costs. This, too, was estimated mechanically at 10% of the investment cost.

Provision for personnel other than those assigned physical maintenance is primarily for staff at the park, museum, or trail. The main functions of the staff are access and security control, and the interpretation program, as well as site administration.

TABLE 31
COSTS BY SUBPROJECT

<u>Subproject</u>	<u>EC\$ 000's</u>
Pitons National Park	1,018
Sulphur Springs Conservation Area	966
Soufriere Town	3,100
Pier	(475) ¹
Waterfront/Mall	(701)
Historical Museum ²	(349)
Shore Improvement and Beach Recreation	(252)
Sewage	(588)
Historic Architectural Walk	(218)
Diamond Baths/Garden ²	222
Rain Forest Trail and Overlooks	<u>2,842</u>
Project Total	7,670

1/ Sub-item costs do not include provision for administration and contingencies (10% and 10%).

2/ Private sector.

C. Profitability Analysis

The internal rate of return (IRR) resulting from the financial assessment of this project is between 8% and 14%; 8% with the low forecast of demand and 14% with the high forecast. As formulated in this preliminary study, the financial assessment includes only the "immediate" or first stage of the project, and, with the exception of the Soufriere Estate Historical Museum and Diamond Baths/Garden, only the public sector subprojects and programs. The financial assessment does not include the Community Tourism Participation Program, which is still to be elaborated. Its inclusion will, of course, result in a lower financial IRR, since the program does represent costs but bears no direct financial benefits. (It is possible that external developmental assistance can be obtained for the Community Participation Program. The financial rate of return of 8% to 14% seems acceptable from the fiscal standpoint.

The Sulphur Springs and the Diamond Baths/Garden subprojects, assessed in isolation, indicate a high financial rate of return between 22% and 30% for the Sulphur Springs, and between 21% and 29% for the Diamond Baths/Garden. The Pitons National Park and the Soufriere Town Subprojects, assessed in isolation, show a financial rate of return which implies subsidization: between -2% and 5% in the case of the Pitons Park, and between 1% and 6% in the case of Soufriere Town. However, these subprojects can't be considered in isolation; they exercise essential externalities on each other, and were they indeed to be analyzed in isolation, the assumptions made in estimating roughly their streams of costs and benefits would per force be altered.

The individual subproject financial assessment indicates where within the project surpluses and deficits occur. This has internal budget implications for the public sector activities and tax implications for the private sector activities (Diamond Baths/Garden and Estate Historical Museum). The public sector investment financial rate of return falls between 6% and 12%, while that of the private sector financial rate of return would be between 31% and 38%, in both cases excluding consideration of taxes.

The financial assessment of the project and the public sector investments and private sector investments, ignoring taxes, were subjected to sensitivity analysis, using the low forecast of demand. The overall project using the high forecast of demand was also subjected to analysis. If there were to be a drop of 10% in income and a 10% increase in costs, the IRR would be only 1% in the low forecast of demand, and 8% in the high. (See Table 32.)

Because the costs consist of such an aggregate of costs, the probability of wide variations in cost is reduced. The exception is the cost of the roads, particularly that in the Rain Forest and Overlooks subproject.

With respect to income, although the project's income consists very largely of visitor expenditures, there is diversity in the type of visitor income, i.e., tourist, cruise passenger, yachtsmen, etc. Moreover, there is diversity within the tourist segment to St. Lucia market, i.e., the U.S., Canada, the U.K., etc.

TABLE 32
SENSITIVITY ANALYSIS OF FINANCIAL EVALUATION

		<u>Low Forecast of Demand</u>				
		Costs and income as estimated	+10% costs	-10% costs	+10% income	-10% income
Project	8%	5%	11%	11%	4%	1%
Private sector only	31%	26%	36%	35%	26%	22%
Public sector only	5%	2%	9%	9%	2%	-1%
		<u>High Forecast of Demand</u>				
Project	14%	11%	18%	17%	11%	8%

(This Study has been placed on an IBM XT computer so that alterations in assumptions or composition of costs and benefits of the project can be accomplished readily, including in St. Lucia.)

CHAPTER VI

TRAINING AND TECHNICAL ASSISTANCE REQUIREMENTS

In a preliminary manner the following technical assistance and training requirements have been identified. Others will probably become evident as the project is elaborated. In general, technical assistance is needed primarily in research on the natural and historical attractions and in elaborating texts and construction specifications for the interpretation programs for the various attractions. Training in park visitor control, management, and guide service are the primary training requirements. Technical assistance and training will be needed in the tourism community participation program, but the specific needs must await the elaboration of the program.

Tentative technical assistance and training needs related to each of the subprojects are:

1. The Pitons

a) Technical assistance in:

- i) detailed plans for trails and overlooks;
- ii) continuing planning of the integrated management and development of the park;
- iii) the legal/regulatory establishment of the Marine Park;
- iv) preparation of the texts and specifications for signs and displays as well as publications of the interpretation program.

- ##### b) Training of park staff in park visitor control/security; interpretation function/guide services, and park management.

2. Sulphur Springs

a) Technical assistance in:

- i) text and physical specifications for the interpretation program, including school materials, publications and signs;
- ii) elaboration of plans for the long term development and management of the conservation area;
- iii) research of the geology of the site.

b) Training of conservation area staff in visitor control/security, interpretation, and natural areas management.

3. Soufriere Town

a) Technical assistance in:

- i) preparation of final designs for the Waterfront/Mall;
- ii) preparation of specifications for facade restoration of buildings along historic architectural walk;
- iii) execution of interpretive program for walk signs and brochures;
- iv) preparation of museum exhibit plans, interpretive program, and display design for estate historical museum;
- v) development and implementation of the tourism community participation program.

b) Training of:

- i) participants in the Community Participation Program (to be elaborated);
- ii) staff of Estate Historic Museum in docenting of museum visitors;
- iii) shop and stall salesmen and saleswomen;
- iv) donkey cart and taxi drivers.

4. Diamond Baths and Garden

a) Technical assistance in:

- i) botanical garden development, including research on the species of plants to introduce and where in the gardens to place them;
- ii) the development of a health spa on Diamond Estate;
- iii) preparation of texts of plant signs.

5. Rain Forest Trail

- a) Technical assistance in detailed plans and specifications for the Desraches promontory, the trails and overlooks;
- b) Training of forest staff in security/control and in guide/interpretation services.

6. Historical Sites

a) Technical assistance in:

- i) archeological research of both the Malmaison and the Bellfond sites;
- ii) selective informational report writing, publicizing in selective ways findings in the development of the sites;
- iii) development planning for the preservation of the sites and for their development for visitors' enjoyment.

7. Lodging

Technical assistance in guest house and rental villa operations - this probably would be included in the tourism community participation programs.

The above tentative technical assistance requirements could be met with: national park landscape architect; naturalist, experienced in the tropics and specialized interpretation skills; architect, specialized in historic preservation; expert in museum development with interpretation skills; museum design specialist; and botanist.

The training could be met with courses for natural area/museum staff in: visitor control/security, interpretation and guide services, and park management; and a course for shop and stall salespeople on selling to tourists.

CHAPTER VII

ECONOMIC EVALUATION

The project's impact on the national economy is evaluated by making two adjustments to its financial assessment. The first is the inclusion in the costs and benefits of the project of those costs and benefits incurred by the economy because of the project but external to its direct revenues and expenditures (i.e., economic externalities) and the exclusion of any transactions which are not benefits or costs to the economy. The second is the re-pricing of the project's costs and benefits, (i.e., its inputs and outputs), using national economy prices (those which reflect the opportunity cost of the input or output to the national economy) in the place of the market prices used in the financial assessment.

A. Externalities

1. Tourism Sector

Although the development of tourism (and the increased employment and foreign exchange it brings) is a central objective of this project, the costs and benefits of the additional lodging and the additional local transportation and tour services, as well as part of the additional consumption of food and beverage and part of the additional shopping to be generated by the project have not been incorporated into the financial assessment of the inputs and outputs of the project.

The project has been composed out of the major part of the Master Plan. The various subprojects and programs involve divided but interdependent responsibilities of the public and private sectors, of national authorities and Soufriere people. In formulating this project to assist Government investment and policy planning, however, with the exception of the Soufriere Estate - Diamond Estate parts of the project, the investments and measures of the public sector comprise the project and the economic activity of the private sector caused by the project is classed as economic externalities.

a) Lodging:

The lodging subproject was described in Chapter III B.7. The investment cost estimates, and the rough estimates of income based on the price and occupancy rates assumed, as well as rough estimates of operating costs, were shown above. The data are incorporated into the project's streams of economic costs and benefits as justified by the forecasted demand.

b) Tour guide services and taxis:

The local tour operators only are considered here, since the international tour operators are, by definition, not part of the national economy. Even if the local tour operators have excess capacity of their physical plant, which is taken to be principally the means of local transportation (buses, micro buses, ships, or boats), the expansion in the number of Soufriere visitors by nearly 3 times over the life of the project would necessitate a considerable increase in their capital investment, i.e., more ships, buses, minibuses etc.. No estimate was made of the cost that might entail.

Chapter I describes the actual tour operations, indicating rough magnitudes of tours sold and their prices. In the case of the Unicorn and Buccaneer cruises to Soufriere the data are available for estimating gross revenue, (which may have been around EC\$ 1.5 million in 1984) but cost data are not, and therefore these transactions cannot be entered into the quantitative economic evaluation.

However, as stated, the project plans for an increase of nearly 3 fold in the number of visitors to Soufriere under the low estimate of demand for the project, and double the 1984 level before the fourth operating year.

c) Other tourism sector businesses:

Other direct tourism sector externalities of the project, additional to lodging and tour services, are transactions of restaurants/bars/cates,

local taxis, donkeys carts, sales of handicrafts, and the sales of food and daily toiletry articles to those living in the guest houses and villas. There are various and sundry transactions, such as payment to local youths who guide the yachts to moorings in the Soufriere Bay and at Jalousie Beach.

In this preliminary study, these externalities are identified but further research would be required to be able to estimate the quantities which may be involved.

The project would heighten the attraction of St. Lucia as a vacation destination. The inclusion of the new lodging facilities reflects that effect. The project would not result in any significant diversion of current tourism. Stay-over tourists in Soufriere would be additionally generated; additional day visitors to Soufriere would be from the future St. Lucia visitor increase. Also, as noted, the average number of tours taken in St. Lucia by tourists to St. Lucia has declined, and the project would reverse that trend.

2. Agricultural and commercial sectors

The project includes the upgrading of nearly four kilometers of road in the area east of Fond St. Jacques. The area presently is largely classified as "Forest", although there is some commercial banana cultivation, particularly in the western portion, and citrus and commercial flower cultivation in the area.

Subsistence agriculture of a range of fruits and vegetables indicates the physical production possibilities of the region that easy road transport might open up.

Improvement in the Sulphur Spring road also would benefit agricultural production in the Sulphur Spring/Terre Blanche Valley. The project also includes the upgrading of about 1.5 kilometers of the Malgretoute road. The agricultural possibilities appear limited here. However, upgrading of the road would enhance the value of the adjacent land for villa sites. The Malgretoute Road skirts the coast. Though the slopes are steep, there appear to be buildable sites along it.

3. Urban development

The historic architecture walk included repair and restoration of 50 house fronts, estimating an average cost of EC\$ 10.000 per house. It was estimated that the Government would subsidize that cost by 20%, leaving an external cost of EC\$ 400,000 for the owners, i.e. the private sector. There would, of course, be a corresponding benefit to the house owners, in the form of the appreciated value of his property. That value could be monetized by its market sale or through renting the house, or it could remain an invisible benefit, in the form of increased simulated rent, imputed to the owner paying himself.

4. Health Sector

Although this study does not have the data to quantify this externality, logically the treatment of town sewage and its disposal through an outfall conduit would reduce the incidence of water-borne disease in Soufriere. This is clearly a net external benefit of the project.

5. Education

The Sulphur Spring, Pitons Park, Diamond Baths and Garden, and the Rain Forest Subprojects and the Estate Historical Museum of the Soufriere Town Subproject all contain provision for an Interpretation Program. In a sense, the entire interpretation program provides educational benefits. Certain elements, however, are more purely education benefits and designed for the St. Lucian residents, particularly students. Those benefits are taken to be at least equal to this costs, and not reflected in the financial assessment. They are:

<u>Subproject</u>	<u>Items</u>	<u>Cost-Benefit</u> (EC\$ 000)
Sulphur Springs	Teaching aids	8
	Library	4
	Historical Research	8
Rain Forest and Overlooks	Teaching materials	8
Diamond Baths/Garden	Botanical research	12
		40

These figures were already included on the cost side of the financial assessment, and will be figured into the benefits side as well in the economic evaluation.

6. Consumer surplus

Consumer surplus, that difference between what a consumer actually pays and what he would be prepared to pay for a good or service, can be reasonably be presumed in all cases of the Soufriere project where consumption of a service is projected at zero price and no other way of accounting for the benefit is used. In the Soufriere project, it is presumed that all visits by resident St. Lucians to tourism attractions is via institutional groups arranged in advance and therefore exempt of the entry fees. No income from residents for entry fees was credited in the financial evaluation.

It appears that most of the people of Soufriere would visit the Sulphur Springs, not so much to see the phenomenon itself, which they probably have seen more than once already, but to see the visitor center and the interpretation signs set up there. Also, most Soufrierians would probably visit at least once the Estate Historical Museum and the Diamond Baths/Garden. At least a few of the rest of the St. Lucians would visit these sites. If one third of the people of the administrative district of Soufriere (estimated mid-1983 population of 9,173), would be prepared to pay EC\$ 1.00 to visit each of the three attractions which they will visit gratis in the first operating year, and one fifth in the second operating year, and one tenth each succeeding year, and 1% of the rest of St. Lucians would visit each year gratis the consumer surplus would approximate:

<u>1986</u>	<u>1987</u>	<u>1988 and onward</u>
EC\$ 000's		
13	10	6

7. Public goods

There are also public goods to be constructed in the project, which bear economic benefits that are difficult to estimate. These include the seawall, the pedestrian promenade on the Waterfront and the Bandstand it incorporates, and the overlooks outside of the controlled natural park areas, i.e., the four overlooking Soufriere Bay. The seawall provides support and defence of the beach, the promenade, and the road to Malgretoute in front of the fisherman's houses. These works, together with the improvement in the house facades and the Mall, will be a source of satisfaction and civic pride for the town.

8. Appreciated real property value

The enhanced developability of the slopes above the Malgretoute road have been mentioned. In reality, that externality is one of appreciated asset value. In Soufriere Town itself the construction of the Waterfront/Mall and the restoration of selected houses along the historic architecture walk would be bear result in appreciated property values. Last among the unquantifiable external effects is the contribution the project would make, the progress it would engender in attaining the objectives set for it in turning around the town's economic, social, and civic decline of recent years. It would quicken the spirit of town life, help restrain some of the more energetic families from moving, keep some of the brighter children in Soufriere schools, provide an objective framework and mechanism for the conservation of the natural attractions, create more harmony between resident and visitor, and heighten resident appreciation of their natural assets and cultural patrimony.

B. Evaluation of financial inputs and outputs:

The revaluation of financial inputs and outputs into "world" or "border" prices in order to reflect their opportunity cost to the national economy was effected by applying ratios across the board, i.e., general conversion factors. The ratio applied to the price of unskilled

labor was 0.8, and that for national costs (labor and goods) and income from the national economy was 0.9^{1/}.

The proportion of cost attributable to labor, that part of labor costs which is estimated to be unskilled, labor, the part deemed for foreign, labor, the material inputs from national source, could only be illustratively estimated in many instances.

In the Pitons Park, the Sulphur Springs, the Diamond Baths/Garden, the Rain Forest and the Historic Sites subprojects and in most elements of the Soufriere Town subproject, land was not considered a financial cost, because it is owned by the project developer (or simply, "the project"). In the case of the Mall, the lots that are privately owned were assumed to be purchased by the project, and a price entered in the project's stream of costs. In the economic analysis, even where the land is owned by the project, its "opportunity cost" must be incorporated. In the case of the Pitons National Park, the value of consumption foregone, or most remunerative alternative employment, is not basically a market function, because it depends on the Government's fiat as to what the alternative use of the land might be.

For the sake of this study it is assumed that the terrain of the two Pitons and the land between to the ridge line would have no other alternative use than being a national park, and under that status has no option for other uses than that proposed in the projects' preferred plan (i.e., no lodging). In that case the opportunity cost for that land is zero. That leaves, in effect, only the area north of the Petit Pitons around Malgretoute, which presumably could be put to other use. Approximately 60 to 70 acres is found in the area tentatively indicated for inclusion in the Park, which conceivably could have other uses. The minimum alternative use would be agricultural and have a value of from EC\$ 5,000 to EC\$ 10,000 per acre. If there are 60 acres at EC\$ 7,500 the economic cost would be EC\$ 450,000.

^{1/}. These ratios may be modified after discussion with the CPU. The important thing is to provide for them in the evaluation, even in preliminary form.

There is little reasonable alternative use for the land involved in the Sulphur Spring subproject, except that of the geothermal plant. The feasibility of using the Sulphur Spring site itself as the location for the plan has yet to be decided. If one of the other two sites are selected, the opportunity cost of the land would be zero. No cost is inputted, therefore, in this study.

The opportunity cost of the land to be used in the Mall is reflected in its financial cost of EC\$ 33,000. The opportunity costs of the Waterfront Promenade is taken as zero, since it has been unused up till now, and the town is not likely to approve commercial structures there anyway.

The opportunity cost for the Estate Historical Museum land, i.e., that on which the mill stands plus a landscaping margin, is estimated at EC\$ 10,000.

The above are the instances where it appears most appropriate to charge the project for the land, where such a cost would be significant.

Omitting the externalities on the non-lodging tourism sector as well as the externalities on the other sectors of the economy, particularly agriculture, because insufficient information was available, the economic evaluation indicates a rate of return of at least between 15% and 18%. The project is more profitable economically than financially.

C. Employment Effect

Not including jobs created from the Soufriere Tourism Community Participation Program, nor those from the construction of the project, the number of continuing jobs estimated to be created from the five subprojects composing the project in the initial phase is 65 (first year of operation). Most of these, 44, would be unskilled (see Table 33). An additional 72 jobs would be created in the tourism private sector, if the 12 additional beach hotel, and 20 villa and 20 guest house rooms are realized in the first year of the project. That would mean at least 137 jobs. As the rest of the lodging projected in the Master Plan is

realized, 364 more jobs would be created in lodging and 182 more jobs in other tourism firms (restaurants, cafes, etc). That is, the private tourism sector's ultimate continuing job generation (excluding the Diamond Bath/Garden and Estate Historic Museum investments) would be 518.

The employment generation of the construction phase of the project (immediate term, but including the Lodging and Historic Sites subprojects) is illustratively estimated at 190 unskilled and 65 skilled man/years of employment.

TABLE 33
ILLUSTRATIVE PROJECTION OF EMPLOYMENT GENERATION
IN THE 1ST. OPERATING YEAR
(Excludes Employment in the Construction of the Project)

<u>Subproject</u>	<u>Total</u>	<u>No. of jobs created</u>	
		<u>Skilled</u>	<u>Unskilled</u>
Pitons Park	9	2	7
Sulphur Springs	11	5	6
Soufriere Town	23	7	16
Diamond Bath/Garden	5	2	3
Rain Forest and Overlooks	<u>17</u>	<u>5</u>	<u>12</u>
Sub Total	65	21	44
Historic and archeol. sites	n/a	n/a	n/a
Lodging	48	31	17
Other tourism	<u>24</u>	<u>18</u>	<u>6</u>
Sub Total	72	49	23
<hr/>			
TOTAL	137	70	67

D. Foreign Exchange Impact

It is roughly estimated that the cumulative net foreign exchange earnings of the project, including the transactions in the lodging subproject, would be positive by the third year of the project, and that by the end of the fifth operating year would be between EC\$ 20 million

and EC\$ 21 million. This would be a minimum, since foreign exchange earnings and costs of the tour operators and a few others were not estimated. Considering the project as formulated for the financial analysis, i.e. excluding the lodging subproject, the cumulative net foreign exchange earnings under the low estimate of demand would be positive by the fourth year of the project, and by the end of the fifth operating year would amount to EC\$ 3.4 million. Under the high estimate, it would sum about EC\$ 5.2 million. The project, therefore, would have a sizeable positive impact on St. Lucia's balance of payments.

The project, in the form evaluated or in one of the alternative combinations of subprojects would have a markedly positive effect on the balance of payments, since a significantly larger proportion of the revenues than the expenditures are in foreign exchange (See Table 34).

TABLE 34
NET FOREIGN EXCHANGE IMPACT:
ILLUSTRATIVE ESTIMATE IN EC\$ MILLION
I. Includes transactions in lodging

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>
Income (low demand)	0	3.1	3.2	7.4	7.7	8.7
(high demand)	0	3.2	3.4	7.7	8.1	9.0
Costs	3.5	0.7	1.7	1.4	1.8	1.5
Balance (low)	-3.1	2.4	1.5	6.0	5.9	7.2
(high)	-3.1	2.5	1.7	6.3	6.3	7.5
<u>Cumulative balance</u>						
(low)	-3.1	-0.7	0.8	6.8	12.7	19.9
(high)	-3.1	-0.6	1.1	7.4	13.7	21.2
II. Project, excluding lodging						
Income (low)	0	1.4	1.5	1.6	1.7	1.8
(high)	0	1.5	1.7	1.9	2.1	2.2
Costs	2.6	0.4	0.4	0.4	0.4	0.4
Balance (low)	-2.6	1.0	1.1	1.2	1.3	1.4
(high)	-2.6	1.1	1.3	1.5	1.7	1.8
<u>Cumulative balance</u>						
(low)	-2.6	-1.6	-0.5	0.7	2.0	3.4
(high)	-2.6	-1.5	0.2	1.7	3.4	5.2

NATURE RESERVE
INTERPRETIVE CENTER

DESIRASCHES

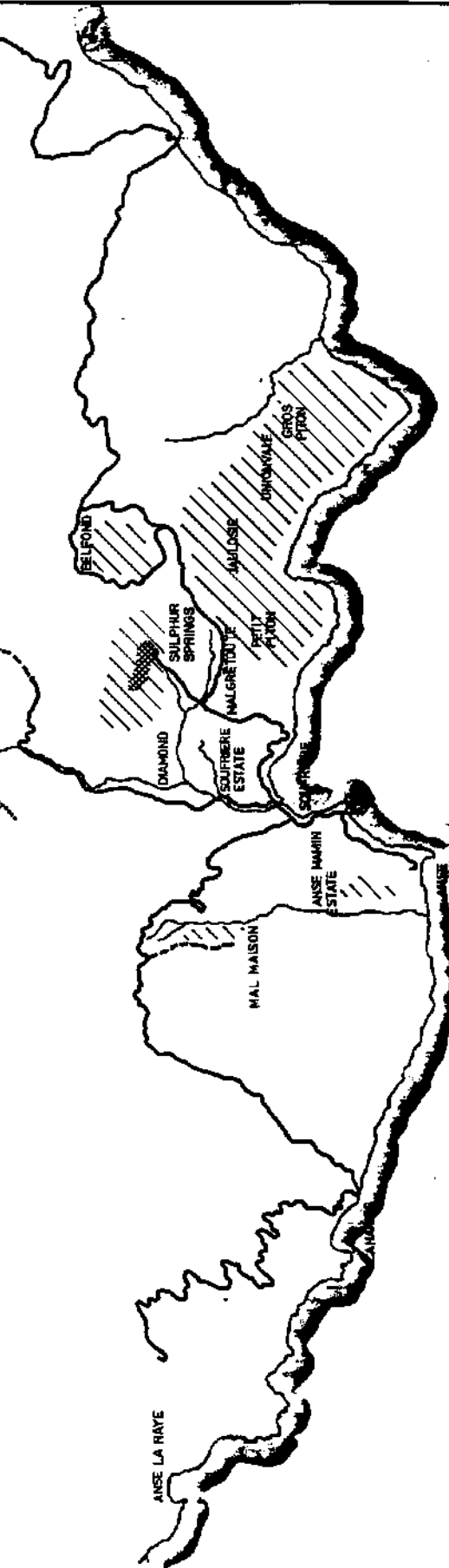
END ST. JACQUES

ANSE LA RAYE

MAL MAISON

ANSE HAVIN
ESTATE

ANSE
CHAMNETT



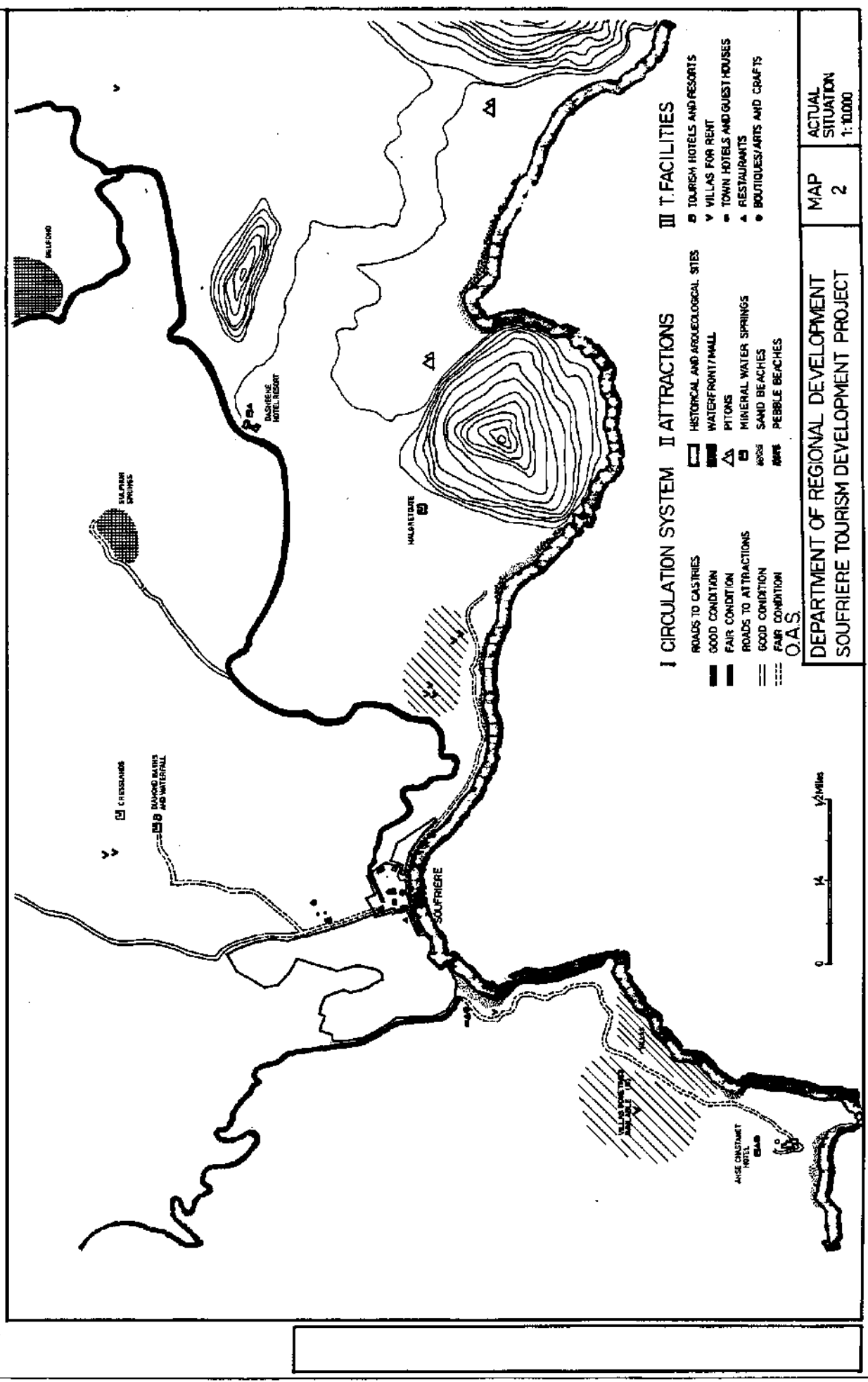
O.A.S.

0 1 2 MILES

DEPARTMENT OF REGIONAL DEVELOPMENT
SOUFRIERE TOURISM DEVELOPMENT PROJECT

MAP
1

STUDY AREA
1:50000



I CIRCULATION SYSTEM II ATTRACTIONS

- ROADS TO CASERIES
- GOOD CONDITION
- FAIR CONDITION
- ROADS TO ATTRACTIONS
- GOOD CONDITION
- FAIR CONDITION
- O.A.S.

- HISTORICAL AND ARCHEOLOGICAL SITES
- WATERFRONT/MALL
- PITONS
- MINERAL WATER SPRINGS
- SAND BEACHES
- PEBBLE BEACHES

III T. FACILITIES

- TOURISM HOTELS AND RESORTS
- VILLAS FOR RENT
- TOWN HOTELS AND GUEST HOUSES
- RESTAURANTS
- BOULIQUES/ARTS AND CRAFTS

0 1/4 1/2 Miles

DEPARTMENT OF REGIONAL DEVELOPMENT
SOUFRIERE TOURISM DEVELOPMENT PROJECT

MAP 2

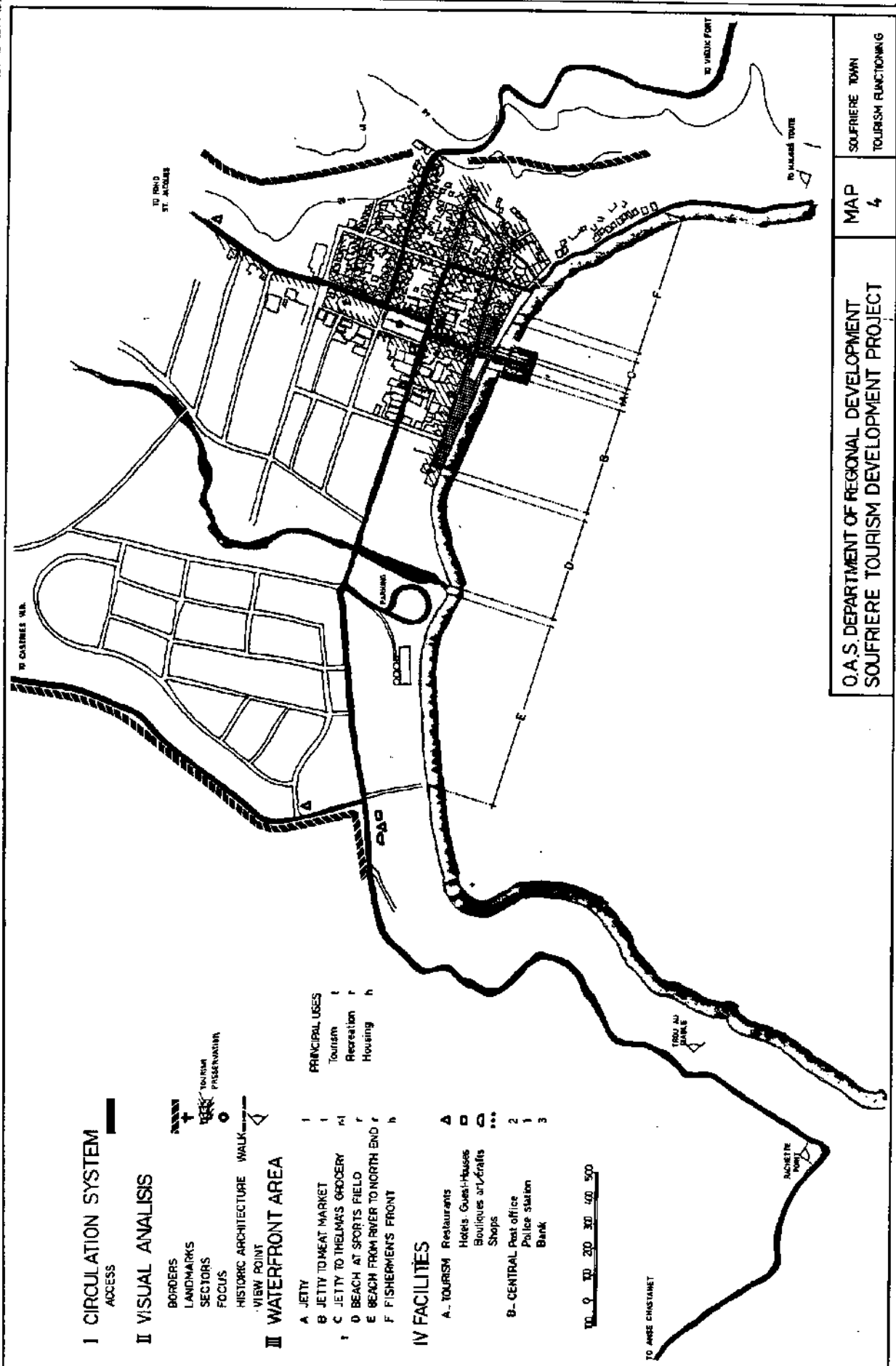
ACTUAL
SITUATION
1:10,000



1 mile

O.A.S.

DEPARTMENT OF REGIONAL DEVELOPMENT	MAP	BEACHES - ADDRESSES
SOUFRIERE TOURISM DEVELOPMENT PROJECT	3	Scale 1:2500



I CIRCULATION SYSTEM ACCESS

II VISUAL ANALYSIS

- BORDERS
- LANDMARKS
- SECTORS
- FOCUS
- HISTORIC ARCHITECTURE
- VIEW POINT
- WALK

III WATERFRONT AREA

- A JETTY
- B JETTY TO MEAT MARKET
- C JETTY TO THELMA'S GROCERY
- D BEACH AT SPORTS FIELD
- E BEACH FROM RIVER TO NORTH END
- F FISHERMEN'S FRONT

IV FACILITIES

- A. TOURISM Restaurants
- Hotels Guest-Houses
- Bouliques art/crafts
- Shops
- B. CENTRAL Post office
- Police station
- Bank

0 100 200 300 400 500

O.A.S. DEPARTMENT OF REGIONAL DEVELOPMENT
 SOUFRIERE TOURISM DEVELOPMENT PROJECT

MAP 4
 SOUFRIERE TOWN
 TOURISM FUNCTIONING

PLANNING CONCEPTS

OUTLINE 1983 CPU

LEGEND



MAIN ROAD



BUILT-UP AREA



MAJOR APPROVED DEVELOPMENTS



APPROVED YACHT MARINAS



OTHER TOURIST ATTRACTIONS



BOUNDARY OF PITONS POLICY AREA



LAND USE INTENSITY ZONES



RECREATION / INTEGRAL CENTRE



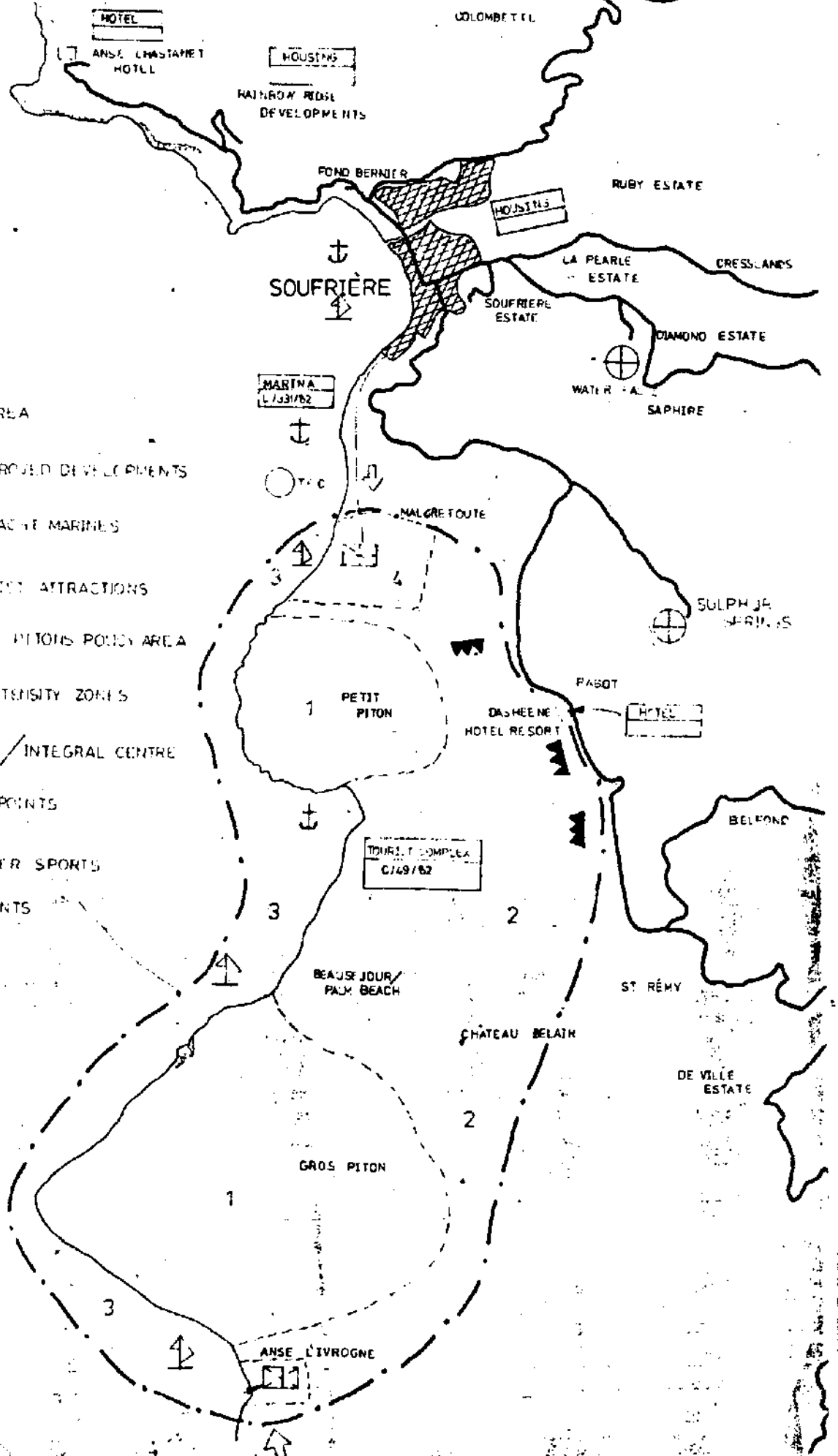
LOOK-OUT POINTS



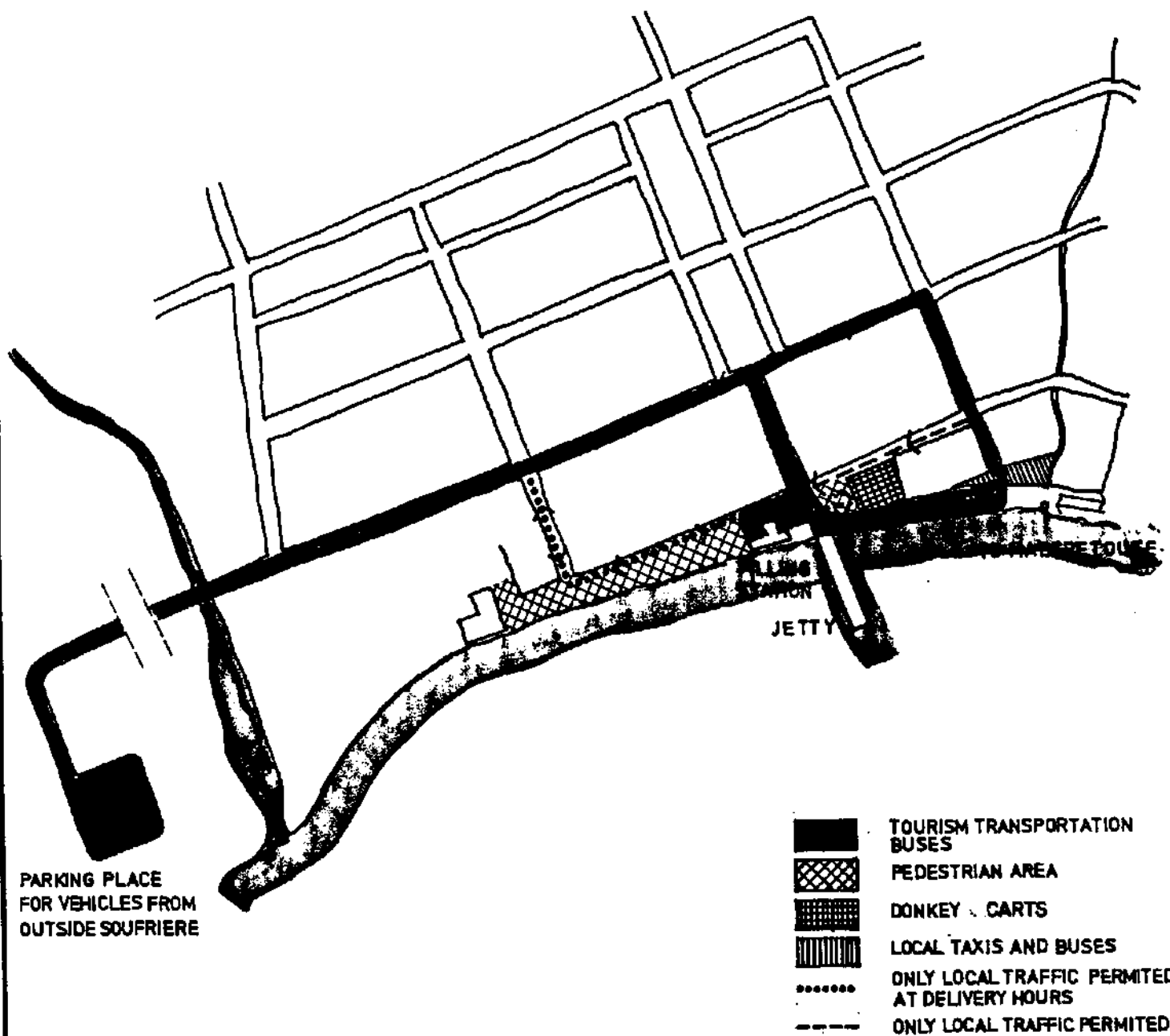
SCUBA / WATER SPORTS



ACCESS POINTS



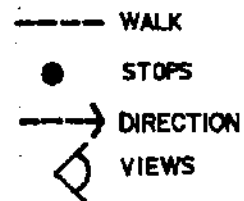
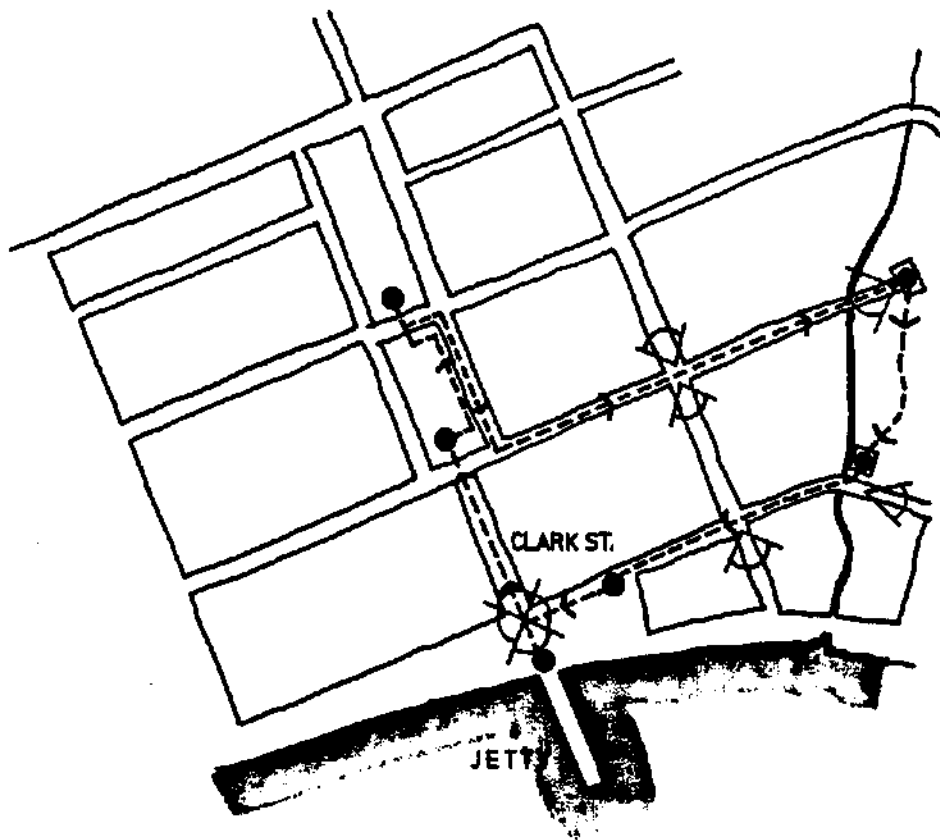
Soufriere Policies and Major Approved Developments, C.P.U. 1983



Map 6

Q.A.S. DEPARTMENT OF REGIONAL DEVELOP.
SOUFRIERE TOURISM DEVELOPMENT PROJECT

WATERFRONT
TRAFFIC ORGANIZATION
SCHEME



Map 7

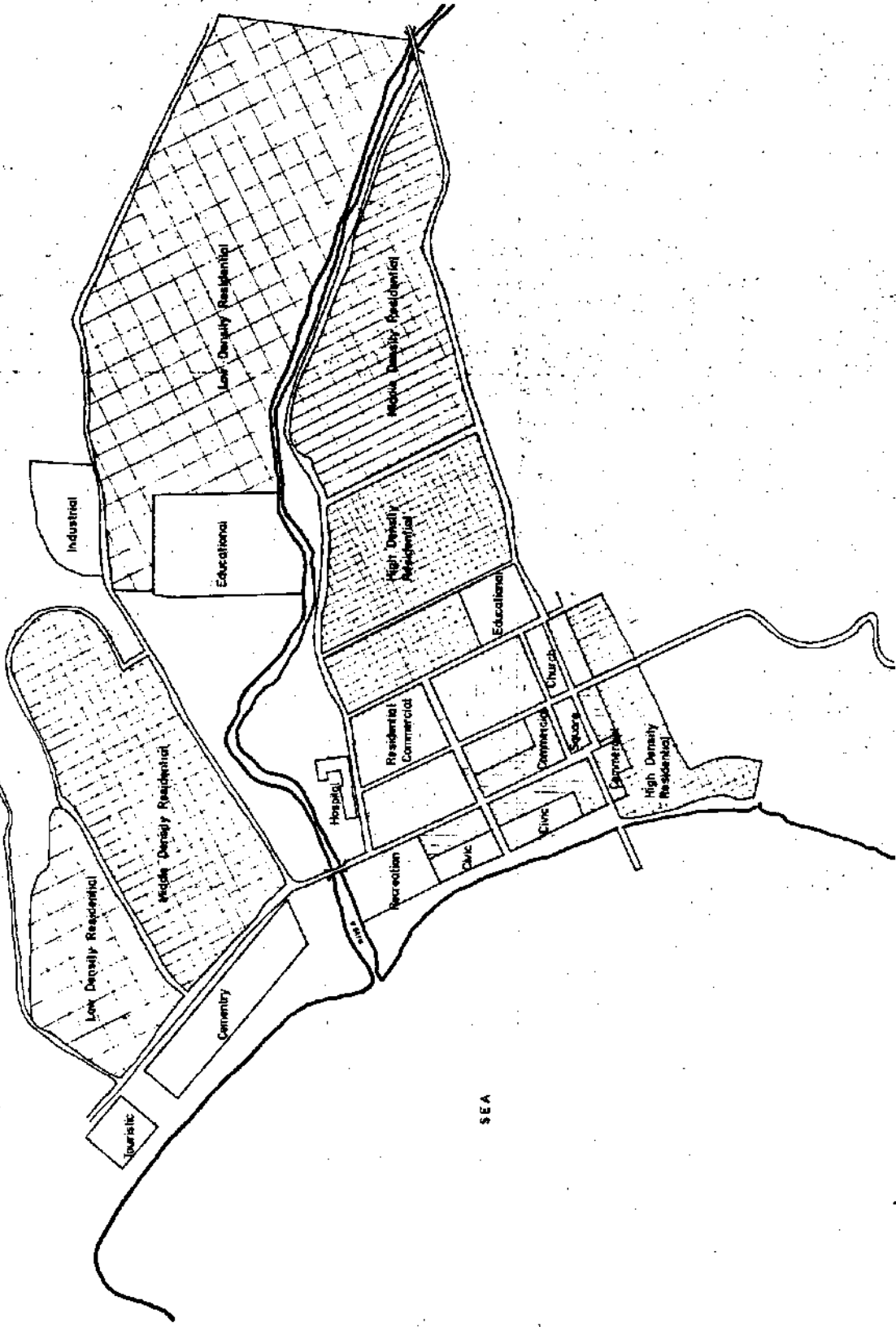
O.A.S

DEPARTMENT OF REGIONAL DEVELOPMENT
SOUFRIERE TOURISM DEVELOPMENT PROJECT

HISTORICAL AND
ARCHITECTURAL WALK
SCHEME

SOUFRIERE 12/11/00 **PRESENT LAND USE Map 8**

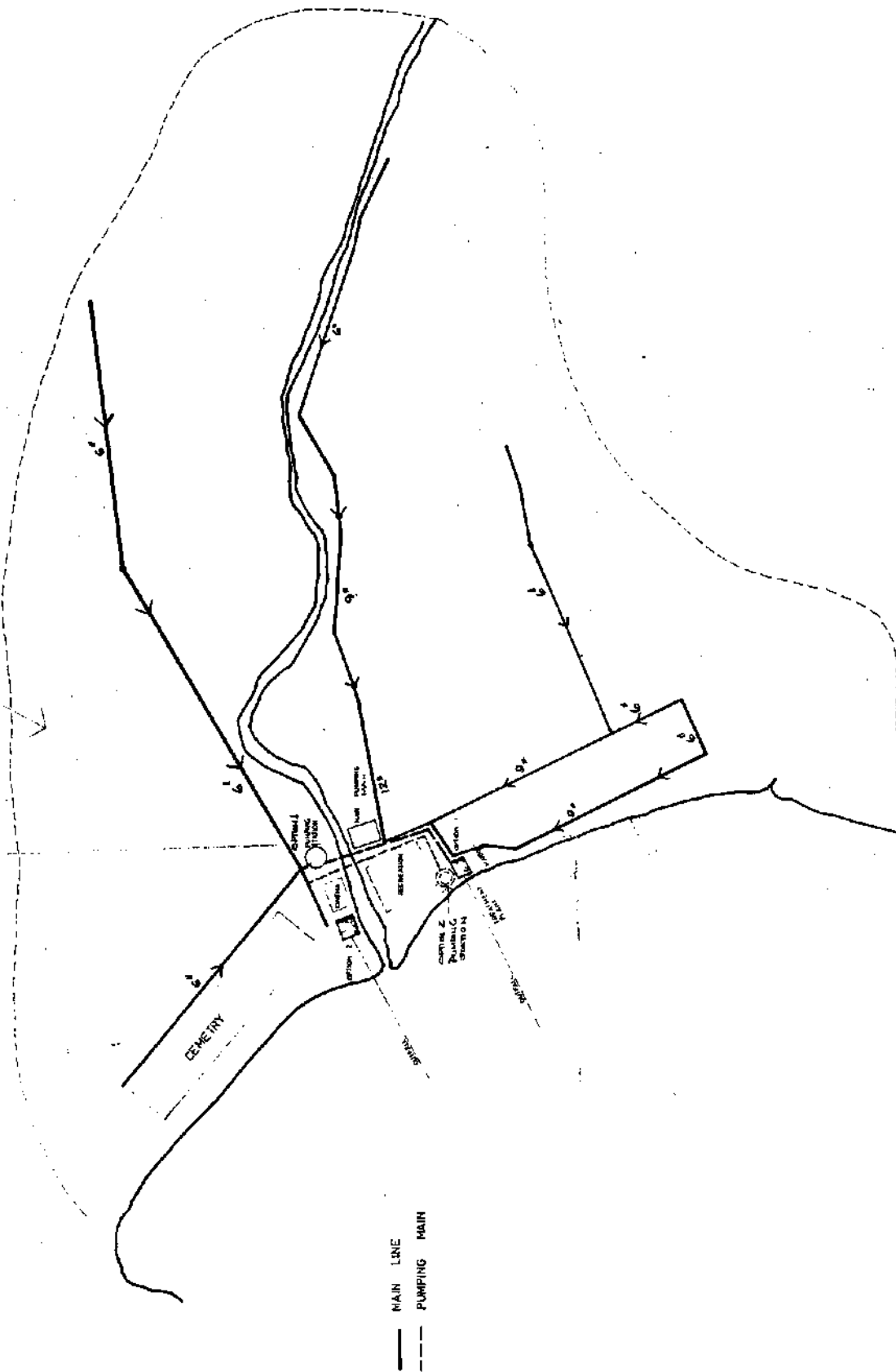
*SOUFRIERE TOURISM PROJECT
 ST LUCIA OAS N.P.C.*



SOUFFRIERE TOWN SEWAGE SYSTEM PROPOSAL Map 9

PROJECT
SOUFFRIERE TOWN ST LUCIA OAS. WPT

PROPOSED WORK



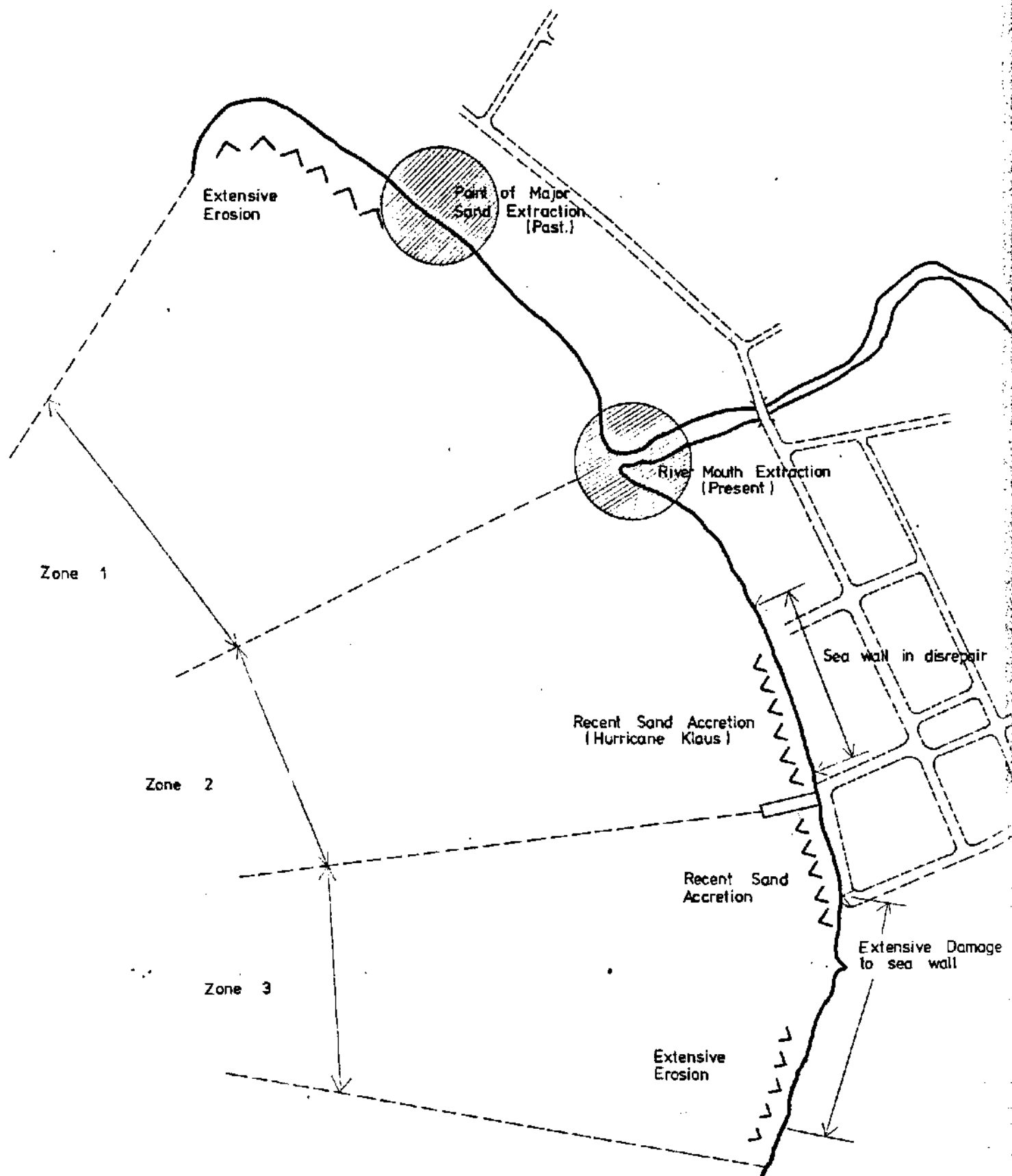
SOUFRIERE BAY

COASTAL PROCESSES : MAP 10

SOUFRIERE TOURISM PROJECT

SCALE : 1 : 2500

ST. LUCIA OAS NPTC



ST. LUCIA OAS NPTC

SOUFRIERE TOWN

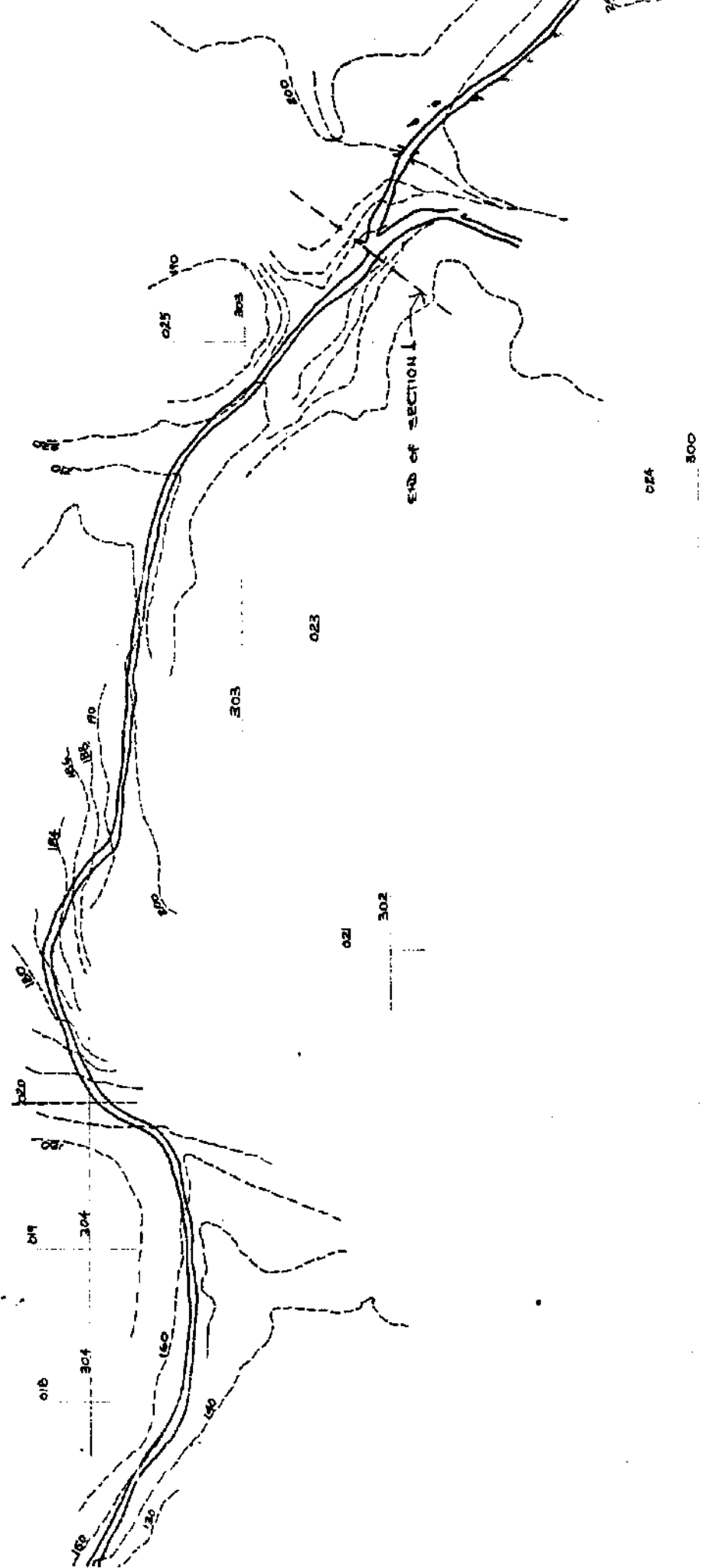
DT

SUPHUR SPRINGS ROAD

SECTION 1.

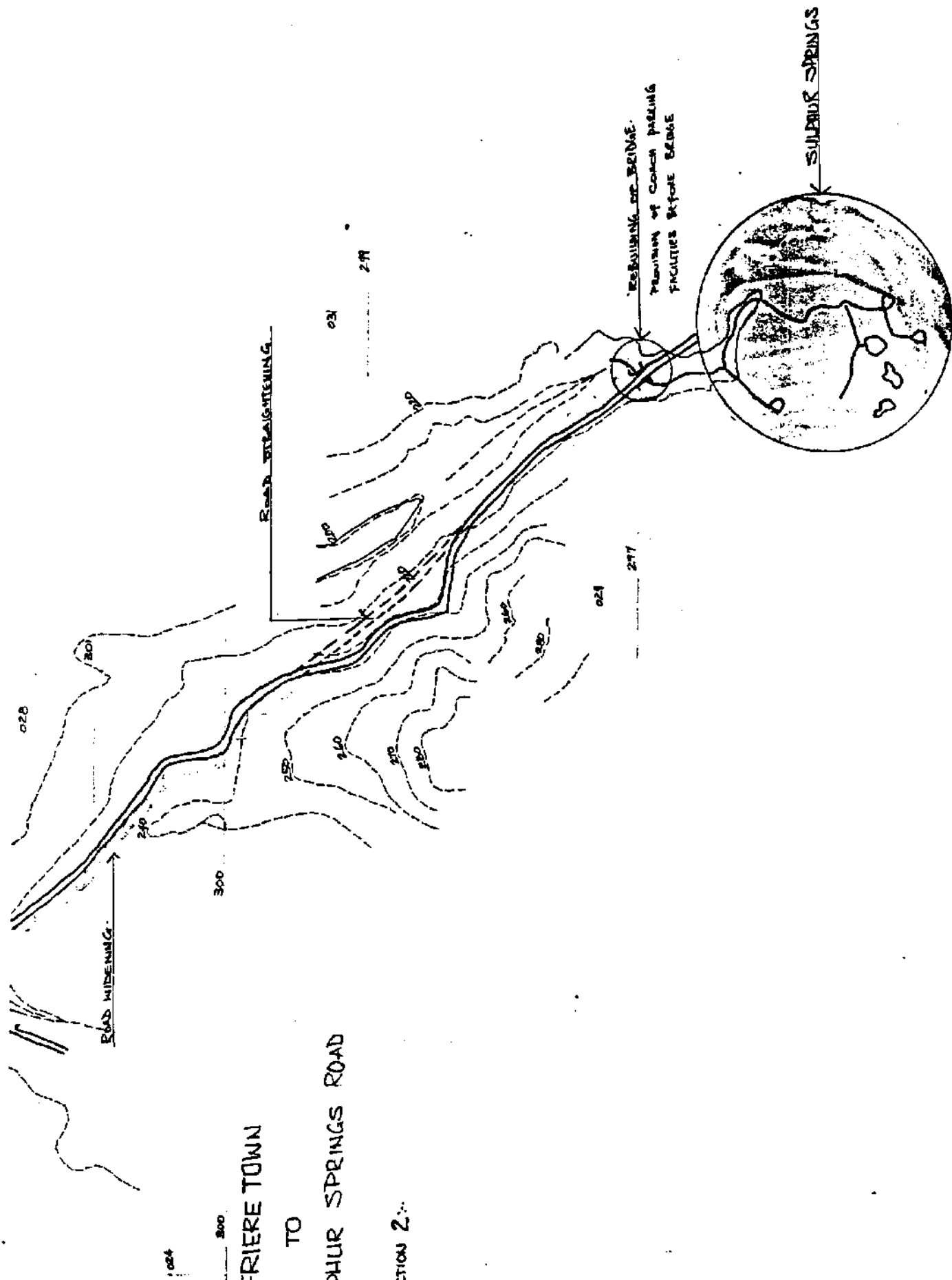
INTRODUCTION OF CRASH BARRIERS

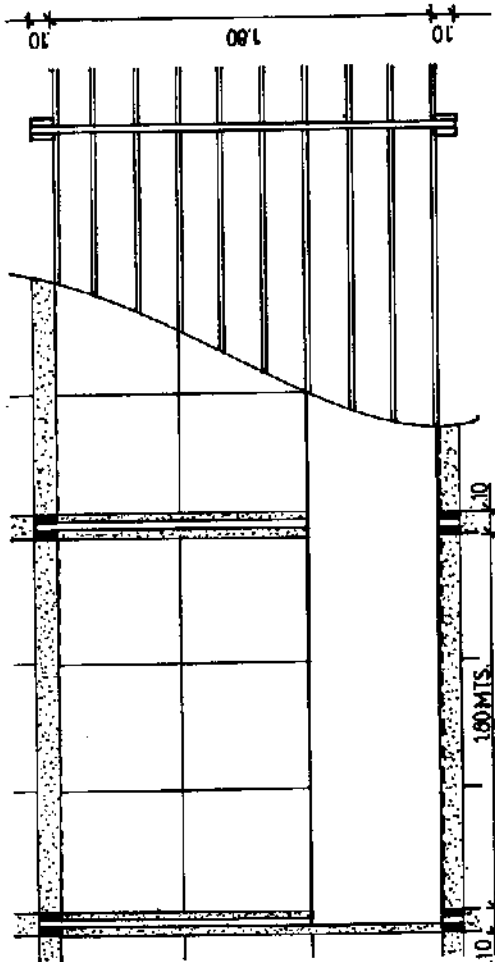
WORKING ALONG ROAD TO IMPROVEMENT OF SIGNAGES AND TURNING CIRCLE.



SOUFRIERE TOWN
TO
SULPHUR SPRINGS ROAD

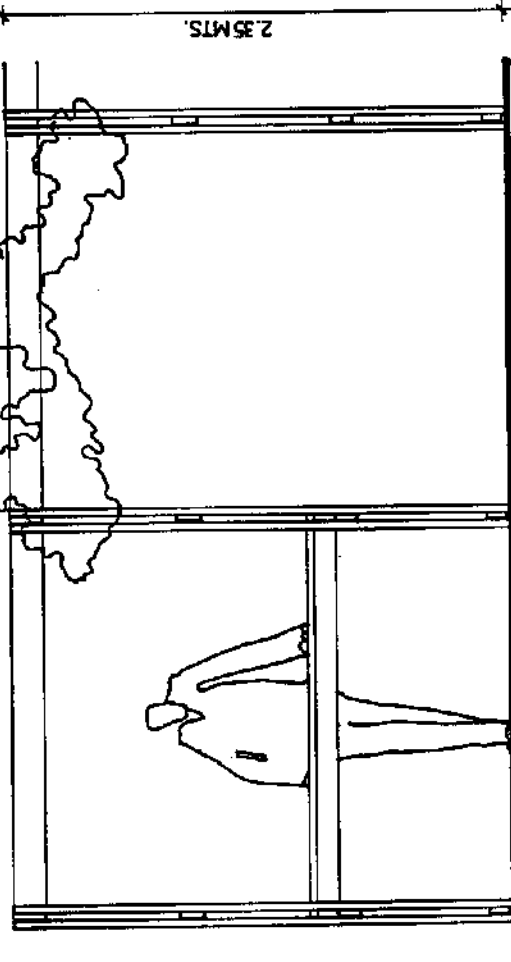
SECTION 2





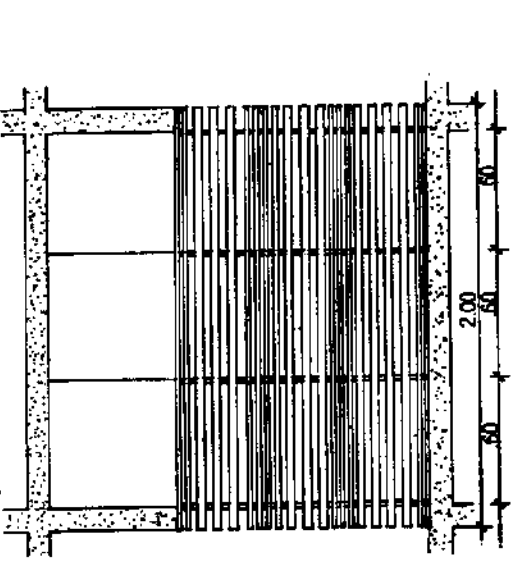
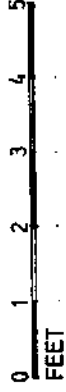
PLAN

ROOF

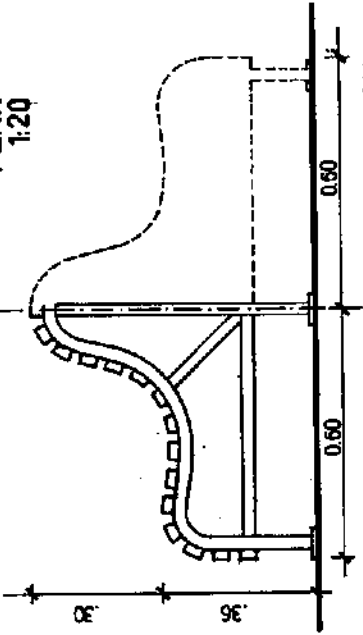


ELEVATION
1:20

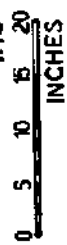
O.A.S.



PLAN
1:20



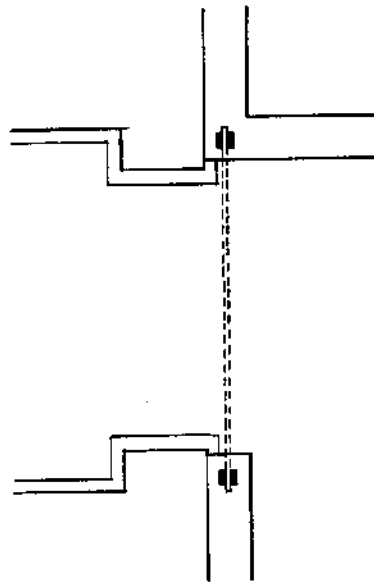
SECTION
1:10



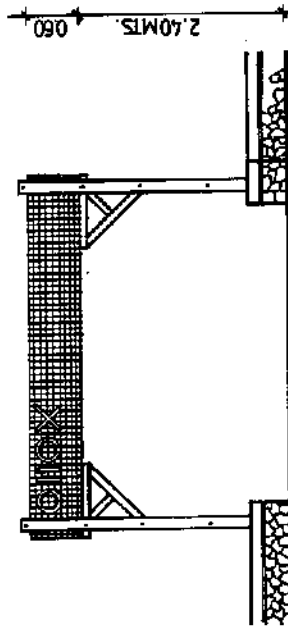
DEPARTMENT OF REGIONAL DEVELOPMENT
SOUFRIERE TOURISM DEVELOPMENT PROJECT

PLAN
1:1

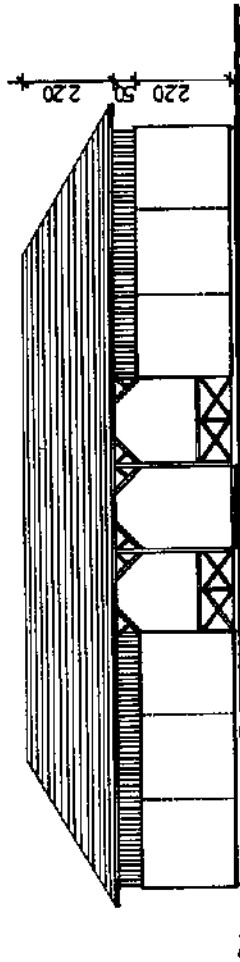
STALLS
BENCH



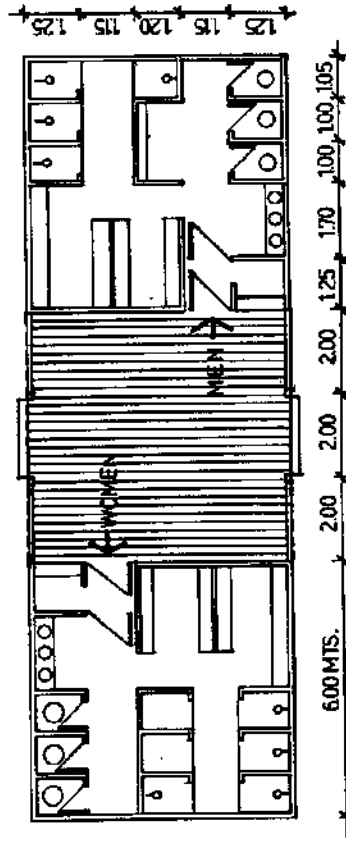
PLAN



ELEVATION
1:50
0 1 2 3 4 5
FEET



FACADE



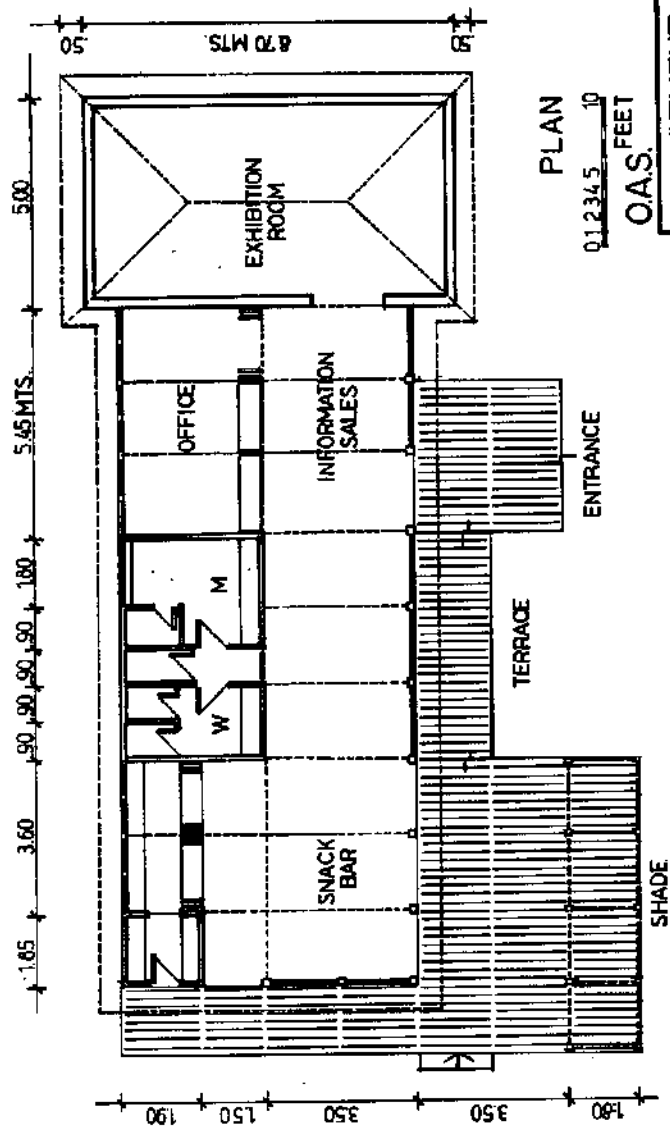
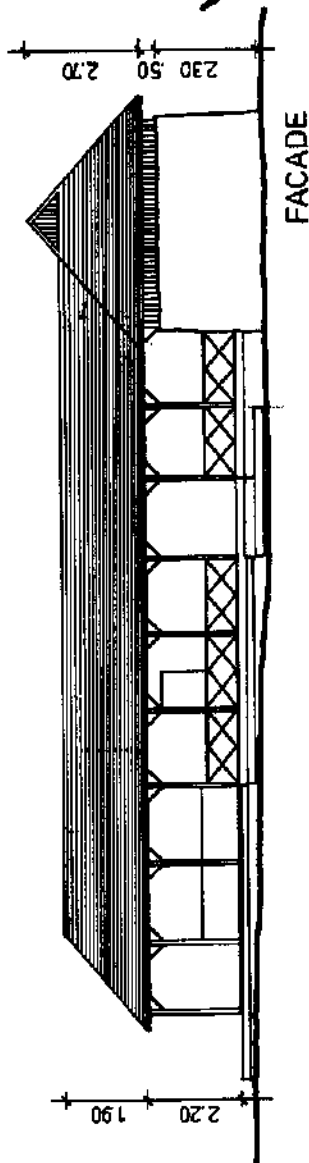
PLAN
1:100
0 1 2 3 4 5
FEET

O.A.S.

DEPARTMENT OF REGIONAL DEVELOPMENT
SOUFRIERE TOURISM DEVELOPMENT PROJECT

PLAN
13/4

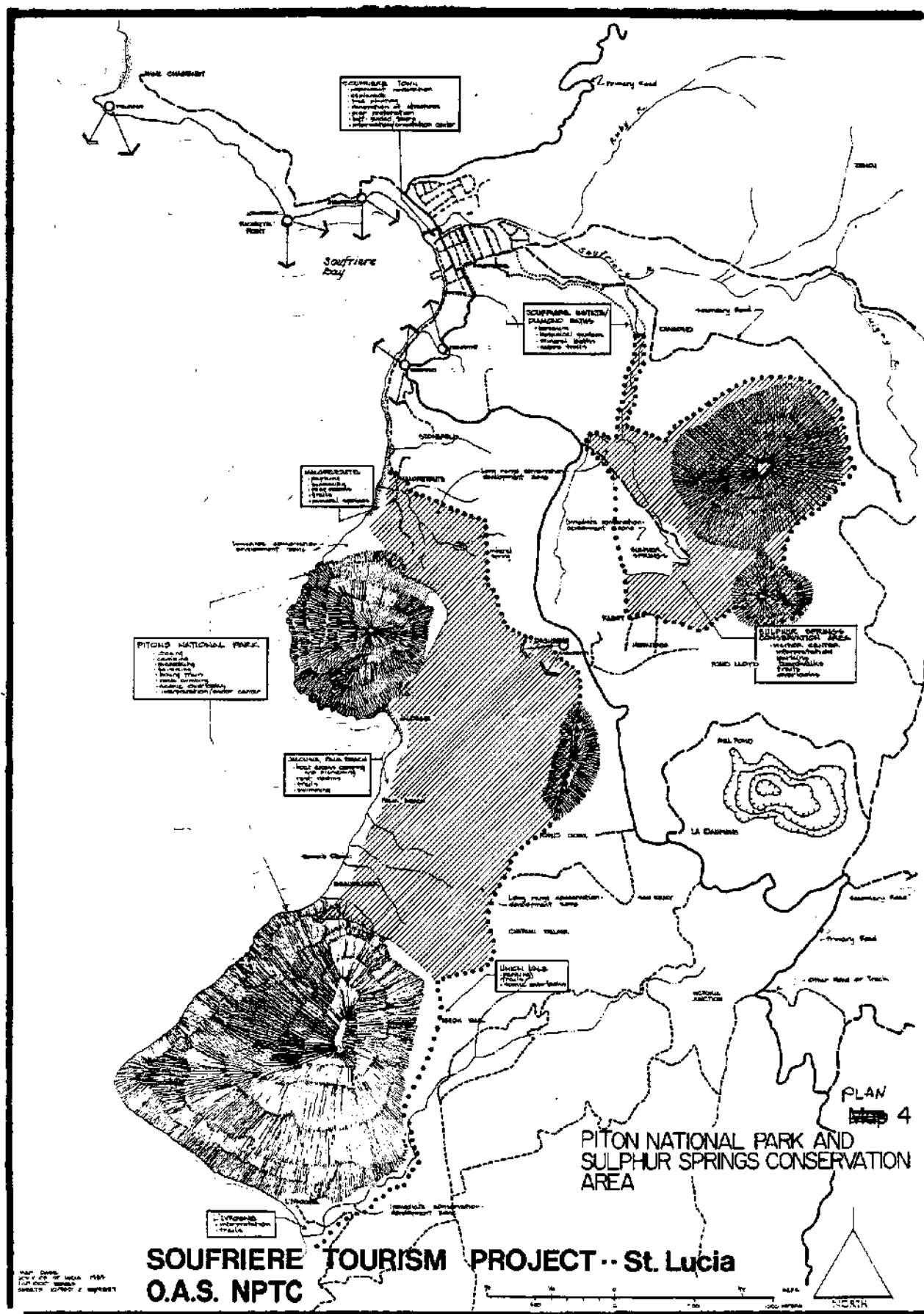
ENTRANCE GATE
CHANGING FTS.



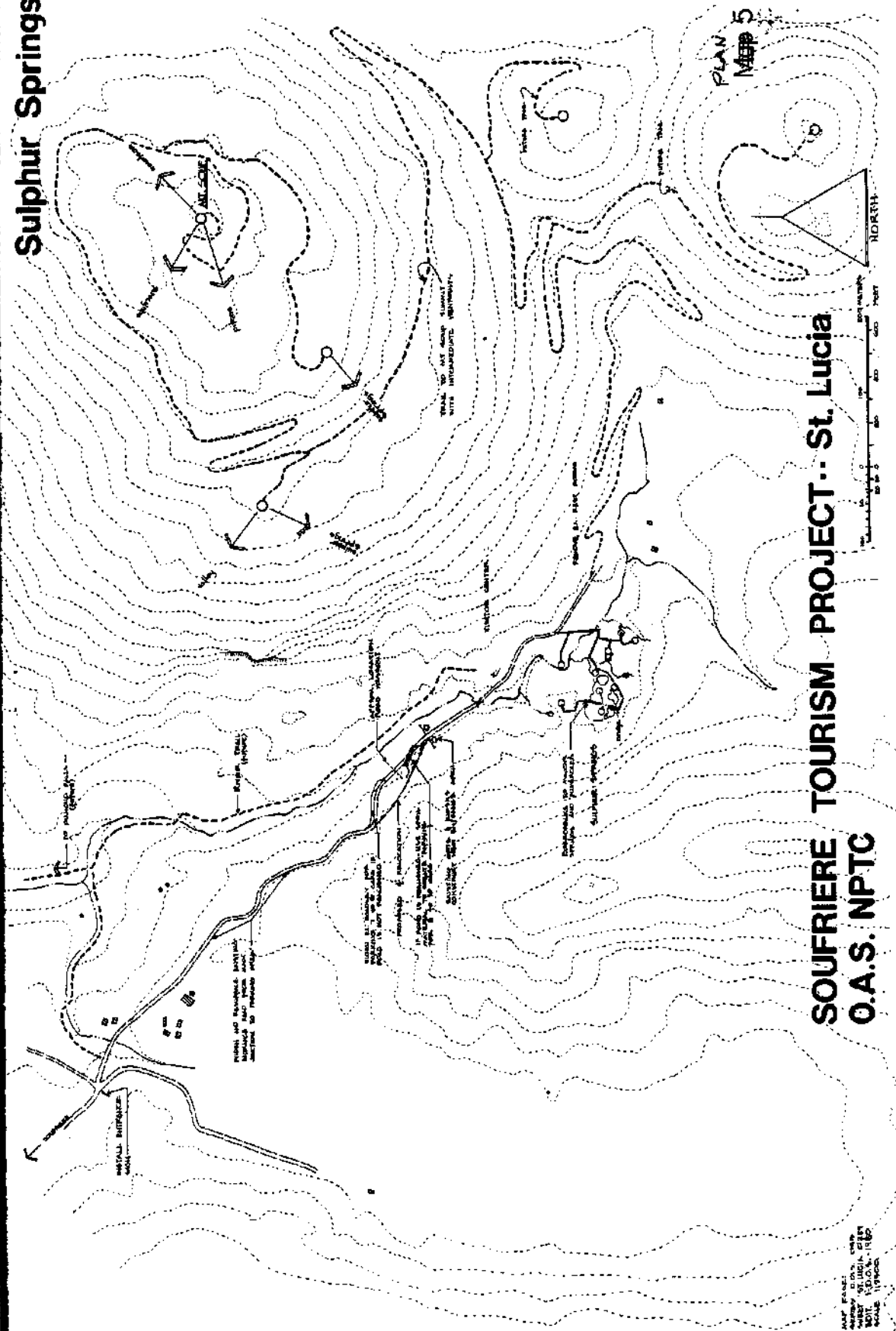
DEPARTMENT OF REGIONAL DEVELOPMENT
SOUFRIERE TOURISM DEVELOPMENT PROJECT

PLAN 2
VISITOR INTERPRET. CENTER

SULFUR SPRINGS
VISITOR INTERPRET. CENTER
1:100



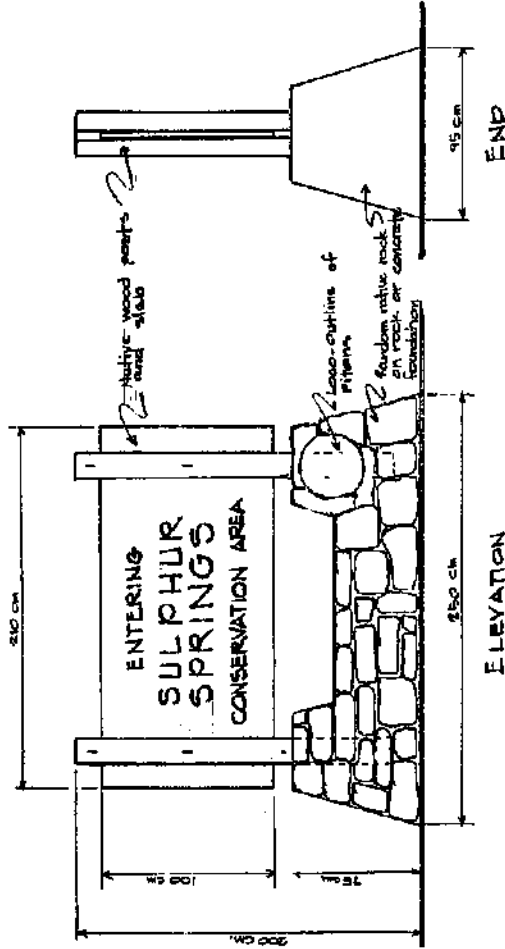
Sulphur Springs



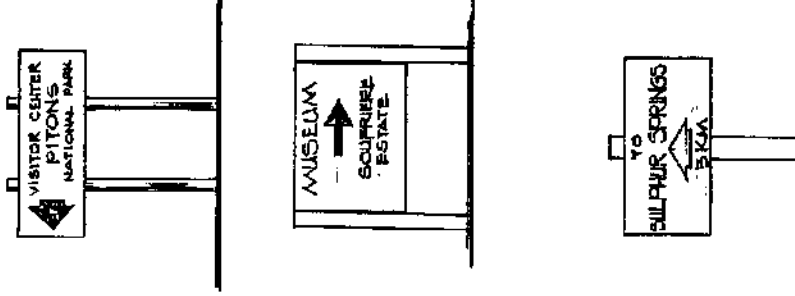
**SOUFRIERE TOURISM PROJECT-- St. Lucia
O.A.S. NPTC**

MAY PAGE:
 MAY 10, 1964
 MAY 11, 1964
 MAY 12, 1964
 MAY 13, 1964
 MAY 14, 1964
 MAY 15, 1964
 MAY 16, 1964
 MAY 17, 1964
 MAY 18, 1964
 MAY 19, 1964
 MAY 20, 1964
 MAY 21, 1964
 MAY 22, 1964
 MAY 23, 1964
 MAY 24, 1964
 MAY 25, 1964
 MAY 26, 1964
 MAY 27, 1964
 MAY 28, 1964
 MAY 29, 1964
 MAY 30, 1964
 MAY 31, 1964

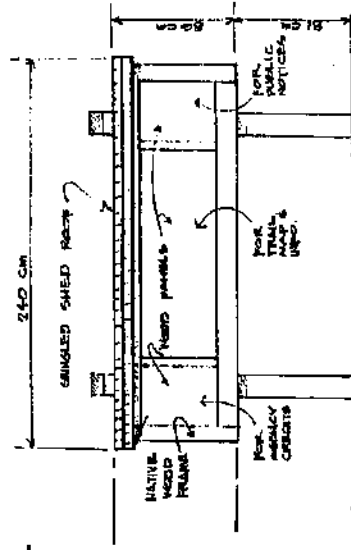
Signs



TYPICAL ENTRANCE SIGN



TYPICAL
DIRECTIONAL
SIGNS

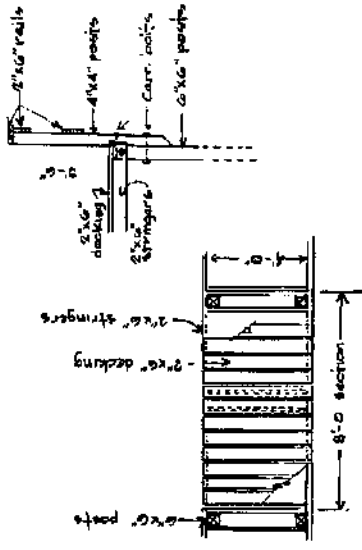


TYPICAL
INFORMATION -
INTERPRETATION SIGN

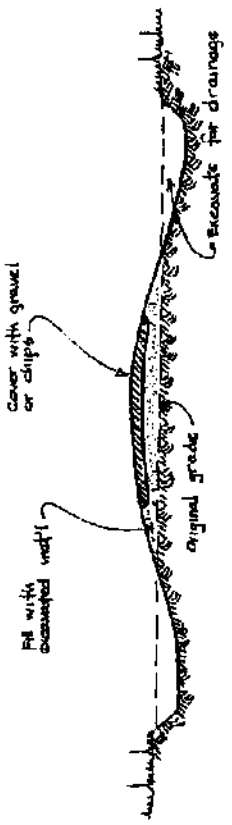
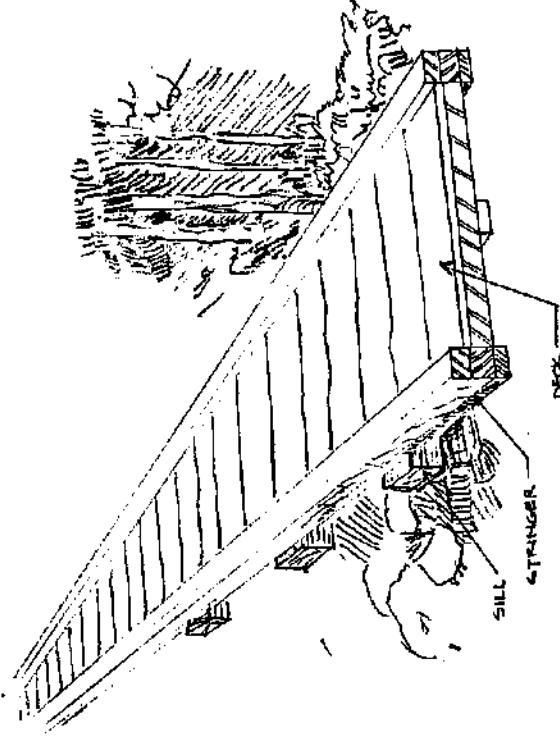
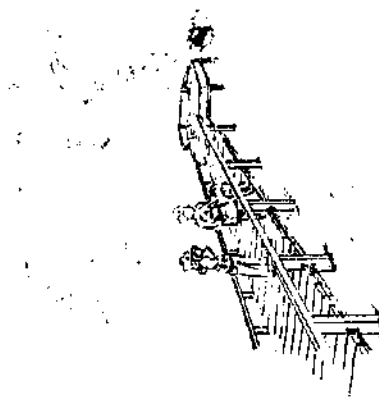
PLAN 6

SOUFRIERE TOURISM PROJECT O.A.S. NPTC

Trails



BOARDWALK

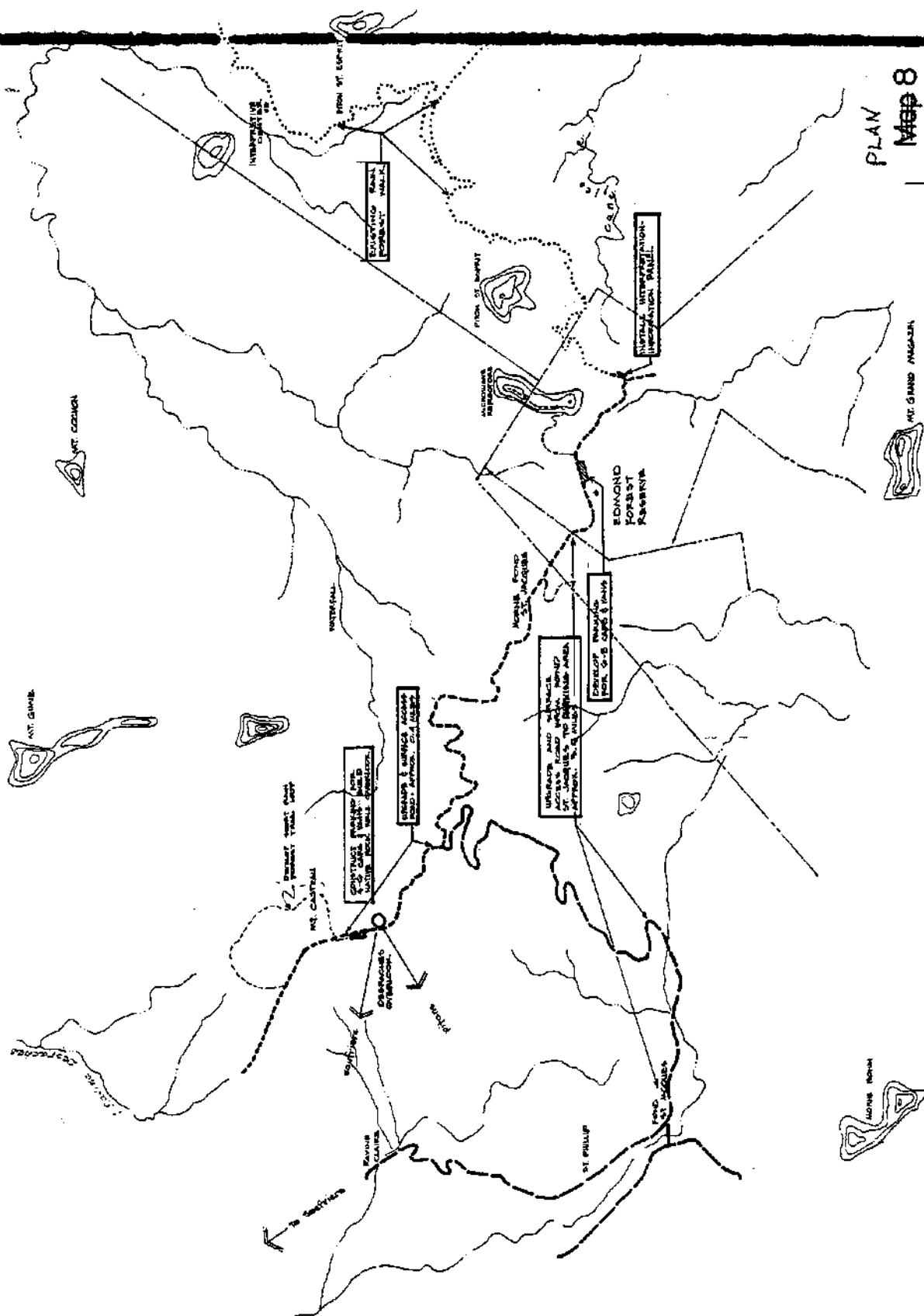


TRAIL SECTION FOR WET AREAS

PLAN 7

SOUFRIERE TOURISM PROJCT O.A.S. NPTC

Rain Forest Trail



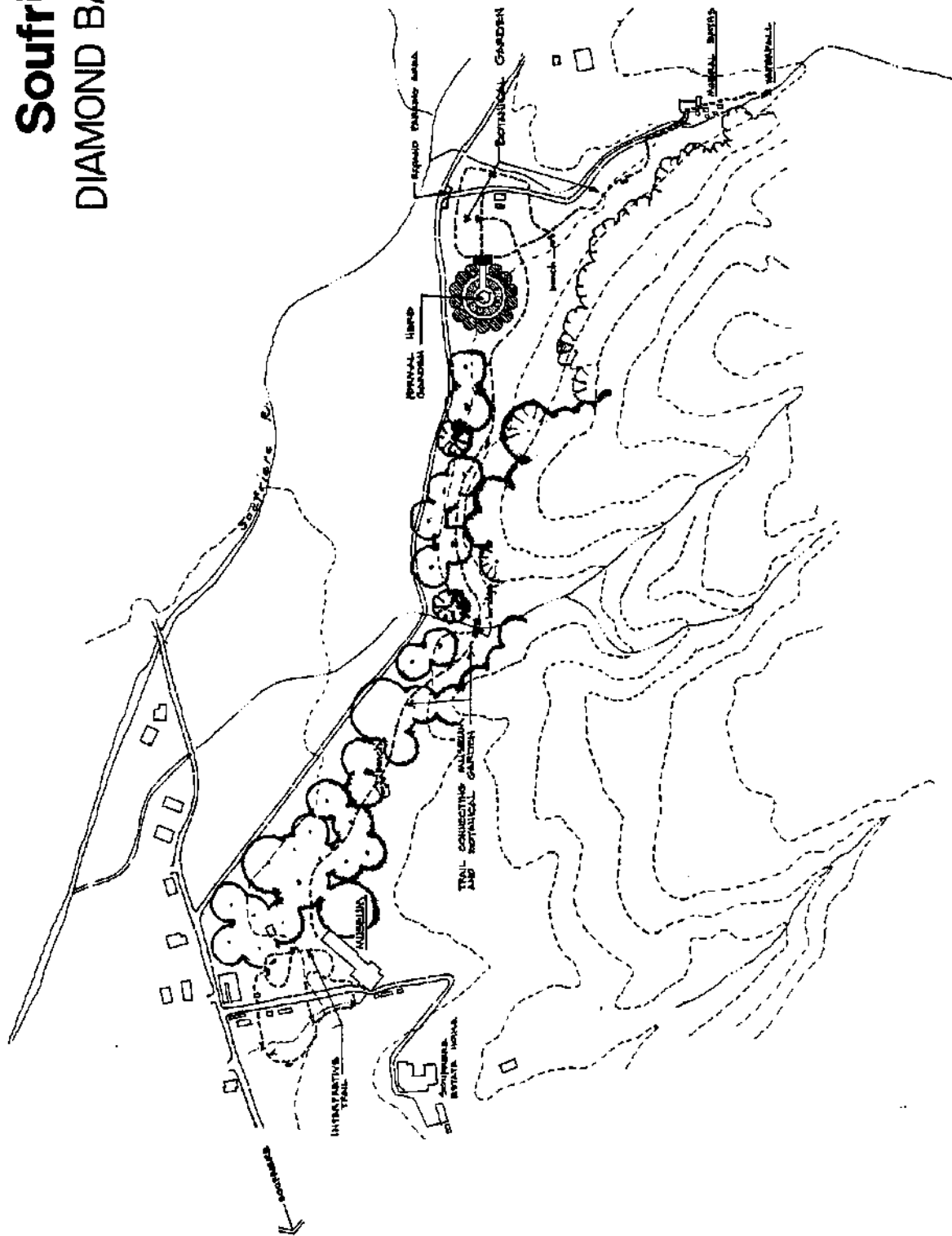
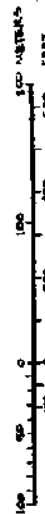
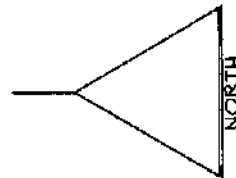
SOUFRIERE TOURISM PROJECT.. St. Lucia
O.A.S. NPTC

NAME: BILLYE
DOB: 07-17-1930
ADDRESS: 1000 1/2 ST. N. W. 1000 1/2 ST. N. W.

Soufriere Estate

DIAMOND BATHS/GARDEN

PLAN
Map 9



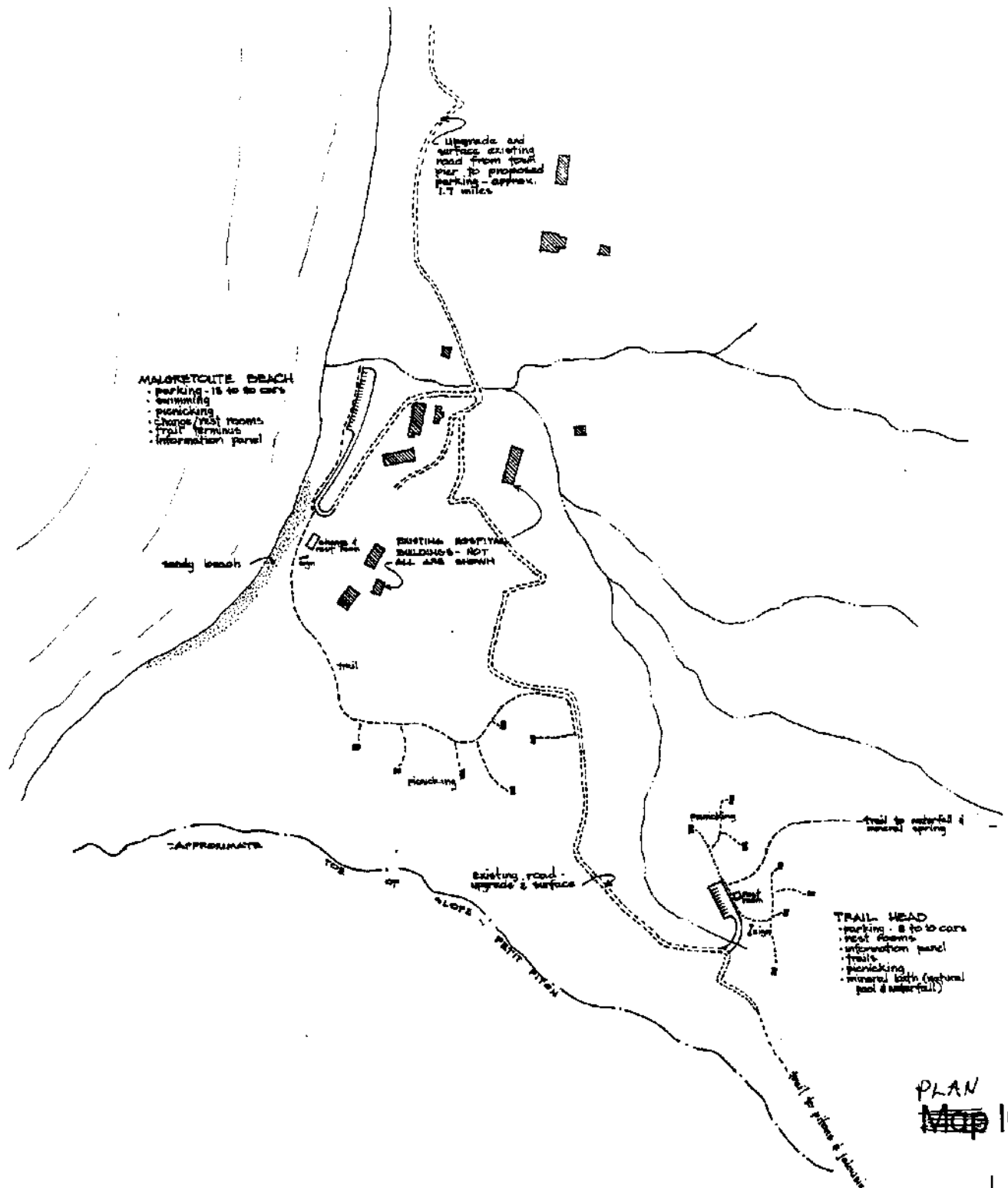
SOUFRIERE TOURISM PROJECT - St. Lucia

O.A.S. NPTC

MAP MADE:
APRIL 1988
BY: ST. LUCIA O.T.S.
EDIT: J. P. O'S. 1988
SCALE 1:12500

Malgretoute

PITONS PARK



PLAN
Map 10

SOUFRIERE TOURISM PROJECT - St. Lucia

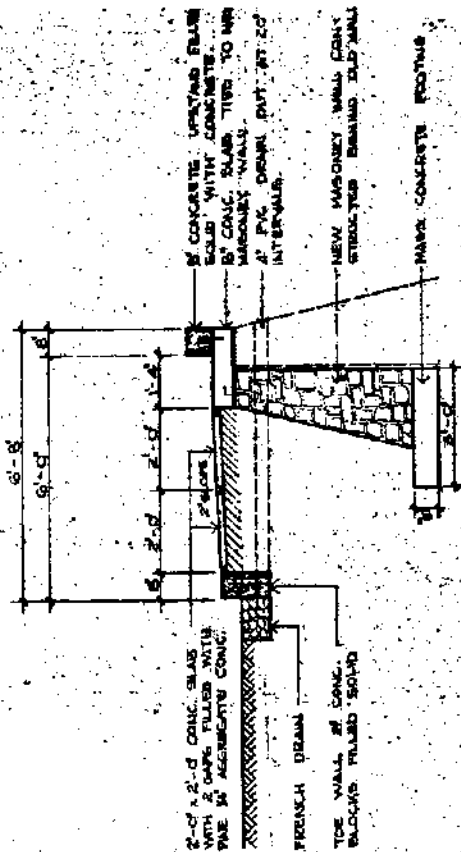
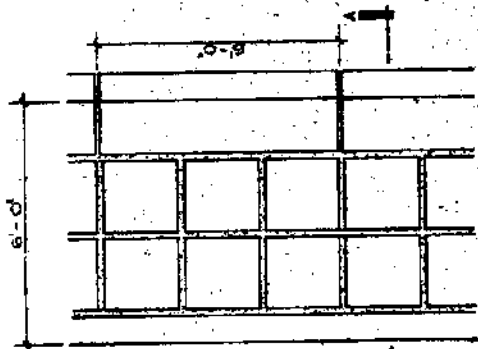
O.A.S. NPTC

MAP DATE:
SERIES D.O.S. 045
SHEET ST. LUCIA 0029
EDITION 1-D.O.S. 1980
SCALE 1:2500

100 50 0 100 200 300 400 500 600 FEET

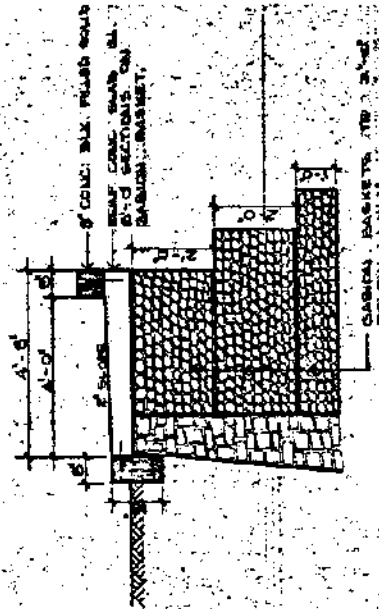
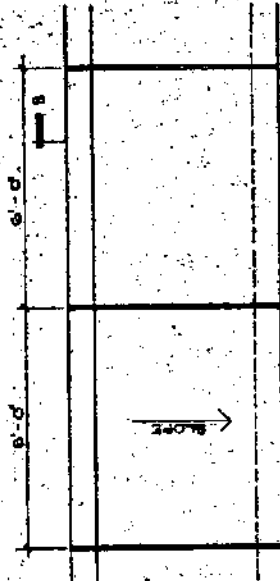


SEA WALL : ZONE 2



SECTION A-A

SEA WALL : ZONE 3



SECTION B-B

PLAN 12 SEA WALL
SOUFRIERE TOURISM PROJECT
ST. LUCIA OAS NPTC

- REINFORCEMENT AREA
- THUSING
- ROCKS
- SEPARATION

SEA WALL : ZONE 3

SEA WALL : ZONE 3

- REINFORCEMENT AREA
- THUSING
- ROCKS
- SEPARATION