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SEMI-ANNUAL REPORT

**CONTRACT ADMINISTRATION
TECHNICAL ADVISORY SERVICES**

TO

VIETNAM HIGHWAY ADMINISTRATION



BY

ROY JORGENSEN ASSOCIATES INC.

CONTRACT No. AID 730-3577

NOVEMBER 1974

ROY JORGENSEN ASSOCIATES, INC.

Engineering and Management Consultants

POST OFFICE BOX 575
GAITHERSBURG, MARYLAND 20760
94 CONG LY
SAIGON VIETNAM

November 13, 1974

Mr. Phan Dinh Tang
Director General
Vietnam Highway Administration
94 Cong Ly
Saigon, Vietnam

Dear Mr. Tang:

Subject: 6 Month Report
Project AID 730-3577

Submitted herewith is the 6 Month Report showing the accomplishment under Contract AID 730-3577 for the period May 4, 1974 to November 4, 1974.

The Plan of Action as presented in our Year End Report has been followed very closely and at this time we see no need to change any schedules in any appreciable amount.

The Standard Specifications for Highways and Bridges have been completed and are being printed. These are in English only. As soon as the printing of these have been completed the translators will begin work.

The Design Manual has all chapters completed and translated and are being checked by your staff. It is anticipated we will submit these to the printer by November 15, 1974.

The entire staff appreciated the help and assistance your personnel and members of USAID Engineering Division have given us during this period. We are looking forward to the next 6 month period when many of our tasks will be implemented.

Advisors assigned to the project, their dates of arrival and departure are shown below:

<u>Name</u>	<u>Title</u>	<u>Date Arrived In Vietnam</u>	<u>Location</u>	<u>Departure Date</u>
Reginald H. Arnold	Deputy Chief of Party	Aug 24, 73	Saigon	-
Donald R. Smail	Construction Manager-Road	Feb 22, 73	Saigon	Aug 16, 74
Norman L. Jose	Construction Manager-Bridge	Sept 11, 73	Saigon	-
Vincent E. Black	Construction Engineer	May 25, 73	Saigon	Jun 25, 74
Donald E. Burgess	Construction Engineer	Jul 22, 73	Saigon	-
Vincent F. Roca	Construction Engineer	Aug 24, 73	Saigon	Nov 24, 73
Travis J. Bunn	Construction Engineer	Jul 17, 73	Nha Trang	-
Kenneth E. Hansing	Construction Engineer	Jul 30, 73	Dalat	-
Edward P. Mallowney	Construction Engineer	Aug 28, 73	Saigon	Aug 29, 74
Perry F. Cooper	Construction Engineer	June 25, 71	Can Tho	Jul 31, 74
Vernon D. Fohlhammer	Construction Manager	Jan 24, 74	Saigon	-
Jesse M. White	Construction Engineer	May 18, 74	Da Nang	..

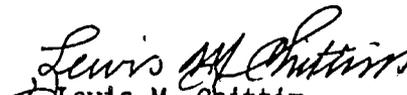
In addition to the above U.S. personnel, 26 Vietnamese are employed.

Mr. Phan Dinh Tang
November 13, 1974
Page 3

FINANCIAL REPORT TO DATE

<u>Budget</u>	<u>Expended To Date</u>	<u>Balance</u>	<u>% Complete Money</u>	<u>% Complete Actual Time</u>	<u>Overall Time</u>
U.S. Dollars					
978,000	666,450	311,550	68%	62%	75%
Piasters					
126,524,000	53,290,559	73,233,441	42%	62%	75%

Sincerely yours,


Lewis M. Chittim
Chief of Party

Incl
as

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INTRODUCTION

This report presents a review of the progress made from May 1974 to November 1974 in the Contract Administration Technical Advisory Services Contract to the Vietnam Highway Administration by Roy Jorgensen Associates, Inc under Contract AID 730-3577.

The report is compiled in Six Chapters, namely:

1. Summary of Progress
2. Policies and Legislation
3. Standard Specifications and Documents
4. Design and Procedural Manual
5. District Assistance Program
6. Expected Accomplishments in the Next Year

Each Chapter gives a description of the accomplishments in its area and appropriate comments regarding the development of the subject.

I. SUMMARY OF PROGRESS

1. General

The ultimate aims and the objectives of this contract effort is to improve the managerial and operational effectiveness and capacity of VHA relative to contract implementation and administration.

With the near completion of the Standard Specifications for Highways and Bridges, Contract Documents and Contract Administration Procedures, we are fast approaching the time for the implementation of Construction Management.

To date the construction program has been limited and largely administered by USAID, pending development of VHA capability.

The Consultant's efforts to systematically develop specifications and contracting procedures has been accelerated where necessary to render the best assistance to VHA toward achieving complete construction management in accordance with the USAID time table.

The assistance provided the VHA Districts has consisted of monitoring CPCD Secondary Projects and also observing and advising on all activities in the District, including maintenance, organizing subdistricts and budgeting. Most of the technical assistance and recommendations have been aimed at improving the selection and production of materials and the construction methods employed. Due consideration has been given to the necessity for labor-intensive methods.

In anticipation of implementing a Maintenance System and to further assist in better management practices the Consultant Advisors in the Districts have been working with VHA Maintenance Staff in making road inventories to be used in planning and budgeting for maintenance operations.

The Advisor in the Saigon District has given technical assistance to the Training Officers in producing audio-visual training aids on preparation of coldmix bituminous patching mixtures and bituminous pavement patching.

Security of highways remains a constraint in carrying out the District activities. Harassment of maintenance crews and blowing up mainline bridges by the subversive forces is a common occurrence.

2. Scope of Services

The accomplishments under this item are summarized as follows:

- a. Policy -- Policies have been defined and approved for Prequalification Procedures, for the Standard Specifications for Highways and Bridges, and for all Contract Administration activities. This item is considered to be approximately 95 percent complete. The remaining 5 percent is to be explored under actual construction operations with the new specifications and contracting procedures.
- b. Legislation -- The Consultant considers that present legislation is adequate. However, when the actual implementation of the approved recommended Contract Administration procedures takes place

it should bring out any inconsistencies or conflicts with present legislation. We therefore consider this item 99 percent complete.

- c. Contract Administration - Procedures and documents have been developed relating to advertising, award and execution of contracts, and evaluation of proposals. These are contained in the Specifications, General Provisions and the Prequalification Procedures. The development of procedures for contract planning, compiling estimates, scheduling, voucher processing and payment of contractors is being developed. The final drafting of this will be done concurrently with the implementation of host country contracts. It is estimated, except for the last noted items, that this work effort is 90 percent complete.
- d. Contractor Qualification Standards - The year end report on this item indicated that Prequalification Procedures, Contract Documents and Specifications including General Provisions had been completed in final draft form and had been submitted to the Review Committee for approval. It was at that time estimated that these were 95 percent complete. We did not, however, anticipate the ensuing difficulty in getting final approval of this draft. This process involves contractor rating and bonding practices and therefore required a great deal more time in resolving differences and arriving at a mutually acceptable compromise. At this time we have completed and sent to the printer the final draft of the Standard Specifications General Provisions, and have completed prequalification procedures. It is anticipated the contractor qualification standards will be used in the near future for host country contracts.

We judge this to be 95 percent complete now, and 100 percent complete by December 1, 1974.

- e. Contract Documents - Preparation of the contract documents has been completed in final draft form and is being reviewed by Staff and VHA committee. This is considered 95 percent complete.
- f. Training - Assistance by our RJA District Advisors continues to be extended to VHA District Engineers and their staffs. This assistance is provided in monitoring CPCD construction projects, routine as well as special maintenance work, reviewing dossiers, making recommendations and comments as seem appropriate, to the District Engineer.

All training is being coordinated with the overall training activity under the general management contract. Our advisors have assisted in the field demonstrations in setting up proper procedures for several training courses, particularly in monitoring the correct methods of work.

The following relevant training courses have been completed or are under development as noted in Exhibit 6 Training Course Index 31 October 1974 of Contract I.

1. In-place Soil Density Determination by the Balloon Test.
2. In-place Soil Density Determination by the Sand Cone Method.
3. Mathematics One
4. Sampling of Materials

- g. Maintenance - This remains at the same status as noted in the year end report, that is, our effort has been providing field advice and guidance to VHA District Engineers and Maintenance Engineers with respect to maintenance practices, methods and the use of equipment.
- h. Reporting System - Because of lack of VHA responsibility for contract work, nothing has been done so far to design and implement a reporting system covering contract activities.

3. Construction Management System

This system will be developed from reference information from the Specifications, regulatory documents, and Standard Manuals. The complete system will provide steps for administering the contract from advertising for bids to final acceptance of the constructed project.

Figure 1 on the following page shows the schedule of activities for the next 6 months period.

Figure 2 gives a summary of percent completion under the various headings.

4. Recommendation for Maintenance System

It was recommended in the year end report that the Scope of Services be amended to make specific provision for a Maintenance Management System.

FIGURE 1

WORK ACTIVITY	MONTHS						PERCENT COMPLETION	
	May	June	July	Aug	Sept	Oct	Expected	Actual
1. Develop Objectives, Policies and Procedures		Completed					100	100
2. Orientation and Assignment of RJA Personnel		Completed					100	100
3. Current Status Review		Completed					100	100
4. District Review of Interim Program		Completed					100	100
5. Contract with A & E Contractor							100	100
6. Development of Road & Bridge Specifications							100	100
7. Involvement of VHA Field Personnel							N.A.	N.A.
8. Develop Contract Administration Procedures							100	95
9. Organize and Implement District Laboratories*							100 [†]	0*
10. Provide Training and Assistance							25	10
11. Development Phase of VHA District Personnel							50	50
12. Review Maintenance Program and Procedures**							50**	50**
13. Develop Construction Management System							90	80
14. Phase Out USAID Construction Work							0	
15. Final Report							0	

* Under other contracts

** See other sections of this report for revised scope of work for Maintenance Program

FIGURE 2

PERCENT COMPLETIONS

31 OCTOBER 1974

SUMMARY OF CONSTRUCTION SYSTEM ACCOMPLISHMENTS

<u>WORK AREAS</u>	<u>DEVELOPMENT</u>	<u>TRANSLATION</u>
1. Policies and Legislation	95%	0%
2. Contract Administration	90%	0%
3.* Standard Specifications	100%	50%
4.**Design and Procedural Documents	65%	30%
5. District Assistance Program	50%	Not Applicable
6. Environmental Impact Statements	100%	Not Applicable

WEIGHTED AVERAGES

	<u>DEVELOPMENT</u>	<u>TRANSLATION</u>
* STANDARD SPECIFICATIONS		
General Provisions	15	0
Highway Specifications	35	0
Bridge Specifications	35	90
Materials	15	-
** DESIGN & PROCEDURAL DOCUMENTS		
Highway Design	95%	95%
Bridge Design	98%	Not necessary
Sampling and Testing	20%	0%
Operational Procedures for the Division of Contract Administration	5%	0%

II. POLICIES AND LEGISLATION

The Consultant feels that most of the problems arising on this subject can be solved satisfactorily under current legislation, and so stated in the year end report. Therefore, there has been no activity in this area.

Development of basic policies is considered complete. These relate primarily to contract administration activity such as, prequalification of contractors, contractor rating system, contract performance standards and changes in contract scope. They will be ready for implementation in December.

Policies and procedures in design, construction and materials functions are essentially covered in the design, construction, and sampling and testing manuals.

Figure 3 on the following page shows the percent of completion under the various headings.

FIGURE 3

PERCENT COMPLETIONS

31 OCTOBER, 1974

POLICIES AND LEGISLATION

	<u>DEVELOPMENT</u> (%)	<u>TRANSLATION</u> (%)
1. Review of Legislation and Policies	100	Not applicable
2. Development of Legislation	Not applicable	
3. Development of Basic Policies	100	0
4. Development of Operating Policies	95	0
OVERALL	98	0

III. STANDARD SPECIFICATIONS AND DOCUMENTS

Standard Specifications being prepared for VHA are divided into four Sections.

General Provisions

Highway Construction Specifications

Bridge Construction Specifications

Materials Specifications

Progress will be reported under these headings.

1. General Provisions

As noted in previous reports the General Provisions of the Standard Specifications is the section which prescribes contract administration regulations, procedures, methods and controls which are legally binding on both the contractor and VHA.

Work on developing the General Provisions (Section 100) part of the Standard Specifications is now complete and being printed as part of the Standard Specifications. These provisions are composed of the following items.

1. Definition of terms
2. Contract type and bidding procedures
3. Bidding requirements and conditions
4. Award and execution of contract
5. Scope of work

6. Control of work
7. Control of materials
8. Legal relations and responsibility to the public
9. Prosecution and progress
10. Measurement and payment

Review and approval of the General Provisions by VHA took far longer than was anticipated. Between 1 May and 30 September a total of 14 conferences were requested by VHA in the process of painstakingly and thoroughly reviewing the General Provisions. These provisions comprise Section 100 of the Standard Specifications and are now 100% complete.

Not part of the General Provisions but closely related are the Methods for Determining Contractor Ratings for Prequalification, also the contract documents known as the "proposal package".

These have been drafted and distributed to VHA Staff, USAID and RJA Staff and approval is expected by the time this report is printed.

2. Highway Construction Specifications

The Highway Construction Specifications were formulated into the following sub-sections.

Section 200	Earthwork
Section 300	Base Courses
Section 400	Bituminous Pavement
Section 550	Portland Cement Concrete Pavement
Section 600	Miscellaneous Construction

The above specifications were drafted and revised many times after conferences with VHA Staff for their opinions and ideas. After final drafting, RJA Advisors and VHA Staff met with the Director General and the Steering Committee to give their final approval. These are now complete and are being printed. Translation to Vietnamese has not commenced.

3. Bridge Construction Specifications

The last draft of these Specifications included any changes necessary to correlate with the Highway Construction Specifications for continuity and reference and for interrelation for construction.

The English version of the Bridge Construction Specifications is now complete and being printed. The translation to Vietnamese has been done and is being reviewed by VHA Staff as time permits.

At the request of the VHA Steering Committee the following Sections were added to those listed in the year end report.

Section 506	ASHLAR MASONRY
Section 517	WATERPROOFING
Section 518	DAMPROOFING
Section 519	NAME PLATES
Section 521	PRESERVATIVE TREATMENTS FOR TIMBER
Section 524	SKIRTING SURFACES
Section 525	ELASTOMERIC BEARINGS
Section 526	CONSTRUCTION OF TUNNEL USING STEEL TUNNEL LINER PLATES

4. Material Specifications

The materials specifications commonly used on construction projects have been compiled and will appear in the back of the Construction Specifications. They are now being printed, and are therefore considered 100% complete.

The materials specifications less commonly used will be noted and filed with VHA for inclusion in the construction contracts as Special Provisions, as need dictates.

Figure 4, Completion Schedule - Standards Specifications and Contract Documents, shows the progress to date and anticipated completion. Completion dates for translation are uncertain due to workload of our translators for technical material.

5. Contract Documents

With VHA approval of the General Provisions to the Standard Specifications, the other contract documents are now being finalized.

Preparation of the proposal form, contract agreement, etc. together with the following standard administrative forms is still in progress:

Invitation for Bids

Notice of Award

Notice to Proceed

Change Order - Extra Work Order

Supplement Agreement

Order to Suspend Work

Order to Resume Work

Request for Approval of Subcontractor
Cost-Plus Statement of Extra Work
Labor, Material and Equipment Rate Agreement
Contractors Payment Voucher
Certificate of Compliance
Certificate of Acceptance

The above will be submitted in November for VHA approval.

Figure 4 on the following page shows the completion schedule for the Standard Specifications.

FIGURE 4

COMPLETION SCHEDULE: STANDARD SPECIFICATIONS AND CONTRACT DOCUMENTS

WORK ITEM	1974		1975	
	Nov	Dec	Jan	Feb
1. STANDARD SPECIFICATIONS				
a. General Provisions				
-- Translation	Completed			
b. Highway Construction Specifications				
-- Translation	Completed			
c. Bridge Construction Specifications				
-- Translation	Completed			
d. Materials Specifications *				
-- Translation				
2. CONTRACT DOCUMENTS				
a. Proposal Package				
-- Translation				
b. Others				
-- Translation				

* Development is complete and they are now being printed.

IV. DESIGN AND PROCEDURAL DOCUMENTS

This Section is composed of six separate documents, namely:

Prequalification of Contractors
Highway Design Manual
Bridge Design Manual
Manual of Sampling and Testing
Operational Procedures for the Division
of Contract Administration
Construction Manual

1. Prequalification of Contractors

The regulations relating to Prequalification of Contractors is contained in a document entitled Rules and Regulations Pertaining to the Prequalification and Registration of Prospective Bidders and Contractors. The rules for the rating of Contractors is contained in a separate document and has been developed after many conferences with VHA Staff. This together with the Bidder's Application for Prequalification and Registration is presently being reviewed in final draft form. These are considered 95% complete.

Because of problems related to the affidavit (as mentioned in First Year Progress Report), and other considerations brought out in discussions with VHA, the original draft of material cited in the First Year Progress Report had to be substantially revised.

Five conferences were requested by VHA on these subjects between May and September.

This redrafting has been completed and the entire prequalification "package" was submitted in October to VHA and USAID for final review and approval.

The "package" as submitted includes:

A. BIDDER'S APPLICATION FOR PREQUALIFICATION AND REGISTRATION

1. Rules and Regulations Pertaining to the Prequalification and Registration of Prospective Bidders and Contractors.

- Section I - General Requirements
- Section II - Preparation of Statement
- Section III - Submission and Acceptance of Applications
- Section IV - Type of Information Required
- Section V - Notification Concerning Prequalification and Registration
- Section VI - Change of Prequalification Rating
- Section VII - Joint Prequalification
- Section VIII - Requests for Proposal Forms
- Section IX - Disqualification and Notice

2. Applicant's Statement of Organization and Experience for Prequalification and Registration (Form 034/PR-1).

3. Applicant's Statement of Available Construction Equipment (Form 034/PR-2).

4. Applicant's Statement of Assets/Liabilities and Financial Statement (Form 034/PR-3).

B. METHODS FOR DETERMINATION OF CONTRACTOR RATINGS FOR PLACEMENT IN THE VHA LIST OF PREQUALIFIED AND REGISTERED BIDDERS

1. Rating Method to be used in the case of Vietnam Contractors who will bid for VHA Works funded by RVN with full payment to the Contractor in piasters.
 - (a) Data Sheet No. 1 for computation of liquid assets and liabilities.
2. Rating Method to be used in the case of all Foreign Contractors and Vietnam Contractors who intend to bid for VHA Works funded all or in part by Foreign Governments or Lending Agencies, with any portion of payment to the Contractor to be made in currencies other than piasters.
 - (a) Data Sheet No. 2 for computation of liquid assets and liabilities.
3. Rating Calculation Sheet For Applicants For Prequalification and Registration.
4. Notice to Applicant of Deficient Application.
5. Notice to Applicant of Rating and Registry Number.
6. Request For Plans and Proposal Form.
7. Notice of Suspension of Prequalification.
8. Notice of Disqualification.

2. Highway Design Manual

As noted in the year end report the manual contains fifteen Chapters. For the detailed breakdown and general description of the contents see the year end report dated May 1974.

A great deal of time has been spent assisting in the translation to Vietnamese. Numerous, slight changes have been made in the English version to better relate to the Vietnamese translation. During the past 4 months approximately 100 manhours in 16 meetings were spent in this effort, and progress was further slowed in the review of the translation due to the technical nature of the work. This manual will be printed in a bilingual format with Vietnamese on the left of each page and English on the right.

This is nearly complete but has more drafting to be done on the model bridge plans. This is considered 95 percent complete and printing will commence as soon as the Standard Construction Specifications have been printed, estimated to be about November 15.

3. Bridge Design Standards

As noted in the year end report, the basic bridge design manual will be the 1973 AASHO Bridge Design Standards, however, certain supplemental materials have been compiled to amend the American text of the AASHO Standards. These also are listed in the above mentioned year end report.

The above has been accomplished and the Bridge Design Standards are considered 100% complete.

4. Manual of Sampling and Testing

This manual will be divided into 3 sections and will consist of:

1. An introduction, geared to field personnel covering reasons for, and duties and objectives of proper sampling and handling of materials.
2. A section which will describe what tests will be conducted and where; that is, in the VHA Central Laboratory, the VHA District Laboratory, or by VHA personnel on the job site.
3. The third section will be a tabulation of all the various samples and tests required.

Work on the manual has been delayed due to higher priority needs. Part 3 of the above has been done, the remaining is in outline form only. This manual is considered 25% complete.

5. Operational Guidelines For The Division of Contract Administration

This will be compiled after completion of all specifications, contract documents, and the contractor prequalification "package".

6. Construction Manual

This will be the last manual to be completed and has been compiled only in outline form. Priority of other work has delayed its completion. It is anticipated this will be completed sometime in April 1975.

This Construction Manual will consist of four parts; Part I, Construction Management Guide; Part II, General Provisions; Part III, Construction

Procedures; and Part IV, Office Procedures and Inspection Reports.

Part I - Construction Management Guide will include the following:

- The objectives of the construction function, and their relationships to the objectives of VHA.
- The applicable basic VHA policies and construction operating policies.
- Diagrams of the organizational structure with statements of responsibilities, reporting relationships and working relationships.
- Position descriptions for correlated officials and key supervisory personnel.
- Diagrams of principal work flows

Part II - General Provisions shall be used by all construction personnel as a reference for general information concerning specifications, plans, mathematics, and materials. A thorough knowledge of Part II of the Construction Manual is necessary to apply procedures contained in Parts III and IV of the Manual.

Part III - Construction Procedures shall be used by all construction personnel to assist in obtaining the quality level of construction required by the specifications.

Part IV - Field Office Procedures and Inspection Reports shall be used by all construction personnel to assist in completing and maintaining required records and reports.

Figure 5 on the following page shows the progress schedule for the Design and Procedural Documents.

FIGURE 5

PROGRESS CONTRACT ADMINISTRATION

WORK ITEM	1974		1975		
	Nov	Dec	Jan	Feb	Mar
1. Prequalification of Contractors					
-- Translation					
2. Highway Design Manual					
-- Translation					
3. Bridge Design Specifications					
-- Translation		Not Necessary			
4. Materials Sampling & Testing Manual					
-- Translation		Not Necessary			
5. Contract Administration Package					
-- Translation					
6. Construction Manual					
-- Translation					

V. DISTRICT ASSISTANCE PROGRAM

District Activities

The district advisors continue to monitor the CPCD program and have made final inspections as well as progress inspections along with VHA personnel on these projects. During these field trips they have observed construction methods and procedures being used and have made recommendations where needed. They have been particularly concerned with quality control in the use of materials and the end result of construction work.

The district advisors have reviewed many of the dossiers prepared in the VHA District office for proposed work on the Provincial Highway Secondary System. They have made recommendations for revising the form of the dossiers so that a more complete description of the intended accomplishments will be noted.

With the damage to highways and bridges by subversive action as well as by floods, the VHA maintenance forces have been occupied in major repairs of this damage. In some areas of the country, Danang in particular, maintenance forces spend all their time in major repairs of this sort and not in routine maintenance. Our advisors have assisted the District Engineers and their staffs in this effort.

Maintenance activities vary throughout the country depending a great deal on the rainy season. During the rainy season considerable damage is done to the highways because of unstable subbases or lack of any base at all. A major portion of the maintenance activity has been in the repair

of shoulders and patching pot holes or larger areas that have broken up. Maintenance work calendars have been developed for all districts. These calendars will help maintenance personnel in scheduling work at the proper times during the year.

The advisors have recommended better quality control in selecting materials, proportioning them and in mixing operations for making premix patching materials. Much time has also been spent in instructing maintenance personnel in the proper methods of preparing and patching pavement failures.

Some of the advisors attend VHA District weekly staff meetings. This gives them an opportunity to hear, first hand, the problems concerning the districts and to give advice, if requested.

The following pages show pictorially, some of the activity in the Districts.

Maintenance Program Needs

It has become evident after observing the work effort in the Districts that there is need of much special maintenance work as well as maintenance work of a routine nature. Heavy trucking, including military vehicles, poor foundation conditions, flood conditions and destruction of bridges and highways by subversive action have kept the maintenance forces over-extended at times.

Programming, training and improving maintenance methods and performance would be of great benefit to VHA and the country.

It is planned to implement a Maintenance System in the next few months in selected subdistricts. Nationwide implementation will take place next year. Ground work has been completed for this with the holding of a Maintenance Activity Conference for RJA Staff. Also visitations by Saigon RJA staff to all the VHA Districts were made to acquaint them with the basic principles of the system. Inventories of roadway features are also being made in selected subdistricts throughout the country.

VI. EXPECTED ACCOMPLISHMENTS NEXT YEAR

1. General Contract Services

It is expected that the specifications and documents will be completed, reviewed and approved by November 1974.

All aspects of contract administration will be implemented by VHA when available and needed. The first host country contract is expected to be administered by VHA in January 1975.

We will assist in implementing the following:

Prequalification of Contractors

Contract Preparation

We will assist, as needed, in translating the remainder of the specifications, contract documents, rules for prequalification of contractors, and other miscellaneous documents and manuals.

2. District Assistance Program

With the proposed plan for several host country contracts administered entirely by VHA, it is anticipated that the construction field activities will increase.

Our district advisors should be especially helpful in providing technical assistance and advice to the District organizations charged with the responsibility for supervision of construction.

We will continue to monitor the secondary CPCD construction program.
We will assist in implementing the following:

District Organization

Project Organization

Project Control

Assist in all Maintenance Activities

Training

Figure 6 on the following page shows proposed progress schedule for the District Assistance Program.

FIGURE 6

PROPOSED PROGRESS SCHEDULE FOR DISTRICT ASSISTANCE PROGRAM

WORK ITEM	1974								1975												1976										
	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A							
1. Implement Prequalification of Contractors									Not Applicable																						
2. Implement Contract Preparation																															
3. Implement District Organization																															
4. Implement Project Organization																															
5. Implement Project Control									USAP & CPED Projects																						
*6. Develop Maintenance System																															
*7. Implement Maintenance System																															
8. Implement District Support Functions--Inventory, Weight Control, Programs, Budgets																															
9. Implement Training																															

* See other sections of this report for revised scope of work for Maintenance Program.

**DA NANG DISTRICT # 1
BRIDGE REPAIR**



This is a typical wood bridge deck originally built by the Military for movement of heavy trucks and equipment. Repairs in progress.

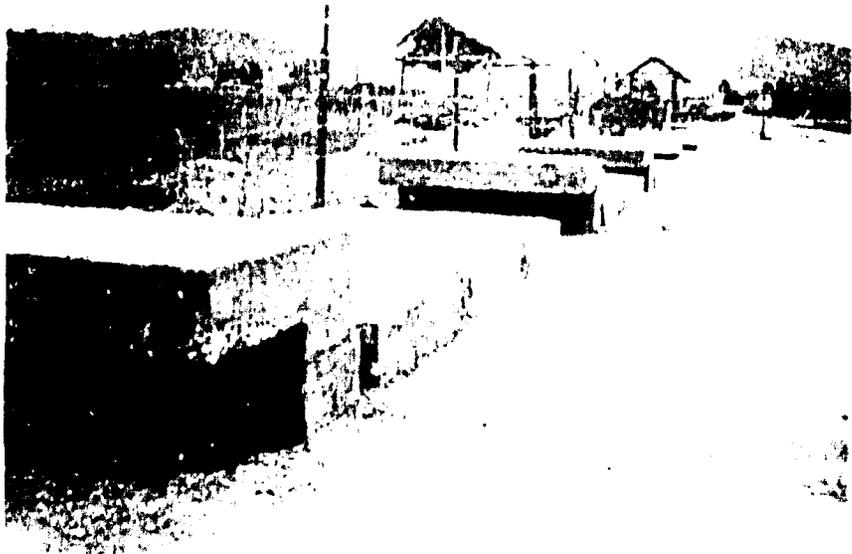


Same bridge completed

DA LAT DISTRICT # 2 BRIDGE CONSTRUCTION



District Advisor checking reinforcing steel on precast bridge deck and curb section.



Completed deck being cured. Many bridges in this District are reconstructed using this method. Frequently mixing and pouring concrete are done by hand labor.

NHA TRANG DISTRICT # 3 MAINTENANCE



District Advisor measuring surface failure prior to repairing. There are many such failures on QL-1

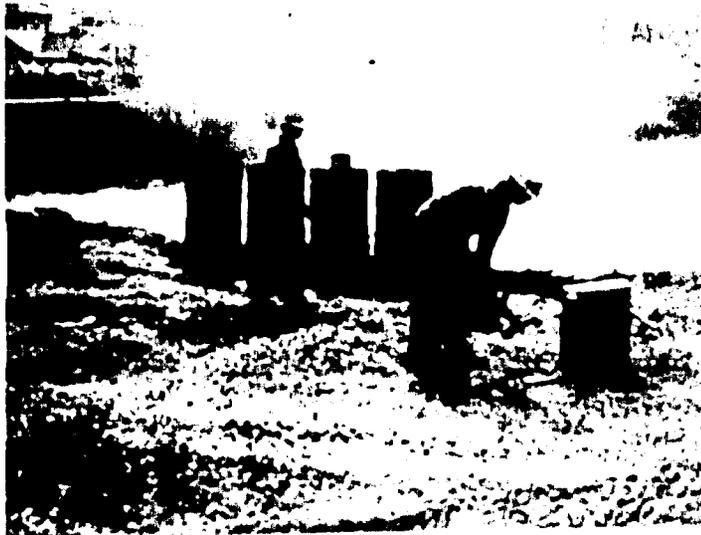


Same area after being repaired by removing old surface and replacing with cold premixed patching material.

SAIGON DISTRICT #4
MAINTENANCE

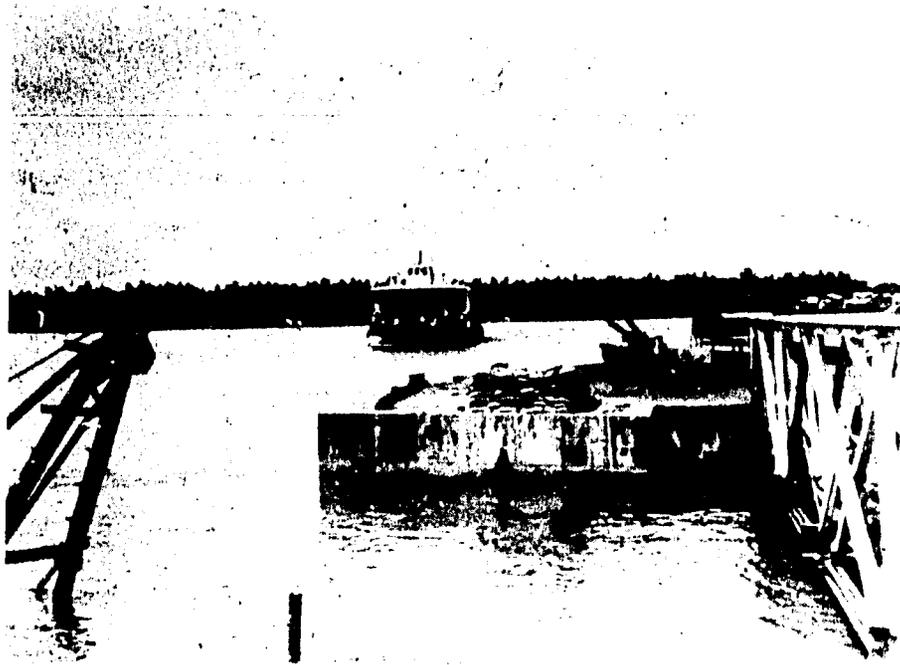


Mixing — premixed patching material using hand labor



Heating asphalt in drums. This method is a common practice throughout the country.

MY THO DISTRICT # 5
FERRY CROSSING



Hau Giang Ferry crossing Mekong River on LTL 60.
These are 100 ton ferries all constructed in Vietnam.

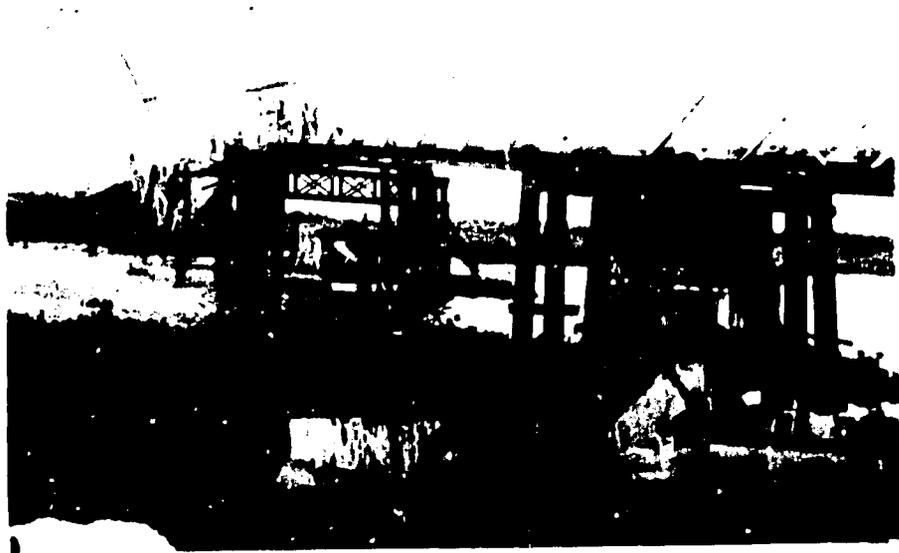


Same ferry docked ad landing. Note
the large number of pedestrians.

**CAN THO DISTRICT # 6
BRIDGE DAMAGE**



Eiffel bridge structure — Ben Nhut. This bridge was completed and accepted on 6 April 1973 at 1100 hours.



The same bridge after Viet Cong action at 3 AM the next day. Note the middle span dropped in river. The length of this bridge is 115 meters.