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

512-L-015

CAPITAL ASSISTANCE PAPER

Proposal and Recommendations
For the Review of the
Development Loan Committee

BRAZIL - COMBINED HIGHWAY PROJECT

5120272

AID-DLC/P-165/P 4

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

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AID-DLC/P-165/4
June 9, 1964

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: Brazil - Combined Highway Project

Attached for your review are the recommendations for authorization of a loan in an amount not to exceed \$18,400,000 to the Superintendencia de Desenvolvimento do Nordeste to assist in financing the cost of goods, materials and services to construct or improve 291 miles of state highways of Northeast Brazil.

On June 29, 1963, the A.I.D. Administrator authorized an \$11,000,000 combined highway loan for Northeast Brazil (See AID-DLC/P-165) and on February 17, 1964 signed an amended loan authorization in the amount of \$15,000,000, increasing the original loan by \$4,000,000 (See AID-DLC/P-165/1). The attached amendment will increase the amount of the loan to \$18,400,000.

This loan proposal is scheduled for consideration by the Development Loan Staff Committee at its meeting on June 12, 1964 and a telephone poll of DLC members will be conducted to determine whether the DLC members approve without a DLC meeting or request a DLC meeting for the consideration of this proposal.

Rachel G. Rogers
Assistant Secretary
Development Loan Committee

Attachments:

Memorandum
Summary and Recommendations
Annexes I-IV

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AID-DLC/P-165/4
June 9, 1964

MEMORANDUM FOR THE DEVELOPMENT LOAN COMMITTEE

SUBJECT: BRAZIL - Combined Highway Project

Problem: A second amendment of the Loan Authorization for the Northeast Brazil Combined Highway Project (AID-DLC/P-165) is recommended. The amendment will increase the amount of the loan by \$3.4 million from the presently authorized \$15,000,000 to \$18,400,000. The additional \$3.4 million will be used to fund the paving of approximately 86 kilometers of the remaining two highways in Pernambuco state of the originally requested loan

Discussion: 1. On June 29, 1963, the A.I.D. Administrator authorized an \$11,000,000 combined highway loan for Northeast Brazil as part of the overall U. S. - Brazil agreement to assist in financing the development of Northeast Brazil. The loan provided for the construction and paving of six projects (403 kms) in the states of Maranhao, Paraiba, Rio Grande do Norte, Alagoas and Ceara. The Borrower Superintendencia de Desenvolvimento do Nordeste (SUDENE); the state highway departments of the relevant states, which will be the executing agencies, will receive the loan proceeds on a grant basis from SUDENE. Subsequently the amount of the loan was increased by \$4 million to include the PE-2 road construction paving in the State of Pernambuco. The thus amended loan was authorized on February 17, 1964 for the total amount of \$15,000,000. Recent events in Brazil make appropriate the immediate inclusion of the remaining two road projects originally requested by the State of Pernambuco, which are fully engineered and feasible. Their inclusion will increase the amount of the loan by \$3.4 million from the presently authorized \$15,000,000 to \$18,400,000.

* PE-62 and PE-91

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2. As in the previous increase of \$4 million the proposed authorization increase of \$3.4 million i. e. altogether \$7.4 million must carry A.I.D.'s new minimum interest rate (i.e. three quarters percent during the grace period and two percent during the period of principal repayment), whereas the original authorization carries the rate of three quarters percent both for the grace period and for the amortization period. The Country Team has recommended strongly that the entire \$18.4 million be made available to SUDENE at the minimum interest possible. Therefore, the amended authorization will retain the three quarters rate on the first eleven million dollars disbursed both during and after the grace period, while imposing a two percent interest rate on the loan balance of \$7.4 million for the period after the grace period.

3. As stated in the memorandum relating to the first amendment (Loan Paper AID/DLC/P-165-1 discussion item 3) the BPR's cost estimates were prepared during October-December 1962 and the dollar amount of the loan was then established by using the exchange rate of CR\$460=US\$1. Since that time inflation has continued at a rapid pace. According to the Vargas Foundation the cost of living (in Guanabara) rose by 80.9% during 1963; during the first quarter 1964 the increase was reportedly at an annual rate of 120%. The exchange rate was changed in April 1963 to CR\$620 per US\$1; since February 1964 it has been fluctuating around CR\$1,200 per US\$. It cannot be forecast at this time whether inflationary cost increases will be compensated by changes in the rate of exchange applicable at the time each disbursement is made and dollars are converted to cruzeiros. Should not enough cruzeiros be generated by such conversions, the Borrower will be required to provide the additional funds needed to complete the project. This obligation will be imposed by a new standard provision which will be used on all Brazil loan agreements.

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4. It is AID's judgment that the paving of the approximately 86 kilometers of PE-62 and PE-91 in Pernambuco state requested to be financed is economically and technically justified, should be given a high priority and should be financed. The cost of paving was estimated by the BPR as follows:

| | <u>Cruzeiros</u> | <u>Dollars</u> | <u>Dollar Equivalent (CR\$460=US\$)</u> |
|-----------------------------------|--|----------------|---|
| Paving & Related costs PE-62 | CR\$670,280,000 | - | \$ 1,457,100 |
| Paving & Related costs PE-91 | 677,261,000 | - | 1,472,300 |
| Contingency (10% of each project) | 134,754,100 | - | 292,943 |
| Engineering (3-1/2%) | | <u>112,782</u> | <u>112,782</u> |
| | TOTAL | \$ 112,782 | |
| | Grand total in dollars & dollar equivalent | \$3,335,125 | |

A detailed technical analysis is attached hereto as Annex I. In summary this Annex shows that (1) highway PE-62 is part of the group of radial highway penetration, starting on highway PE-5 near the City of Carpina and connecting four counties over 44 kms to the State line with Paraiba, one of the most fertile areas of the region, and (2) highway PE-91 connects the cities of Caruaru and Catende, over the distance of 42 kms, connecting two distinct but complementary economic zones, thus constituting a vital economic artery.

5. The discussion in the original loan paper (AID-DLC/P-165) regarding the use of the Special Letter of Credit procedure (p.12) is equally valid in connection with the proposed amendment, and is incorporated by reference.

The discussion in the original loan paper on the question of cost estimates is however, modified in accordance with the following. Recent data submitted by the USAID indicate that all the construction and paving projects, including the Pernambuco projects, were costed in latter 1962, at which time the 460 rate was reasonably related to the value of the cruzeiro. Under these circumstances, therefore, conversion at the 460 rate yields relatively accurate dollar amounts. Thus, the \$3.4 million figure for the PE-62 and PE-91 Pernambuco projects, as well as the \$4 million for PE-2 and \$11 million figure for the other six road projects should be considered as reasonably firm estimated costs of the projects, as expressed in dollars.

6. The Borrower (SUDENE) proposes to grant the loan proceeds to the state highway departments. SUDENE has the legal authority, when approval is given by the appropriate Minister, to pledge the credit of the government of Brazil. The practical effect of the loan funds being allotted to the States on a grant basis is that SUDENE will have to fund the loan repayments from its own budget. AID is satisfied that the states are making a maximum effort to develop roads and, as noted in the loan paper proposing a Northeast Brazil Highway Maintenance Equipment loan (AID-DLC/P-192, Revised), state highway budgets are already so strained by construction programs that needed maintenance programs are being deferred. With specific reference to highways PE-62 and PE-91, as for highway PE-2, it is noted that the state of Pernambuco is completing all the grading and related work on all the 186 km road segments for which AID will finance paving costs.

7. The amount of the dollar loan is essentially for local costs which is a departure from AID's preference for lending not more than fifty percent (the rule-of-thumb estimated ratio of overall increase in imports to increase in local expenditure) of the value of local currency projects. This departure is recommended in view of the importance which is attached to the original project package, of which PE-62 and PE-91 are an integral part, which had been previously approved, and in view of the non-availability of U.S.-owned local currency, as explained under Point 7 of the Summary and Recommendations of the attached Amended Combined Highway Project.

Summary and Recommendations: A revised Summary and Recommendations of the original loan paper, and a revised draft loan authorization, providing for an increase of the loan to cover the costs of the PE-62 and PE-91 highway projects, are attached herewith.

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AID-DLC/P-165/24
June 9, 1964

BRAZIL - COMBINED HIGHWAY PROJECT

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AID-DLC/P-165/4
June 9, 1964

NORTHEAST BRAZIL
AMENDED-COMBINED HIGHWAY PROJECT
SUMMARY AND RECOMMENDATIONS

1. BORROWER: The Superintendencia de Desenvolvimento do Nordeste (SUDENE), the Superintendency of Development in Northeast Brazil. The State Highway Departments of the relevant States will be the recipients of the cruzeiros into which the dollar proceeds of the loan will be converted, and will carry out the respective highway projects.
2. AMOUNT OF THE LOAN: A loan of up to \$18.4 million. Total costs of the nine projects combined in this loan are estimated at Cr\$8,488 million. ^{1/}

Dollar proceeds will be made available through special letters of credit which can only be used for U.S. procurement. The cruzeiro counter-value of these proceeds will be made available to SUDENE (see Financial Analysis).

Between 95 and 100 per cent of project costs may be paid in local currency. Procurement of U.S. engineering services, up to a maximum of 5 per cent of project costs, may occur.

3. TOTAL COST OF PROJECT: Construction and paving under the nine projects included under this loan will cost \$18.4 million. Together with the existing A.I.D. \$9 million highway equipment loan, A.I.D. lending for highway projects in Northeast Brazil during FY 1964 totals some \$27 million. In addition, some \$10 million in applications for equipment have been processed in SUDENE and are being considered by A.I.D. this fiscal year.

^{1/} Exchange rate used is Cr\$460-\$1.00. This rate prevailed both at the time the application was filed (April, 1963) and at the time the cost estimates for the project were made (October-December, 1962). Loan amount is rounded to nearest unit million.

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Brazilian input into NE roads is, on the other hand, very substantial. SUDENE alone budgets an input of \$58 million in the period 1961-65. Total anticipated Brazilian input into NE highways for the period 1961-65 is not available, but is most likely a multiple of the SUDENE figure. Projections based on the period 1956-61 indicate that the other entities engaged in road building (DNER-the Brazilian National Highway Department, the National Highway Fund, the various state highway departments, and the municipalities) will themselves enlarge the road network by some 20% in the period 1961-65. Included in this figure are, of course, the first-class DNER system of national highway routes which are linking the NE to the rest of Brazil.

It is clear that Brazil is making a major self-help effort in highway development, and that present and future loan-financed projects constitute a relatively small part of the total highway program.

4. PURPOSE: To cover the combined total costs of goods, materials and services to improve 489 kms (291 miles) of state highways in 6 states of Northeast Brazil which are part of the five year Northeast Highway Development program.
5. BACKGROUND: By agreement dated April 13, 1962, the U. S. agreed to make available to the Government of Brazil during a period of 2 years, \$131,000,000 in dollars and cruzeiros, toward implementation of the Northeast Five Year Plan of development as formulated by SUDENE, an agency of the Brazilian Government. The Plan allocated substantial sums to the development of highways. The \$15 million authorized on February 17, 1964 for this project has been credited to the U.S. Government's commitment.

The specifications, cost and preparatory engineering on these road projects have been reviewed by a team of representatives of the U.S. Bureau of Public Roads (BPR) during a special tour of duty on Northeast Brazil recently completed. The BPR group found the projects adequately prepared and technically feasible and recommended approval by A.I.D.

6. PROJECT DESCRIPTION: The project is the construction, surfacing and/or paving of 126 kms of state highway on routes MA-51 and MA-15 in Maranhao (2 projects); 33 kms on route PB-1 in Paraiba; 50 kms on route RN-4 in Rio Grande do Norte; 44 kms on route AL-13 in Alagoas; 50 kms on route CE-35 in Ceara; and 186 kms on routes PE-2, PE-62 and PE-91 in Pernambuco state. All construction contracts will be let by public bidding.
7. AVAILABILITY OF ALTERNATIVE FINANCING: The Inter-American Development Bank is not interested in this project. The Export-Import Bank also is not interested in the project. No other external sources of financing are available.

The Mission reports that all local currency funds presently generated from PL-480 sales agreements have been committed for other projects. While additional local currency funds are expected to become available in the future, these future availabilities will not permit obligation at this time for the purpose of this loan (TOAID 1759, May 27, 1964). In any case, should excess local currency become available, consideration will be given to the use of such P.L. 480 funds.

8. VIEW OF COUNTRY TEAM: The Country Team recommends this combined project.
9. STATUTORY CRITERIA: The statutory criteria have been satisfied. (See Annex II).
10. ISSUES: None
11. RECOMMENDATIONS: Authorization of a loan to SUDENE for an amount not to exceed \$18,400,000.
 1. Interest and Terms of Repayment. Borrower shall repay the loan to A.I.D. in United States dollars within forty (40) years from the first disbursement under the loan, including a grace period of not to exceed ten (10) years. Borrower shall pay A.I.D. interest in United States dollars as follows:

- (a) On the disbursed balance of the first eleven million United States dollars (\$11,000,000) disbursed, three quarters of one ($3/4$ of 1) percent per annum ; and
- (b) On the disbursed balance of the remainder of the loan, three quarters of one ($3/4$ of 1) percent per annum for ten (10) years after the first disbursement which causes the sum of all disbursements to exceed eleven million United States dollars (\$11,000,000), and two (2) percent per annum thereafter.

2. Other Terms and Conditions.

- (a) Equipment, materials and services (except shipping which shall be procured from the United States and marine insurance) financed under the loan shall be procured from the United States of America or Brazil.
- (b) United States dollars utilized under the loan to finance local costs shall be made available to the Borrower or its designee through appropriate procedures and shall be used only for procurement in the United States (excepting marine insurance).
- (c) The loan shall be secured in a manner satisfactory to A.I.D.
- (d) As conditions precedent to disbursement, A.I.D. shall require:
 - i. Arrangements satisfactory to A.I.D. to make available the cruzeiros for the project.
 - ii. Employment of qualified U. S. or Brazilian technical consultants, satisfactory to A.I.D., to advise and assist in carrying out of the project.
 - iii. Arrangements satisfactory to A.I.D. for maintenance of the roads to be constructed or improved.
- (e) The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

Project Committee:

Loan Officers: ~~HRoberts~~/AGBačić
Counsel : DTrubek
Engineer : FMcRee
Desk Officer : ~~WJFeuerlein~~
Drafting Officer : AGBačić

STATE OF PERNAMBUCO - HIGHWAY PAVING PROJECTS PE-62 and PE 91

DETAILED DESCRIPTION OF THE PROJECT

A. The Project

Highway PE-91 - This highway is a connecting link between BR-5 at Caruaru and BR-11 at Palmares. The section that will be improved extends from Agrestina to Catende, a distance of 42 Km. Practically all of this section has been graded. A contract is now under way to complete the grading of the final section.

The work proposed will consist of placing sub-base and base material and a 7 meter bituminous surface. From 0 Km at Agrestina to Km 22, a double surface treatment will be placed. From Km 22 to Km 42 at the junction with PE-2 the surface will be a hot mix 4 cm in depth.

Highway PE-62 - This section starts at Km 63 of Highway PE-5 near Carpina. It extends for 44 Km, connecting the counties of Carpina, Nazare, Alianca and Timbauba. The grading of PE-62 has been completed with the exception of about 7 Km on the Timbauba and where a contract for grading is now in progress.

The work proposed will consist of placing sub-base and base course and a 7 meter double surface treatment over the entire section.

The proposed loan will also provide for the procurement of the services of a qualified consulting engineer to be selected by the Pernambuco Department of Highways (DER) and subject to the approval of USAID/NE-B. The consulting engineer will advise and assist the DER in the preparation of final plans, specifications and estimates, in supervising the construction and inspection of the work under the loan. The consultant will certify to Borrower as to the quality and quantity of the construction work performed.

B. Engineering Plan

The activity described above, which is to be totally financed by the development loan, is considered to be technically sound in accordance with FAA Section 201(b)(2). The requirements of FAA Section 611 for completion of preliminary engineering plans and a reasonably firm cost estimate have been met.

A detailed preliminary estimate of cost has been prepared which adequately covers the construction work to be done under the loan. (See Annex III, Exhibit A for preliminary cost estimates).

1. Design Criteria

Design of the two routes will be based on DNER design criteria. Exhibit E is a tabulation of the principal features of the DNER standards. Total surfacing depths are based on CBR and Group Index values with six ton wheel loads. The following limiting values will apply to the individual routes:

PE-62 - Design Speed: 60 Km/hour - Maximum grade: 6.0% - Minimum sight distance: 130 meters - Minimum radius curve: 100 meters - Sub-base width: 14 meters - Shoulder width: 3.10 and 3.50 meters - paved surface 7 meters - Structure width 8.2 meters, curb to curb.

PE-91 - Design Speed: 60 Km/hour - Maximum Grade: 6.5%. Minimum Sight Distance: 130 meters - Minimum Radius of Curvature: 110 meters - Shoulder width: 3.10 and 3.50 meters Paved surface: 7 meters - Structure widths: 8.2 meters, curb to curb.

2. Surveys and Preliminary Plans

As this project will be for paving only, no location surveys were necessary for the work included in this loan. Drainage structures have been placed and grading will be completed in the near future. Soil investigations have been made of the existing materials on the roadways and also of materials from possible borrow and surfacing materials sites along the routes. Depths of sub-base, base and surfacing courses are determined by CBR and Group Index procedures in conjunction with in-place materials and materials available along the route.

3. Construction Standards

Construction procedures and quality of materials will be governed by the provisions of the DNER Standard Specifications. The specifications have been reviewed and are complete and adequate to control the proposed work.

4. Availability of Local Resources and Equipment

The work required under this project will be performed by contract on the basis of competitive bids. Experienced contractors with adequate equipment and trained personnel are available for performance of the work.

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ANNEX I, Pg. 3 of 5

Plans, specifications and estimates will be prepared by DER assisted by a consultant procured under the terms of the loan. Control of construction operations and quality control of materials will also be accomplished by DER assisted by the consultant.

Selected materials for blending of sub-base and base courses are available at pre-tested sites along the route. Crushed aggregates for base courses and bituminous paving can be produced at quarry sites along each route. Medium curing asphalts for prime coat and asphalt cement for the hot mix surfacing and the double surface treatment will be shipped from refineries at Rio Grande do Sul or Sao Paulo.

The proposed schedule for performance of the contracts is shown in Exhibit D.

C. ECONOMIC CHARACTERISTICS OF THE AREA TO BE SERVICED

The State of Pernambuco has an area of 98,079 square kilometers, equivalent to 1.15% of all Brazil. As of 1960, the population was estimated to be 4,120,000 of which some 37% was urban and 63% rural; there were some 16,000 automobiles and 20,000 trucks and buses in circulation; there were 1,602 kms of federal roads of which only 346 kms were paved, 2,047 kms of state roads of which 120 kms were paved, and 12,500 kms of municipal roads.

The Pernambuco highway system is basically made up of a system of roads which, starting in Recife, open fanwise to the interior of the country and is designed to do two things: (1) Form a connecting link to the south of the country, and (2) Foster economic integration between the sugar oriented economy of the "Zona de Mata" (vegetal coastal belt), the "Agreste" (transitional region) and the "Sertao" (semi-arid, westerly region) where subsistence agriculture and cattle raising have predominated.

Highway PE-62 forms part of the group of radial highways of penetration and serves the Northwestern region of the State. It starts on highway PE-5 in the city of Carpina and goes to the state line with Paraiba, serving the cities of Nazare, Alianca and Timbauba and has a length of 44 kilometers. The section Recife-Carpina of highway PE-5 is already paved, so that the paving of PE-62 will not constitute an isolated project but will maintain the continuity, in the systematic execution of the paving plan of the highways of penetration of the state. The traffic on this highway is already of considerable volume and a recent count shows a maximum of 615 vehicles daily.

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ANNEX I, Pg. 4 of 5

The highway PE-62 is connected to BR-11 north by highway PE-64 which links Alianca to Goiana and to which city also converge highways PE-61 and PE-63, the latter providing outflow to the production of the Sirigi valley, one of the most fertile in the region, and PE-61 links with Itabaiana, in Paraiba, a zone of large dairy production furnishing Recife.

Highway PE-91 connects the cities of Caruaru and Catende. Of the interior cities of Pernambuco, Caruaru is the most important as a commercial, industrial or live stock raising center. Caruaru is a commercial emporium with inter-state influence. The exchanges between Caruaru and Campina Grande in Paraiba, are important. Catende, together with nearby Palmares constitutes the center of another economic zone which is the most important of the wooded area.

As they represent two completely distinct economic zones, one, that of Catende, dedicated solely to the single cultivation of sugar cane and the other, that of Caruaru, a large producer of cereals, cotton, manufactured products and cattle herds, for the supply of meat to the population, the highway link between the two centers is of vital importance.

This function of PE-91 is most important, because the Southern zone of Pernambuco in the wooded area, does not produce the essential commodities needed by its population, having to import them from the rural areas. Today this importation is, to a large extent, done through Recife, with an increase in routing of the order of 235 kilometers, which increases considerably the price of the products besides facilitating the appearance of middlemen.

PE-91 is 42 kilometers long. It also forms an important link between two of the principal highways of the State, BR-25 and BR-11, besides substituting, for some time, the Southern section of BR-10 paving of which, at present is not thought of. BR-10 north, together with PE-91 will form the most important transverse highways in Pernambuco interlinking the three principal highways of penetration of the State, PE-5 to the North, and BR-25 to the Center and PE-2 to the South.

The present traffic on this highway is very low due to two important factors: (a) the highway is not finished and, due to the nature of the silty clay soils, it becomes completely impassable during rain periods; (b) as a consequence of the previous inexistence of roads, there is no tradition for highway traffic in the region.

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SUMMARY OF COST ESTIMATES FOR PE-62 AND PE-91

| | <u>CR\$ MILLIONS</u> | <u>EQUIVALENT (*) \$ THOUSANDS</u> |
|-----------------------------------|----------------------|--|
| Construction Highway <u>PE-62</u> | 670 | 1,457 |
| 10% for Contingencies | 67 | 146 |
| 3½% for Consultant Engineering | <u>26</u> | <u>56</u> |
| PE-62 Total CR\$ | 763 | \$1,659 |
| Construction Highway <u>PE-91</u> | 677 | 1,472 |
| 10% for Contingencies | 68 | 147 |
| 3½% for Consultant Engineering | <u>26</u> | <u>57</u> |
| PE-91 Total CR\$ | 771 | \$1,676 |

(*) Based on CR\$ 460 = \$1.00

Highway PE-62 - 44 Km or 26 miles

Highway PE-91 - 42 Km or 25 miles

PE-62 Average Construction Cost - CR\$ 17 million per km
or \$ 64 thousand per mile

PE-91 Average Construction Cost - CR\$ 18 million per Km
or \$ 67 thousand per mile

CHECK LIST OF STATUTORY CRITERIA (ALLIANCE FOR PROGRESS)

Foreign Assistance Act of 1961, as amended, (hereinafter FAA), Section 102. The loan will further the policy of the Act, as stated in this Section. Every possible precaution will be taken to assure that loan proceeds are not diverted to short-term emergency purposes (such as budgetary purposes, balance of payments purposes, or military purposes) or any other purpose not essential to the long-range economic development of Brazil.

- * 2. FAA Section 201(d). The interest rate applicable to the loan is $6 \frac{3}{4}$ of 2% per annum. Funds loaned will not be reloaned.
- * 3. FAA Section 202(c). Foreign Aid and Related Agencies Appropriation Act of 1964 (hereinafter "App.") Section 117. Funds have been appropriated by Congress for this loan.
- * 4. FAA Section 204. The terms and conditions of the loan are in accordance with standards and criteria established by the Development Loan Committee. The loan is to be submitted to DLC pursuant to MO 1251.1.
- * 5. FAA Section 251(a). The loan will promote economic development in Brazil and will contribute to the welfare of its people.
- * 6. FAA Section 251(b)(1). Brazil is adhering to the principles of the Act of Bogota and Charter of Punta del Este and is showing a responsiveness to the vital economic, political and social concerns of its people. Brazil has demonstrated a clear determination to take effective self-help measures.

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* Affirmative finding required by law.

7. FAA Section 251(b)(2). The activity to be financed is economically and technically sound.
8. FAA Section 251(b)(3). The activity is consistent with and is related to other development activities being undertaken or planned and will contribute to realizable long-range objectives.
9. FAA Section 251(b)(4). The loan will have no foreseeable adverse affect on the U.S. economy.
10. FAA Section 251(b). Financing from other free world sources (including private sources within the United States) on reasonable terms for the project is not available.
11. FAA Section 251(b). The terms of the loan (3/4 of 2% interest, 40 year amortization) are reasonable under circumstances affecting the loan and the capacity of Borrower to repay the loan.
12. FAA Section 251(b). Brazil is making reasonable efforts to encourage repatriation of capital invested in other countries by its own citizens.
- *13. FAA Section 251(b). There are reasonable prospects that the loan will be repaid.
- *14. FAA Section 251(e). An application has been received for this loan which gives sufficient information and assurances to indicate reasonably that the funds will be used in an economically and technically sound manner.
15. FAA Section 251(g). In view of the nature of the project it is not appropriate to utilize the loan to assist in promoting the cooperative movement in Latin America.

16. FAA Section 601(b)(4). The loan will be administered in such a manner as to encourage and facilitate participation by private enterprise to the maximum extent practicable.
17. FAA Section 601(b)(6). In the implementation of the loan, United States private engineering services, and other services of United States private enterprise shall be employed. American small business shall be assisted to the maximum extent practicable to participate equitably in the furnishing of goods and services for the project, in accordance with the procedures described in this section of the Act.
- *18. FAA Section 604(a). Equipment, materials and services (except Marine Insurance) financed for the project under the loan shall be procured from the United States of Brazil. (Procurement in Brazil is authorized by the Presidential Determination of October 18, 1961, as amended.) Dollars utilized under the loan to finance local costs of the project shall be made available through appropriate procedures, and, except for Marine Insurance, shall be used only for procurement in the United States.
- *19. FAA Section 604(b). Any commodities financed by the loan and purchased in bulk will be purchased at prices no higher than prevailing U.S. market prices.
- *20. FAA Section 604(d). Loan funds shall be available for Marine insurance on commodities shipped when such insurance is placed on a competitive basis, as specified in this section of the Act. In the event that Brazil discriminates against any U.S. marine insurance company, commodities purchased with loan funds shall be insured against marine risk with a U.S. company, as required by this section.
- *21. FAA Section 611(a)(1). Necessary substantive technical and financial planning for the project has been completed, and a reasonably firm estimate of cost of the project to the United States has been obtained.
- *22. FAA Section 611(a)(2). No further legislative action in Brazil is required for implementation of the project.

- * 23. FAA Section 611(b), App. Section 101. The project does not involve a water or related land resource construction.
- * 24. FAA Section 611(c). Construction contracts to be financed by the loan shall be let on a competitive basis.
- * 25. FAA Section 619. Not applicable. Brazil is not a newly independent country.
- * 26. FAA Section 620 (a) App. Sections 109 (a), 109(b). No assistance will be furnished under this loan to the present government of Cuba, nor does furnish assistance to the present government of Cuba. Brazil has taken appropriate steps to prevent ships or aircraft under its registry from engaging in any Cuba trade.
- * 27. FAA Section 620(b). The Secretary of State has determined that Brazil is not controlled by the International Communist Movement.
- * 28. FAA Section 620(c). Brazil is not indebted to any U.S. citizen for goods or services furnished or ordered, where such a citizen has exhausted available legal remedies or where the debt is not denied or contested by or the indebtedness arises under an unconditional guaranty of payment given by Brazil.
- * 29. FAA Section 620(d). Loan funds will not finance construction or operation of any productive enterprise which will compete with United States enterprise.
- * 30. FAA Section 620(e) Neither the government of Brazil nor any governmental agency or subdivision thereof has, on or after

January 1, 1962, nationalized, expropriated or seized ownership or control of property of any U. S. citizen or firm, taken steps to repudiate or nullify existing contracts with such citizens or firms, or imposed or enforced discriminatory taxation or other exactions or restrictive conditions, or taken other actions having the effect of nationalizing, expropriating or otherwise seizing ownership or control of property owned by U. S. citizens or firms, as specified in this section of the Act, without taking appropriate steps to discharge its obligations, as specified in this section of the Act.

- * 31. FAA Section 620(f), App. Sections 109(a). Assistance provided by this loan will not be furnished to any communist country.
- * 32. FAA Section 620(g). Assistance provided by this loan will not be used to compensate for expropriated or nationalized property.
- * 33. FAA Section 620(h). Assistance provided by this loan will not be used in a manner which promotes or assists foreign aid projects or activities of the communist bloc countries.
- * 34. FAA Section 620(i). The President has not determined that Brazil is engaging in or preparing for aggressive military efforts directed against the United States, or any country receiving assistance from the United States, or against any country to which sales are made under PL 480, nor is any basis for such determination known to A.I.D.
- * 35. FAA Section 636(h). Brazil will contribute all additional local currency needed to meet the cost of contractual and other services to be rendered in conjunction with the project. Because of inflation and exchange rate variations it is not possible at this time to specify precisely the amount of local currency which will be supplied to the project by Brazil.

- * 36. App. Section 102. Obligations of funds in excess of \$25,000 for engineering fees to any firms or group of firms financed under the loan will be reported to the committees on appropriations of the Senate and House.
- * 37. App. Section 104. Funds obligated by the loan, and local currency generated thereby, will not be used to pay pensions, annuities, etc., as prohibited in this section.
- * 38. App. Section 111. U. S. Personnel to serve under contracts or services financed by the loan shall have security clearance.
- * 39. App. Section 112. Firms which provide engineering, procurement, and construction services financed by the loan, for the Project, and the terms of their contracts, shall be approved by AID.
- * 40. App. Section 114. Loan funds will not be used to make any payment to the U. N.
- * 41. App. Section 118. Construction work financed by the loan shall be performed by qualified persons, in accordance with AID regulations promulgated pursuant to this section.
- * 42. App. Section 601. Loan funds will not be used for publicity or propaganda purposes within the United States.

ANNEX III - EXHIBITS

| Exhibit No. | <u>Page</u> |
|---|-------------|
| A. BENEFIT COST RATIO | 1-3 |
| B. MAPS | 4-5 |
| C. CROSS SECTION DETAIL | 6-9 |
| D. SCHEDULE FOR SURFACING AND PAVING OF HIGHWAYS | 10 |
| E. DESIGN CRITERIA | 11 |
| F. ESTIMATES OF QUANTITIES AND COSTS | 12-16 |

BENEFIT COST RATIO

PE - 62

The traffic count shows 350 vehicles per day of which 210 are trucks over 6 tons. This count was taken in 1962. It has been expanded to 1963, 1973 and 1983 using an estimated annual rate of 5% increase in traffic.

VEHICLES PER DAY

| | | | |
|--------|-------------|-------------|-------------|
| | <u>1963</u> | <u>1973</u> | <u>1983</u> |
| Cars | 146 | 238 | 388 |
| Trucks | <u>220</u> | <u>358</u> | <u>582</u> |
| | 366 | 596 | 970 |

Assuming 14.05 cents per mile as the cost of operation on earth road and 9.80 cents per mile as the cost of operation on a paved road, both in good condition, the saving is 4.25 cents per mile for cars. Also assume that the save for one truck under 6 ton is equal to double that for one car and the saving for one truck over 6 ton or for one bus is triple that for one car. The saving for one mile for one day then becomes:

| | | | |
|---------------------------------|------------------|-------------------|-------------------|
| | <u>1963</u> | <u>1973</u> | <u>1983</u> |
| Cars x 1 | 146 - 146 | 238 - 238 | 388 - 388 |
| Trucks over 6 Ton x 3 | 220 - <u>660</u> | 358 - <u>1074</u> | 582 - <u>1746</u> |
| | 806 | 1313 | 2134 |
| Benefits (Savings at 4-1/46) | \$34.10 | \$55.70 | \$90.70 |

The estimated cost is approximately CR\$17,300,000 per kilometer. This may be converted to cost per mile per day in US dollars by the following expression:

$$A \times \frac{BC}{DE}, \text{ in which}$$

- A = Cost per kilometer in cruzeiros.
- B = Yearly capital cost factor, at 6% for 30 years
- C = Conversion factor, Km - Mi.
- D = Exchange rate, cruzeiros per US dollar
- E = 365 (days in year)

For PE-62 the expression becomes:

$$17,300,000 \times \frac{.0726 \times 1.61}{460 \times 365} = \$12.10 \text{ per mile per day}$$

Benefit Cost Ratio is:

| | | |
|-----------------------------------|-----------------------------------|-----------------------------------|
| $\frac{1963}{34.10/12.10}$ 2.8 | $\frac{1973}{55.70/12.10}$ 4.6 | $\frac{1983}{90.70/12.10}$ 7.5 |
|-----------------------------------|-----------------------------------|-----------------------------------|

BENEFIT COST RATIO

PE - 91

The traffic count on PE-91 for a period of one week during October 1962 showed an average of 78 vehicles per day. This count was taken during construction of grading and drainage. It is assumed that normal traffic would be 50 per cent more if no construction operations were under way.

| | <u>Average Daily Traffic</u> | <u>Vehicles Actual +50%</u> | |
|--------------------|----------------------------------|---------------------------------|------------|
| Cars | 34% | 27 | 40 |
| Buses | 8% | 6 | 9 |
| Trucks under 6 Ton | 56% | 43 | 65 |
| Trucks over 6 Ton | 2% | 2 | 3 |
| | <u>100%</u> | <u>78</u> | <u>117</u> |

The 1963, 1973 and 1983 traffic has been computed using a 5% estimated annual increase.

VEHICLES PER DAY

| | <u>1963</u> | <u>1973</u> | <u>1983</u> |
|--------------------|-------------|-------------|-------------|
| Cars | 42 | 68 | 105 |
| Buses | 9 | 15 | 25 |
| Trucks under 6 Ton | 68 | 105 | 171 |
| Trucks over 6 Ton | 3 | 5 | 8 |
| TOTAL DAILY | <u>122</u> | <u>193</u> | <u>309</u> |

Assuming 14.05 cents per mile as the cost of operation on earth road and 9.80 cents per mile as the cost of operation on a paved road, both in good condition, the saving is 4.25 cents per mile for cars. Also assume that the saving for one truck under 6 ton is equal to double that for one car and the saving for one truck over 6 ton or for one bus is triple that for one car. The saving for one mile for one day then becomes:

| | <u>1963</u> | <u>1973</u> | <u>1983</u> |
|-----------------------------|-------------|-------------|-------------|
| Cars x 1 | 42 - 42 | 68 - 68 | 105 - 105 |
| Buses x 3 | 9 - 27 | 15 - 45 | 25 - 75 |
| Trucks under 6 ton x 2 | 68 - 136 | 105 - 210 | 171 - 342 |
| Trucks over 6 ton x 3 | 3 - 9 | 5 - 15 | 8 - 24 |
| VEHICLES PER DAY | 241 | 338 | 546 |
| Benefits (Saving at 4-1/46) | \$9.10 | \$14.30 | \$23.10 |

The estimated cost is approximately CR\$ 18,350,000 per kilometer. This may be converted to cost per mile per day in US dollars by the following expression:

$$A \times \frac{BC}{DE}, \text{ in which}$$

- A = Cost per kilometer in cruzeiros
- B = Yearly capital cost factor, at 6% for 30 years
- C = Conversion factor, Km - Mi.
- D = Exchange rate, cruzeiros per US dollar
- E = 365 (days in year)

For PE-91 the expression becomes:

$$18,350,000 \times \frac{.0726 \times 1.61}{460 \times 365} = \$12.85 \text{ per mile per day}$$

Benefit Cost Ratio is:

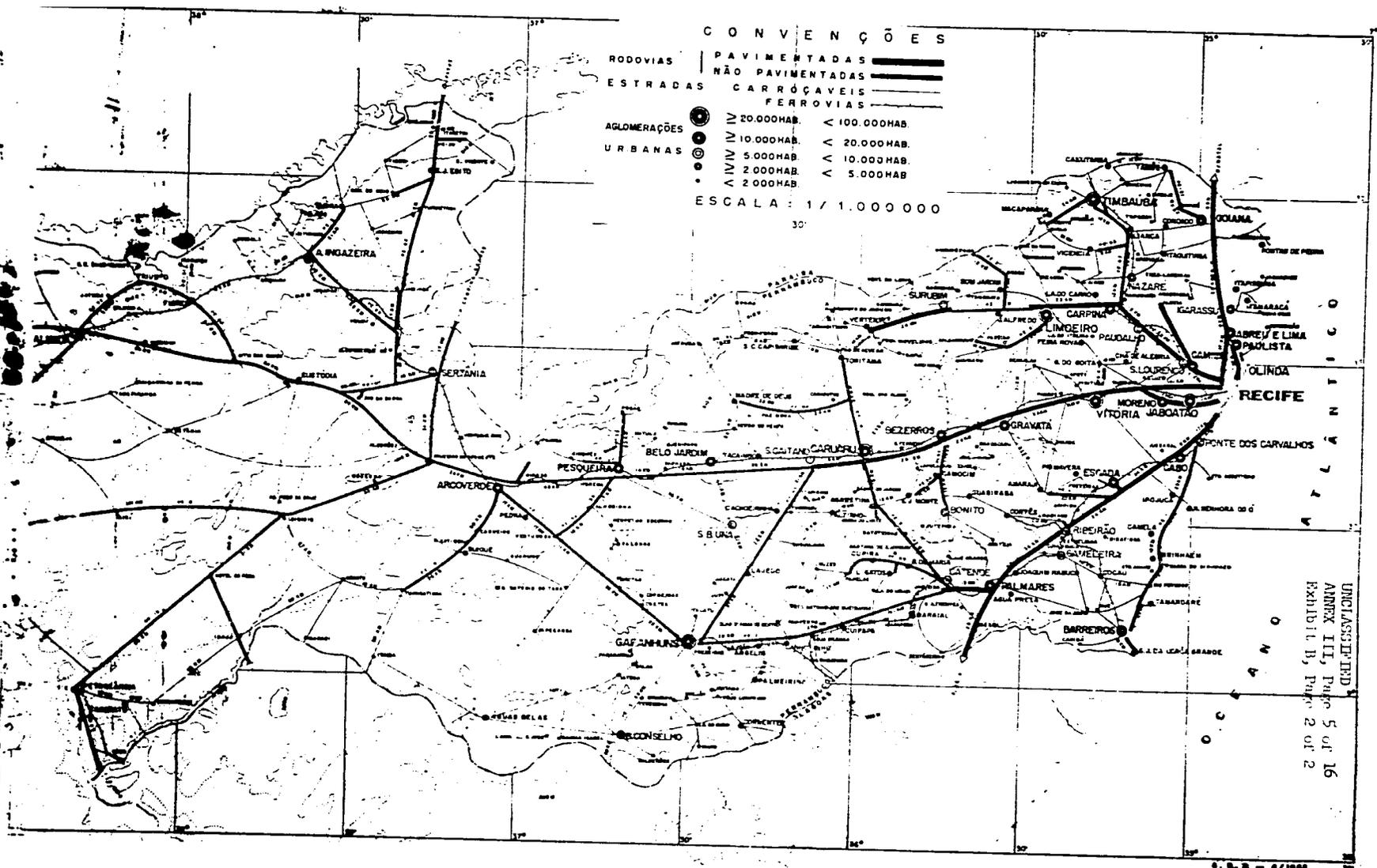
| <u>1963</u> | <u>1973</u> | <u>1983</u> |
|-------------|-------------|-------------|
| 9.10/12.85 | 14.50/12.85 | 23.10/12.85 |
| 0.71 | 1.13 | 1.80 |

CONVENÇÕES

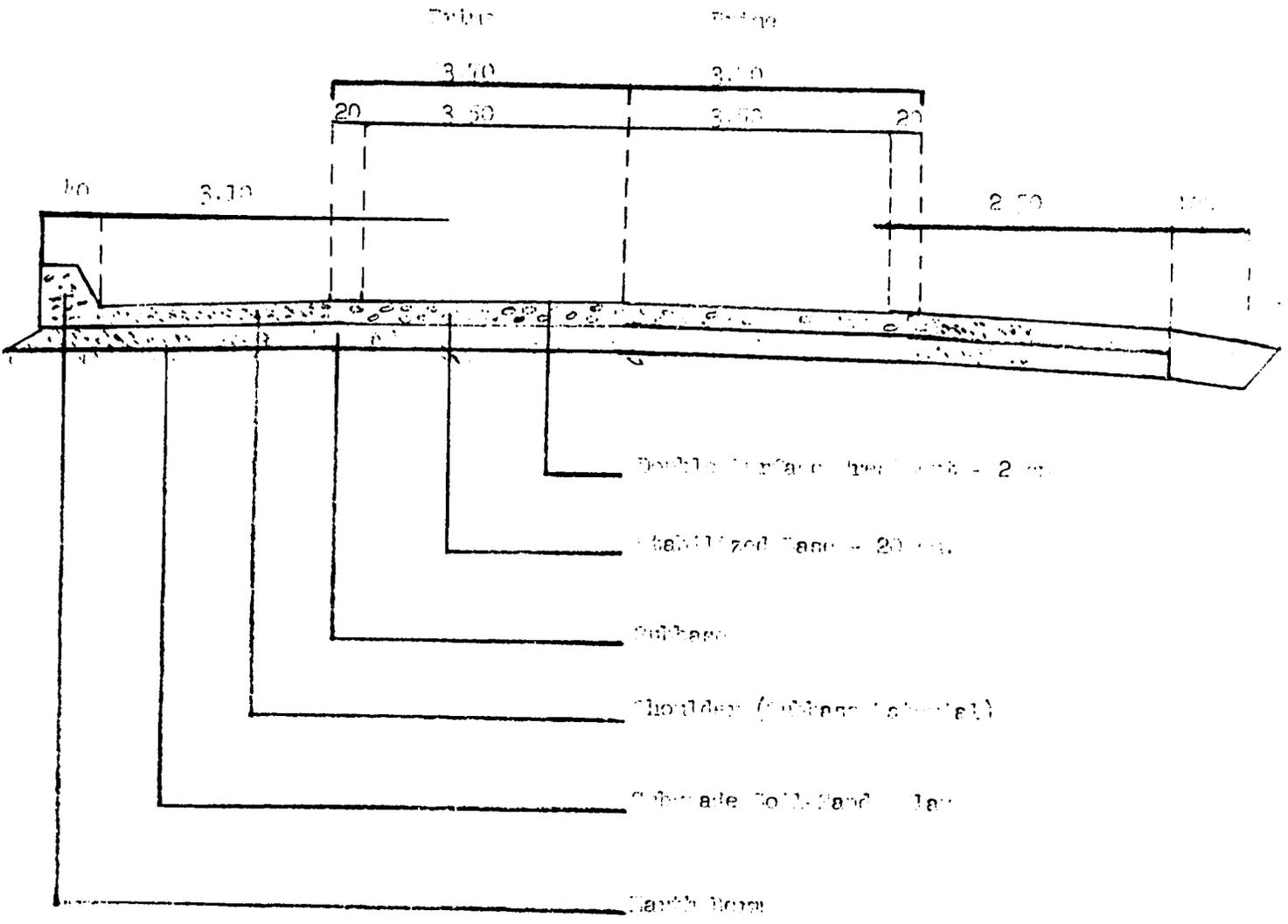
- | | | |
|--------------|------------------|--------------------------|
| RODOVIAS | PAVIMENTADAS | |
| | NÃO PAVIMENTADAS | |
| ESTRADAS | CARROÇAVEIS | |
| | FERROVIAS | |
| AGLOMERAÇÕES | IV | 20.000HAB. < 100.000HAB. |
| | V | 10.000HAB. < 20.000HAB. |
| URBANAS | VI | 5.000HAB. < 10.000HAB. |
| | VII | 2.000HAB. < 5.000HAB. |
| | VIII | 2.000HAB. |

ESCALA : 1 / 1.000.000

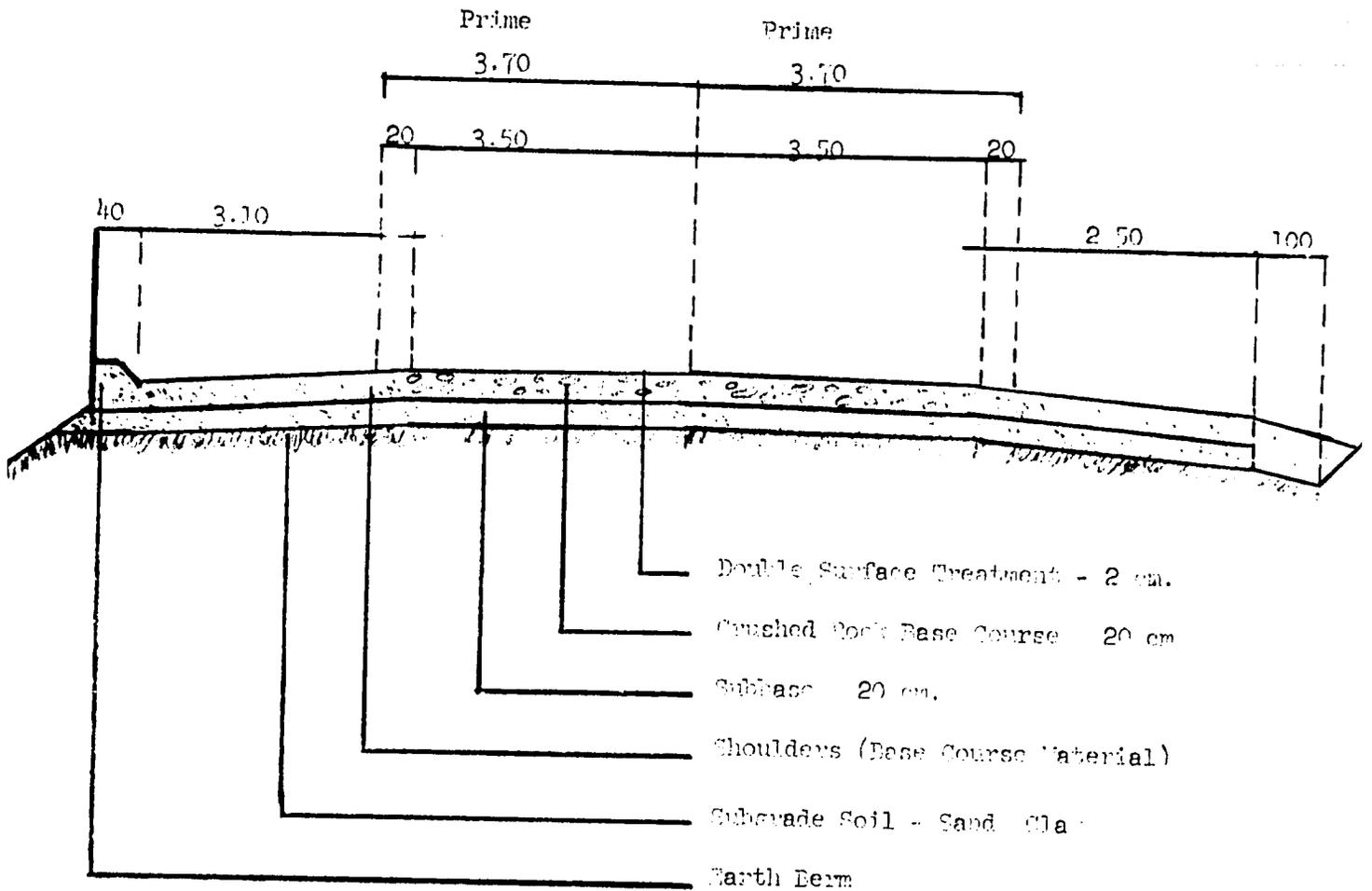
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ANNEX II, Page 5 of 16
Exhibit B, Page 2 of 2

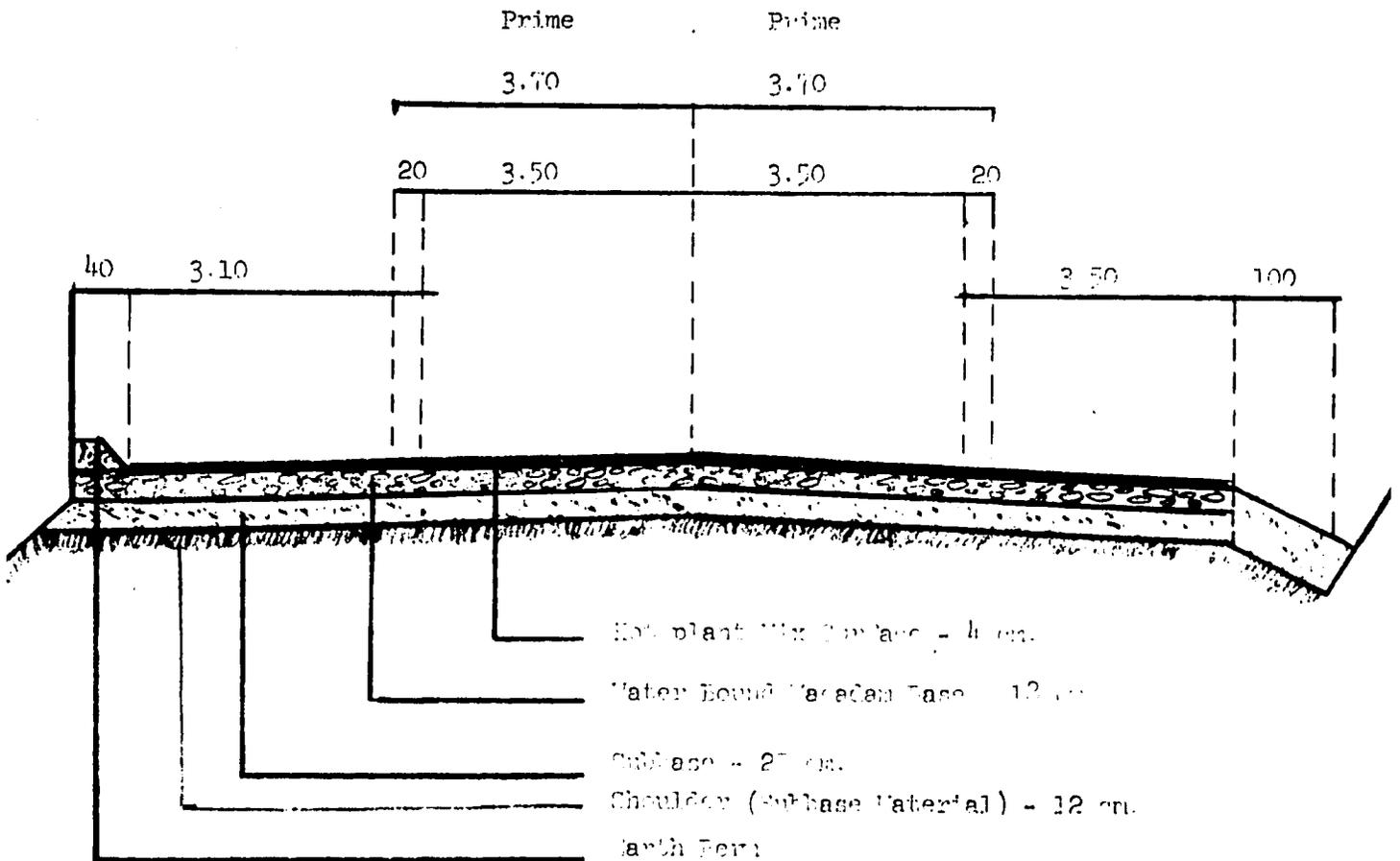


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 Exhibit C, Pg. 2 of 4



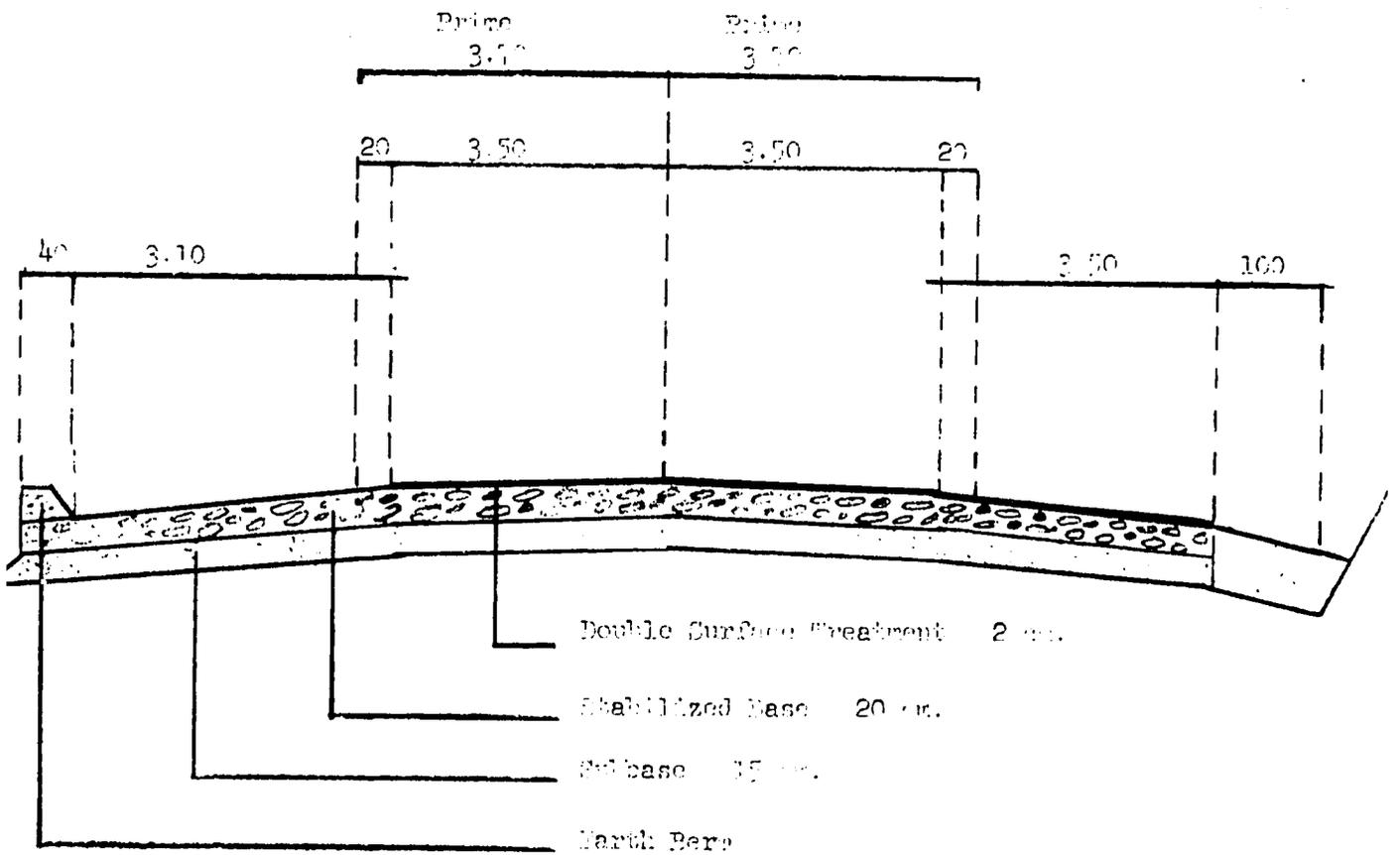
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 ANNEX III, Pg. 8 of 16
 Exhibit C, Pg. 3 of 4



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VIEW 3, Pg. 9 of 16
SECTION, Pg. 4 of 4



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D.E.R. SCHEDULE OF SCHEDULES AND DAVING OF RECORDS

IE-2, IE-62 AND IE-91 (PERMANENT)

| YEAR | IE-2 | IE-62 | IE-91 | TOTALS |
|---------|--|--|--------------------------|--------|
| 1963 | 30 Km, Catende-Quipapá | 30 Km, Carpina-Allianza 3 Km, Allianza-Tinabala | 7 Km, Agrestina-Catende | 70 Km |
| 1964 | 11 Km, Catende-Quipapá 25 Km, Quipapá-Carandans | 11 Km, Allianza-Tinabala | | 47 Km |
| 1965 | 34 Km, Quipapá-Carandans | | 30 Km, Agrestina-Catende | 64 Km |
| 1966 | | | 5 Km, Agrestina-Catende | 5 Km |
| TOTALS: | 100 Km, Catende-Carandans | 44 Km, Carpina-Tinabala | 42 Km, Agrestina-Catende | 186 Km |

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ANNEX III, Page 15 of 16
Exhibit D, Page 1 of 1

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| Project Category | Capacity ADT (1) | Pavement Type | Terrain | Design Speed Km/hr | Super-Elevation % | Min. Radius m (2) | Minimum sight Distance | | Maximum Grades % (3) | Pavement Widths m (4) | Minimum Shoulder Widths m | Embank Slopes | |
|------------------|------------------|---------------|----------|--------------------|-------------------|-------------------|------------------------|---------|----------------------|-----------------------|---------------------------|---------------|---------|
| | | | | | | | Stopping | Passing | | | | Less Than 3m | Over 3m |
| Special | Over 3000 | | Flat | 100 | Max 10 | 430 | 200 | 800 | 3 | | | | |
| | | | Rolling | 80 | Min 2 | 280 | 150 | 500 | 4 | 7.5 | 3.0 | | |
| | | | Mountain | 60 | | 160 | 100 | 300 | 5 | | 2.5 | | |
| Class I | Over 1000 | | Flat | 100 | Max 8 | 340 | 150 | 800 | 3 | | 2.0 | | |
| | | | Rolling | 80 | Min 2 | 200 | 100 | 500 | 4 | 7.0 | 2.5 | | |
| | | | Mountain | 60 | | 100 | 65 | 300 | 6 | | 2.0 | | |
| Class II | 500 to 1000 | | Flat | 80 | Max 8 | 200 | 100 | | 3 | 6.0 to 7.0 | 1.5 | | |
| | | | Rolling | 60 | Min 2 | 110 | 65 | | 4 | | 2.0 | | |
| | | | Mountain | 40 | | 30 | 35 | | 4 | | 1.5 | | |
| Class III | Less Than 500 | | Flat | 60 | Max 8 | 110 | 65 | | 6 | | 1.2 | | |
| | | | Rolling | 40 | Min 2 | 50 | 35 | | 4 | 6.0 to 7.0 | 1.0 | | |
| | | | Mountain | 30 | | 30 | 25 | | 5 | | 1.0 | | |

- (1) - Whenever a traffic of over 3000 ADT is anticipated, the roadway design is expected to be drafted to include two independent lanes, after interconnected. The same applies to steep areas where 2000 ADT is anticipated.
- (2) - Special and Class I roads - All curvature of less than 600 meters shall be transitioned with transition curves with radii in direct proportion to the length. Class II & III roads. Transition Curves shall be adopted for curvature radius of less than 440 meters. The transition to be used may be one called circular transition with double radius.
- (3) - Values are maximum for sections up to 1000 meters above sea level. They shall be reduced 5% for altitudes over 1000 meters. They may be increased 1% for lengths of sections up to 900 meters on flat terrain, 3000 meters in rolling terrain and 150 meters in mountainous terrain.
- (4) - On the roads containing two independent roadways with 2 lanes on each roadway, the roadway should be 7 meters wide. Curves will be widened where required by design speed and radius of Curvature.

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ANNEX III, Page II of 16
Exhibit E, Page 1 of 1

PE-91 ESTIMATE OF QUANTITIES & COSTS
(based on CR\$ 1.00 = \$1.00)

1st Section - Km 0 - 22

| | Unit | Quantity | Unit Cost | CR\$ Total Cost | \$Equivalent Total Cost |
|--|------|----------|-----------|--------------------|----------------------------|
| (a) Select borrow for subbase & base | M3 | 14,800 | 230 | 17,204,000 | 37,400 |
| (b) Haul of select borrow (Av. 15 Km) | Ton | 127,600 | 670 | 85,492,000 | 185,800 |
| (c) Preparation of subgrade & processing & compacting sub-base | M3 | 50,600 | 930 | 47,058,000 | 102,500 |
| (d) Processing & compacting of base | M3 | 62,900 | 930 | 58,497,000 | 127,200 |
| (e) Application of Prime Coat (MC-1) | M2 | 179,500 | 30 | 5,385,000 | 11,700 |
| (f) Construct double surface treatment (incl. AC application & furnishing aggregate) | M2 | 158,400 | 270 | 42,768,000 | 95,000 |
| (g) Haul of surface treatment aggregate (Av. 15 Km) | Ton | 7,040 | 670 | 4,717,000 | 10,200 |
| (h) Asphalt for prime (MC-1) | Ton | 268 | 59,000 | 15,812,000 | 34,400 |
| (i) Asphalt for surface treatment (AC 150-200) | Ton | 481 | 37,000 | 24,136,000 | 56,800 |
| | | | | <u>305,069,000</u> | <u>650,000</u> |

2nd Section - Km 22-42

| | | | | | |
|---|-----|---------|--------|--------------------|----------------|
| (a) Select borrow for sub-base | M3 | 24,000 | 270 | 6,480,000 | 14,100 |
| (b) Haul of select borrow (Av. 4 Km) | Ton | 40,000 | 230 | 9,200,000 | 20,000 |
| (c) Preparation of sub-grade & processing & compacting sub-base | M3 | 64,000 | 930 | 59,520,000 | 129,400 |
| (d) Processing & compacting water-bound macadam base (incl. furnishing aggregate) | M3 | 28,000 | 4,480 | 125,440,000 | 272,700 |
| (e) Haul of base aggregate (Av. 15 Km.) | Ton | 40,000 | 670 | 26,800,000 | 58,300 |
| (f) Processing & compacting shoulder material | M3 | 14,000 | 1,200 | 16,800,000 | 36,500 |
| (g) Application of Prime Coat (MC-1) | M2 | 160,000 | 30 | 4,800,000 | 10,400 |
| (h) Construct bit plant mix surfacing (incl. furnish. aggregate, hauling to road & empctg.) | M3 | 5,600 | 9,800 | 54,880,000 | 119,300 |
| (i) Haul of aggregate for plant mix (Av. 15 Km quarry to plant) | Ton | 9,600 | 670 | 6,432,000 | 14,000 |
| (j) Asphalt for prime (MC-1) | Ton | 240 | 59,000 | 14,160,000 | 30,800 |
| (k) Asphalt for plant mix (AC 85-100) | Ton | 920 | 54,000 | 49,680,000 | 108,000 |
| | | | | <u>374,192,000</u> | <u>813,500</u> |

PE-91 is 42 Km Long TOTAL PROJECT PE-91
Av. Cost per Km. - CR\$16,125,000

677,261,000 1,472,300

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ANNEX III, Pg. 12 of 16
Exhibit F, Pg. 1 of 5

PE-62 ESTIMATE OF QUANTITIES & COSTS
(Based on CR\$ 460 - \$1,00)

| | | Unit | Quantity | Unit Cost | CR\$ Total Cost | \$Equivalent Total Cost |
|---------------------------------|--|------|----------|-----------|--------------------|----------------------------|
| <u>1st Section - Km 0 - 25</u> | | | | | | |
| (a) | Select Borrow for Base | M3 | 80,000 | 270 | 21,600,000 | 47,000 |
| (b) | Haul of Select Borrow (Av. 9 Km) | Ton | 160,000 | 420 | 67,200,000 | 146,000 |
| (c) | Processing & compacting of existing subgrade for sub-base | M3 | 50,000 | 930 | 51,150,000 | 111,200 |
| (d) | Blending existing sub-base with select borrow & processing & compacting for base | M3 | 72,000 | 1,200 | 86,400,000 | 187,800 |
| (e) | Application of Prime Coat (MC-1) | M2 | 200,000 | 30 | 4,000,000 | 13,000 |
| (f) | Construct double surface treatment (incl. AC application & furnishing aggregate) | M2 | 175,000 | 270 | 47,250,000 | 102,700 |
| (g) | Haul of surface treatment aggregate (Av. 12 Km) | Ton | 9,500 | 580 | 5,510,000 | 12,000 |
| (h) | Asphalt for Prime (MC-1) | Ton | 930 | 59,000 | 19,470,000 | 42,300 |
| (i) | Asphalt for Surface Treatment (AC 150-200) | Ton | 550 | 54,000 | 29,700,000 | 64,600 |
| | | | | | <u>334,280,000</u> | <u>726,700</u> |
| <u>2nd Section - Km 25 - 44</u> | | | | | | |
| (a) | Select Borrow for Sub-base and Shoulders | M3 | 64,000 | 250 | 16,000,000 | 34,800 |
| (b) | Haul of select borrow (Av. 9 Km) | Ton | 94,000 | 420 | 39,480,000 | 85,800 |
| (c) | Preparation of subgrade & processing & compacting subbase and shoulders | M3 | 80,000 | 1,200 | 96,000,000 | 208,700 |
| (d) | Excavation of rock outcropping and crushing for base | M3 | 31,000 | 1,660 | 51,460,000 | 111,900 |
| (e) | Construction of crushed base (incl. hauling spreading, processing and compaction) | M3 | 31,000 | 1,790 | 55,490,000 | 120,600 |
| (f) | Application of Prime Coat (MC-1) | M2 | 150,000 | 30 | 4,500,000 | 9,800 |
| (g) | Construct double surface treatment (incl. AC application & furnishing & haul. aggregate) | M2 | 130,000 | 270 | 35,100,000 | 76,300 |
| (h) | Asphalt for Prime (MC-1) | Ton | 250 | 29,000 | 14,750,000 | 32,000 |
| (i) | Asphalt for surface treatment (AC 150-200) | Ton | 430 | 54,000 | 23,220,000 | 50,500 |
| | | | | | <u>336,000,000</u> | <u>730,400</u> |
| | | | | | <u>670,280,000</u> | <u>1,457,100</u> |

PE-62 is 44 Km. Long TOTAL PROJECT PE-62
Av. Cost per Km - CR\$15,234,000

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ANNEX III, Pg. 13 of 16
Exhibit F, Pg. 2 of 5

PROJECT PROGRAM OF
USE OF P.L. 480 CRUZEIROS BETWEEN
JUNE 1, AND DECEMBER 31, 1964

(Billions Cr\$)

| | |
|----------------------------|--------------|
| A. <u>Availability</u> | 120. |
| B. <u>Utilization</u> | |
| (1) Power | 28.9 |
| (2) Roads | 21.3 |
| (3) Industrial Development | 29. |
| (4) BNDE | 20. |
| (5) Northeast | 10. |
| (6) Miscellaneous | 10. |
| | <u>119.2</u> |

Details of Utilization

| | |
|---------------------------------|-------------|
| A. Power | |
| (1) FURNAS | 4.5 |
| (2) CNEC | 10. |
| (3) CEMAT | 2.9 |
| (4) Passo Real | 10. |
| (5) Caxias de Sul | 1.5 |
| | <u>28.9</u> |
| B. Roads | |
| (1) Goias | 10.8 |
| (2) Parana | 10.5 |
| | <u>21.3</u> |
| C. Industrial Development Banks | |
| (1) FINASA | 18. |
| (2) Santa Catarina | 4. |
| (3) CODEPAR | 5. |
| (4) Bahia | 2. |
| | <u>29.</u> |

(Billions Cr\$)

| | | |
|----------------|------------|-------|
| D. <u>ENDE</u> | 20. | |
| E. Northeast | 10. | |
| F. Contingency | <u>10.</u> | 119.2 |

Projects by Degree of Readiness For
 Loan Authorization

| | | |
|--|------------|--|
| A. <u>Mission authorized (next step signing of obligating document)</u> | | |
| (1) FURNAS | 4.5 | |
| (2) CEMAT | <u>2.9</u> | |
| | 7.4 | |
| B. <u>Projects with Feasibility Study in hand under intensive review</u> | | |
| (1) CELG | 10 | |
| (2) Goias Roads | 10.8 | |
| (3) Parana Roads | 10.5 | |
| (4) CAMIG | 2. | |
| (5) Caxias do Sul | 1.5 | |
| (6) Vargas Foundation | <u>2.</u> | |
| | 36.8 | |
| C. <u>Feasibility Study being reviewed</u> | | |
| (1) Passo Real | 10. | |
| D. <u>Projects where discussions with Borrower and preliminary evaluation indicate reasonably firm assurance of project feasibility</u> (Development Banks) | | |
| (1) FINASA | 18. | |
| (2) Santa Catarina | 4. | |
| (3) CODEPAR | 5. | |
| (4) Bahia | <u>2.</u> | |
| | 29. | |

(Billions Cr\$)

E. BNDE (Mission already approved in principle Cr\$2.8 billion and has under study another Cr \$7 billion in projects)

F. Northeast 10.

G. Contingency 10.

Grand Total

| | |
|----|------------|
| A. | 7.4 |
| B. | 36.8 |
| C. | 10. |
| D. | 28. |
| E. | 20. |
| F. | 10. |
| G. | <u>10.</u> |

Grand Total 122.2

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington 25, D. C.

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AID-DLC/P-165/E/A DRAFT
AID Loan No. 512-L-015
ANNEX IV, Page 1 of 2
June 9, 1964

AMENDED LOAN AUTHORIZATION

Provided from: Alliance for Progress Funds
Brazil: Combined Highway Project

Pursuant to the authority vested in the Administrator, Agency for International Development, I hereby amend the Loan Authorization dated June 29, 1963, to read as follows:

Pursuant to the authority vested in the Administrator of the Agency for International Development ("A.I.D.") by the Foreign Assistance Act of 1961, as amended, and the delegations of authority issued thereunder and after consultation with the Development Loan Committee, I hereby authorize the establishment of a loan pursuant to Part I, Chapter 2, Title VI, Alliance for Progress, to the Superintendencia de Desenvolvimento do Nordeste (Borrower) of not to exceed Eighteen million four hundred thousand United States dollars (\$18,400,000) to assist in financing the cost of goods, materials and services to construct or improve 291 miles of state highways of Northeast Brazil, this loan to be subject to the following terms and conditions:

1. Interest and Terms of Repayment. Borrower shall repay the loan to A.I.D. in United States dollars within forty (40) years from the first disbursement under the loan, including a grace period of not to exceed ten (10) years. Borrower shall pay A.I.D. interest in United States dollars as follows:
 - (a) On the disbursed balance of the first eleven million United States dollars (\$11,000,000) disbursed, three quarters of one ($3/4$ of 1) percent per annum; and
 - (b) On the disbursed balance of the remainder of the loan, three quarters of one ($3/4$ of 1) percent per annum for ten (10) years after the first disbursement which causes the sum of all disbursements to exceed eleven million United States dollars (\$11,000,000), and two (2) percent per annum thereafter.

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2. Other Terms and Conditions.

- (a) Equipment, materials and services (except shipping which shall be procured from the United States and marine insurance) financed under the loan shall be procured from the United States of America or Brazil.
- (b) United States dollars utilized under the loan to finance local costs shall be made available to the Borrower or its designee through appropriate procedures and shall be used only for procurement in the United States (excepting marine insurance).
- (c) The loan shall be secured in a manner satisfactory to A.I.D.
- (d) As conditions precedent to disbursement, A.I.D. shall require:
 - i. Arrangements satisfactory to A.I.D. to make available the cruzeiros for the project.
 - ii. Employment of qualified U. S. or Brazilian technical consultants, satisfactory to A.I.D., to advise and assist in carrying out of the project.
 - iii. Arrangements satisfactory to A.I.D. for maintenance of the roads to be constructed or improved.
- (e) The loan shall be subject to such other terms and conditions as A.I.D. may deem advisable.

Administrator

Date