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DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

CAPITAL ASSISTANCE PAPER

5/18/73

Proposal and Recommendations
For the Review of the
Development Loan Committee

BOTSWANA-ZAMBIA REGIONAL ROAD LOAN AMENDMENT

690-H-001

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DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

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AID-DLC/P-1011/2

May 18, 1973

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Botswana-Zambia Regional Road Loan Amendment

Attached for your review are the recommendations for authorization of a loan amendment in an amount not to exceed \$3,700,000 to the Government of Botswana to provide the necessary funds to carry out the project based on the costs of the bids for construction.

Please advise us as early as possible, but in no event later than close of business on Friday, May 25, 1973, if you have a basic policy issue arising out of this proposal.

Development Loan Committee
Office of Development Program
Review

Attachments:
Summary & Recommendations
Annexes I - IV

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BOTSWANA-ZAMBIA REGIONAL ROAD LOAN AMENDMENT

TABLE OF CONTENT

	<u>Page</u>
SUMMARY AND RECOMMENDATIONS	i-ii
I. <u>INTRODUCTION</u>	1
A. Description and Background	1
B. A.I.D. Development Objectives	1
C. The Borrower	2
II. <u>ECONOMIC ANALYSIS</u>	2
A. Cost/Benefit Analysis	2
III. <u>TECHNICAL ANALYSIS</u>	3
A. Bid Analysis	3
IV. <u>IMPLEMENTATION</u>	5
A. Implementation Plan	5
B. Procurement of Materials and Services	6
V. <u>FINANCIAL ANALYSIS</u>	6
A. Financial Plan	6
B. Justification for Concessional Terms and Local Cost Financing	7
C. Prospects for Repayment	7
VI. <u>ECONOMIC EFFECTS OF LOAN</u>	7
VII. <u>IMPACT ON THE ENVIRONMENT</u>	8

ANNEXES

- I - Capital Assistance Loan Authorization Amendment
- II - Incremental Analysis
- III - Checklist of Statutory Criteria Development Loan Fund
- IV - 611(e) Certification

BOTSWANA-ZAMBIA REGIONAL ROAD LOAN AMENDMENT

SUMMARY AND RECOMMENDATIONS

1. Borrower: Government of Botswana (GOB)
2. Loan Amendment Amount: \$4.0 million
3. Terms:
 - A. Maturity: 40 years including a 10-year grace period.
 - B. Interest: 2 percent per annum during the grace period, 3 percent per annum thereafter.
 - C. Repayment: Interest and principal repayable in U.S. dollars.
4. Total Cost of the Project:

A.I.D. Loan 690-H-001	\$12,600,000
Proposed A.I.D. Loan Amendment	4,000,000
Government of Botswana	210,000
Government of Zambia	<u>326,000</u>
Total	\$17,136,000
5. Project Description: The project is the construction and engineering supervision of three roads within Botswana totaling some 227 miles, which will provide a regional transport link between Zambia and Botswana. Botswana citizens also will be trained in road construction, supervision and maintenance techniques.
6. Purpose of the Loan Amendment: To provide the necessary funds to carry out the project based on the costs of the bids for construction.
7. Background: In November 1970 A.I.D. provided Botswana with a \$850,000 grant to finance the engineering design of the roads. On April 23, 1972 A.I.D. authorized a \$12.6 million loan to finance the construction and supervision of the roads. Evaluation of the bids submitted by contractors has caused A.I.D. and the GOB to reconsider the amount necessary for construction (see Section III below) and necessitates this \$4.0 million amendment.

8. Export-Import Bank Clearance: Clearance unnecessary.
9. Country Team Views: The country teams and OSARAC endorse this loan amendment.
10. Statutory Criteria: Satisfied under original A.I.D. Loan 690-H-001 (see CAP AID-DLC-P-1011 of April 18, 1972). No changes since that time. See Annex III.
11. Recommendations: Authorization of a \$4.0 million Loan Amendment to A.I.D. Loan 690-H-001 to provide the funds necessary to undertake the Botswana-Zambia Regional Highway construction project, and to provide certain technical assistance to the GOB Ministry of Works and Communications.

CAPITAL ASSISTANCE COMMITTEE

	<u>REDSO/EA</u>	<u>AID/W</u>
Loan Officer:	P. Guedet	G. Thompson
Engineer:	R. Fedel	P. Stearns
Lawyer:	R. Meighan	R. Johnson
Desk Officer:		F. Scordato

I. INTRODUCTION

A. Description and Background

In November 1970 A.I.D. provided Botswana with a \$850,000 grant to finance the engineering design of the roads. A loan of \$12.6 million was authorized on April 28, 1972 to finance the construction and engineering supervision for an improvement to about 227 miles of road, and the procurement of road maintenance equipment at an estimated cost of \$130,000 (see Capital Assistance Paper AID-DLC/P-1011, dated April 18, 1972). Total estimated project costs at that time were estimated to be \$12.6 million including \$9.47 million for construction; \$1.0 million for engineering supervision; \$.13 million for maintenance equipment; and \$2.0 million for project contingencies. The A.I.D. loan financed these costs with the GOB providing an estimated \$200,000 in design-related services and the GRZ \$326,000 in ferry facilities on the Zambezi River.

The U.S. engineering firm of Tippetts-Abbett-McCarthy-Stratton (TAMS) carried out the detailed design under an A.I.D. grant. Their preliminary construction costs were the basis of the loan authorization. Their final design cost estimate of \$11.5 million was completed in mid-1972. Contingency item in CAP covered this increase over the preliminary estimate of \$9.47 million.

A.I.D. approved the prequalification of seven U.S. contractors, six of whom requested bid documents. Four contractors attended the site-visit and pre-bid conference in early December 1972. Following a five month postponement of bid opening to permit bidder review of recently completed sub-surface water investigation, the bids were opened on March 30, 1973. The following bids were received:

Grove International Corp.	\$13.5 million
Central International	15.3 million
Oman Construction Co., Inc.	15.9 million
Nello L. Teer Co.	19.3 million

The Grove bid has been analyzed by TAMS and considered to be fully responsive and reasonable in cost after consideration of various factors which account for the increase in cost over the final TAMS estimate. The GOB has reviewed the bid and concurred in awarding the contract to Grove.

B. A.I.D. Development Objectives

A.I.D. development objectives in Botswana, as throughout Southern Africa are to continue to support the economic development of the small land-locked countries in this area so that these countries

can develop economic strength and stability, therefore, giving them the opportunity to develop alternatives to dependence on neighboring minority-dominated states. (See Botswana-Zambia Road CAP No. AID-DLC/P-1011 for a more thorough review of U.S. Foreign Policy vis-a-vis Southern Africa.)

C. The Borrower

The borrower will be the Government of Botswana (GOB). The project will be executed by the Botswana Ministry of Works and Communications (MOWC).

II. ECONOMIC ANALYSIS

A. Cost/Benefit Analysis

The major increase expected in the cost of road construction will have some negative effect on the expected present value of benefits and costs. We expect that this will now be offset somewhat by increased through-traffic between Swaziland and South Africa to Zambia and the possibility of more direct Botswana-Zambia trade. Total Botswana-Zambia trade amounts to some \$1.9 million a year. Zambia-South Africa trade was about \$87 million in 1970. Zambia-Swaziland trade amounts to about \$3.0 million per year. Zambia's decision not to utilize Rhodesian transport facilities has meant that its neighboring states should benefit from increased direct and transfer trade to and from Zambia. Since the road will provide the only direct land access not passing through Rhodesia to Zambia from the South, there should be some increase of trade moving through Botswana, perhaps as much as or more than \$25 to \$30 million a year. If Botswana can reap financial benefits from this trade net of increased expenses in road maintenance, all such benefits could be related to this road since the road provides the only alternative access route to Zambia.

Although it is extremely difficult to make a precise calculation, the economic rate of return of this road can be roughly estimated to remain at about 11.8 percent because of the expected increase in truck traffic due to the Zambia-Rhodesia border closing. This is based on the assumption that the annual net financial benefits from increased road user taxes to Botswana would amount to \$400,000 a year. A.I.D. will discuss with GOB officials what procedures the GOB intends to follow in order to collect road user taxes from commercial traffic transiting through Botswana. Discounting the additional \$3.7 million road construction costs and the \$400,000 annual stream of net benefits ratio of about 1 to 1, essentially the same as the cost benefit ratio projected in the original loan paper (See Annex II.)

We have also recomputed the project's return based on higher costs and no increase in benefits. The cost benefit ratio is approximately 1 to 1 at a discount rate of 9.3 percent. I.E., the project's economic rate of return is 9.3 percent, a sufficiently high return for an infrastructure project in a developing country with limited public sector investment opportunities such as Botswana.

The GOB has committed itself to develop the infrastructure of Northeast Botswana and expects the road to result in complementary development investments in agriculture, etc. which in the future will have high payoffs to the economy of Botswana. This situation cannot be quantified, but it is an important point in considering this loan amendment.

III. TECHNICAL ANALYSIS

A. Bid Analysis

A.I.D. believes several major factors contribute mostly to the shortfall in construction funding. The first three relate to the unit prices for road surface and base materials which exceeded TAMS estimate. The others relate to various political and economic situations.

The first factor concerns the uncertainty of water for compaction in the southern half of the project. Hydrologic data presented with the bid documents and amplified in the pre-bid conference indicated that water would be in plentiful supply within the Northern half of the construction area. Although early test well borings and geologic surveys led to optimistic estimates of water availability in the Southern half, subsequent investigation tended to throw doubts on the quantity of water which would be found in the Southern area. Since the unit prices for base and surface course materials are quoted "in place", the contractor bears the risk of supplying the water needed to obtain the specified compaction. The uncertainties involved in this risk resulted, in part, in increased unit prices for base and surface materials.

During the review of the draft bid documents, alternative approaches were considered which would have paid the contractor separately for water transported beyond a free haul distance or provided additional payments if test borings made by the consulting engineer proved inadequate. No reasonable method was found which would limit the contractor's claims under either of these alternatives or which would permit monitoring of his charges without an unreasonably large inspection force. The present bid method was retained with the realization that it would involve the risk of higher unit price bids but at the same time would limit the Government's responsibility for unknown factors which could increase the project's cost beyond foreseeable limits.

The second factor concerns the high compaction requirements specified for the base and surface courses, i.e., base course 95% maximum density determined by AASHO T-180, Method C, and surface course 98% maximum density determined by the same AASHO designated test. It should be noted that AASHO T-99 method is more commonly used in road construction and the compactive effort is not nearly as great as with the T-180 method. Thus, the surface course at 98% AASHO T-180 would be about 104% AASHO T-99. Normally, a soil aggregate surface course compacted to 100% AASHO T-99 would be considered adequate for this standard road since additional compaction would occur throughout construction. However, to minimize road maintenance costs, the GOB placed greater than normal emphasis on compaction requirements for the base and surface courses.

The third factor concerns the availability of base and surface course materials. Although a number of these sources have been designated in the bid documents, recent tests and findings have caused uncertainty regarding the adequacy of these sources. The engineer is currently undertaking additional investigations for materials. However, the prevailing uncertainty at the time of bid preparation was a factor in producing higher unit prices than the engineer's estimate for base and surface materials.

The total increase in unit price bids for base and surface course materials over the engineer's estimates due to these factors (water and soils) amounts to \$2.99/cu. mtr. for base course material (an increase of 169 percent) and \$3.84/cu. mtr. for surface course material (an increase of 185%).

These factors alone amount to an increase of \$3,441,567 over the engineer's original estimates. Other major items in the low bidders bid are about 50 percent higher than the engineer's estimate. On the other hand, the low bidder has bid only \$570,772 for mobilization against the engineer's estimate of \$1,675,000. It is, therefore, assumed that part of the increased unit prices reflect uncertainties caused by the Zambia/Rhodesia border closing which can result in increased cost to the contractor in bringing in construction equipment and imported materials. The contractor has preferred to include

the cost of this risk in his unit prices rather than in fixed amounts in mobilization which are limited to the maximum sums in the bid. We should recognize that the contractor chose to bid low on fixed items in order to have more flexibility in his contract in case there are adverse factors which cause overruns. (The actual bid was \$13,474,115 or \$1,977,299 over the engineer's estimates; see Section V.)

The bid analysis by TAMS sets forth additional factors which account for the bid increase over their estimate. These factors include:

- a) cost escalation resulting from the postponement of bid opening from the originally planned date of October 30, 1972 to March 30, 1973;
- b) inflation of construction costs in the U.S.;
- c) dollar devaluations;
- d) increase in the U.S. prime interest rate to borrow money to undertake contractor financing of men and plant;
- e) decrease in availability of subcontractors and manpower due to border closing;
- f) extension of the period of construction through another rainy season due to the postponement of bid opening.

The foregoing data have been accepted by both the GOB and A.I.D. as justifying the increased project cost.

IV. A. Implementation Plan

The revised project implementation plan is as follows:

Loan Amendment Authorization	May 1973
Loan Amendment Signing	June 1973
Bid Award	June 1973
Contract Signing	June 1973
CP's Satisfied	July 1973

Contractor Mobilization	July 1973
Contractor on Site	September 1973
Construction Complete	January 1976

B. Procurement of Materials and Services

The construction contract will be awarded to Grove Construction, a U.S. firm. All goods and services used in the project must be of Country Code 941 or local source and origin.

V. FINANCIAL ANALYSIS

A. Financial Plan

The original financial plan set forth in the \$12.6 million loan authorized in April 1972, provided funds as follows:

	<u>FX</u>	<u>Local Costs</u>	<u>Total Costs</u>
Construction	\$6,292,856	\$3,179,952	\$ 9,472,808
Engineering Supervision	600,000	400,000	1,000,000
Engineering Equipment	130,000	-	130,000
Contingency	<u>1,232,270</u>	<u>764,922</u>	<u>1,997,192</u>
Total A.I.D. Loan	\$8,255,126	\$4,344,874	\$12,600,000
GOB Contribution	-	200,000	200,000
GOZ Contribution	<u>-</u>	<u>326,000</u>	<u>326,000</u>
Total	\$8,255,126	\$4,870,874	\$13,126,000

Both construction and contingency items are changed as a result of the Grove bid of \$8,977,842 in dollars and 3,160,825 Rand (\$4.492 million). The revised project requiring the \$3.7 million loan amendment is as follows:

	<u>FX</u>	<u>Local Costs</u>	<u>Total Costs</u>
Construction	\$8,978,000	\$4,492,000	\$13,470,000
Engineering Supervision	600,000	400,000	1,000,000
Maintenance Equipment	130,000	-	130,000
Contingency	<u>1,000,000</u>	<u>700,000</u>	<u>1,700,000</u>
Total A.I.D. Loan	\$10,708,000	\$5,592,000	\$16,300,000
GOB Contribution	-	200,000	200,000
GOZ Contribution	<u>-</u>	<u>326,000</u>	<u>326,000</u>
Total	\$10,708,000	\$6,118,000	\$16,826,000

The proposed \$3.7 million loan amendment will finance approximately \$2,453,000 of U.S. costs and \$1,247,000 of local costs.

The contingency item in the revised financial plan is reduced both in amount and percentage from that in the original plan. At the time the loan was authorized the construction costs were of a preliminary character. The revised costs are based upon actual bidding. The \$1.7 million project contingency provides nearly 12 percent for construction overruns which might arise during construction as well as any additional engineering costs which may develop as a consequence of the contractors method of construction, i.e., central mixing plant.

The funds provided under the proposed \$3.7 million loan amendment would be made available on the same terms applicable to the original loan.

B. Justification for Concessional Terms and Local Cost Financing

The GOB has had recurrent current deficits, since its independence. It expects its current budget to be in surplus for at least the next three years due to import taxes on mining equipment slated for the Shashe Project and other mining ventures. Nevertheless, its capital expenditures will continue to exceed available domestic resources despite its laudable efforts to generate tax revenues. These capital expenditures will have to be financed by borrowing, primarily from external donor sources.

Botswana is one of the twenty-five countries in the world now considered to be at the bottom of the development ladder. In order to break out of the low productivity low investment cycle, it is devoting more than 20 percent of its Gross National Product to capital investments. Its infrastructure needs are enormous, and are necessary to open up large areas of the country.

Because of the GOB's present weak financial position and its concurrent need for massive infrastructure development to open the country, A.I.D. considers both its concessional loan terms and its financing of over 95 percent of the project's local costs and 100 percent of the additional local costs noted herein entirely justified.

C. Prospects for Repayment

There are reasonable prospects for repayment of this loan.
(See AID-DLC/P-1011)

VI. ECONOMIC EFFECTS OF LOAN

These remain as noted in the original paper (AID-DLC/P-1011).

VII. IMPACT ON THE ENVIRONMENT

There is no change in the environmental impact from that noted in the original loan paper.

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

CAPITAL ASSISTANCE LOAN AUTHORIZATION
AMENDMENT

Provided From: Development Loan Funds
Botswana-Zambia Road (Construction) (Regional)

Pursuant to the authority vested in the Administrator of the Agency for International Development (hereinafter called "A.I.D.") by the Foreign Assistance Act of 1961, as amended, and the delegations of authority issued thereunder, I hereby authorize the following:

An amendment to increase the above-captioned loan to the Government of Botswana ("Borrower") by an amount not to exceed three million seven hundred thousand dollars (\$3,700,000) to assist in financing the foreign exchange and local costs of equipment, materials and services required to construct the Botswana-Zambia Road, subject to the following terms and conditions:

1. Interest Rate and Terms of Repayment: Borrower shall repay the loan in forty (40) years, including a grace period of not to exceed ten (10) years. Borrower shall pay interest on the unrepaid principal and any interest accrued thereon at a rate of (a) two percent (2%) per annum during the grace period and (b) three percent (3%) per annum thereafter.
2. Currency of Repayment: Repayment of the loan and payment of interest shall be made in United States dollars.
3. Other Terms and Conditions:
 - a. Procurement. Equipment, materials and services financed under the loan shall be procured from Botswana and from countries included in Code 941 of the A.I.D. Geographic Code Book.
 - b. Other Terms and Conditions. The loan shall be subject to other terms and conditions as A.I.D. may deem advisable.

Assistant Administrator for Africa

Date

INCREMENTAL ANALYSIS

<u>Year</u>	<u>Additional Construction Costs</u>	<u>Costs Discounted at 12%</u>	<u>Benefit Stream</u>
0	\$ 800,000	\$ 800,000	\$400,000 annual benefit stream discounted over 20 years
1	1,200,000	1,071,600	
2	1,300,000	1,036,100	
3	400,000	254,000	
	Total Cost	\$3,161,700	Total Benefits \$2,987,600

Cost Benefit Ratio at 12% - .98 to 1.0

CHECKLIST OF STATUTORY CRITERIA
DEVELOPMENT LOAN FUND

Many of the questions require only yes or no answers. Others, however, must be answered more fully. In those cases, a specific reference to explicit discussion of the matter in the loan paper will suffice. But where the loan paper does not deal explicitly with a matter that clearly requires more than a yes or no response, sufficient response must be made to indicate that the matter has been appropriately considered.

The following abbreviations are used in the checklist:

FAA - Foreign Assistance Act of 1961, as amended, incorporating amendments effected by the Foreign Assistance Act of 1971.

App. - Foreign Assistance and Related Agencies Appropriations Act, 1972.

Space for answers is provided in the margin to the right of each question. This form must be made a part of the Capital Assistance Paper.

I. COUNTRY PERFORMANCE

A. Progress Towards Country Goals

1. FAA §§ 201(b)(5), 201(b)(7), 201(b)(8), 208. Discuss the extent to which the country is:

(a) Making appropriate efforts to increase food production and improve means for food storage and distribution.

Botswana provides extension services for both livestock and agriculture to improve methods of animal husbandry and crop production.

(b) Creating a favorable climate for foreign and domestic private enterprise and investment.

In Botswana the National Development Bank provides loans to new business ventures. An Industrial Development Act passed in 1968 organizes licenses of manufacturers. The Mines and Miners Act of 1967 was passed to ensure that mineral resources are adequately exploited. Presently foreign companies are involved in the Shashe mining project.

(c) Increasing the people's role in the developmental process.

Economic development efforts by the GOB reflect its determination to meet its people's aspirations. This project will create numerous jobs for Botswanans.

(d) Allocating expenditures to development rather than to unnecessary military purposes or intervention in other free countries' affairs.

Botswana has no direct expenditure for military purposes.

(e) Willing to contribute funds to the project or program.

The GOB is providing funds to support the project (see Section V-A.).

(f) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangement; and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.

Botswana's Tribal Lands Act of 1968 passes land from chiefs to Tribal Land Boards providing representation in the allocation procedure. Over the past several years tax reforms have provided for taxing Africans and non-Africans alike and giving a greater allocation of taxes to local authorities.

(g) Responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

The construction of the road is an impressive indication of the GOB's responsiveness to the social concerns and needs of its people.

B. Relations with the United States

1. FAA §620(c). Is the government indebted to any U.S. citizen for goods or services furnished or ordered where: (a) such citizen has exhausted available legal remedies, including arbitration, or (b) the debt is not denied or contested by the government, or (c) the indebtedness arises under such government's, or a predecessor's unconditional guarantee?

No such indebtedness is known to exist.

2. FAA §620(d). If the loan is intended for construction or operation of any productive enterprise that will compete with U.S. enterprise, has the country agreed that it will establish appropriate procedures to prevent export to the U.S. of more than 20% of its enterprise's annual production during the life of the loan?

Not applicable.

3. FAA §620(e)(1). Has the country's government, or any agency or subdivision thereof, (a) nationalized or expropriated property owned by U.S. citizens or by any business entity not less than 50% beneficially owned by U.S. citizens, (b) taken steps to repudiate or nullify existing contracts or agreements with such citizens or entity, or (c) imposes or enforced discriminatory taxes or other exactions, or restrictive maintenance or operation conditions? If so, and more than six months has elapsed since such occurrence, identify the document indicating that the government, or appropriate agency or subdivision thereof, has taken appropriate steps to discharge its obligations under international law toward such citizen or entity? If less than six months has elapsed, what steps if any has it taken to discharge its obligations?

No.

4. FAA §620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction by mob action of U.S. property, and failed to take appropriate measures to prevent a recurrence and to provide adequate compensation for such damage or destruction?

No.

5. FAA §620(l). Has the government instituted an investment guaranty program under FAA §221(b)(1) for the specific risks of inconvertibility and expropriation or confiscation?

Yes.

6. FAA §620(o): Fisherman's Protective Act of 1954, as amended, Section 5. Has the country seized, or imposed any penalty or sanction against, any U.S. fishing vessel on account of its fishing activities in international waters? If, as a result of a seizure, the U.S.G. has made reimbursement under the provisions of the Fisherman's Protective Act and such amount has not been paid in full by the seizing country, identify the documentation which describes how the withholding of assistance under the FAA has been or will be accomplished.

Not applicable.

7. FAA §620(q). Has the country been in default, during a period in excess of six months, in payment to the U.S. on any FAA loan?

No.

8. FAA §620(t). Have diplomatic relations between the country and the U.S. been severed? If so, have they been renewed?

No break in relations with the U.S.

C. Relations with Other Nations and the U.N.

1. FAA §620(i). Has the country been officially represented at any international conference when that representation included planning activities involving insurrection or subversion directed against the U.S. or countries receiving U.S. assistance?

Not to A.I.D.'s knowledge.

2. FAA §§620(a), 620(n); Has the country sold, furnished, or permitted ships or aircraft under its registry to carry to Cuba or North Viet-Nam items of economic, military, or other assistance?

Not to A.I.D.'s knowledge.

3. FAA §620(u); App. §108. What is the status of the country's U.N. dues, assessments, or other obligations? Does the loan agreement bar any use of funds to pay U.N. assessments, dues, or arrearages?

The Loan Agreement will restrict the use of loan funds to the project. Botswana is current on U.S. dues and assessments.

D. Military Situation

1. FAA §620(i). Has the country engaged in or prepared for aggressive military efforts directed against the U.S. or countries receiving U.S. assistance?

Not to A.I.D.'s knowledge.

2. FAA §620(e). What is (a) the percentage of the country's budget devoted to military purposes, and (b) the amount of the country's foreign exchange resources used to acquire military equipment? Is the country diverting U.S. development assistance or P.L. 480 sales to military expenditures? Is the country diverting its own resources to unnecessary military expenditures? Has the country spent money for sophisticated weapons systems?

There is no direct expenditure for military purposes for Botswana. About 8% of the GOB's 1969/70 budget was allocated for internal security which was primarily for the police. The answer to the last three questions is no.

II. ' CONDITION OF THE LOAN

A. General Soundness

-- Interest and Repayment

1. FAA §§201(d), 201(b)(2).
Is the rate of interest excessive or unreasonable for the borrower? Are there reasonable prospects for repayment? What is the grace period interest rate; the following period interest rate? Is the rate of interest higher than the country's applicable legal rate of interest?

The rate of interest is not considered excessive or unreasonable for the Borrower. See Section V. C. for prospects for repayment. The rate of interest is not higher than Botswana's applicable legal rate of interest.

-- Financing

1. FAA §201(b)(1). *To what extent can financing on reasonable terms be obtained from other free-world sources, including private sources within the U.S.?*

See Section VI. D of the original loan paper.

-- Economic and Technical Soundness

1. FAA §§201(b)(2), 201(e). *The activity's economic and technical soundness to undertake loan; does the loan application, together with information and assurances, indicate that funds will be used in an economically and technically sound manner?*

Yes; see Sections II, III, and IV of the original loan paper.

2. FAA §611(a)(1). Have engineering, financial, and other plans necessary to carry out assistance, and a reasonably firm estimate of the cost of assistance to the U.S., been completed?

Yes; see Section III. F. of original loan papers.

3. FAA §611(b); App. §101. If the loan or grant is for a water or related land-resource construction project or program, do plans include a cost-benefit computation? Does the project or program meet the relevant U.S. construction standards and criteria used in determining feasibility?

Not applicable.

4. FAA §611(c). If this is a Capital Assistance Project with U.S. financing in excess of \$1 million, has the principal A.I.D. officer in the country certified as to the country's capability effectively to maintain and utilize the project?

Yes; see Annex IV.

B. Relation to Achievement of Country and Regional Goals

-- Country Goals

1. FAA §§207, 281(a). Describe this loan's relation to:

a. Institutions needed for a democratic society and to assure maximum participation on the part of the people in the task of economic development.

Although this loan has no direct relation to this stated goal, opening up of Botswana's interior is certainly a prerequisite to any serious effort at democratizing its society and increasing the involvement of its people in the task of development.

b. Enabling the country to meet its food needs, both from its own resources and through development, with U.S. help, of infrastructure to support increased agricultural productivity.

One benefit to be obtained from the project is the opening up of Northeastern Botswana for the development of agricultural projects.

c. Meeting increasing need for trained manpower.

Direct relation. This project contains a training element to train numerous personnel in road construction supervision.

d. Developing programs to meet public health needs.

Not applicable.

e. Assisting other important economic, political, and social development activities, including industrial development; growth of free labor unions; cooperatives and voluntary agencies; improvement of transportation and communication systems; capabilities for planning and public administration; urban development; and modernization of existing laws.

This project will have a direct influence on the development of industry along its lengths, and the improvement of transportation and communications systems.

2. FAA §201(b)(4). Describe the activity's consistency with and relationship to other development activities, and its contribution to realizable long-range objectives.

See Sections I, II and V of the original Capital Assistance Paper.

3. FAA §201(b)(9). How will the activity to be financed contribute to the achievement of self-sustaining growth?

See Section II. B & C of the original loan paper.

4. FAA §201(f). If this is a project loan, describe how such project will promote the country's economic development, taking into account the country's human and material resource requirements and the relationship between ultimate objectives of the project and overall economic development.

See Section II and III. D of the original loan paper.

5. FAA §201(b)(3). In what ways does the activity give reasonable promise of contributing to development of economic resources, or to increase of productive capacities?

See Section II of the original loan paper.

6. FAA §281(b). How does the program under which assistance is provided recognize the particular needs, desires, and capacities of the country's people; utilize the country's intellectual resources to encourage institutional development; and support civic education and training in skills required for effective participation in political processes.

The A.I.D. program in Botswana has been developed and pursued with all of these criteria in mind.

7. FAA §601(a). How will this loan encourage the country's efforts to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture, and commerce; and (f) strengthen free labor unions?

See Section II of the original loan paper for (a), (b), (c), (d), (e); there is no information as to (f).

8. FAA §202(a). Indicate the amount of money under the loan which is: going directly to private enterprise; going to intermediate credit institutions or other borrowers for use by private enterprise; being used to finance imports from private sources; or otherwise being used to finance procurements from private sources.

See Section IV. B; VI. B & C of the original loan paper.

9. FAA §611(a)(2). What legislative action is required within the recipient country? What is the basis for a reasonable anticipation that such action will be completed in time to permit orderly accomplishment of purposes of loan?

None required.

-- *Regional Goals*

1. FAA #619. *If this loan is assisting a newly independent country, to what extent do the circumstances permit such assistance to be furnished through multilateral organizations or plans?*

Presently it is intended that the U.S.G. will fully finance this project. However circumstances are such to permit other donors to participate in the broader project of developing the road related sectors discussed in Section II.C of the original loan paper.

2. FAA #209. *If this loan is directed at a problem or an opportunity that is regional in nature, how does assistance under this loan encourage a regional development program? What multilateral assistance is presently being furnished to the country?*

See Sections I. A & B, and V.D of the original loan paper.

C. Relation to U.S. Economy

-- *Employment, Balance of Payments, Private Enterprise*

1. FAA #201(b)(6); 102, Fifth. *What are the possible effects of this loan on U.S. economy, with special reference to areas of substantial labor surplus? Describe the extent to which assistance is constituted of U.S. commodities and services, furnished in a manner consistent with improving the U.S. balance of payments position.*

See Section VI A and B of the original loan paper.

2. FAA §§612(b), 636(h). What steps have been taken to assure that, to the maximum extent possible, foreign currencies owned by the U.S. and local currencies contributed by the country are utilized to meet the cost of contractual and other services, and that U.S. foreign-owned currencies are utilized in lieu of dollars?

It is deemed inappropriate to attempt to use U.S. G. owned foreign currency to pay cost of U.S. goods and services. U.S. owned local currency is not available. The GOB is fully dependent on external sources for its development budget. See Section V of the original Capital Assistance Paper.

3. FAA §601(d); App. 109. If this loan is for a capital project, to what extent has the Agency encouraged utilization of engineering and professional services of U.S. firms and their affiliates? If the loan is to be used to finance direct costs for construction, will any of the contractors be persons other than qualified nationals of the country or qualified citizens of the U.S.? If so, has the required waiver been obtained?

See Sections IV and VI of the original loan paper. Answer to the second question is no.

4. FAA §608(a). Provide information on measures to be taken to utilize U.S. Government excess personal property in lieu of the procurement of new items.

Excess property deemed not suitable for this project in view of nature and use of goods to be purchased.

5. FAA §602. What efforts have been made to assist U.S. small business to participate equitably in the furnishing of commodities and services financed by this loan?

The Agency's advertisement requirement will be complied with.

6. FAA §621. If the loan provides technical assistance, how is private enterprise on a contract basis utilized? If the facilities of other Federal agencies will be utilized, in what ways are they particularly suitable; are they competitive with private enterprise (if so, explain); and how can they be made available without undue interference with domestic programs?

The loan will utilize the services of the U.S. consulting engineer to provide on-the-job training in road construction supervision. Questions 2 and 3 are not applicable.

7. FAA §611(c). If this loan involves a contract for construction that obligates in excess of \$100,000, will it be on a competitive basis? If not, are there factors which make it impracticable?

Construction contracts will be awarded on a competitive basis.

Procurement

1. FAA §604(a). Will commodity procurement be restricted to U.S. except as otherwise determined by the President? Yes.

2. FAA §604(b). Will any part of this loan be used for bulk commodity procurement at adjusted prices higher than the market price prevailing in the U.S. at time of purchase? Not applicable.

3. FAA §604(e). Will any part of this loan be used for procurement of any agricultural commodity or product thereof outside the U.S. when the domestic price of such commodity is less than parity?

Not applicable.

D. Other Requirements

1. FAA §201(b). Is the country among the 20 countries in which development loan funds may be used to make loans in this fiscal year?

This is a regional project; thus it is exempt from the country limitation.

2. App. §106. Does the loan agreement provide, with respect to capital projects, for U.S. approval of contract terms and firms?

The loan agreement will require such approvals.

3. FAA §620(k). If the loan is for construction of a productive enterprise, with respect to which the aggregate value of assistance to be furnished will exceed \$100 million, what preparation has been made to obtain the express approval of the Congress?

Not applicable.

4. FAA §§620(b), 620(f). Has the President determined that the country is not dominated or controlled by the international Communist movement? If the country is a Communist country (including, but not limited to, the countries listed in FAA §620(f)) and the loan is intended for economic assistance, have the findings required by FAA §620(f) been made and reported to Congress?

Botswana is not a Communist or Communist-dominated country.

5. FAA §620(h). What steps have been taken to insure that the loan will not be used in a manner which, contrary to the best interest of the United States, promotes or assists the foreign aid projects of the Communist-bloc countries?

Procurement of goods and services for the project will be limited to Code 941. Loan Agreement will restrict the use of funds to A.I.D. project purposes.

6. App. 110. Will any funds be used to finance procurement of iron and steel products for use in Viet-Nam other than as contemplated by 110?

Not applicable.

7. FAA §636(1). Will any part of this loan be used in financing non-U.S.-manufactured motor vehicles? If so, has the required waiver been obtained?

No to first question.

8. FAA §§620(a)(1) and (2), 620(p) No.
Will any assistance be furnished or funds made available to the government of Cuba or the United Arab Republic?
9. FAA §620(a). *Will any part of this loan be used to compensate owners for expropriated or nationalized property? If any assistance has been used for such purpose in the past, has appropriate reimbursement been made to the U.S. for sums diverted?* No to first question. No previous assistance has been used for such purposes.
10. FAA §201(f). *If this is a project loan, what provisions have been made for appropriate participation by the recipient country's private enterprise?* See Section VI of the original loan paper.
11. App. §104. *Does the loan agreement bar any use of funds to pay pensions, etc., for persons who are serving or who have served in the recipient country's armed forces?* The Loan Agreement will restrict the use of funds to the project.
12. MMA Sec. 901.b. *Does the loan agreement provide, for compliance with U.S. shipping requirements, that at least 50% of the gross tonnage of all commodities financed with funds made available under this loan (computed separately by geographic area for dry bulk carriers, dry cargo liners, and tankers) be transported on privately owned U.S.-flag commercial vessels to the extent such vessels are available at fair and reasonable rates for U.S. flag vessels?* Yes.

13. FAA §481. Has the country failed to take adequate steps to prevent narcotic drugs from entering the U.S. unlawfully?

No. Botswana is cooperating with the U.S. and international organizations in the control of narcotic drugs.

14. App. ^S 109. Compliance with requirement with regard to financing construction work performed by Third Country Nationals.

Appropriate requirements will be included in the loan agreement and construction contract. Procurement of construction services are however eligible from A.I.D. Code 941 countries.

ANNEX IV

AID-DLC/P-1011/1.

611(e) CERTIFICATION

I, Charles Ward, the principal officer of the Agency for International Development in the Southern Africa Region (OSARAC), having taken into account, among other things, the maintenance and utilization of projects in Botswana previously financed or assisted by the United States, the Ministry of Works and Communications' responsibility for maintaining roads throughout Botswana, and the previous assistance from other donors specifically directed to road construction and maintenance, do hereby certify that in my judgement the Government of Botswana has both the financial capability and human resources capability to effectively maintain and utilize the capital assistance project, the Botswana-Zambia Road.

Charles Ward, Principal Officer

Date

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

UNCLASSIFIED

AID-DLC/P-1011/4

July 19, 1973

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Botswana - Zambia Regional Road Loan Amendment

Attached are a Corrigendum and corrected pages to reflect the increase from \$ 3,700,000 to \$4,000,000 for the amendment to the subject loan. Please insert the corrected pages in their proper sequence in the loan paper.

The recommendations for authorization of a loan amendment in an amount not to exceed \$3,700,000 to the Government of Botswana to provide the necessary funds to carry out the project based on the costs of the bids for construction were distributed to you May 18, 1973.

Development Loan Committee
Office of Development Program
Review

Attachments: (Revised July 19, 1973)

Memorandum for the DLC

Corrigendum

Summary & Recommendations - Pages i., ii., 2, 3, 6, 7

ANNEX I, II

Previously Distributed: (May 18, 1973)

Memorandum for the DLC

Summary and Recommendations

ANNEXES I - IV

UNCLASSIFIED

CORRIGENDUM

BOTSWANA - ZAMBIA REGIONAL ROAD LOAN AMENDMENT

SUMMARY AND RECOMMENDATIONS

- Page 1: Loan Amendment Amount: Change \$3.7 million to \$4.0 million
Total Cost of Project: Proposed A.I.D. Loan Amendment change \$3,700,000 to \$4,000,000.
- Government of Botswana Contribution change \$200,000 to \$210,000.
Total Cost change \$16,826,000 to \$17,136,000
- Background: Change amount last line from \$3.7 million amendment to \$4.0 million amendment.
- Page ii: Recommendations: Change Authorization of a \$3.7 million Loan Amendment to \$4.0 million Loan Amendment.
- Page 2: Change last line para 4 to read: "Discounting the additional \$4.0 million road construction costs and the \$400,000 annual stream of net benefits results in an incremental rate of return of 9.5% and a benefit cost ratio of 1 to 1. The overall projects adjusted rate of return is approximately 11.5% which .3% less than the rate of return projected in the original loan paper (See Section II)."
- Page 3: Change second line para 1 to read: "The cost benefit ratio is approximately 1 to 1 at a discount rate of 9.1 percent. I.E., the projects economic rate of return is 9.1 percent..."
- Page 6: See attached revised page 6 Financial Analysis
- Page 7: Change the amount in first line para 2 a \$3.7 million loan amendment to \$4.0 million loan amendment.
- ANNEX I: See Attached revised Capital Assistance Loan Authorization Amendment.
- ANNEX II: See attached revised Annex II Incremental Analysis

can develop economic strength and stability, therefore, giving them the opportunity to develop alternatives to dependence on neighboring minority-dominated states. (See Botswana-Zambia Road CAP No. AID-DLC/P-1011 for a more thorough review of U.S. Foreign Policy vis-a-via Southern Africa.)

C. The Borrower

The borrower will be the Government of Botswana (GOB). The project will be executed by the Botswana Ministry of Works and Communications (MOWC).

II. ECONOMIC ANALYSIS

A. Cost/Benefit Analysis

The major increase expected in the cost of road construction will have some negative effect on the expected present value of benefits and costs. We expect that this will now be offset somewhat by increased through-traffic between Swaziland and South Africa to Zambia and the possibility of more direct Botswana-Zambia trade. Total Botswana-Zambia trade amounts to some \$1.9 million a year. Zambia-South Africa trade was about \$87 million in 1970. Zambia-Swaziland trade amounts to about \$3.0 million per year. Zambia's decision not to utilize Rhodesian transport facilities has meant that its neighboring states should benefit from increased direct and transfer trade to and from Zambia. Since the road will provide the only direct land access not passing through Rhodesia to Zambia from the South, there should be some increase of trade moving through Botswana, perhaps as much as or more than \$25 to \$30 million a year. If Botswana can reap financial benefits from this trade net of increased expenses in road maintenance, all such benefits could be related to this road since the road provides the only alternative access route to Zambia.

Although it is extremely difficult to make a precise calculation, the economic rate of return of this road can be roughly estimated to remain at about 11.8 percent because of the expected increase in truck traffic due to the Zambia-Rhodesia border closing. This is based on the assumption that the annual net financial benefits from increased road user taxes to Botswana would amount to \$400,000 a year. A.I.D. will discuss with GOB officials what procedures the GOB intends to follow in order to collect road user taxes from commercial traffic transiting through Botswana. Discounting the additional \$4.0 million road construction costs and the \$400,000 annual stream net benefits results in an incremental rate of 9.5% and a benefit cost ratio of 1 to 1. The overall projects adjusted rate of return is approximately 11.5% which is .3% less than the rate of return projected in the original loan paper (See Section 11).

We have also recomputed the project's return based on higher costs and no increase in benefits. The cost benefit ratio is approximately 1 to 1 at a discount rate of 9.1 percent. I.E., the project's economic rate of return is 9.1 percent, a sufficiently high return for an infrastructure project in a developing country with limited public sector investment opportunities such as Botswana.

The GOB has committed itself to develop the infrastructure of Northeast Botswana and expects the road to result in complementary development investments in agriculture, etc. which in the future will have high payoffs to the economy of Botswana. This situation cannot be quantified, but it is an important point in considering this loan amendment.

III. TECHNICAL ANALYSIS

A. Bid Analysis

A.I.D. believes several major factors contribute mostly to the shortfall in construction funding. The first three relate to the unit prices for road surface and base materials which exceeded TAMS estimate. The others relate to various political and economic situations.

The first factor concerns the uncertainty of water for compaction in the southern half of the project. Hydrologic data presented with the bid documents and amplified in the pre-bid conference indicated that water would be in plentiful supply within the Northern half of the construction area. Although early test well borings and geologic surveys led to optimistic estimates of water availability in the Southern half, subsequent investigation tended to throw doubts on the quantity of water which would be found in the Southern area. Since the unit prices for base and surface course materials are quoted "in place", the contractor bears the risk of supplying the water needed to obtain the specified compaction. The uncertainties involved in this risk resulted, in part, in increased unit prices for base and surface materials.

During the review of the draft bid documents, alternative approaches were considered which would have paid the contractor separately for water transported beyond a free haul distance or provided additional payments if test borings made by the consulting engineer proved inadequate. No reasonable method was found which would limit the contractor's claims under either of these alternatives or which would permit monitoring of his charges without an unreasonably large inspection force. The present bid method was retained with the realization that it would involve the risk of higher unit price bids but at the same time would limit the Government's responsibility for unknown factors which could increase the project's cost beyond foreseeable limits.

Contractor Mobilization	July 1973
Contractor on Site	September 1973
Construction Complete	January 1976

B. Procurement of Materials and Services

The construction contract will be awarded to Grove Construction, a U.S. firm. All goods and services used in the project must be of Country Code 941 or local source and origin.

V. FINANCIAL ANALYSIS

A. Financial Plan

The original financial plan set forth in the \$12.6 million loan authorized in April 1972, provided funds as follows:

	<u>FX</u>	<u>Local Costs</u>	<u>Total Costs</u>
Construction	\$6,292,856	\$3,179,952	\$ 9,472,808
Engineering Supervision	600,000	400,000	1,000,000
Engineering Equipment	130,000	-	130,000
Contingency	<u>1,232,270</u>	<u>764,922</u>	<u>1,997,192</u>
Total A.I.D. Loan	\$8,255,126	\$4,344,874	\$12,600,000
GOB Contribution	-	200,000	200,000
GOZ Contribution	<u>-</u>	<u>326,000</u>	<u>326,000</u>
Total	\$8,255,126	\$4,870,874	\$13,126,000

"Both construction and contingency items are changed as a result of the Grove bid of \$8,977,842 in dollars and \$3,160,825 Rand (\$4.717 million). The revised project costs including these to be financed by the \$4.0 million loan amendment are as follows:

	<u>FX</u>	<u>Local Costs</u>	<u>Total Costs</u>
Construction	\$8,978,000	\$4,717,000	\$13,695,000
Engineering Supervision	600,000	420,000	1,020,000
Maintenance Equipment	150,000	-	150,000
Contingency	<u>1,000,000</u>	<u>735,000</u>	<u>1,735,000</u>
Total A.I.D. Loan	\$10,728,000	\$5,872,000	\$16,600,000
GOB Contribution	-	210,000	210,000
GOZ Contribution	<u>-</u>	<u>326,000</u>	<u>326,000</u>
Total	\$10,728,000	\$6,408,000	\$17,136,000

The proposed \$4.0 million loan amendment will finance approximately \$2,573,000 of U.S. costs and \$1,427,000 of local costs.

The contingency item in the revised financial plan is reduced both in amount and percentage from that in the original plan. At the time the loan was authorized the construction costs were of a preliminary character. The revised costs are based upon actual bidding. The \$1.7 million project contingency provides nearly 12 percent for construction overruns which might arise during construction as well as any additional engineering costs which may develop as a consequence of the contractors method of construction, i.e., central mixing plant.

The funds provided under the proposed \$4.0 million loan amendment would be made available on the same terms applicable to the original loan.

B. Justification for Concessional Terms and Local Cost Financing

The GOB has had recurrent current deficits, since its independence. It expects its current budget to be in surplus for at least the next three years due to import taxes on mining equipment slated for the Shashe Project and other mining ventures. Nevertheless, its capital expenditures will continue to exceed available domestic resources despite its laudable efforts to generate tax revenues. These capital expenditures will have to be financed by borrowing, primarily from external donor sources.

Botswana is one of the twenty-five countries in the world now considered to be at the bottom of the development ladder. In order to break out of the low productivity low investment cycle, it is devoting more than 20 percent of its Gross National Product to capital investments. Its infrastructure needs are enormous, and are necessary to open up large areas of the country.

Because of the GOB's present weak financial position and its concurrent need for massive infrastructure development to open the country, A.I.D. considers both its concessional loan terms and its financing of over 95 percent of the project's local costs and 100 percent of the additional local costs noted herein entirely justified.

C. Prospects for Repayment

There are reasonable prospects for repayment of this loan.
(See AID-DLC/P-1011)

VI. ECONOMIC EFFECTS OF LOAN

These remain as noted in the original paper (AID-DLC/P-1011).

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

CAPITAL ASSISTANCE LOAN AUTHORIZATION
AMENDMENT

Provided From: Development Loan Funds
Botswana-Zambia Road (Construction) (Regional)

Pursuant to the authority vested in the Administrator of the Agency for International Development (hereinafter called "A.I.D.") by the Foreign Assistance Act of 1961, as amended, and the delegations of authority issued thereunder, I hereby authorize the following:

An amendment to increase the above-captioned loan to the Government of Botswana ("Borrower") by an amount not to exceed Four Million Dollars (\$4,000,000) to assist in financing the foreign exchange and local costs of equipment, materials and services required to construct the Botswana-Zambia Road, subject to the following terms and conditions:

1. Interest Rate and Terms of Repayment: Borrower shall repay the loan in forty (40) years, including a grace period of not to exceed ten (10) years. Borrower shall pay interest on the unrepaid principal and any interest accrued thereon at a rate of (a) two percent (2%) per annum during the grace period and (b) three percent (3%) per annum thereafter.
2. Currency of Repayment: Repayment of the loan and payment of interest shall be made in United States dollars.
3. Other Terms and Conditions:
 - a. Procurement. Equipment, materials and services financed under the loan shall be procured from Botswana and from countries included in Code 941 of the A.I.D. Geographic Code Book.
 - b. Other Terms and Conditions. The loan shall be subject to other terms and conditions as A.I.D. may deem advisable.

Assistant Administrator for Africa

Date

INCREMENTAL ANALYSIS

<u>Year</u>	<u>Additional Construction Costs</u>	<u>Costs Discontinued at 10%</u>	<u>Benefit Stream at 10%</u>
0	800,000	800,000	400,000 annual benefit stream discontinued over 20 years.
1	1,300,000	1,181,700	
2	1,400,000	1,156,400	
3	<u>500,000</u>	<u>375,000</u>	
	TOTAL COSTS	3,513,600	TOTAL BENEFITS 3,405,600

<u>Year</u>	<u>Additional Construction Costs</u>	<u>Costs Discontinued at 9%</u>	<u>Benefit Stream at 9%</u>
0	800,000	800,000	400,000 annual benefits discontinued over 20 years.
1	1,300,000	1,192,100	
2	1,400,000	1,178,800	
3	<u>500,000</u>	<u>386,000</u>	
	TOTAL COSTS	3,556,900	TOTAL BENEFITS 3,651,600

Incremental Internal Rate of Return = 9.5%