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Zila Roads Maintenance and Improvement Project
(USAID PROJECT NO. 388-0056)

PROGRESS REPORT

FOR THE MONTH OF
JANUARY, 1985.

By
Wilbur Smith and Associates
In association with
Bangladesh Consultants Ltd.
and
Public Administration Service

ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT

USAID PROJECT No. 318-0056

PROGRESS REPORT

January 1985

TABLE OF CONTENTS

Subject	Page No.
List Of Exhibits	iv
List Of Appendices	iv
1.0 <u>GENERAL</u>	1
2.0 <u>ORGANIZATION AND MANAGEMENT</u>	1
3.0 <u>MAINTENANCE SYSTEM AND SUPERVISION</u>	2
3.1 <u>General</u>	2
3.2 <u>Sylhet District</u>	2
3.2.1 <u>General</u>	2
3.2.2 <u>1983 - 1984 Maintenance Projects</u>	3
3.2.3 <u>1984 - 1985 Maintenance Projects</u>	4
3.3 <u>Rangpur District</u>	5
3.3.1 <u>1983 - 1984 Maintenance Projects</u>	5
3.3.2 <u>1984 - 1985 Maintenance Projects</u>	5
3.4 <u>Faridpur District</u>	6
3.4.1 <u>1983 - 1984 Maintenance Projects</u>	6
3.4.2 <u>1984 - 1985 Maintenance Projects</u>	6
4.0 <u>PREPARATION OF TECHNICAL SPECIFICATIONS</u>	7
4.1 <u>Bridges</u>	7
4.2 <u>Revision Of Specifications</u>	7
4.3 <u>Revision Of Concrete Mixture Design</u>	7
5.0 <u>TRAINING</u>	7
5.1 <u>General</u>	7
5.2 <u>On-The-Job Training</u>	9
5.2.1 <u>General</u>	9
5.2.2 <u>District Soil Laboratory Activities</u>	9

TABLE OF CONTENTS (Cont.)

Subject	Page No.
5.3 <u>Domestic (In-Country) Training</u>	9
5.3.1 <u>General</u>	9
5.3.2 <u>System Assessment</u>	9
5.3.3 <u>System Design</u>	9
5.3.4 <u>System Implementation</u>	9
5.4 <u>U.S.A./Third Country Training</u>	9
5.4.1 <u>General</u>	9
5.4.2 <u>Program Preparation</u>	10
5.4.3 <u>Program Implementation</u>	10
5.5 <u>Report Preparation</u>	10
5.5.1 <u>General</u>	10
5.5.2 <u>Project Training Report</u>	10
5.5.3 <u>Audio-Visual Presentations</u>	10
6.0 <u>CONSTRUCTION SYSTEM AND SUPERVISION</u>	11
6.1 <u>General</u>	11
6.2 <u>Sylhet District</u>	11
6.3 <u>Rangpur District</u>	11
6.4 <u>Faridpur District</u>	40
7.0 <u>PROCUREMENT OF EQUIPMENT</u>	40
7.1 <u>Local Procurement</u>	40
7.1.1 <u>Tar Boilers</u>	40
7.1.2 <u>Trailer-Mounted Water Tanks</u>	40
7.2 <u>International Procurement</u>	40
7.2.1 <u>Heavy Equipment, Vehicles, And Tools</u>	40
7.2.2 <u>USA Office Vehicles</u>	40
8.0 <u>PERSONNEL</u>	53
9.0 <u>PROBLEMS AND PROPOSED SOLUTIONS</u>	53
9.1 <u>Organization And Management</u>	53
9.2 <u>Maintenance System And Supervision</u>	53
9.3 <u>Preparation Of Technical Specifications</u>	53
9.4 <u>Training</u>	53
9.5 <u>Construction System And Supervision</u>	53

TABLE OF CONTENTS (Cont.)

	<u>Subject</u>	<u>Page No.</u>
9.6	<u>Procurement Of Equipment</u>	54
9.7	<u>Personnel</u>	54
9.8	<u>Miscellaneous</u>	54
10.0	<u>MISCELLANEOUS</u>	54

ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT

USAID PROJECT No. 388-0056

PROGRESS REPORT

January 1985

LISTS OF EXHIBITS AND APPENDICES

Subject	Page No.
<u>List Of Exhibits</u>	
Exhibit I - ZRMI Training Program Schedule And Current Status	8
Exhibit II - Map, Sylhet District	12
Exhibit III - Construction Supervision Projects - Sylhet (7 sheets) ..	13
Exhibit IV - Bar Charts, Project Schedules, And Current Status, Sylhet District	20
Exhibit V - Map, Rangpur District	27
Exhibit VI - Construction Supervision Projects - Rangpur (7 sheets) .	28
Exhibit VII - Bar Charts, Project Schedules, And Current Status, Rangpur District	35
Exhibit VIII - Map, Faridpur District	41
Exhibit IX - Construction Supervision Projects - Faridpur (5 sheets)	42
Exhibit X - Bar Charts, Project Schedules, And Current Status, Faridpur District	47
<u>List Of Appendices</u>	
Appendix A - Photographs Of Visit Of U.S. Ambassador To Sylhet District	55
Appendix B - Photographs Of Maintenance Activities	62
Appendix C - District Soil Laboratory Activities	69
Appendix D - Photographs Of Construction Activities	77
Appendix E - Current Status Of Personnel	118
Appendix F - Monthly Financial Statement, January 1985	121

ZILA ROADS MAINTENANCE AND IMPROVEMENT PROJECT

USAID PROJECT NO. 388 - 0056

PROGRESS REPORT

1.0 GENERAL

One of the events of note during this reporting period was the visit to the Sylhet District by Messrs. Gene V. George, USAID Project Officer, R. N. Hasan, Project Manager, and Brigadier Abdullah, Project Engineer. This group, along with the XEN and the RE, held meetings with the Sylhet-area contractors to fully explain all Project requirements for acceptance of work accomplished and reimbursement of same. At the same time, the group was able to define final completion dates of the works in progress.

In the December 1984 Progress Report, the visit of the U.S. Ambassador to Bangladesh to the Sylhet District Projects was discussed. Pictures of this important event are included in the report in Appendix A.

Both Sylhet and Faridpur Districts reported very favorable progress by the contractors. Both report that, with the possible exception of some major structures, all work should be completed by mid-1985. However, once again the reports from Rangpur are very gloomy. Reports of unsatisfactory work performance and general progress continue to come from this District in spite of the December 1984 visit by the PM, when these difficulties were discussed and, supposedly, mutual agreements reached on how the problems could best be resolved.

All in-country training is now complete, and all evaluation reports have been submitted. However, the picture is not so bright for the Third-Country training program. During this reporting period, it was necessary to once again cancel the second AIT training course, which had been scheduled for 03 to 24 February 1985. Now there is no hope of rescheduling the second AIT training course until after LGEB has obtained all required BDG approvals and clearances.

2. ORGANIZATION AND MANAGEMENT

A very generalize organizational chart for LGEB was received from that organization during this reporting period. This chart, supplemented by reports from the field, has enabled the Consultant to have a more complete picture of the magnitude of the organizational and management problems generated by this restructuring of the internal political boundaries.

It is also quite clear that the organization and management report previously submitted by the Consultant will require some major revisions if it is to accurately reflect the organization which now exists. Requests have been made for approval of a specialist to be assigned to review and revise the previous report. It is hoped that the requested approval will be quickly granted so that the specialist can undertake this vital work as soon as possible.

0 MAINTENANCE SYSTEM AND SUPERVISION

3.1 General

The three projects which comprise the '83 - '84 Pilot Maintenance Scheme in each of the three Districts (old) have not yet been satisfactorily completed. Now the problem is further complicated in each District by the addition of as many as eight to ten '84 - '85 maintenance schemes.

The roads involved in the District maintenance programs are shown on the respective (old) District maps, which are identified as follows :

- o Exhibit II - Sylhet District
- o Exhibit V - Rangpur District
- o Exhibit VIII - Faridpur District

3.2 Sylhet District

3.2.1 General

It has been observed that the maintenance system is not functioning as well as might be expected. It seems that more emphasis is placed on quantity production relative to the expenditure of funds, rather than to type of maintenance required and the finished quality of the work performed.

The goal of this maintenance program is the improvement of past and present maintenance work, not the expenditure of maintenance funds for expenditure's sake alone. Maintenance work done in such a manner that it must be done again in a short time because it will not withstand the ordinary ravages of the weather, or the wear and tear of vehicular traffic, does not reflect improvement in the system.

It does not appear that sufficient study is made of the actual repair and/or maintenance requirements of the roads scheduled for inclusion in the current maintenance program. Little attention is given to the possible need for additional drainage structures or the repair or maintenance of existing ones.

On earth roads, in-place material can often be easily and economically reshaped to achieve the level and camber desired in the road surface. Instead, material is taken from adjacent areas and dumped haphazardly on the road surface. No attempt is made to level, camber, or dress this material. The result is the formation of pockets which collect rainwater and allow it to infiltrate into the subgrade, thereby causing further deterioration of the road.

Sometimes the material is neatly placed along the road centerline, and never leveled nor graded. Since passing vehicles straddle these winrows, little or no benefit of compaction by vehicular traffic is achieved.

Photos of maintenance work in Sylhet may be found in Appendix B.

3.2.2 1983 - 1984 Maintenance Projects

These projects continue to be plagued by shortages in the revolving fund, which result in suspension of the work. There are various reasons for this undesirable situation :

- o A lack of understanding of how a "revolving fund" functions,
- o Expenditures are collected over a two or three month time period and then are submitted for reimbursement in one lump sum after the fund has been depleted, and
- o Unrealistic planning or anticipation of funds required on a routine, systematic basis: i.e., weekly, monthly, etc.

The revolving fund was originally established at Tk. 25,000, and was subsequently increased to Tk. 50,000. At a recent meeting with the PM, it was agreed to again increase the fund to Tk. 100,000. It was also noted that materials supplied by tender, such as culvert pipe, bitumen, and aggregates, should have no bearing on the revolving fund.

Badaghat Road

The maintenance of this paved road has been taken up again and is progressing well — 1.5 km of a total of 4.5 km have been completed. However, some of the side approaches have not been filled nor graded, and some of the shoulder sections must be cut below the level of the adjoining pavement and sloped away from it. The workers must be instructed to fill in the tar boiler holes and to complete all work so that maintenance can progress as a complete unit.

3.2.3 1984 - 1985 Maintenance Projects

Hatimganj - Dhakadakshin Road

Preventive maintenance has been initiated and has progressed to the beginning of the hilly area, where side ditches must be cut and two new culverts installed to prevent erosion and damage to the work already complete. At the Dhakadakshin end of this project, maintenance work has been started under another program. In this case, it again appears that there has been no attempt to instruct the workers on the proper execution of maintenance work.

Bahubal - Putijuri - Bijnaghat Road

The maintenance of the earth section between Putijuri and Paniunda is underway. Particular attention is given to leveling, filling, and cambering of the road surface, and the excavation of side ditches. Material from this latter operation is used to build up the roadbed. Approximately 2 km are now complete, and the work is the best example of good maintenance seen to date.

Munshi Bazar - Kurmachar Road

The earth road maintenance program started at Munshi Bazar and has reached the Kamalgang intersection on the R & H highway; a total of 4.7 km now complete. The grading and cambering have been done correctly, and the satisfactory results are reflected in an increase in local vehicular traffic.

Tajpur - Syedpur Road

This earth road maintenance was started at the end of the pavement near Tajpur, and has progressed some 1.4 km toward Syedpur. However, better use of maintenance resources would have been obtained by concentrating on the Goalabazar - New Market section, which is heavily traveled and is in very poor condition. Some maintenance work is in progress on the New Market - Nayabondar section to prepare for the expected increase in traffic which will result from the completion of the 10.1 m box culvert of Project ZRMI/13/83-84.

Sunamganj - Chahatak Road

The earth road maintenance began at the end of the HBB soling near the outer limits of Sunamganj and has progressed for about 1.2 km. However, within this distance, there is one large gap where SWPW

proposes to construct a box culvert in the near future. In addition, there are 8 nos. 1 m. or 1.5 m box culverts under construction. At about Km 0.8, there is a very large opening in the embankment, where there are remnants of an old bridge that had failed.

If it is ever decided to replace the failed bridge, consideration should be given to moving the crossing a few meters down stream. The channel is well defined at that point and the span is much shorter. A large box culvert might well be more economic than a bridge.

That earth road maintenance work that has been done is not satisfactory. There has been some filling of the depressions in the surface, but no attempt to properly grade and camber the surface. Also, there is no evidence of side slope maintenance.

The consultant has recommended that the approximately 800 m from the HBB soling and the old bridge site be maintained in a proper manner and that the balance of the road past the bridge site be left for the future.

3.3 Rangpur District

3.3.1 1983 - 1984 Maintenance Projects

Rangpur - Mahiganj Road

The original length of this project was 6223 ft, but after patching and sealcoating some 3582 lin. ft, the balance, except for some random patching, remains untouched. However, it may be said that the remaining portion is in relatively better condition than that section which has already been given the seal coat treatment.

Rangpur - Badarganj Road

The original length of this project was 9750 ft, but after completion of some 2693 lin. ft., the work was suddenly suspended. After a long interval, the work was again taken up on 26/01/85. At present, there are about 18 laborers working on earth shoulder improvement. However, there is no supervisor present and there is no compaction equipment available. The result is poor quality work.

3.3.2 1984 - 1985 Maintenance Projects

The XEN's office has selected 8 projects to be included in this operation for FY '84 - '85 :

- o Rangpur Sunderganj Road,
- o Gaibandha - Sadullahpur Road,
- o Gaibandha - Kamarjani Road,
- o Rangpur - Kamdia Road,
- o Nilphamari - Jaldhaka Road,
- o Mirganj - Jaldhaka Road,
- o Barodarga - Bhendabari Road, and
- o Rangpur - Badarganj Road

None of these projects are in operation as of the end of this reporting period.

3.4 Faridpur District

3.4.1 1983 - 1984 Maintenance Projects

Rajbari - Baliakandi Road

The shoulders have been regraded between the Horaj and the Matiapara bridges. Near Matiapara, the area of worn HBB that was repaired by bituminous grouting has shown serious disintegration since it was opened to traffic. It has not yet been determined whether it is the brick chips, or the worn HBB bricks, that are disintegrating, but this work has been halted in any case. It is now planned to install a test strip using grouted stone chips. Should this strip also fail, the worn brick will be lifted, processed, relaid as WBM, and paved.

Talma - Nagarkanda Road

The pothole repairs near Nagarkanda have been completed through the WBM. These repairs, together with the replacement of the distorted WBM previously completed, have resulted in a reasonably good riding surface. The completion of the pothole repairs and the replacement of the remaining distortions await the availability of bituminous material. Three work crews are now engaged in shoulder repair and regrading them to drain away from the pavement.

3.4.2 1984 - 1985 Maintenance Projects

As of this reporting period, the projects proposed for this program have been selected, but have not yet been formally approved.

3.5 Maintenance Management

During this reporting period, the maintenance management report was compiled, printed, and bound. It is now being reviewed for comments and possible revisions prior to final printing.

4.0 PREPARATION OF TECHNICAL SPECIFICATIONS

4.1 Bridges

Work on plan preparation for bridges of less than 40-foot span has been completed in both Sylhet and Faridpur. This work is still in progress in Rangpur. As per request of LGEB plan, design and schedule of quantities of 5 (five) bridges of Rangpur and 3 (three) bridges of Sylhet district have been prepared by the consultant and submitted.

4.2 Revision of Specifications

It was expected that a thorough review and revision of specifications would get underway by the end of this reporting period. However, the arrival of the specialist was delayed until February 1985, so the work schedule for this facet of the program had to be adjusted accordingly.

4.3 Revision of Concrete Mixture Design

The Sylhet RE has reported that a revision of schedule of rates for the Sylhet District is about to get underway. Since these rate schedules also act as specification guides for the work, the RE has strongly recommended that great care be exercised in the preparation of concise and explicit terms which form a part of the rate schedules.

It is also hoped that the controversial issue of concrete mixture design can be addressed and resolved during the general review and revision of specifications just discussed.

5.0 TRAINING

5.1 General

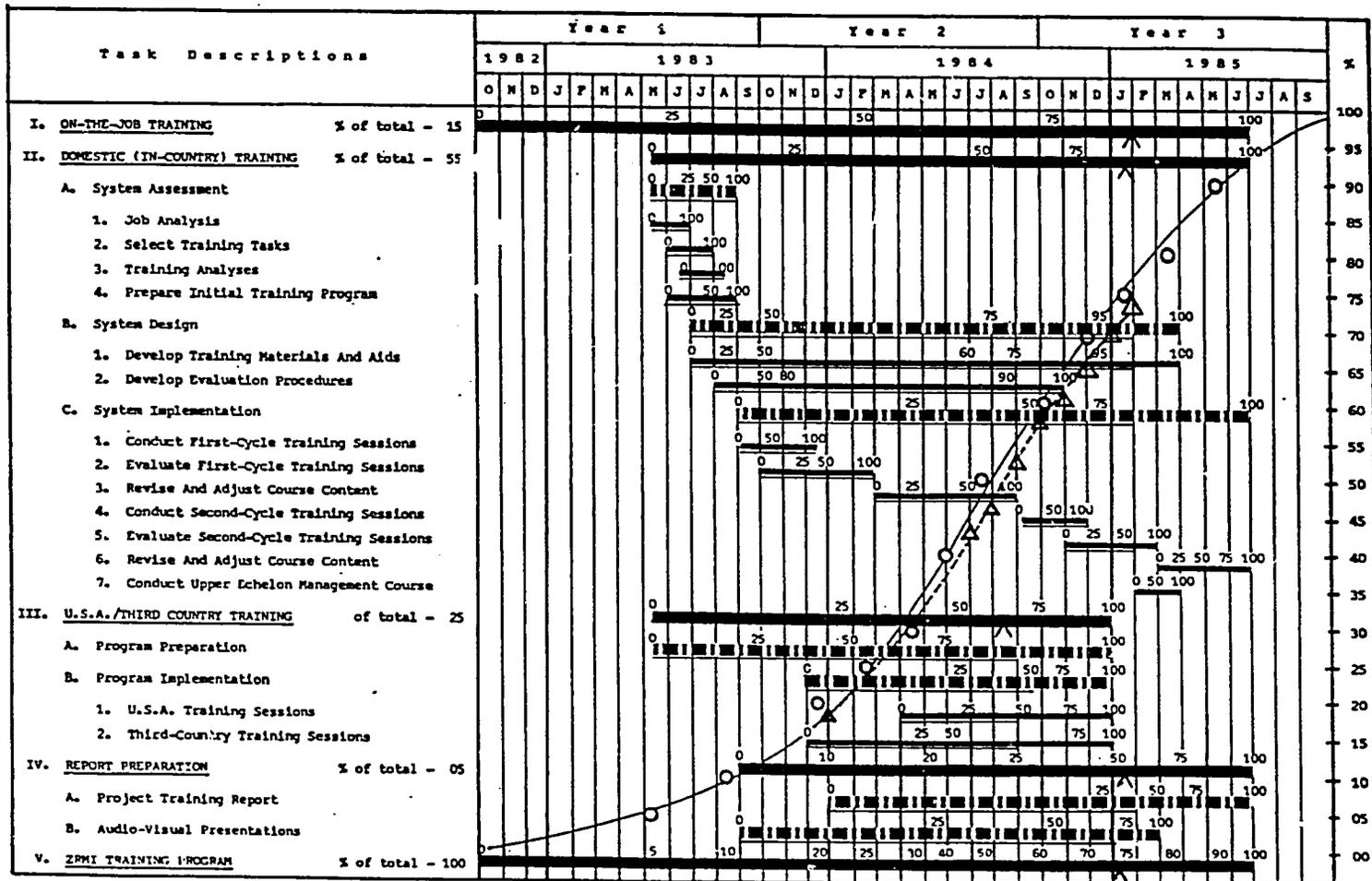
As shown on Exhibit I, the overall progress of the ZRMI Project Training Program as of the end of this reporting period was about 74 percent, compared to a scheduled progress of 78 percent. This slippage reflects a continuing lack of progress in the U.S.A/Third Country Training element, which has a relative weight of 25 percent of the entire Program.

To further enhance the utility of Exhibit I, some refinements have been added so that the reader can personally evaluate the current status of each activity and its relative effect on Program progress as a whole :

- o For the 5 principal elements, a tick on the underside of the large solid bar indicates current progress.
- o For the large intermittent bars and the small solid bars, a light line directly underneath each bar indicates current progress.

Exhibit -1

ZRMI PROJECT TRAINING PROGRAM SCHEDULE AND CURRENT STATUS



5.2 On-The-Job Training

5.2.1 General

From an examination of Exhibit I, it is estimated that the progress of this activity was 83 percent at the end of this reporting period.

5.2.2 District Soil Laboratory Activities

Summaries of the activities of the individual soil laboratories are attached as Appendix C to this report. The quality control analyses performed in these laboratories under the supervision of the RE's and with the assistance of their respective staffs, form an important part of the on-the-job Training effort.

5.3 Domestic (In-Country) Training

5.3.1 General

It is estimated that as of the end of this reporting period progress of this activity was about 76 percent.

5.3.2 System Assessment

This secondary activity is 100 percent complete

5.3.3 System Design

This secondary activity is about 96 percent complete

5.3.4 System Implementation

This secondary activity is about 76 percent complete.
First-Cycle Training Sessions - 100 percent complete
First-Cycle Evaluations - 100 percent complete
(First) Course Revision and Adjustment - 100 percent complete.
Second-Cycle Training Sessions - 100 percent complete
Second-Cycle Evaluations - 100 percent complete
(Second) Course Revision And Adjustment - This work, if any is indicated, will be undertaken in February 1985.

Upper Echelon Management Course - Still scheduled for presentation during the first quarter of 1985.

5.4 U.S.A / Third Country Training

5.4.1 General

It is estimated that as of the end of this reporting period progress of this activity was about 70 percent

5.4.2 Program Preparation

This program remains at 85 percent complete.

The second AIT Training Course, which had been rescheduled for February 1985, had to be canceled once again because of failure to obtain the necessary approvals and clearances from BDG.

Concerning the next U.S.A. observation/training course, there is still no consensus among all concerned parties for scope or number of participants for the second and succeeding programs.

5.4.3 Program Implementation

First U.S.A. Session - This may be considered to be 100 percent complete, although no trip reports have yet been received from any of the three participants.

Second U.S.A Session - Since there has been no decision concerning U.S.A Training/Observation trips subsequent to the first session, there is no further progress to report on this segment of the program.

First AIT Session - This may be considered to be 100 percent complete, although to date the only trip report received was that prepared by the DE, Rangpur.

Second AIT Session - This session had been rescheduled for 03 to 24 February 1985, but during this reporting period it became clear that BDG would not grant the necessary clearances. Therefore, it was necessary to once again cancel this session. No later date will be negotiated until BDG has indicated that necessary approvals and clearances will indeed be granted.

5.5 Report Preparation

5.5.1 General

This main segment is about 55 percent complete.

5.5.2 Project Training Report

This activity is right on schedule and is considered to be about 38 percent complete as of the end of this reporting period.

5.5.3 Audio - Visual Presentations

This activity is considered to be about 70 percent complete, as compared with a scheduled completion of about 76 percent.

6.0 CONSTRUCTION SYSTEM AND SUPERVISION

6.1 General

Both Sylhet and Faridpur report that construction activities are in full swing and expect that, with the possible exception of some structures, all projects should be essentially complete by mid-1985. However, a different story is coming out of Rangpur. Here, not only was the work progress very slow for the remaining '82 - '83 and '83 - '84 Projects, but very little progress had been accomplished to date on the Projects for '84 - '85. This situation has prevailed in Rangpur for quite some time now, and it is imperative that the basic cause (s) be determined and corrective action taken.

Starting with this report, a new format for reporting progress has been developed. This is an attempt both to standardize the manner in which information is received from the individual RE's, and to compile it and present it to the reader in a simplified, but usable form. Comments and constructive criticism are invited. If the reaction is favorable, a comparable format will be adopted for the reporting of the maintenance activities.

In brief, for each District, the District Map, with all projects identified, is first presented as an Exhibit. This is followed by a second Exhibit, which is composed of the standard reporting sheets for each District. Immediately following is an Exhibit composed of the progress diagrams for each District. Photographs of construction activities will still be found in Appendix D.

6.2 Sylhet District

Exhibit II is a map of the (old) Sylhet District on which have been marked, with appropriate symbols and numbers, both the maintenance and the construction projects in the Sylhet District.

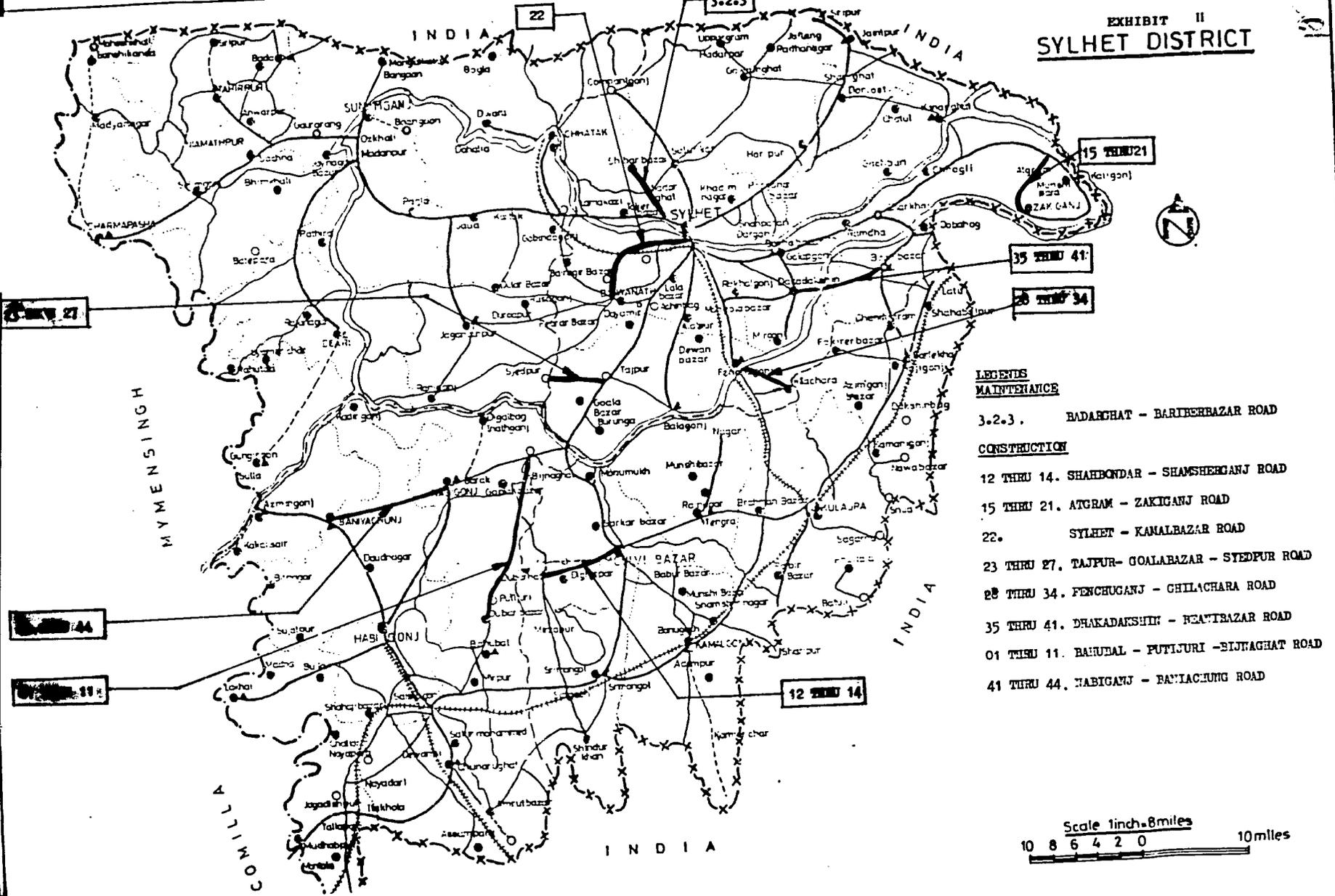
Exhibit III, consisting of 7 sheets, lists all the construction projects in the Sylhet District, by road and by fiscal year in which programmed. The "Serial Number" has no significance other than to serve as a simple symbol for locating the project on its respective map.

Exhibit IV, consisting of 6 sheets, contains the bar charts and progress curves for those projects that are currently active.

6.3 Rangpur District

Exhibit V is a map of the (old) Rangpur District on which have been marked, with appropriate symbols and numbers, both the maintenance and the construction projects in the Rangpur District.

EXHIBIT II
SYLHET DISTRICT



LEGEND
MAINTENANCE

3.2.3. BADARCHAT - BARIBERBAZAR ROAD

CONSTRUCTION

- 12 THRU 14. SHAHBONDAR - SHAMSHERGANJ ROAD
- 15 THRU 21. ATGRAM - ZAKIGANJ ROAD
- 22. SYLHET - KAMALBAZAR ROAD
- 23 THRU 27. TAJPUR - GOALABAZAR - SYEDPUR ROAD
- 28 THRU 34. FENCHUGANJ - CHILACHARA ROAD
- 35 THRU 41. DRAKADAKSHIN - REAMTBAZAR ROAD
- 01 THRU 11. BANUAL - PUTIJURI - SIJTAGHAT ROAD
- 41 THRU 44. HABIGANJ - BANJACHUNG ROAD

Scale 1 inch = 8 miles
 10 8 6 4 2 0 10 miles

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 1 of 7

Serial Number	Contract Identification	Description Of work Order	Percent Complete	Current Comments
<u>Bahubal - Putijuri - Bijnaghat Road</u>				
<u>1982 - 1983 Projects</u>				
01	ZRMI/11/82-83	Bituminous pavement	100	Final bill processed
<u>1983 - 1984 Projects</u>				
02	ZRMI/01/83-84	Bituminous pavement (250 m)	100	<u>Final bill being processed</u>
03	ZRMI/02/83-84	Box Culvert (13.3 m) (Putijuri)	100	<u>Final bill being processed</u>
04	ZRMI/03/83-84	Box Culverts, 2 nos. (Resurat & Burigaon)	100	<u>Two running bills processed; final site cleanup not yet complete</u>
05	ZRMI/04/83-84	Box Culverts, 3 nos. (Revised) (Fultoli & Kandigaon)	100	<u>Two running bills processed; final site cleanup not yet complete</u>
06	ZRMI/05/83-84	Box Culvert (Kargaon)	100	<u>Two running bills processed</u>
07	ZRMI/06/83-84	Box Culverts, 4 nos. (Revised) (Gazipur, Aingson, & Debpur)	100	<u>Final bill being processed; two 1.5 m box culverts canceled</u>
08	ZRMI/07/83-84	RCC Pipe Culverts, 14 nos. (Revised)	100	<u>Final bill being processed</u>
<u>1984 - 1985 Projects</u>				
09	ZRMI/10/84-85	Bituminous pavement (Putijuri)	---	<u>No work Order received to date</u>
10	ZRMI/11/84-85	Box Culverts, 3 nos.	---	<u>work Order issued 01/12/84, but no progress to date</u>
11	ZRMI/12/84-85	Reconstruct existing bridge slabs, 16 nos.	---	<u>work Order issued 22/11/84; progress to date limited to material gathering</u>

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 2 of 7

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Shahbondar - Shamsheganj Road</u>				
<u>1982 - 1983 Projects</u>				
12	ZNI/17/82-83	Aluminous Pavement	100	Final bill processed
<u>1984 - 1985 Projects</u>				
13	ZRI/5A/84-85	Leveling course (2.825 km)	000	<u>The contractor has been engaged in earth filling and leveling over a reach of approximately 150 m. No aggregates have yet been stockpiled. No running bills processed</u>
14	ZRI/5B/84-85	Leveling course (2.625 km)	002	<u>The Work Order for this portion of the work was issued some weeks prior to the ZRI/5A/84-85, so there has been a little more progress. Leveling of the road embankment is in progress over about 1 km of this portion. As yet, there has been no attempt made to center the road surface. Some materials have been stockpiled. No running bills processed</u>

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 3 of 7

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Atgram - Takiganj Road</u>				
<u>1982 - 1983 Projects</u>				
15	ZRMI/16/82-83	Bituminous pavement (2 km)	100	<u>Final bill processed. As predicted, the 700 m of pavement accepted provisionally have failed. Acceptable corrective measures not undertaken.</u>
<u>1983 - 1984 Projects</u>				
16	ZRMI/05/83-84	Box Culvert (23 m)	085	<u>Abutments, wingwalls, and piers are complete, and top slab scheduled to be cast soon. Approaches 60 percent complete. One bill processed</u>
17	ZRMI/10/83-84	Bituminous Pavement (1.78 km)	100	<u>Final bill being processed</u>
18	ZRMI/11/83-84	Leveling course (4.55 km)	075	<u>3.35 km complete, and subgrade of remaining portion is complete. The assigned roller was transferred away. Three running bills processed</u>
<u>1984 - 1985 Projects</u>				
19	ZRMI/13/84-85	Bridge (Revised to Box Culvert) (31 m)	015	<u>Dewatering and foundation excavation is underway. Some materials have been gathered on site and reinforcing steel being worked. No bills</u>
20	ZRMI/14/84-85	MCC Pipe Culverts, 15 nos.	---	<u>No progress to date. No running bills processed.</u>
21	ZRMI/15/84-85	Bridge (Revised to 3 nos. Box Culverts) (66 m)		
	15A & C	Box Culverts, 2 nos. (5 m)	012	<u>Work Order issued for 100 days. Work has begun on foundation excavations, and foundation slab was cast at the Km 7.2 site during the last week of January. No running bills processed</u>
	15 B	Box Culvert (24.4 m)	000	<u>Work Order issued for 120 days. No activity as yet. No running bills processed.</u>

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 4 of 7

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Sylhet - Kamal Bazar Road</u>				
<u>1982 - 1983 Projects</u>				
22	ZRMI/19/82-83	Bituminous pavement	100	Final bill processed
<u>Tajpur - Goalabazar - Syedpur - Khadimpur Road</u>				
<u>1982 - 1983 Projects</u>				
23	ZRMI/20/82-83	RCC Pipe Culverts, 13 nos. (Revised)	100	Final bill processed
24	ZRMI/21/82-83	Box Culvert	100	Final bill processed
<u>1983 - 1984 Projects</u>				
25	ZRMI/12/83-84	Bituminous pavement (Revised)	100	Final bill processed
26	ZRMI/13/83-84	Box Culvert (10.1 m) (New Market) (Revised)	<u>085</u>	<u>Two running bills processed. The top slab has been cast and earthwork for backfilling and approach construction is in progress. Completion of this work will open access to Nayabondar for vehicular traffic for the first time.</u>
<u>1984 - 1985 Projects</u>				
27	ZRMI/16/84-85	Bridge (31 m) (Nayabondar) (Revised to 24.4 m Box Culvert)	<u>008</u>	<u>No running bills processed. Cofferdams have been built and a large volume of water has been pumped from the site. With the removal of the water, the bank opposite the market slumped in several places, but there was no slumping of the bank on the market side. Some design changes were necessary to compensate for this difference in soil conditions and reaction to rapid draw-down.</u>

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 5 of 7

Serial Number	Contract Identification	Description Of work Order	Percent Complete	Current Comments
<u>Fenchuganj - Maijgaon - Ghilachara Road</u>				
<u>1982 - 1983 Projects</u>				
28	ZRMI/22/82-83	Bituminous pavement (0.5 miles) (Maijgaon)	<u>088</u>	<u>Two running bills processed. On 08 January, this project lacked some 400 lin. ft of pavement for completion. The PM set a completion date of 20 January, but completion will not be achieved by then.</u>
29	ZRMI/23/82-83	RCC Pipe Culverts, 6 nos.	<u>060</u>	<u>One running bill processed. The contractor has fabricated the forms, cast all the required pipe, and prepared and placed one culvert by 20 January. Completion is expected by 15 February if all goes well.</u>
<u>1983 - 1984 Projects</u>				
30	ZRMI/14/83-84	Earthwork and Leveling course (2.8 km) (Revised)	<u>070</u>	<u>Two running bills processed. The assignment of the much-needed roller has accelerated progress on this contract. Coordination of this work with that undertaken by local Chairman has been good.</u>
<u>1984 - 1985 Projects</u>				
31	ZRMI/17/84-85	Bituminous pavement (0.925 km)	<u>035</u>	<u>No running bills processed. This contract will be revised to include the portion of ZRMI/22/82-83 which falls on the approaches of ZRMI/15/84-85 in order to close out ZRMI/22/82-83.</u>
32	ZRMI/18/84-85	Leveling course and Earthwork (2.8 km)	<u>010</u>	<u>No running bill processed. Earthwork and realignment of the road are in full progress. Coordination with work being done by the local Chairman has been good, and some leveling course is placed.</u>
33	ZRMI/19/84-85	Box Culverts, 2 nos. (6.8m & 3.6 m)	<u>055</u>	<u>One running bill in process. All work accomplished to date has been on the larger of the two culverts. Construction of both abutments, wingwalls, and center pier has been excellent.</u>
34	ZRMI/20/84-85	Box Culverts, 6 nos. (1.5 m)	<u>050</u>	<u>No running bills processed. Contractor is already working on the third of the six and the quality of workmanship is excellent. Adequate diversion roads have already been constructed for all.</u>

Exhibit III - CONSTRUCTION SUPERVISION PROJECTS - SYLHET

Sheet 6 of 7

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Dhakadakhin - Beanibazar Road</u>				
<u>1982 - 1983 Projects</u>				
35	ZRMI/24/82-83	Earthwork and Bituminous pavement (0.75 mile) (Revised)	<u>058</u>	<u>Three running bills processed. No change in the past two months, as the completion of this contract awaits completion of ZRMI/21/84-85, which was also complete this reporting period.</u>
36	ZRMI/25/82-83	RCC Pipe Culverts, 6 nos. (Revised)	<u>075</u>	<u>One running bill processed. As of this reporting period, there are 6 nos 2 ft dia. pipe culverts completed, with pipe for two more being cast. There are also two no. 1 ft dia culverts constructed and 4 nos. 0.25 m side culverts. A change order has not yet been received.</u>
<u>1983 - 1984 Projects</u>				
37	ZRMI/15/83-84	Box Culvert (Noakhal) (Revised)	<u>100</u>	<u>All 5 box culverts are complete, but only one is acceptable for reimbursement. A final partial bill has been processed for the acceptable work. The four rejected culverts will be handled locally.</u>
38	ZRMI/16/83-84	Earthwork and Bituminous pavement, (2.45 km) (Revised)	<u>065</u>	<u>Two running bills processed. Quality of workmanship has been improving during the past months. Saturated fill materials have slowed progress on the earthfill. Sub-base, base, and pavement satisfactory.</u>
<u>1984 - 1985 Projects</u>				
39	ZRMI/21/84-85	Box Culvert (5.2 m) and Retaining wall (Dhakadakhin)	<u>085</u>	<u>The top slab was cast in late January, and construction of the brick retaining wall is in progress. Backfilling and approach work, channel cleaning, and site finishing remain to be completed. One running bill is in progress.</u>
40	ZRMI/22/84-85	Box Culvert (26.5 m) (Lula River) (Revised)	<u>==</u>	<u>No running bill processed. The original contractor showed no interest in the revised contract, so it was re-ordered. No further progress has been noted, and ideal construction conditions are now being wasted.</u>
41	ZRMI/23/84-85	Bridge (86 m) (Radhajuri)	<u>010</u>	<u>No running bill processed. The excavation and casting of the east abutment foundation and a part of three piers was accomplished during the month. Contractor unable to drive substandard piling more than 6 to 10 ft. Cofferdam and diversion road have been built.</u>

**EXHIBIT IV
BAR CHARTS
PROJECT SCHEDULES, AND CURRENT STATUS
SYLHET DISTRICT**

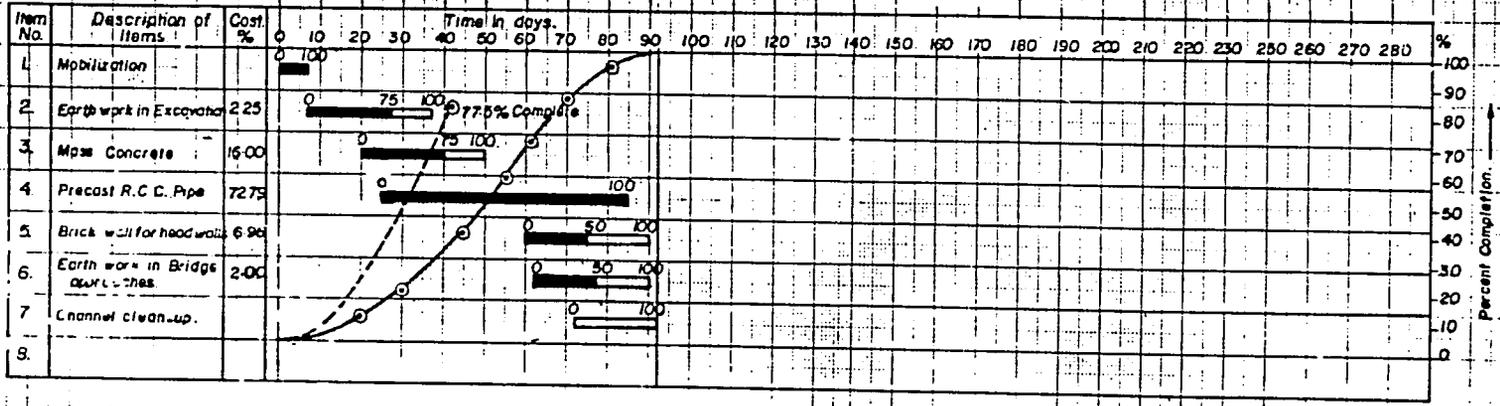
SYLHET DISTRICT

Construction of 6 Nos. 2'-00" dia R.C.C. Pipe Culvert on
Fenchugonj- Gilachara Road. Tender No. ZRMI-23/'82-'83)

- (a) Schedule Progress.
- (b) Revised Schedule.
- (c) Actual Progress.

Estimated Cost	:Tk.	87,820.00
Contract Cost	:Tk.	96,600.00
Scheduled Starting date	:	Dec. 22, 1984
Actual Starting date	:	Dec. 24, 1984
Scheduled Completion date	:	March 20, 1985
Revised Completion date	:	
Revised Cost	:Tk.	
Date of revision	:	

Dec. 22, 1984
 Jan. 21, 1985
 Feb. 20, 1985
 March, 22, 1985
 April 21, 1985



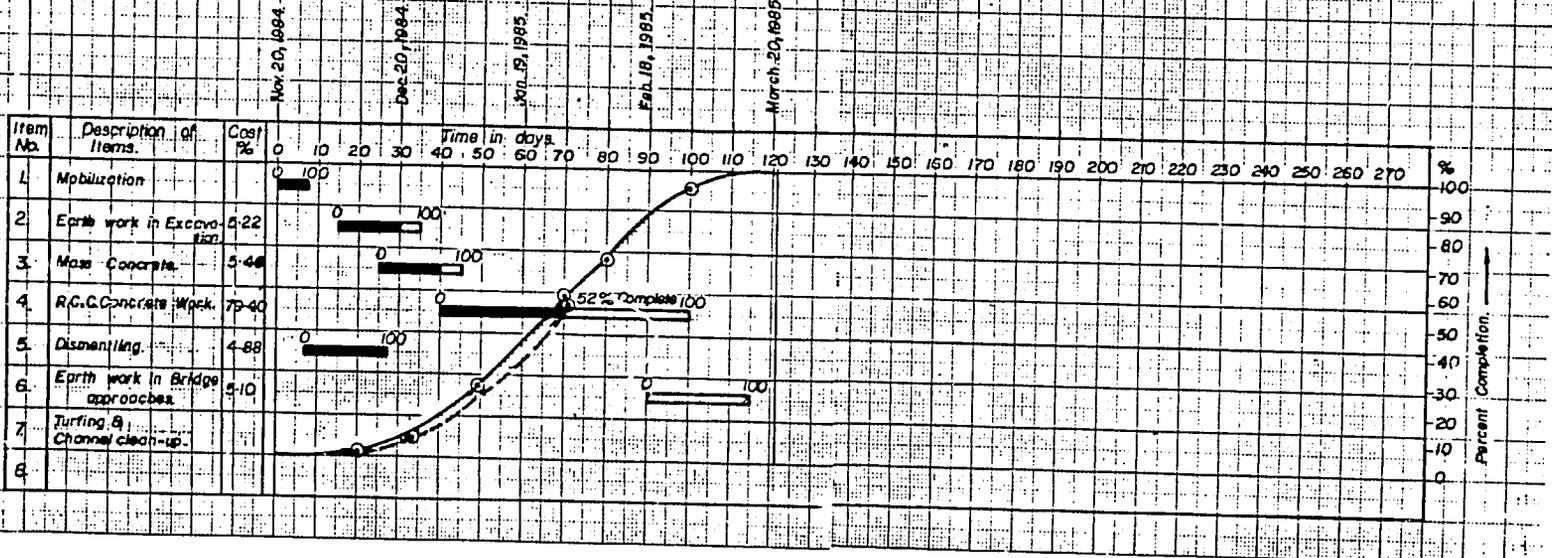
SYLHET DISTRICT

**Construction of 6 Nos R.C.C. Box Culvert, Size 1.5m. x 1.5m.
on Fanchugonj-Gilachara Road (1984-85)**

Tender No. ZRMI-20/(84-85).

- (a) Schedule: Progress
- (b) Revised Schedule
- (c) Actual Progress

Estimated Cost	:Tk	3,45,200.00.
Contract Cost	:Tk	3,62,460.00.
Scheduled Starting date	:	Nov. 20, 1984.
Actual Starting date	:	Nov. 21, 1984.
Scheduled Completion date	:	March 21, 1985.
Revised Completion date	:	
Revised Cost	:Tk	
Date of revision	:	

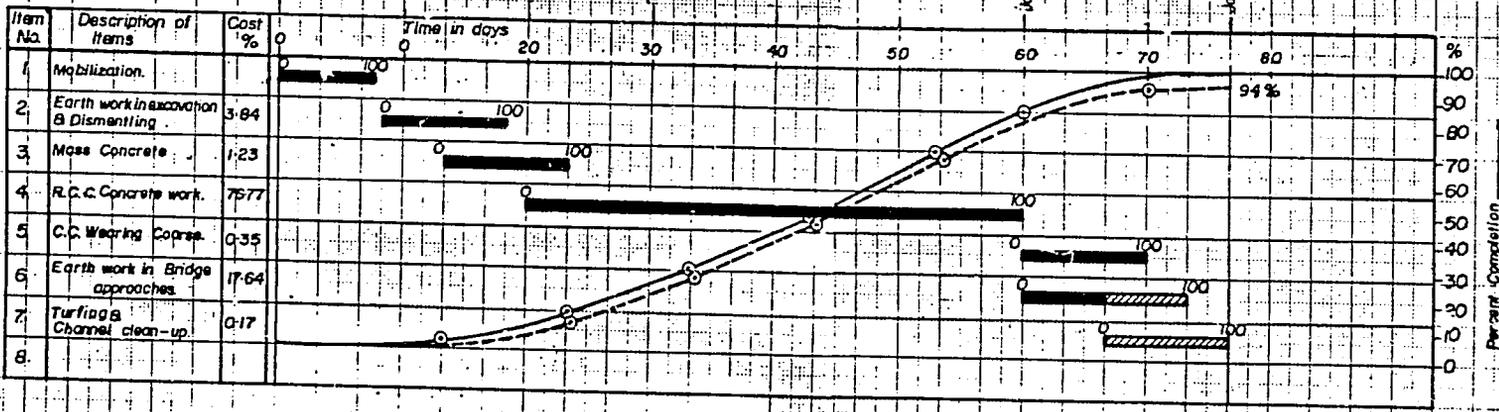


SYLHET DISTRICT

**Construction of R.C.C. Box Culvert, Size 5.20m.x4.50m
on Dhakadakshin-Beanibazar Road (1984-'85).
Tender No. ZRMI-21/(84-85).**

- (a) Schedule Progress.
- (b) Revised Schedule
- (c) Actual Progress

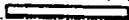
Estimated Cost : Tk. 2,92,500.00.
 Contract Cost : Tk. 2,86,621.00.
 Schedule Starting date : Nov. 15, 1984
 Actual Starting date : Nov. 18, 1984
 Scheduled Completion date : Jan. 30, 1985
 Revised Completion date : _____
 Revised Cost : Tk. _____
 Date of revision : _____



SYLHET DISTRICT

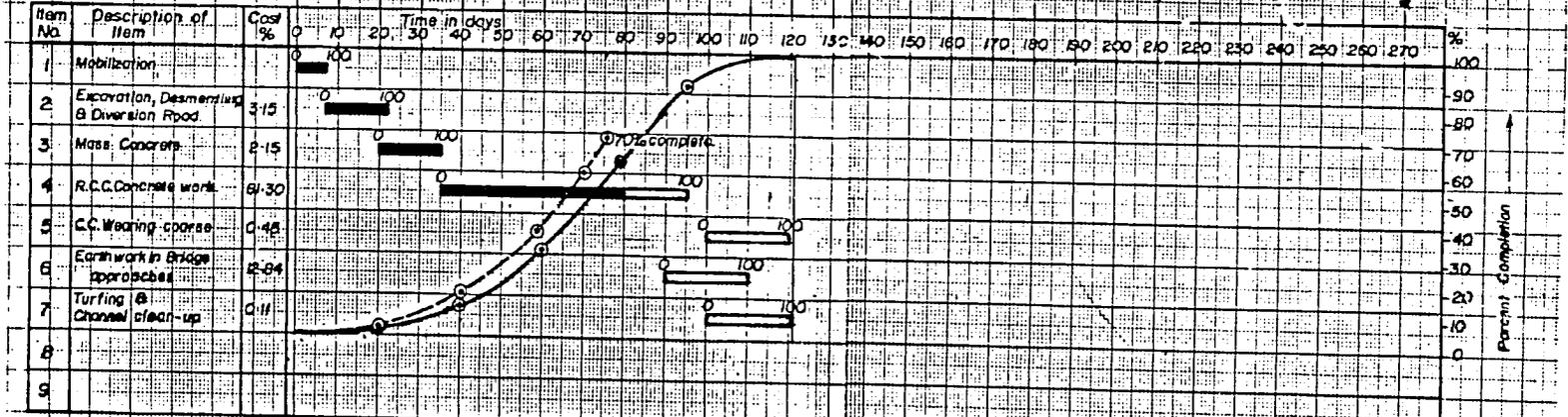
Construction of R.C.C. Box Culvert, Size 6.85m x 4.50m on
Fenchuganj-Gilachara Road. (1984-85).

Tender No. ZRMI-19/(84-85)

- (a)  Schedule Progress
- (b)  Revised Schedule
- (c)  Actual Progress

Estimated Cost	:TK	3,27,700.00
Contract Cost	:TK	3,20,457.00
Scheduled Starting date	:	Nov 17, 1984
Actual Starting date	:	Nov 20, 1984
Scheduled Completion date	:	March 18, 1985
Revised Completion date	:	
Revised Cost	:TK	
Date of Revision	:	

Nov 17, 1984 Dec 17, 1984 Jan 15, 1985 Feb 15, 1985 March 17, 1985
 April 19, 1985 May 19, 1985 June 15, 1985 July 14, 1985 Aug 14, 1985



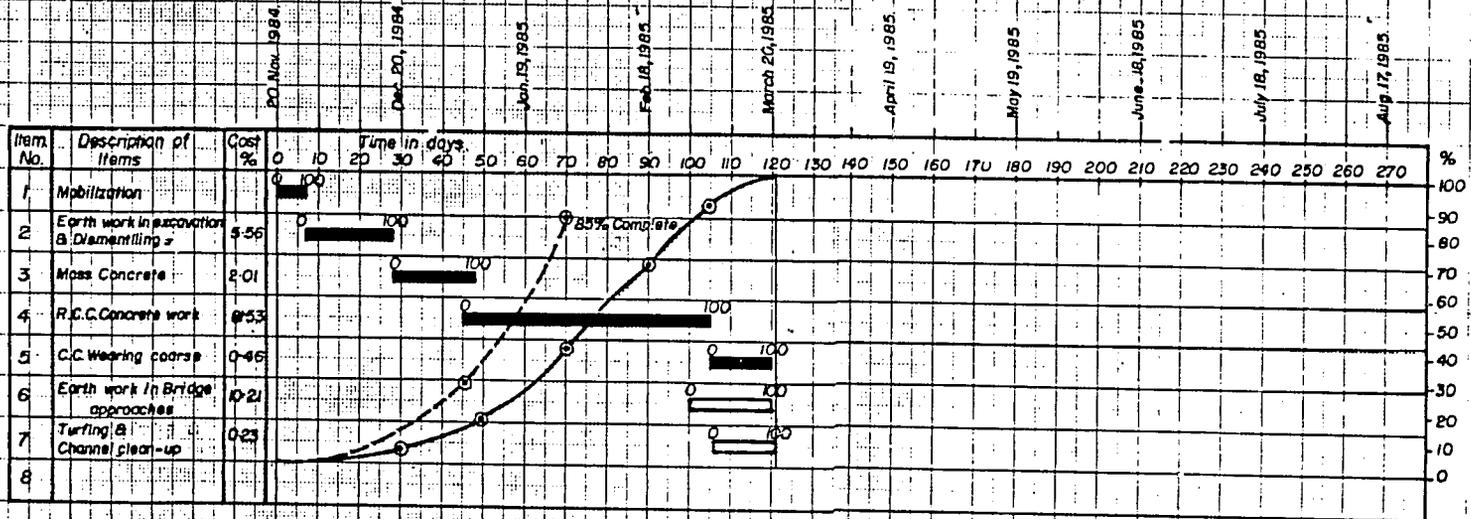
SYLHET DISTRICT

Construction of R.C.C. Box Culvert, Length 5-20m. Breadth 6-00m.
Height 3-00m. at Hasnabad on Bahubal-Putijuri Road.

Tender No. ZRMI-11/(1984-'85).

- (a)  Schedule Progress.
- (b)  Revised Schedule
- (c)  Actual Progress.

Estimated Cost	Tk.	2,48,300-00.
Contract Cost	Tk.	2,72,906-53.
Scheduled Starting date		20 Nov. 1984.
Actual Starting date		28 Dec. 1984.
Scheduled Completion date		21 March 1985.
Revised Completion date		
Revised Cost	Tk.	
Date of revision		



SYLHET DISTRICT

Construction of R.C.C. Box Culvert, Size 3.60m. x 3.5m. at
Barchar on Bahubal-Putijuri Road. (1984-'85)

Tender No. ZRMI-11/(84-85)

- (a)  Schedule Progress.
- (b)  Revised Schedule.
- (c)  Actual Progress.

Estimated Cost	Tk.	1,87,400/00
Contract Cost	Tk.	2,05,971/00
Scheduled Starting date		20, Nov. 1984
Actual Starting date		10, Dec. 1984
Scheduled Completion date		21, March 1985
Revised Completion date		
Revised Cost	Tk.	
Date of Revision		

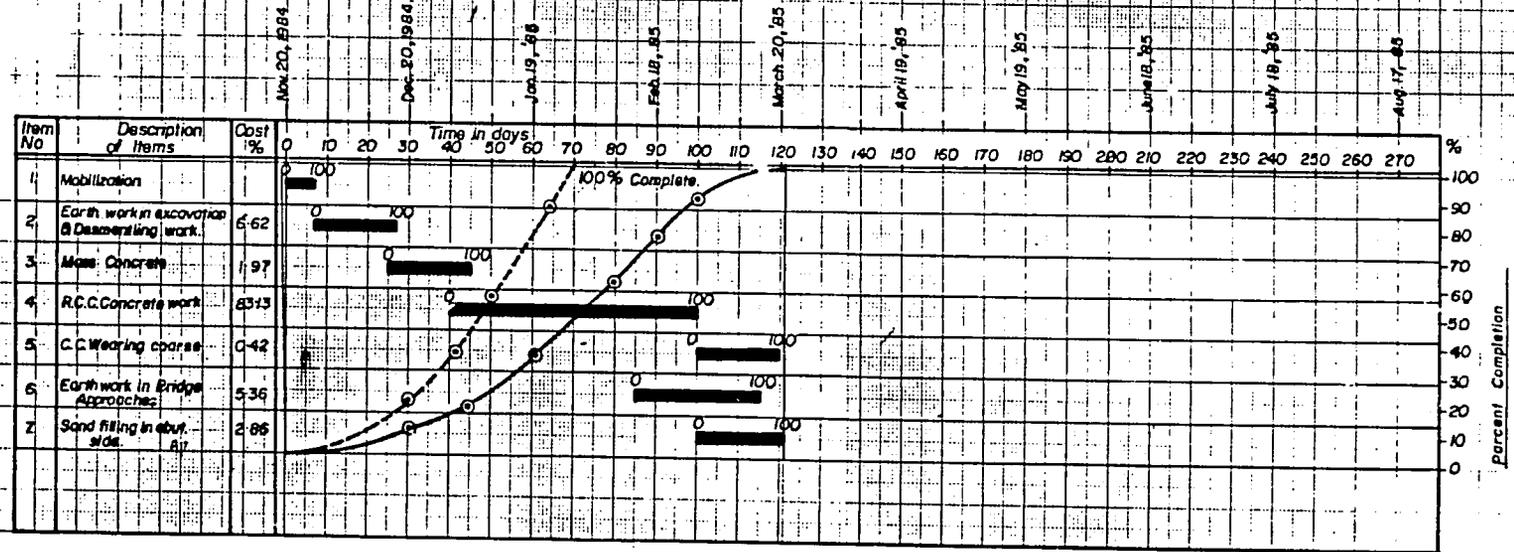


EXHIBIT V
RANGPUR DISTRICT



LEGEND:
MAINTENANCE

- 3.3-1A. RANGPUR - MAHIGANJ ROAD
- 3.3-1B. RANGPUR - BADARIANJ ROAD

CONSTRUCTION

- 01 THRU 08. GAIBANDEHA-FAMARJANI ROAD
- 09 THRU 16. MIRGANJ - JALDHAKA ROAD
- 17 THRU 34. CHATRA - KHALASHPIR - BHEENDABARI ROAD
- 35 THRU 47. KANDIA - GHORAGHAT ROAD
- 48 THRU 52. RAJARHAT - ULLASHATA ROAD
- 53 & 54. GAIBANDEHA - HALDANGA ROAD
- 55 & 56. GAIBANDEHA - SACHATA ROAD

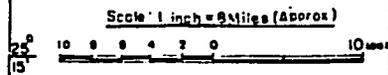
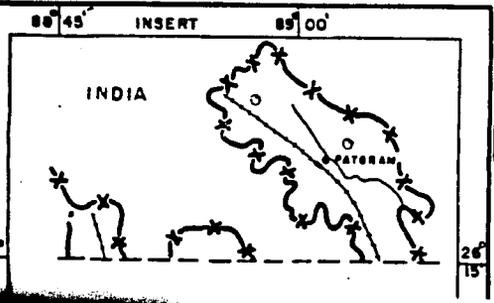
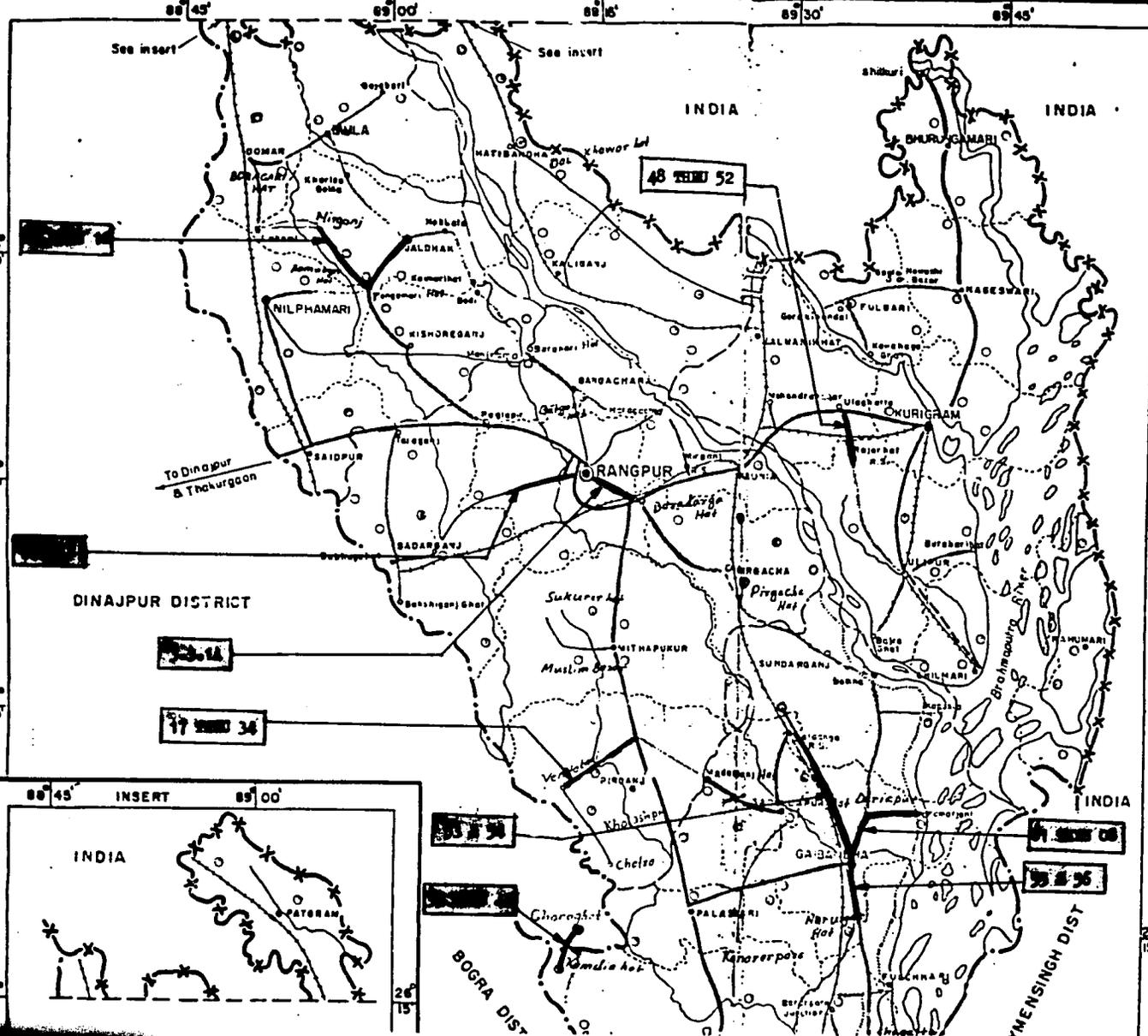


Exhibit VI - CONSTRUCTION SUPERVISION PROJECTS - RANGPUR

Sheet 1 of 7

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Gaibandha - Kamarjani Road</u>				
<u>1982 - 1983 Projects</u>				
01		HBB	100	All work completed April 1984. Maintenance still required for eroded earth shoulders.
<u>1983 - 1984 Projects</u>				
02	Group A	Bituminous pavement	==	WBM completed October 1984. Some stone shingles and pea gravel have been stockpiled, but no pavement accomplished. Some shoulder improvement work accomplished, but not according to specifications.
03	Group B	Bituminous pavement	==	WBM about 93 percent complete, but no pavement work accomplished, not even stockpiling of materials. Some shoulder improvement work accomplished, but of poor quality because of lack of compactive effort.
04	Group C	Bituminous pavement	==	WBM 52 percent complete, but of poor quality. No stockpiling of pavement material. Some shoulder improvement work accomplished, but of poor quality because of lack of compactive effort.
<u>1984 - 1985 Projects</u>				
05	Group 1a	Bituminous pavement	==	No work underway as of 27 January 1985.
06	Group 1B	bituminous pavement	==	No work underway as of 27 January 1985.
07	C - 4	RCC bridge, 16 ft. (Darisapur)	==	Abutment foundation excavation complete and one abutment foundation has been cast. Second foundation scheduled to be cast in near future.
08	B - 8	RCC Bridge, 20.4 m (Kumarpara)	==	Tenders invited, but no work Order issued to date.

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Mirganj - Jal dhaka Road</u>				
<u>1982 - 1983 Projects</u>				
09	Groups A, B, & C	Bituminous pavement	100	Completed May 1984. Maintenance work should be started.
10	Group D	Bituminous pavement	081	All work suspended since 05 January 1985
11	Group E	Bituminous pavement	---	This was formerly Group D of the '81-'84 Projects, and was redesignated Group E on 15/11/84. About 52 percent of shoulder improvement has been done, but only 500 lin. ft first layer of khoa is complete. Contract completion date of 31/01/85 will never be attained.
<u>1983 - 1984 Projects</u>				
12	Group A	Bituminous pavement	---	WBH work is complete and shoulder improvement work in progress. However, compactive effort for WBH was inadequate and additional compaction is required before pavement work is undertaken.
13	Groups B, C-1, & C-2	Bituminous pavement	---	Pavement work is complete in these groups. Except for minor shoulder improvement, no major tasks remain to be done.
11	Group C	Bituminous pavement	---	Transferred to 1982 - 1983 Projects as Group E
<u>1984 - 1985 Projects</u>				
14	Group 3-A	Bituminous pavement	---	Earth shoulder improvement work in progress, but with no quality control. Chief defects are lack of compaction, moisture control, and failure to clear organic material.
15	Group 3-B	Bituminous pavement	---	Earth shoulder improvement work in progress, but with no quality control. Chief defects are lack of compaction, moisture control, and failure to clear organic material.
16	Group 3-C	Bituminous pavement	---	Earth shoulder improvement work in progress, but with no quality control. Chief defects are lack of compaction, moisture control, and failure to clear organic material.

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Barodarga - Bhendabari Road</u>				
<u>1982 - 1983 Projects</u>				
17	Groups A & B	Bituminous pavement	==	<u>Pavement complete, but some thickness corrections required. Shoulder improvement work still not complete.</u>
18	Groups C, D-1, & D-2	Bituminous pavement	==	<u>Pavement work complete.</u>
19	Group C-2	Bituminous pavement	==	<u>Pavement work complete, but some shoulder improvement work still required.</u>
<u>1983 - 1984 Projects</u>				
20	Group A	Bituminous pavement	==	<u>2650 lin. ft pavement complete -- progress about normal rate</u>
21	Group B	Bituminous pavement	==	<u>2000 lin. ft pavement complete -- progress intermittent. Some earth shoulder improvement work underway.</u>
22	Group C	Bituminous pavement	==	<u>1600 lin. ft pavement complete -- progress intermittent. Some earth shoulder improvement work underway.</u>
23	Group D	Bituminous pavement	==	<u>Work Order cancelled 20/12/84. No new contractor yet engaged for balance of uncompleted work.</u>
24	Group E	Bituminous pavement	==	<u>2100 lin. ft WBM and 500 lin. ft pavement complete. Progress rate is very slow.</u>
25	Group F	Bituminous pavement	==	<u>2360 lin. ft WBM complete, but no pavement work in progress as yet. Progress rate is decidedly intermittent.</u>
<u>1984 - 1985 Projects</u>				
26	Group 2(a)A	Bituminous pavement	==	<u>No progress to report.</u>
27	Group 2(a)B	Bituminous pavement	==	<u>Bricks have been stockpiled and khaa manufacturing is in progress.</u>

Exhibit VI - CONSTRUCTION SUPERVISION PROJECTS - RANGPUR

Sheet 4 of 7

Serial Number	Contract Identification	Description Of work Order	Percent Complete	Current Comments
<u>Barodarga - Bhendabari Road (Cont.)</u>				
<u>1984 - 1985 Projects (Cont.)</u>				
26	Group 2(a)C	Bituminous pavement	---	<u>No progress to report.</u>
29	Group A	Bituminous pavement	---	<u>No progress to report.</u>
30		Bituminous pavement	---	<u>No progress to report.</u>
31	C - 1	RCC Box Culvert, 8 ft (Gurjipara)	---	<u>Diversion road complete, dismantling of old structure in process, khaa manufacture in progress.</u>
32	C - 2	RCC Slab, 13 ft (Gurjipara)	---	<u>Diversion road complete, existinc damaged slab removed, bed block casting complete, shuttering for slab casting underway.</u>
33	C - 3	Pipe culvert, 50 in. dia (Mile 2)	---	<u>no work progres to report.</u>
34		RCC Box Culvert, 10 ft (Mile 1)	---	<u>No progress to report.</u>

Exhibit VI - CONSTRUCTION SUPERVISION PROJECTS - RANGPUR

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Kamdia - Ghoraghat Road</u>				
<u>1962 - 1983 Projects</u>				
35	Groups A, C, & D	HBB	100	All work, including shoulder repair work is now complete.
36	Group B	HBB	<u>0%5</u>	<u>Correction of some HBB and shoulder improvement work must be finished,</u>
<u>1963 - 1984 Projects</u>				
37	Group A	HBB	==	<u>1500 lin. ft HBB work complete, no shoulder improvement work to date. Progress rate is very slow; scheduled completion date was 31/12/84.</u>
38	Groups B & C	HBB	==	<u>HBB and shoulder improvement work complete, but some corrective measures required for the latter. Sand drain still to be provided.</u>
39	Group D	HBB	==	<u>Shoulder improvement work is complete, but no HBB work to date. First bricks brought to site were rejected. This contract will run far past the scheduled completion date of 13/01/85.</u>
<u>1984 - 1985 Projects</u>				
40	Group 2 (b)A	Bituminous pavement	==	<u>No progress to report.</u>
41	Group 2 (b)B	Bituminous pavement	==	<u>No progress to report.</u>
42	Group 2 (b)C	Bituminous pavement	==	<u>No progress to report.</u>
43	Group 2 (b)D	Bituminous pavement	==	<u>No progress to report</u>

Exhibit VI - CONSTRUCTION SUPERVISION PROJECTS - RANGPUR

Sheet 6 of 7

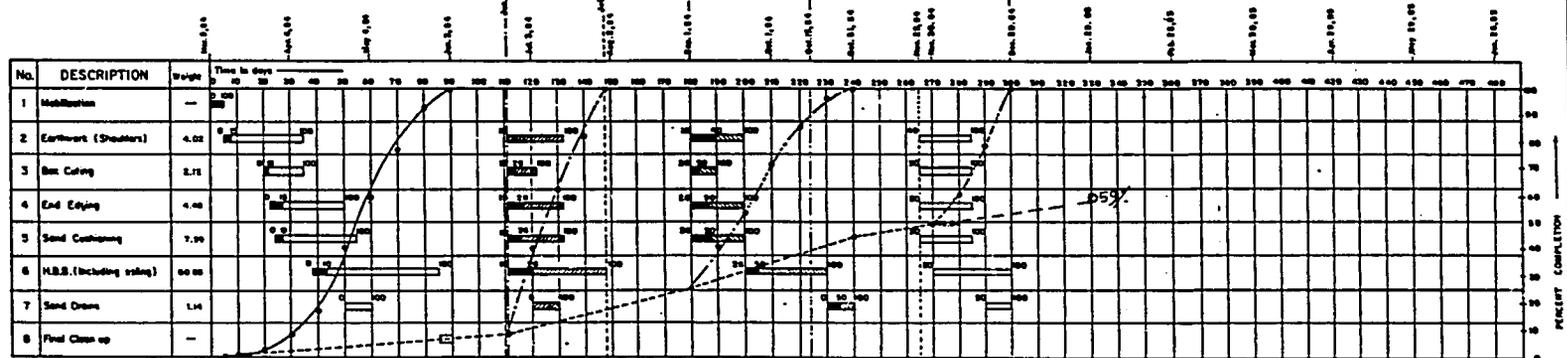
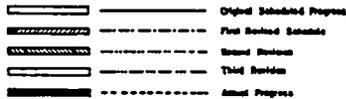
Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Kamia - Ghoraghat Road (Cont.)</u>				
<u>1984 - 1985 Projects (Cont.)</u>				
44	Group 4 (a)A	Bituminous pavement	==	<u>No progress to report.</u>
45	Group 4 (a)B	Bituminous pavement	==	<u>No progress to report.</u>
46	Group 4 (a)C	Bituminous pavement	==	<u>No progress to report.</u>
<u>1982 - 1983 Projects (Cont.)</u>				
47		Tree afforestation	==	<u>No progress to report</u>
<u>Rajarhat - Ullaghata Road</u>				
<u>1982 - 1983 Projects</u>				
48	Groups A & D	HBB	==	<u>Since Groups C and D contracts were canceled due to non performance, this road is not considered to be eligible as a ZRM Project. There is a gap of 4870 ft between Groups A and D. Furthermore, 3 major structures are required for unbroken access in any case. The work is 80 percent complete in Group A and 55 percent complete in Group D, but in both cases, the work is of sub-standard quality.</u>
49	Groups B & C	HBB	==	<u>No new Work Orders issued as of the date of this report.</u>
<u>1983 - 1984 Projects</u>				
<u>1984 - 1985 Projects</u>				
50	B - 5	RCC Bridge, 24.4 m (Deulia Beel)	==	<u>No progress to report.</u>

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Rajarhat - Ullaghata Road (Cont.)</u>				
<u>1984 - 1985 Projects (Cont.)</u>				
51	B - 6	RCC Bridge, 14.2 m (Baddayar Bazar)	---	No progress to report.
52	B - 7	RCC Bridge, 14.2 m (Pangahat)	---	No progress to report.
<u>Gaibandha - Naldanga Road</u>				
<u>1984 - 1985 Projects</u>				
53	B - 1	RCC Bridge, 20 ft	---	Bypass road complete and existing structure razed. Construction layout in progress as of the end of this reporting period.
54	B - 2	RCC Bridge, 20 ft (Kholahati)	---	Diversión road under construction, razing of existing structure is in process, and khoa manufacture underway.
<u>Gaibandha - Saghhata Road</u>				
<u>1984 - 1985 Projects</u>				
55	B - 3	RCC Bridge, 15 ft	---	No progress to report.
56	B - 4	RCC Bridge, 10.2 m (Sharifpur)	---	No progress to report.

EXHIBIT VII
BAR CHARTS
PROJECT SCHEDULES, AND CURRENT STATUS
RANGPUR DISTRICT

**RANGPUR DISTRICT
IMPROVEMENT OF KAMDIA-GHORAGHAT ROAD 1983-1984
H.B.B. PAVEMENT
REVISED PROGRESS CHART**

Revised Estimated Cost:	Tk. 16,34,137
Total Contracted Cost:	Tk. 16,23,117
Scheduled Starting Dates:	See Item (1)
Actual Starting Dates:	See Item (2)
Scheduled Completion Dates:	See Item (3)
First Revised Completion Date:	July 31, 1984
Second Revised Completion Date:	October 31, 1984
Third Revised Completion Date:	December 31, 1984
Dates of Revisions:	June 24, Sept. 1st, Oct. 15, 1984
Total Length:	11,000 feet



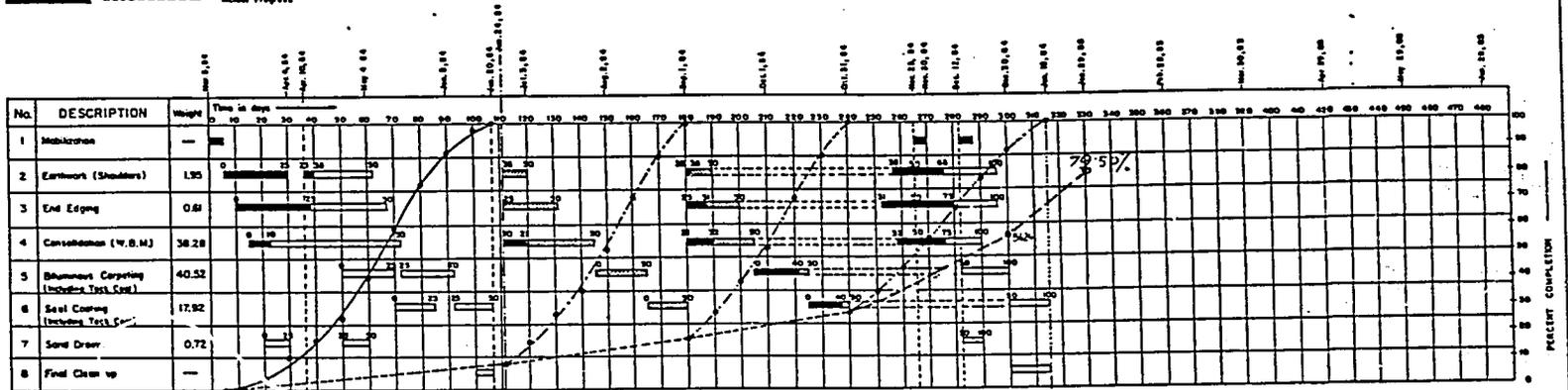
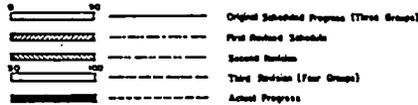
NOTES: (1) Groups B and C: March 5, 1984
 Group A: Nov. 23, 1984
 Group D: Dec. 16, 1984

(2) Groups B and C: March 10, 1984
 Group A: Dec. 4, 1984
 Group D: Dec. 16, 1984

(3) Groups B and C: June 5, 1984
 Group A: July 31, 1984
 Group D: Dec. 31, 1984

RANGPUR DISTRICT
IMPROVEMENT OF MIRGONJ-JOLDHAKA ROAD 1983-1984
BITUMINOUS CARPETING
REVISED PROGRESS CHART

Estimated Cost: Tk. 19,97,250
 Contracted Cost: Tk. 16,48,150
 Scheduled Starting Date: See Item (1)
 Actual Starting Date: See Item (2)
 Scheduled Completion Date: See Item (3)
 First Revised Completion Date: August 31, 1984
 Second Revised Completion Date: October 31, 1984
 Third Revised Completion Date: December 31, 1984
 Date of Revision: June 24, 1984, Sept. 10, Oct. 15, 1984
 Total Length: 8,400 feet



NOTES: (1) Group C-E: March 3, 1984; Group B: April 7, 1984; Group A: December 12, 1984; Group C4: November 23, 1984
 (2) Group C-E: March 10, 1984; Group B: April 10, 1984; Group A: December 12, 1984; Group C4: November 23, 1984
 (3) Group: O-2: June 3, 1984; Group B: June 20, 1984; Group A: January 15, 1983; Group C4: December 31, 1984
 (4) Work Order for Group B cancelled by the Z.P. Group B will no longer be part of this scheme for 1983-84

RANGPUR DISTRICT
IMPROVEMENT OF PARODARGA-BHENDABARI ROAD 1983-1984
BITUMINOUS CARPETING
REVISED PROGRESS CHART

Estimated Cost: Tk. 47,45,533
Original Contracted Cost: Tk. 42,02,280
Revised Contracted Cost: Tk. 46,99,266
Scheduled Starting Date: March 5, 1984
Actual Starting Date: June 2, 1984
Scheduled Completion Date: March 31, 1984
First Revised Completion Date: June 2, 1984
Second Revised Completion Date: August 31, 1984
Third Revised Completion Date: October 31, 1984
Date of Revision: June 24, Sept. 16, Oct. 15, 1984
Total Length: 18,000 feet

Original Scheduled Progress
First Revised Schedule
Second Revision
Third Revision
Actual Progress

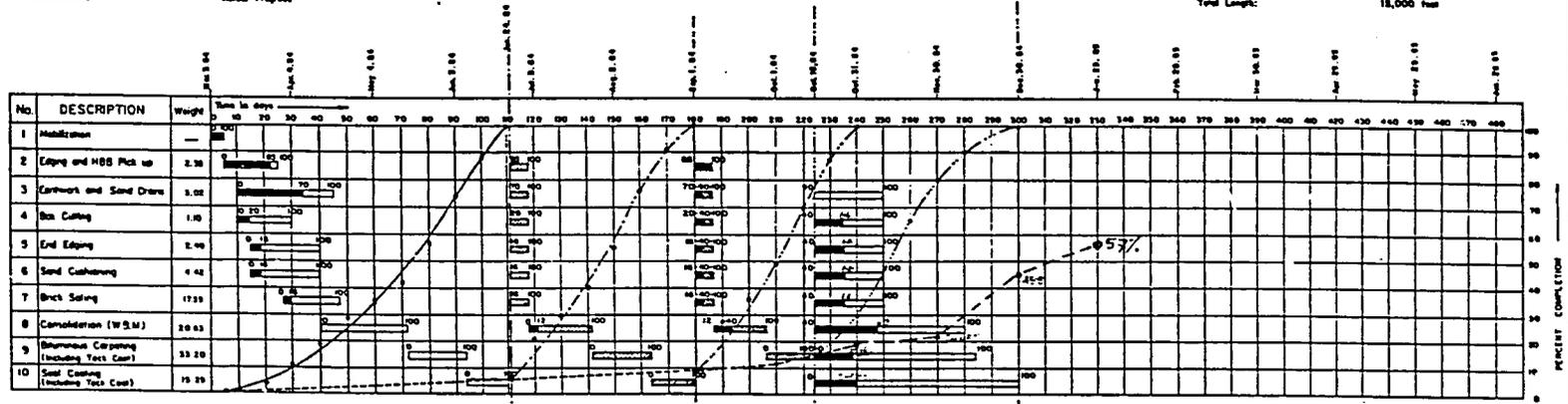


Exhibit VI, consisting of 7 sheets, lists all the construction projects in the Rangpur District, by road and by fiscal year in which programmed. The "Serial Number" has no significance other than to serve as a simple symbol for locating the project on its respective map.

Exhibit VII, consisting of 4 sheets, contains the bar charts and progress curves for those projects that are currently active.

6.4 Faridpur District

Exhibit VIII is a map of the (old) Faridpur District on which have been marked, with appropriate symbols and numbers, both the maintenance and the construction projects in the Faridpur District.

Exhibit IX, consisting of 5 sheets, lists all the construction projects in the Faridpur District, by road and by fiscal year in which programmed. The "Serial Number" has no significance other than to serve as a simple symbol for locating the project on its respective map.

Exhibit X, consisting of 5 sheets, contains the bar charts and progress curves for those projects that are currently active.

7.0 PROCUREMENT OF EQUIPMENT

7.1 Local Procurement

7.1.1 Tar Boilers

Still waiting for authorization from LGEB to purchase 12 units.

7.1.2 Trailer-Mounted Water Tanks

The manufacturer is still in the process of assembling 6 units. Expected delivery date is 15 February 1985.

7.2 International Procurement

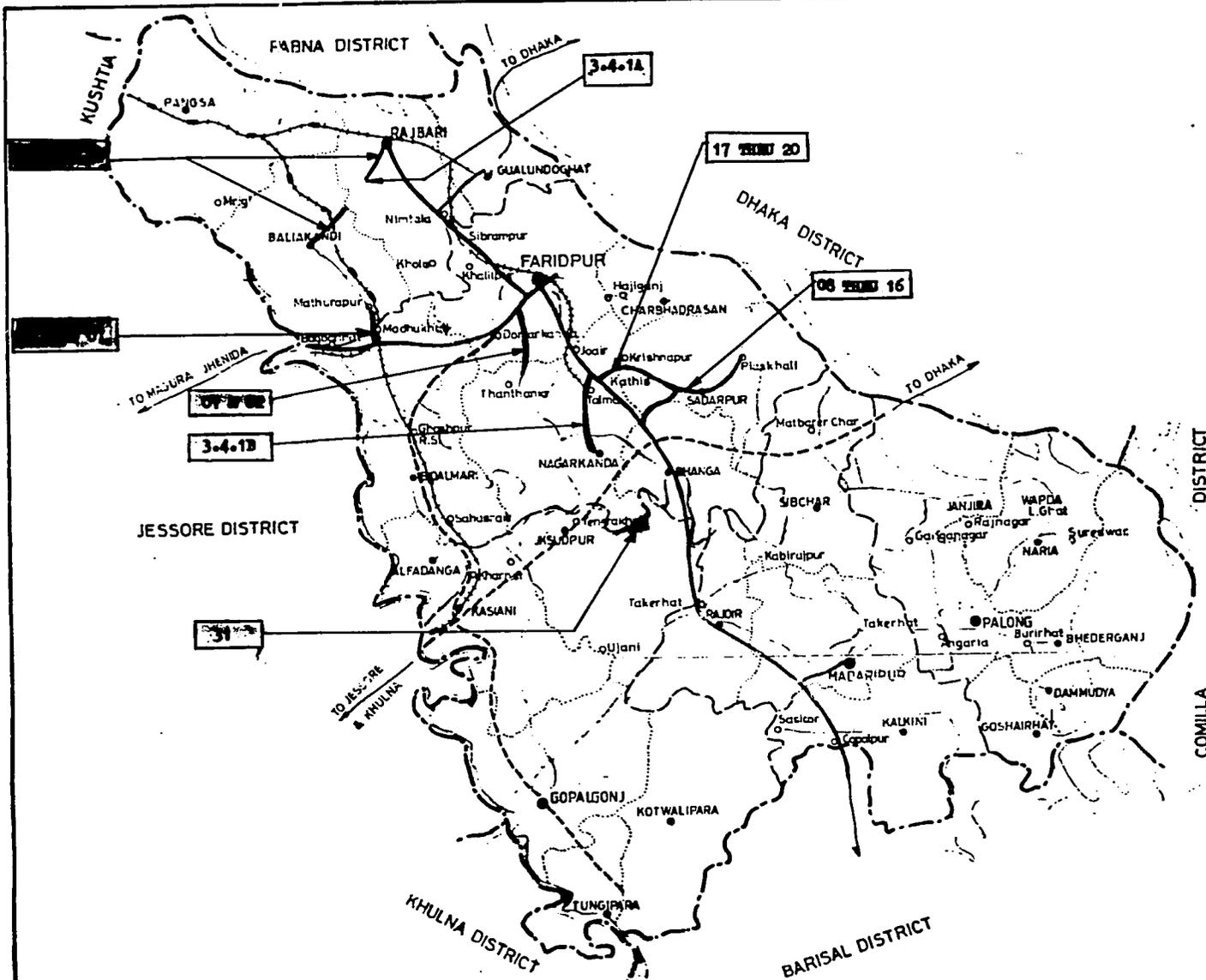
7.2.1 Heavy Equipment, Vehicles, And Tools

Still waiting for authorization from LGEB to undertake final procurement proceedings.

7.2.2 WSA Office Vehicles

To date, the two WSA office vehicles, a sedan and a minibus, have not been purchased. No immediate resolution to the problem can be expected in the near future.

EXHIBIT VIII
FARIOPUR DISTRICT



LEGENDS
MAINTENANCE

3-4-1A. RAJBARI - BALIAKANDI ROAD

3-4-1B. TALMA - NAGARKANDA ROAD

CONSTRUCTION

01 & 02. BADAEPUR - SALTIA ROAD

03 THRU 07. NADEUKHALI - BALIAKANDI ROAD

08 THRU 16. HATEKRISHNAPUR - PIJAKHALI ROAD

17 THRU 20. TALMA - HATEKRISHNAPUR ROAD

21 THRU 30. BALIAKANDI - RAJBARI ROAD

31. DIGNAGAR - MUNSUDPUR ROAD

Scale 1 Inch = 8 Miles

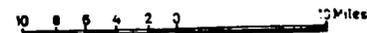


Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Sheet 1 of 5

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Badarpur - Saltha Road</u>				
<u>1982 - 1983 Projects</u>				
01		Bituminous pavement	100	Final payment processed
<u>1983 - 1984 Project</u>				
02		Bituminous pavement	100	Final payment processed
<u>Madhukhali - Baliakandi Road</u>				
<u>1982 - 1983 Projects</u>				
03		Bituminous pavement	100	Final payment processed
<u>1983 - 1984 Projects</u>				
04	Groups E, F, G, H, & I	Bituminous pavement	100	Final payment processed
05	Group J	Bituminous pavement	100	Final bill being processed.
<u>1984 - 1985 Projects</u>				
06	ZKHIP/01/84-85, Group K	Bituminous pavement	---	WBM complete. Crushing of boulders for pavement aggregate is in process, and some bituminous material has been stockpiled. Pavement work is expected to get underway in February.
07	ZKHIP/02/84-85, Group L	Bituminous pavement	---	WBM is complete, although final compaction is required. Boulders are being crushed for aggregate, and pavement work is expected to start in February.
<u>Hatkrishnapur - Badarpur - Pajkhali Road</u>				
<u>1983 - 1984 Projects</u>				
08	ZKHIP/01/83-84, Group A	Bituminous pavement	100	Final bill being processed.
09	ZKHIP/10/83-84, Group D	Bituminous pavement	100	Final bill being processed.
10	ZKHIP/11/83-84, Group E	Bituminous pavement	100	Final bill being processed.

Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Sheet 2 of 5

Serial Number	Contract Identification	Description Of work order	Percent Complete	Current Comments
<u>Matkrishnapur - Sadarpur - Pajkhal Road (Cont.)</u>				
<u>1984 - 1985 Projects</u>				
11	ZMIP/10/84-85, Group B	Bituminous pavement	---	work Order issued 15/01/85. Contractor is having difficulty finding sand of the correct F.M., but is expected to start work in early February.
12	ZMIP/11/84-85, Group C	Bituminous pavement	---	work Order issued 15/01/85. Contractor is having difficulty finding sand of the correct F.M., but is expected to start work in early February.
13	ZMIP/25/84-85	RCC bridge, 36 ft (Majunder)	---	No progress to report due to continuing high water table at job site.
14	ZMIP/26/84-85	RCC Bridge, 30 ft (Taltala)	---	No progress to report because of continuing high water table at job site.
15	ZMIP/50/84-85	RCC Bridge, 30 ft	---	No progress to report due to continuing high water table at job site.
16	ZMIP/27/84-85	RCC Bridge, 30 ft (Khalgo)	---	Abutment excavation is complete. Contractor is stockpiling steel, aggregates, and cement in preparation for footing pours early in February.

Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Sheet 3 of 5

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Talma - Hatkrishnapur Road</u>				
<u>1984 - 1985 Projects</u>				
17	ZRMIP/05/84-85, Group A	WBM, 5260 lin. ft	==	<u>Contractor has completed picking up all existing brick.</u>
18	ZRMIP/06/84-85, Group B	WBM, 5290 lin. ft	==	<u>Contractor has completed excavation and 3600 lin. ft of sand cushion edging and soling. Some 650 lin. ft of WBM are complete.</u>
19	ZRMIP/07/84-85, Group C	WBM, 5260 lin. ft	==	<u>All WBM work is complete, and one interim payment has been processed.</u>
20	ZRMIP/08/84-85, Group D	WBM, 4074 lin. ft	==	<u>All existing brick has been lifted and is being processed into khos.</u>
<u>Baliakandi - Rajbari Road</u>				
<u>1984 - 1985 Projects</u>				
21	ZRMIP/14/84-85, Group 1	Bituminous pavement, 1.6 km	==	<u>Some 650 lin. m of excavation complete, and some sand has been stock-piled. Bricks are available and are being processed into khos.</u>
22	ZRMIP/15/84-85, Group 2	Bituminous pavement, 1.6 km	==	<u>Some 1100 lin. m of excavation complete; and 300 lin. m of sand cushion, edging and soling are down. Bricks are available for khos.</u>
23	ZRMIP/16/84-85, Group 3	Bituminous pavement, 1.6 km	==	<u>This contractor has completed some 1100 lin. m of excavation.</u>

Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Sheet 4 of 5

Serial Number	Contract Identification	Description Of Work Order	Percent Complete	Current Comments
<u>Baliakandi - Rajbari Road (Cont.)</u>				
<u>1984 - 1985 Projects (Cont.)</u>				
24	ZRMP/17/84-85, Group 4	Bituminous pavement, 1.6 km	---	<u>Some 700 lin. m of excavation and 250 lin. m of sand cushion, edging and soling are complete. First sand deliveries were rejected because of low F.M.</u>
25	ZRMP/18/84-85, Group 5	Bituminous pavement, 1.6 km	---	<u>Some 250 lin. m of excavation are complete, and khaa is being processed.</u>
26	ZRMP/19/84-85, Group 6	Bituminous pavement, 1.6 km	---	<u>Some 1250 lin. m of excavation and 850 lin. m of sand cushion, edging, and soling are complete. Also, some 700 lin. m of WBM have been completed.</u>
27	ZRMP/20/84-85, Group 7	Bituminous pavement	---	<u>Some 450 lin. m of excavation are complete.</u>
28	ZRMP/21/84-85, Group 8	Bituminous pavement over existing ASM	---	<u>Contractor has completed crushing boulders for pavement aggregate, and is waiting for delivery of bituminous material and the availability of a roller to start paving operations.</u>
29	ZRMP/22/84-85,	bridge approach, Horsi bridge	---	<u>embankment work is about 45 percent complete. Field densities are running about 50 percent of Modified Proctor Optimum, which is probably about as high as can be obtained with hand tampers.</u>
30	ZRMP/23/84-85	Bridge approach, Matiapara bridge	---	<u>embankment is about 45 percent complete, and field densities are running about the same as described for the Horsi bridge.</u>

Exhibit IX - CONSTRUCTION SUPERVISION PROJECTS - FARIDPUR

Sheet 5 of 5

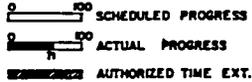
Serial Number	Contract Identification	Description of Work Order	Percent Complete	Current Comments
<u>Dignagar - Mukhsudpur Road</u>				
<u>1:84 - 1965 Projects</u>				
31	ZMIP/24/64-85	Bridge approach, Banagram Bridge	==	<u>Local political pressures forced the placing of these earth embankments at a rate not commensurate with good fill construction practices. As a result, slips have occurred at both corners of the north abutment and field densities are lower than the two approach projects previously discussed.</u>

EXHIBIT X
BAR CHARTS
PROJECT SCHEDULES, AND CURRENT STATUS
FARIDPUR DISTRICT

**FARIDPUR
ALL SCHEMES
AND
MAINTENANCE
84-85**

DATE: 31 JAN. 85
% COMPLETION :
SCHEDULED = 11 %
ACTUAL = 10 %

LEGEND

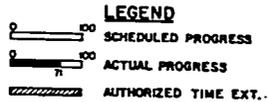


DESCRIPTION	COST (LAC)	WTD %	JAN.	FEB.	MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
MADHUKHALI-BALIAKAND	25.70	8.3	30	45	75	80	88	100						
BALIAKANDI-RAJBARY	122.15	38.3	10	25	55	64	82	98						90%
TALMA-HATKRISHNAPUR	64.15	20.7	10	25	54	68	87	100						80%
HATKRISHNAPUR-SADARPUR	41.56	13.4	0	15	37	52	68	98						70%
BRIDGE APPROACHES	18.45	8.8	15	27	50	100								60%
BRIDGES	27.51	8.8	0	22	30	50	60	100						50%
PILOT MAINTENANCE	10.88	3.8	0	38	58	80	100							40%
														30%
														20%
														10%

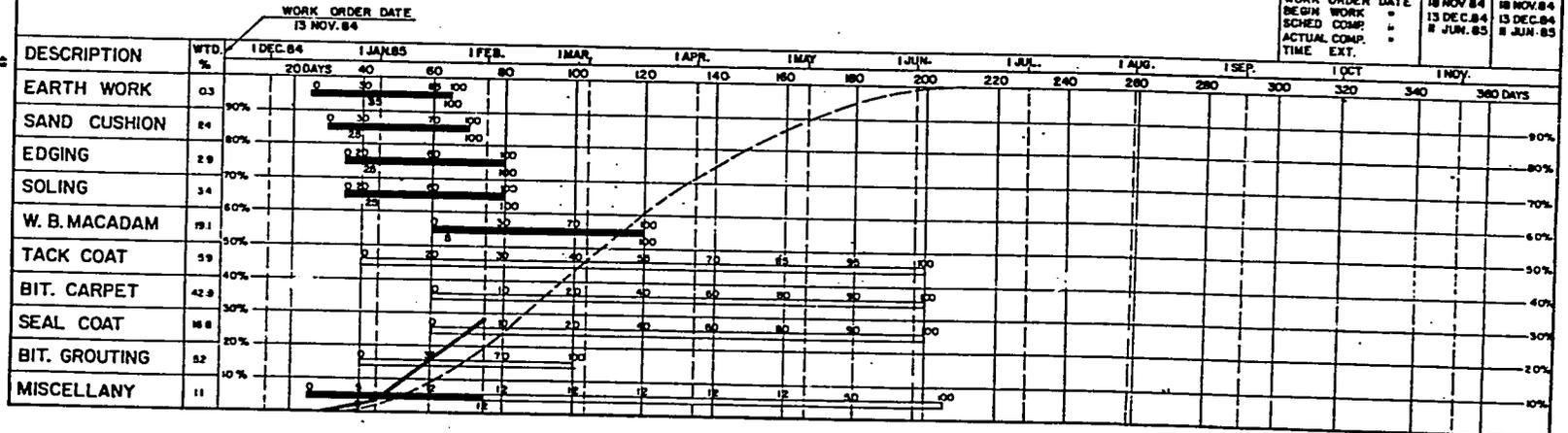
87

**FARIDPUR
MADHUKHALI-BALIAKANDI
ROAD
ALL GROUPS
84-85 SCHEMES**

DATE: 31 JAN. 85
% COMPLETION:
SCHEDULED = 20%
ACTUAL = 26%



TOTAL		CONTRACT DATA	
9782 L.F.	LENGTH	K	L
25,70,32	5328 L.F.	14,00,397	4454 L.F.
	COST (TK)		1,68,736
WORK ORDER DATE		18 NOV 84	18 NOV 84
BEGIN WORK		"	13 DEC 84
SCHED COMP		"	11 JUN 85
ACTUAL COMP. TIME EXT.		"	11 JUN 85



107

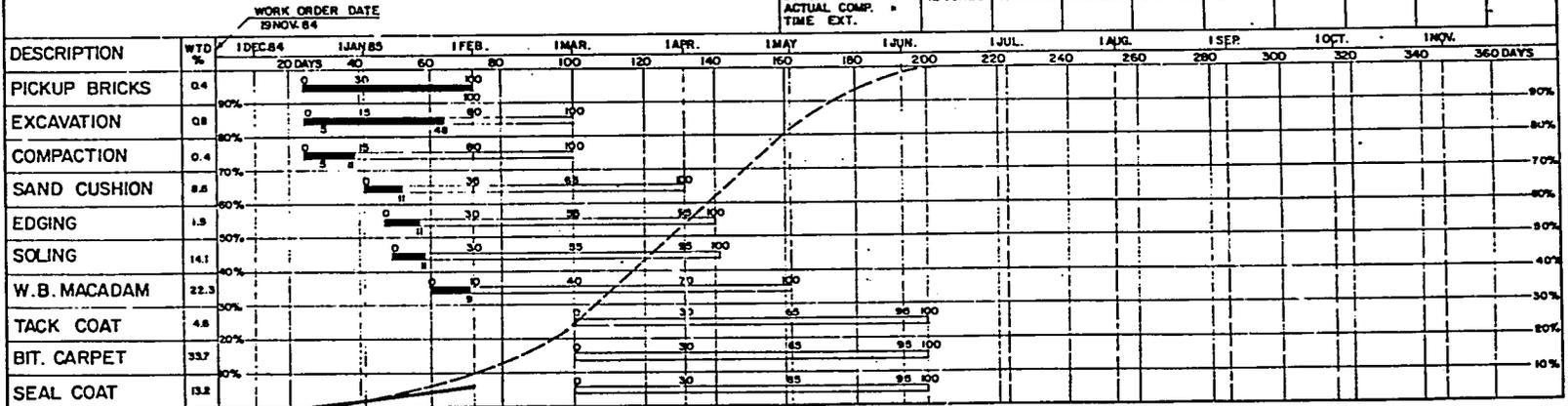
FARIDPUR
BALIAKANDI - RAJBARY
ROAD
ALL GROUPS
84-85 SCHEMES

DATE: **31 JAN. 85**
 % COMPLETION:
 SCHEDULED = 10%
 ACTUAL = 6%



CONTRACT DATA

TOTAL	GROUP	1	2	3	4	5	6	7	8
11563 m.	LENGTH	1600 m.	5'40 m.	1425 m.					
122,53,995	COST (TK)	20,36,85	17,41,350	16,33,765	18,26,280	20,35,885	16,99,990	5,87,802	20,87,8
	WORK ORDER DATE	19 NOV.84	20 NOV.84	20 NOV.84	18 NOV.84	19 NOV.84	19 NOV.84	20 NOV.84	19 NOV.84
	BEGIN WORK	14 DEC.84	15 DEC.84	15 DEC.84	13 DEC.84	14 DEC.84	14 DEC.84	15 DEC.84	14 DEC.84
	SCHED. COMP.	12 JUN.85	13 JUN.85	13 JUN.85	11 JUN.85	12 JUN.85	12 JUN.85	13 JUN.85	12 JUN.85
	ACTUAL COMP. TIME EXT.								

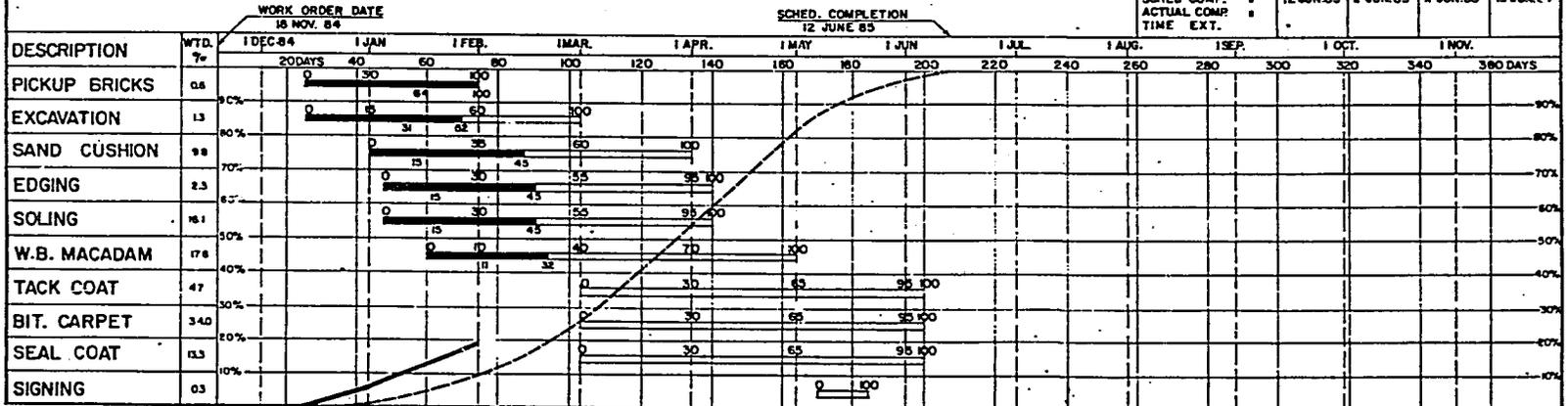


**FARIDPUR
TALMA-HATKRISHNAPUR
ROAD
ALL GROUPS
84-85 SCHEMES**

DATE: 31 JAN 85
% COMPLETION:
 SCHEDULED = 10%
 ACTUAL = 15%

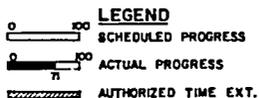


CONTRACT		DATA			
TOTAL	GROUPS	A	B	C	D
19,914 L.F.	LENGTH	5280 L.F.	5280 L.F.	5280 L.F.	4074 L.F.
64,15,88	COST (TK)	8,38,14	16,33,024	1645,590	12,98,460
WORK ORDER DATE	19 NOV 84	18 NOV 84	18 NOV 84	25 NOV 84	25 NOV 84
BEGIN WORK	14 DEC 84	13 DEC 84	13 DEC 84	21 DEC 84	21 DEC 84
SCHED COMP.	12 JUN 85	11 JUN 85	11 JUN 85	19 JUL 85	19 JUL 85
ACTUAL COMP.					
TIME EXT.					



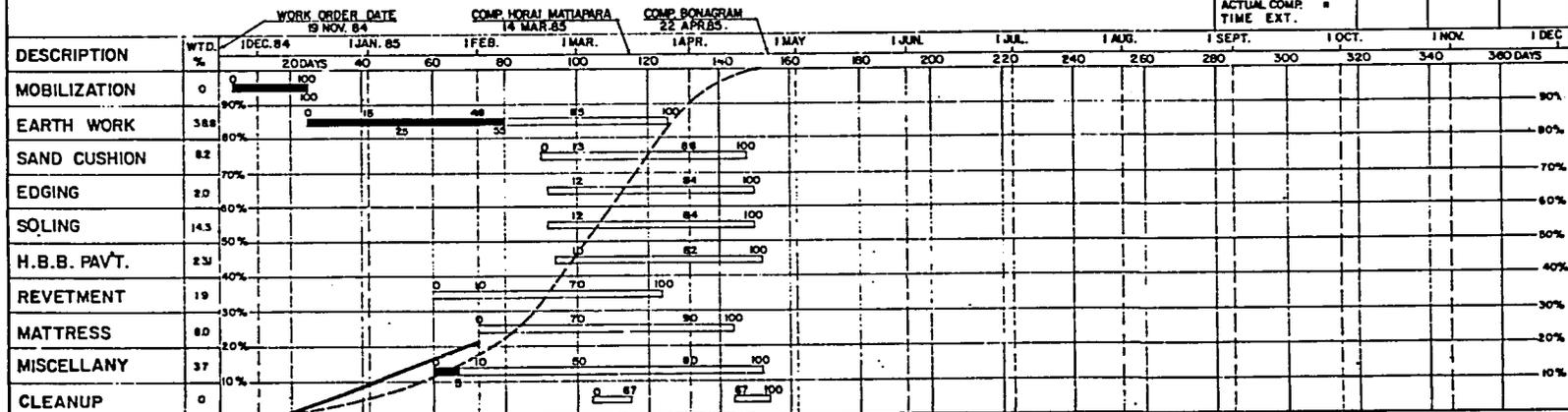
**FARIDPUR
BRIDGE APPROACHES
BONAGRAM - HORAI - MATIAPARA
84-85 SCHEMES**

DATE: 31 JAN 85
% COMPLETION:
SCHEDULED = 18%
ACTUAL = 22%



CONTRACT DATA

TOTAL	BRIDGE	BONAGRAM	HORAI	MATIAPARA
1045 m.	LENGTH	410 m.	410 m.	225 m.
18,45,165	COST (TK)	8,85,000	6,63,940	2,90,225
WORK ORDER	DATE	25 NOV 84	19 NOV 84	19 NOV 84
BEGIN WORK	"	23 DEC 84	14 DEC 84	14 DEC 84
SCHED COMP.	"	22 APR 85	14 MAR 85	14 MAR 85
ACTUAL COMP.	"			
TIME EXT.	"			



8.0 PERSONNEL

The current status of all personnel (WSA/BCL/PAS) is shown in tabular form in Appendix E. Problems in connection with personnel assignments are discussed in the following section.

9.0 PROBLEMS AND PROPOSED SOLUTIONS

9.1 Organization And Management

In the Progress Report for December 1984, a series of ten problems which were common to all three Districts, and which have been sources for complaints throughout the life of the Project, were presented and discussed. It will be noted that many of these same problems reappear in this report, particularly in the Rangpur District. Since both Sylhet and Faridpur have reported marked improvement in the solution of these problems, there is no reason to feel that the same cannot be accomplished in Rangpur. To actively seek a solution there will certainly benefit all concerned.

9.2 Maintenance System And Supervision

Problems in connection with this work have been discussed in the review of the individual projects.

9.3 Preparation Of Technical Specifications

Problems in connection with imprecise and poorly defined specifications, and their adverse impact on quality of work, have been discussed in many previous reports. The RE, Sylhet, has been particularly active in this respect.

With the expected return in February of the specialist in specifications, it is hoped that these problems can be resolved to the complete satisfaction of all concerned.

9.4 Training

Now that the in-country training sessions are complete, any training problems that remain are those associated with scope and venue of any future overseas training courses. The cancellation of the second AIT training course because LGEB was unable to obtain the necessary BDG clearances has exacerbated this problem. It will now be necessary to obtain all required clearances prior to attempting to reschedule any additional AIT training courses.

9.5 Construction System And Supervision

Problems in connection with this work have been discussed in the review of the individual projects.

9.6 Procurement Of Equipmnt

As pointed out previously, most of the obstacles to procurement of equipment will be removed when LGEB issues the necessary authorizations to proceed with procurement.

9.7 Personnel

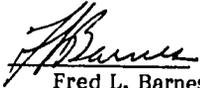
Problems in this area revolve around obtaining the approval for short-term assignments for expatriate specialists. The timely completion of various reports, which the Consultant is contractually obligated to furnish, is dependent upon the short-term specialist (s) being on hand as required. The unwarranted lapse of time between the time that a request for approval of a short-term specialist is submitted and the time that approval is received from LGEB is a source of serious delay to the Consultant.

9.8 Miscellaneous

No specific miscellaneous problems

10.0 MISCELLANEOUS

The Monthly Financial Statement may be found in Appendix F.


Fred L. Barnes
Chief of Party

APPENDIX - A

PHOTOGRAPHS OF VISIT BY HONORABLE H.B. SCHAFER,
U.S. AMBASSADOR TO BANGLADESH, TO SYLHET DISTRICT

17 TO 19 DECEMBER 1984



Mrs. H.D. Schaffer in front of the Khadin Tea Estate Dungalow.



The XEN pointing out the Koral Bazar Road alignment to the Ambassador.



The XE explains the job problems of the Kanai Bazar Road.



The gathering organized by the Dhakadakhin area villagers and the XE.



The Ambassador and the XEI, just to the left of old bridge remnant, in the midst of the procession to the school.



Another view of the procession.



The Ambassador and the XEF arriving at the school for the ceremonies.



The local Moultvi giving the invocation.



Local youth reading the villagers' petition for financing of the Radhajuri bridge to the Ambassador.



A view of the reception gathering taken from the platform; Mr. Shamin Raiman of USAID in foreground.



Another view of the reception; the local gifts presented to the Ambassador are seen at right foreground.

APPENDIX B

PHOTOS OF MAINTENANCE ACTIVITIES

SYLHET DISTRICT

FARIDPUR DISTRICT

SYLHET DISTRICT

1983-84 PILOT MAINTENANCE PROGRAM

HATINGANJ - DHAKADAKSHIN ROAD



A view of the type of embankment "conservation" practiced by uninstructed and unsupervised personnel. Adequate materials could have been obtained by excavating required ditches in the area.

The specifications for R.C.C. pipe culvert material are explicit. However, this picture, and the following, illustrate the quality of product to be expected from unsupervised Contractors.





Primitive type of form work being used to cast RCC pipe culvert. Man on top is casting and rodding the concrete to obtain consolidation. Note the difference in pipe diameter at top and bottom.

1984-1985 MAINTENANCE PROJECT

Sanamganj - Chhatak Road

A view of completed surfacing and levelling with 15 in box culvert under construction by SWP in background.



A view of the existing embankment on this job. Large gap in the background is the site of a collapsed bridge.

FARIDPUR DISTRICT
1983-1984 PILOT MAINTENANCE PROJECTS
Talma - Nagarkanda Road



Replacement of HBB in damaged portion at Nagarkanda.



Completed HBB replacement section at Nagarkanda.

Faridpur District (contd.)

Talma - Nagarkanda Road (contd.)



Completed section of Khoa consolidation at damaged pavement site.



Repairing failed WBM portion of pavement.

Faridpur District (contd.)

Talma - Nagarkanda Road (contd.)



Completed section of Khoa consolidation
at the failed pavement area.

APPENDIX - C

DISTRICT SOIL LABORATORY ACTIVITIES.

SYLHET DISTRICT

RANGPUR DISTRICT

FARIDPUR DISTRICT

LABORATORY ACTIVITIES OF SYLHET DISTRICT FOR THE
MONTH OF JANUARY, 1985.

Name of road and location from where materials collected	Sample no.	Wt. of Cube/ Cylinder.	Size of sample.	Slump.	Proportion of mix.	Age in days.	Load in lbs.	Compressive strength in PSI	Remarks.
Putijuri-Bahubal -Bijnaghat Road. (Top slab at Putijuri end).	S ₁₁	8500	6"x6"	2"	1:2:4	33	92000	2556	Fine aggregate (F.M.=1.90)+Coarse aggregate(20mm- 30mm down graded) + Chattack cement.
		8400	6"x6"	2"	1:2:4	33	90000	2500	
Atgram-Zakiganj Road- (Abutment wall).	S ₁₂	8400	6"x6"	3"	1:2:4	28	84600	2350	Fine aggregate (F.M. = 1.90) + Coarse aggregate (20 mm - 30 mm down graded) + Chattack cement.
		8350	6"x6"	3"	1:2:4	28	86500	2403	

**LABORATORY ACTIVITIES OF SYLHET DISTRICT FOR THE
MONTH OF JANUARY, 1985.**

Name of road/haul and location.	Test Result	Sieve /Hydro-meter analysis.			Atterberg limits.			Field density.		Compaction test.		% Compaction.		C.B.R. (%)		Remarks.
		Sand (%)	Silt (%)	Clay (%)	L.L. (%)	P.L. (%)	P.I. (%)	Yd kg/m ³	W (%)	M.D.D. (kg/m ³)	C.M.C (%)	Modified.	Standard.	Unsoaked.	Soaked.	
Tajpur - Khadimpur road. (Shair Sand).	F.N. =1.98	99.76	0.24	-	-	-	-	-	-	-	-	-	-	-	-	Used for RCC box culvert at New Market.
Dhakadakshin-Beani bazar Road. (Depth 0.15-0.3m)- (East side of the Radhaji bridge app. towards Beani bazar).	-	32	48	20	-	-	-	1622.49	22.36	1909.22	15.60	85	-	-	-	Compacted sub-grade.
- 71 - Dhakadakshin-Beani bazar Road. (Depth 0.15-0.3m)- (Gap between double and 4th box culvert)	-	16	67	17	-	-	-	1529.00	28.24	-	-	-	-	-	-	All samples have been taken after raising of the road.
- Ditto -	-	-	-	-	-	-	-	1497.12	30.97	-	-	-	-	-	-	-ditto-
Dhakadakshin-Beani bazar Road. (Depth 0.15-0.30)- (Gap double box culvert and 1st culvert).	F.M. =2.49	23	62	15	-	-	-	1542.11	24	1968.24	15.02	78	-	-	-	-ditto-

Yd = Dry density.
W = Water content.
MDD = Max dry density.
C.M.C = Optimum water content.

LABORATORY ACTIVITIES OF RANGPUR DISTRICT FOR THE
MONTH OF JANUARY, 1985.

Name of road/Khal and location.	Test Result	Sieve /Hydro-meter analysis.			Atterberg limits.			Field density.		Compaction test.		Compaction.		C.B.R. (%)		Remarks.
		Sand (%)	Silt (%)	Clay (%)	L.L. (%)	P.L. (%)	P.I. (%)	γ_d kg/m ³	W (%)	M.D.D. (kg/m ³)	O.M.C (%)	Modified.	Standard.	Unseal-kod.	Seal-kod.	
Barodarga-Bhendabari Road.(Near the M. Islam house - new construction bridge.	-	-	-	-	-	-	-	-	-	-	-	-	-	37.34	13.50	Another test result already been submitted with last month's report.
Damdama-Mahiganj Road - earth work.	-	15	78	7	-	-	-	-	-	1694	15.60	-	-	-	-	

γ_d = Dry density.
W = Water content.
MDD = Max dry density.
O.M.C = Optimum water content.

LABORATORY ACTIVITIES OF RANGPUR DISTRICT FOR THE
MONTH OF JANUARY , 1985.

Name of road and location from where materials collected.	Brick size.	Absorption capacity.	F.M. of sand/Pea gravels.	Water contents (%).	<u>Remarks.</u>
Barodarga-Bhendabari Road. 1st box culvert.	-	-	F.M. = 1.77	-	May be used for cc work.
Barodarga-Bhendabari Road. (Group-C,1982-83 for sand cushioning.	-	-	F.M. =0.72	-	Does not follow the specification.
Dariapur-Gaibandha Road 10 Span Bridge. -do-	-	-	F.M. =1.51	-	-do-
Kamdia-Ghoraghat Road. (Group - A).	-	-	F.M. =0.78	-	Does not follow the specification.
Gaibandha-Naldanga Road, village of Kholahati 20' Span Bridge.	-	-	F.M. =1.38	-	-do-

LABORATORY ACTIVITIES OF RANGPUR DISTRICT FOR THE MONTH OF JANUARY, 1985.

Name of road and location from where materials collected.	Grading of pea gravels and stone chips by % of finer by sieve analysis.												Remarks.
	Sieve 1"	Sieve 3/4"	Sieve 1/2"	Sieve 3/8"	Sieve 1/4"	Sieve no.4	Sieve no.8	Sieve no. 10	Sieve no. 16	Sieve no. 40	Sieve no. 80	Sieve no. 200.	
Jaldhaka-Mirganj Road, Group-D(old) in 1982-83.	93.50	71.00	41.00	-	-	3.50	-	1.00	-	0.50	0.40	0.35	This material does not follow the specification.
-ditto-	100	92	72	-	-	14.5	-	4.00	-	2.50	1.50	0.90	"
Gaibandha - Kamarjani Road. (Group - A).	100	90	72	-	-	12.5	-	2.00	-	0.50	0.35	0.25	"
Barodarga-Bhendabari Road. Group- E. (1983-84).	100	80	52.5	-	-	7.5	-	4.5	-	4.35	2.85	0.35	"

LABORATORY ACTIVITIES OF FARIDPUR DISTRICT FOR THE
MONTH OF JANUARY, 1985.

Name of road and location from where materials collected.	Brick size.	Absorption capacity.	F.M. of sand/Pea gravels.	Water contents (%).	<u>Remarks.</u>
Baliakandi-Rajbari Road. (Group- 7). ...	-	-	F.M. = 1.07	-	Local sand.
-ditto- (Group- 1). ...	-	-	F.M. = 1.025	-	Local sand.
-ditto- (Group- 2). ...	-	-	F.M. = 0.89	-	Local sand.
-ditto- (Group- 4). ...	-	-	F.M. = 0.427	-	Local sand.
Rajbari- Baliakandi. (Group- 4). ...	-	-	F.M. = 0.85	-	Local sand.
Modhukhali-Baliakandi Road. (Group- L). ...	-	-	F.M. = 0.924	-	-
Talma-Hatkrishnapur Road. (Group- B). ...	-	-	F.M. = 0.80	-	-

- 75. -

**LABORATORY ACTIVITIES OF FARIDPUR DISTRICT FOR THE
MONTH OF JANUARY, 1985.**

Name of road/dhal and location.	Test Result	Sieve /Hydro-motor analysis.			Atterberg limits.			Field density.		Compaction test.		% Compaction.		C.B.R. (%).		Remarks.
		Sand (%)	Silt (%)	Clay (%)	L.L. (%)	P.L. (%)	P.I. (%)	γ_d kg/m ³	W (%)	M.D.D. (kg/m ³)	O.M.C (%)	Modified.	Standard.	Unsoaked.	Soaked.	
Bonagram Bridge Approach. ...	-	-	-	-	-	-	-	1472.3	22.23	1750.5	15.6	-	84.11	-	-	Sample from Hole no.1.
Baliakandi-Rajbari Road. (Group- 6). ...	-	-	-	-	-	-	-	1593.9	23.58	1630.65	22.0	-	97.75	-	-	
Bonagram Bridge Approach... ...	-	-	-	-	-	-	-	1417.5	25.24	1726.3	18.1	-	82.1	-	-	Sample from Hole no.1.
-76- Field(Hatkrishnapur). (Group- B). ...	Sp.Gr. 2.50	5%	76%	19%	-	-	-	-	-	-	-	-	-	-	-	-
Talma- Hatkrishnapur. (Group- C). ...	-	-	-	-	-	-	-	1705.6	14.35	1736.0	14.75	-	98.2	-	-	-
-ditto- (Group- B). ...	-	-	-	-	-	-	-	1581.6	13.78	1665.5	15.5	-	94.96	-	-	-
Baliakandi-Rajbari Road. (Group- 3). ...	-	-	-	-	-	-	-	1696.7	13.23	1721.6	17.0	-	98.55	-	-	-
-ditto- (Group- 2). ...	-	-	-	-	-	-	-	1523.2	19.74	1782.5	14.12	-	85.45	-	-	-

γ_d = Dry density.
W = Water content.
MDD = Max dry density.
O.M.C = Optimum water content.

APPENDIX - D

PHOTOS OF CONSTRUCTION ACTIVITIES.

SYLHET DISTRICT

RANGPUR DISTRICT

FARIDPUR DISTRICT

SYLHET DISTRICT

1982 - 1983 Projects

Atgram - Zakiganj Road.



A view of the pavement failure that has resulted from poor construction practices. This condition was predicted by the Consultants and is located on the 700 meter section considered as unacceptable during final payment.

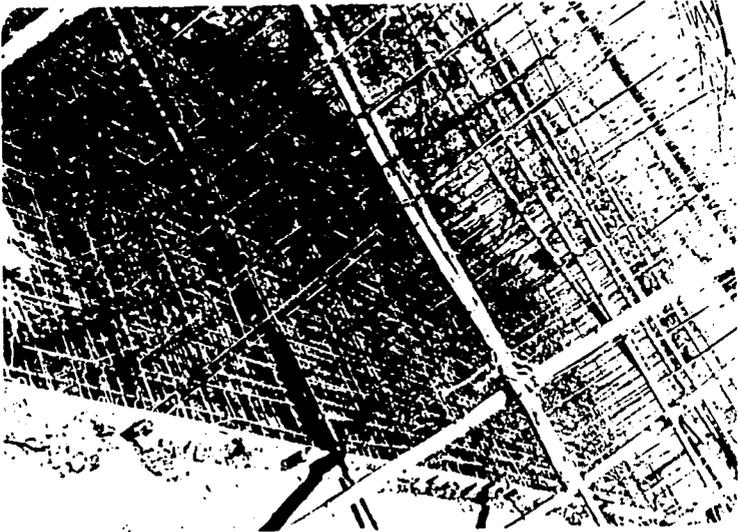
ZRMI/18/82-83, Pavement, 2 Km., Completed 09/09/84.

Atgram - Zakiganj Road

ZRMI/9/83-84 - 22.98 meter Box Culvert



An overall view of the culvert site with foundation slab cast and structural steel placed - December 21, 1984.



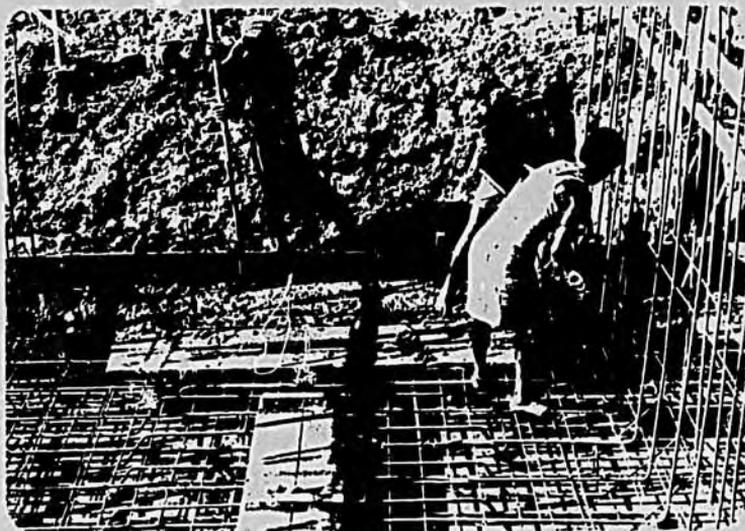
A view of the organization and preparation of reinforcing rod for the bottom slab casting - December 21, 1984.

Atgram - Zakiqanj Road

ZRMI/9/83-84 - 22.98 meter Box Culvert



Concrete mixer, aggregates and workman mixing concrete for casting bottom slab 21 December 1984.



The casting and rodding of the bottom slab
21 December 1984.

Atgram - Zakiganj Road

22.98 meter Box Culvert



A view of the progress, taken on 6 January 1985 from the north side.



A view of the progress on 6 January, taken from the south side and towards Atgram.

Atgram - Zakiganj Road

ZRHI/11/83-84 - 4.55 Kms. Levelling Course



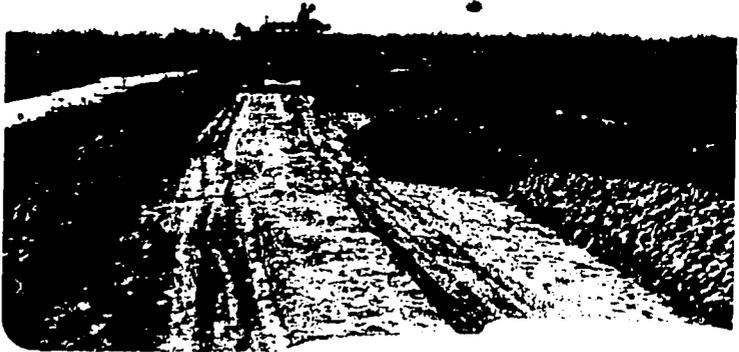
Completed and compacted section of levelling course,
21.12.84.



Preparation of subgrade for the reception of the
aggregates stockpiled at the side -
21.12.84.

Atgram - Zakiranj Road

ZRHI/11/83-84



Stockpiling sandy earth for blending with the coarse aggregates of the levelling course already stockpiled 6 January 1985.



By levelling, cambering, and compacting the subgrade, the workmen are preparing the site to receive stockpiled aggregates. Photo taken on 06/01/1985.

Atgram - Zakiganj Road

ZRMI/13/84-85



Site of the 24.4 meter Box culvert to be constructed. Remnants of the old wooden bridge which will be utilized as piling are seen in this photo.

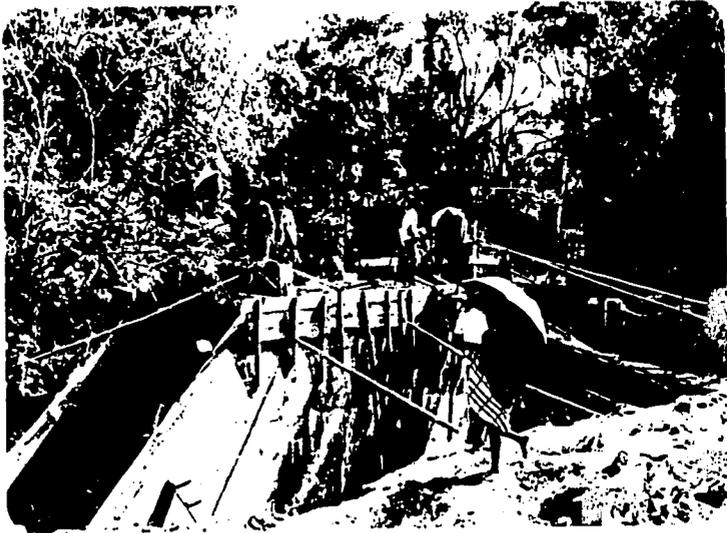
SYLHET DISTRICT

Tajpur - Syedpur - New Market Road

ZR/H/13/83-84, 10.1 meter Box Culvert



View of completed top slab and forms for railings
29/01/85.



View of completed box culvert, with old, partially
demolished culvert at lower right.

SYLHET DISTRICT

Tajpur - Syedpur - New Market Road

ZRHI/13/83-84, 10.1 meter Box culvert



Partially complete earth embankment approach
to recently constructed box culvert,
29/01/85.

Tajpur - Syedpur - Jagannathpur Road

ZRMI/16/84-85 - 26.5 meter Box culvert

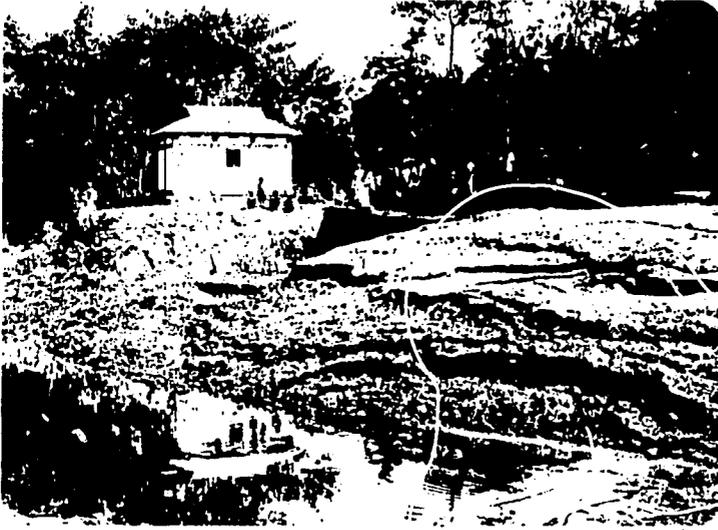


A view along the alignment of the proposed
box bridge to be constructed at Nayabondar
under 1984-85 schemes -
15 December 1984.

SYLHET DISTRICT

Tajpur - Syedpur - Naya Bondar Road

26.5 meter Culvert, ZPH/16/84-85



View of the south embankment excavation at culvert site. Note unstable bank condition.

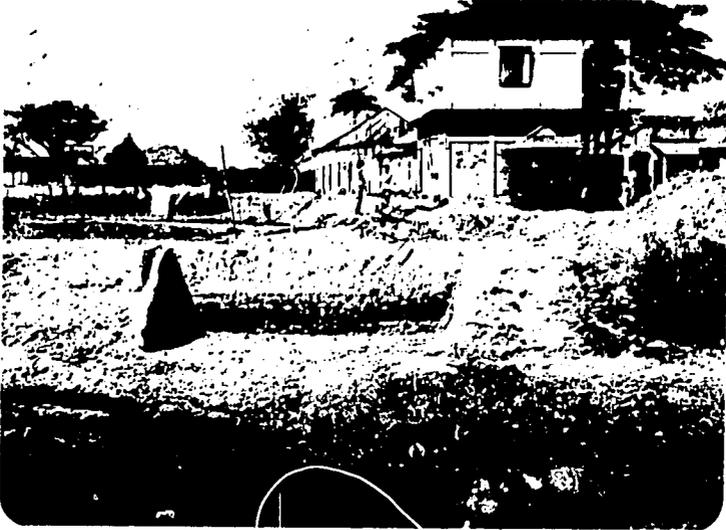
Another view of the unstable bank conditions on the south side.



SYLHET DISTRICT

Tajpur - Syedpur - Nayabondar Road

ZRHI/16/84-85 - 26.5 meter Box Culvert



A view of foundation excavation on the north side of the site. Note that this site is much more stable than the south side.



Eulish piling to be used in the foundation.
It is of specified quality.

SYLHET DISTRICT

Dhakadakhin - Beanibazar Road

ZRII/16/83-84 - 2.45 Kms. Pavement

The base material has been placed on this section, and now awaits sandy soil for blending and compaction.



Recently placed embankment material which requires further consolidation and compaction before the addition of the levelling course or sub-base aggregates.



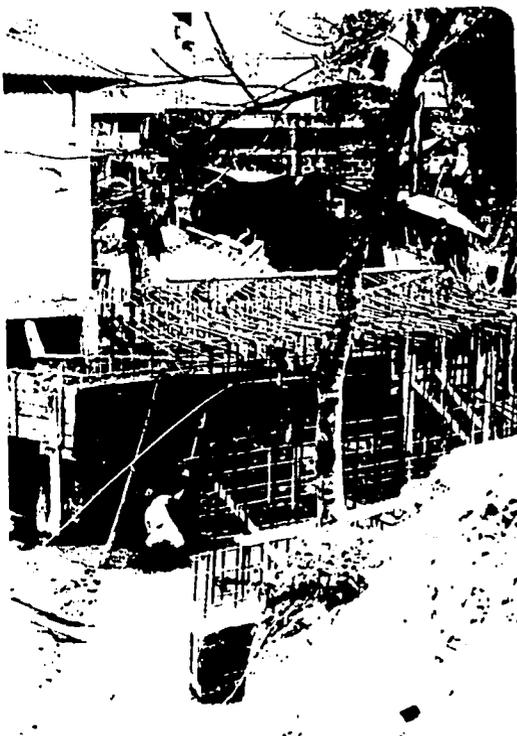
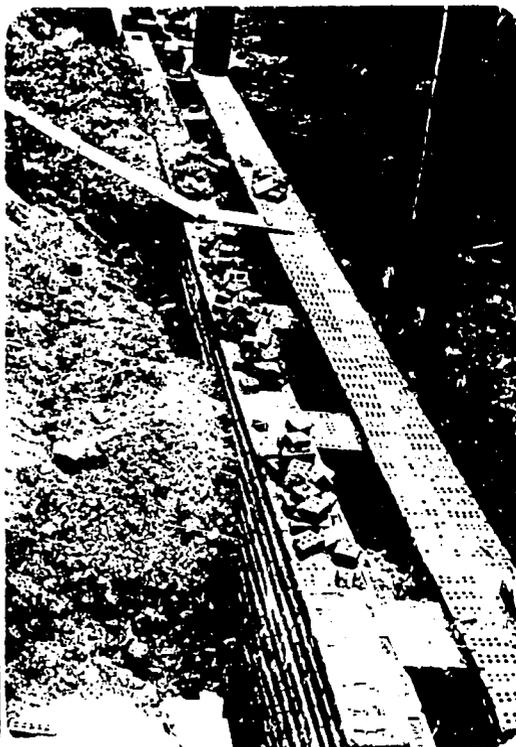
An overall view of the retaining wall in the foreground and the Box Culvert in the background. The far end of the retaining wall will be into the culvert and from the wing wall.



A view of the nearly completed retaining wall and box culvert. Photo taken 30/01/85.



A view of the hollow type brick construction of the retaining wall. The void spaces will be back filled with impervious material.

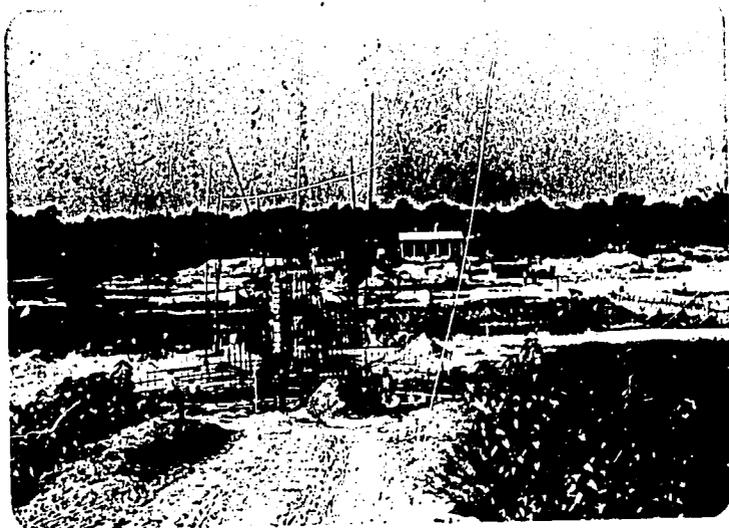


Stripping the forms of the abutment wall on the Dhakadakshin Bazar side. Photo was taken on 6 January 1985.

SYLHET DISTRICT

Dhakadakshin - Beanibazar Road

ZR41/23/84-85 - 86 meter Bridge, Radhajuri.



Panoramic view of bridge site, view towards
Dhakadakshin.



View from the west, showing pier and
abutment progress.

SYLHET DISTRICT

Dhakadakhshin - Beanibazar Road

ZRNI/23/84-85 - 82 meter Bridge, Radhajuri



A view of the progress on the
cast abutment and wing wall.
Photo taken 30/01/85.



View from the west
showing progress in
foundation excavation.



SYLHET DISTRICT

Nabiganj - Paniachung Road

ZRMI/17/83-84 - 14.76 meter Box Culvert at Nabiganj



Water curing of the top bridge slab, with the railing and approaches to be completed. Photo taken on 12 December 1984.

An illustration of the saturated material used to build the approaches. The Contractor has since been able to acquire better material. This Project completed on 15 January 1985.



RANGPUR DISTRICT

Barodarga-Rhendabari road



Bituminous carpetting completed in groups C2 and D1(82-83).

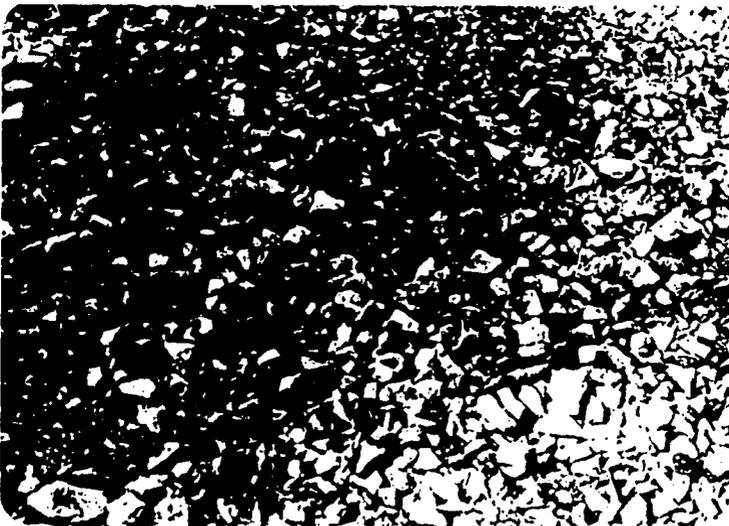


Shoulder improvement in group-A(83-84) was underway on 19 January, 1985. This work was being done on the damaged areas of earth work previously done by the same contractor.

Barodanga -Ehendabari road



WEM work in progress in group-C(83-84). Quality control was not good on this work.



This type of khoa was spread on the bed for WEM work in group-C (83-84). Suggestion were given for sorting out the sub-standard material before rolling is done.

Rangpur District
Mirganj-Jaldhaka Road



WEM completed in group-A(83-84). Shoulder improvement remains to be done and defects of WEM are to be rectified.



Checked the thickness and compaction of WEM work on 18 January '85 in group-A(83-84). Thickness less than specified and inadequate compaction were found. It was suggested that these shortcomings be corrected before pavement work is started.

Mirganj-Jaldhaka Road.



Proper technique for shoulder improvement was demonstrated once again to the site people of group-A(83-84).



Shoulder improvement work was in progress in group-A(84-85), but there was no control of quality. There was no compaction of soil as it was placed and big clods were found inside the work that was already complete.

Mirganj-Jaldhaka Road.



A view of the sub-standard earth work being done for shoulder improvement in group-B(84-85). Mr.Zahangir,AE,, later demonstrated to the labourers the procedures to be followed during the earth work.

Rajarhat-Ullaghata Road



Latest position of the work of group-D(82-83) on January 20,1985. From this view, the work appear to be acceptable.

Rajarhat-Ullaghata Road.



Same work as stated in fig-10 above. Surface finishing looks alright but under the surface the work is not good. However present quality of work is better than past work performance.

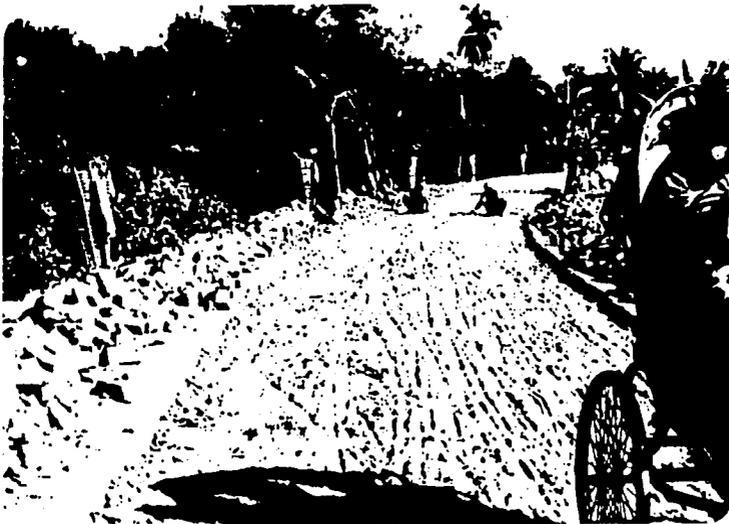


Another part of the Group-D(82-83) work. Shoulder improvement is complete here.

Faridpur District
Madhukhali- Baliakandi Road

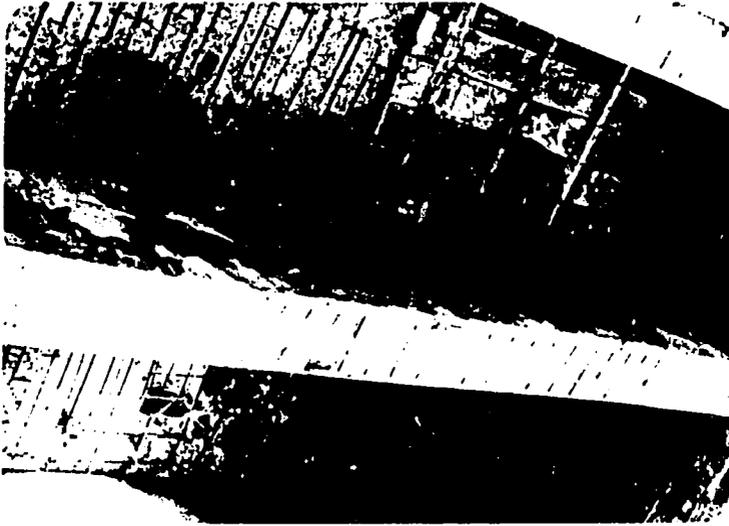


Construction of WBM, Group-L

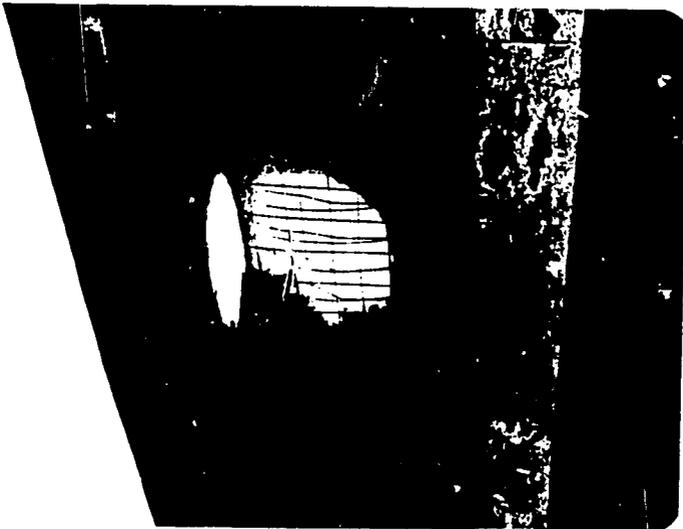


Sub-base prepared for WBM, Group-K .

Faridpur District
Modhukhali-Baliakandi Road

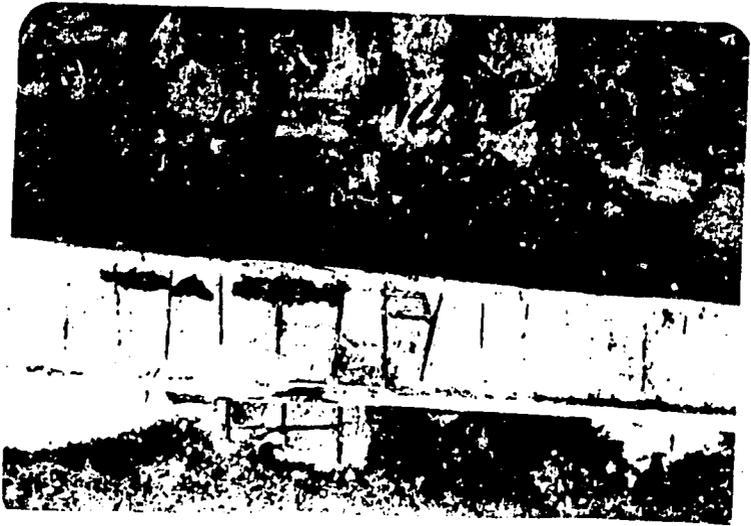


Poor condition of casting bridge deck and girder.



View of completely failed bridge deck .

FARIDPUR DISTRICT
Kodhukhali- Baliakandi Road.



View of poor condition of bridge deck beam .

Faridpur District
Rajbari- Baliakandi Road.



Deputy Commissioner of Rajbari District expressing his satisfaction for improvement of Rajbari-Baliakandi Road under USAID project.



Box cutting in progress, Group-1

Faridpur District
Rajbari-Ealiakandi Road



Box cutting in progress, Group-2



Pick-up of existing HEB in progress, Group-3

Faridpur District
Rajbari-Baliakandi Road



View of saturation of sand cushion at work site, Group-6



Compaction of sand cushion, Group-6

Faridpur District
Rajbari- Baliakandi Road



Construction of WBM, Group-6

Faridpur District
Matiapara Bridge approach
Rajbari-Baliakandi Road



View of construction of bridge approach.



View of benching and compaction techniques used in construction of high bridge approach.

Faridpur District
Rajbari-Baliakandi Road
Horai Bridge approach



Condition of Horai bridge approach before start of reconstruction.



View of construction of Horai bridge approach.

Faridpur District
Rajbari- Baliakandi Road
Horai Bridge approach



Compaction of earth layer and clod breaking deservng construction of Horai Bridge approach.



Field density test, Horai Bridge approach.

Faridpur District
Banagram Bridge approach



View of construction of Banagram Bridge approach .

Faridpur District
Talma - Matkrishnapur Road



Box cutting in progress, Group - A



Pick up of existing HEB and solving, Group - B



Complete section of Box culvert, Group-B



Preparation of sand cushion, Group-B



Subgrade field density test, Group-C



Preparation of sand cushion, Group-C



Construction of WEM, Group- C



Compaction of WEM, Group-C



Complete section of WBM, 1st Layer, Group- C

APPENDIX - E

CURRENT STATUS OF PERSONNEL

CURRENT STATUS OF PERSONNEL.

Sheet 1 of 2.

Title.	Name.	Status.	Comments.
D H A K A O F F I C E.			
Chief of Party.	Fred L. Barnes.	On duty,11/01-31/01.	Arrived Dhaka on 11.1.85.
Training Adviser.	Gifford E. Roger.	On duty,18/01-31/01.	Arrived Dhaka on 18.1.85.
Associate C.O.P.	K.M.Huque.	On duty,01/01-31/01.	Total 08 working days.
Soil/Materials Lab. Training Specialist.	M.Majid.	On duty,01/01-31/01.	Total 16 working days.
Structural Engineer.	M.A.Aziz.	On duty,01/01-31/01.	Total 7 working days.
Project Engineer/ Training Coordinator.	A.H.M.Abdullah.	On duty, 01/01-31/01.	-
Office Engineer.	G.S.M.Habibur Rahman.	On duty, 01/01-31/01.	-
Asstt.Engineer.	Dr.Kamruzzaman.	On duty,01/01-31/01.	Total 12 working days.
Asstt.Design Engineer.	Rahim Faruque.	On duty,01/01-31/01.	Total 10 working days.
Asstt.Design Engineer.	A.Kashid.	On duty,01/01-31/01.	Total 5 working days.
Laboratory Engineer.	S. Arefin.	On duty,01/01-31/01.	-
Draftsman.	Nazimuddin Ahmed.	On duty,01/01-31/01.	-
Draftsman.	Md. Shafi.	On duty,01/01-31/01.	Total 5 working days.
Draftsman.	Mir Syed Ali.	On duty,01/01-31/01.	Total 22 working days.
Draftsman.	Akhal Chandra.	On duty,01/01-31/01.	Total 12 working days.
Administrative Asstt.	Md. Harun.	On duty,01/01-31/01.	-
Accountant.	A.K.M.A.Taher.	On duty,01/01-31/01.	-
A/cs.Assistant.	M.M.Mohiuddin.	On duty,01/01-31/01.	-
Secretary.	Fahmida Chowdhury.	On duty,01/01-31/01.	-
Typist.	Andre Sarker.	On duty,01/01-31/01.	-
Driver.	E.Hossain.	On duty,01/01-31/01.	-
Driver.	F.Rahman.	On duty,01/01-31/01.	-
Messenger.	A.Majid.	On duty,01/01-31/01.	-
Guard.	S.A.Khalifa.	On duty,01/01-31/01.	-
Guard.	A.Rashid.	On duty,01/01-31/01.	-
Caretaker.	Mokfaruodin Skr.	On duty,01/01-31/01.	-
Cleaner.	Anwara.	On duty,01/01-31/01.	-
Gardener.	N.Zaman.	On duty,01/01-31/01.	-

F A R I D P U R.

Resident Engineer.	N.Ziegler.	On duty,01/01-31/01.	-
Asstt.Resident Engineer.	A.H.M.R.Halib.	On duty,01/01-31/01.	-
Asstt.Engineer.	A.Z.M.Amirul Islam.	On duty,01/01-31/01.	-
Inventory Engineer.	Shah A. Newaz.	On duty,01/01-31/01.	-
Laboratory Technician.	Mizanur Rahman.	On duty,01/01-31/01.	-
Surveyor.	Tajul Islam.	On duty,01/01-31/01.	-
Sub-Asstt.Engineer.	S.Afrad.	On duty,01/01-31/01.	-
Sub-Asstt.Engineer.	A.Sayed.	On duty,01/01-31/01.	-
Sub-Asstt.Engineer.	S.Islam.	On duty,01/01-31/01.	-
Draftsman.	M.Rahman.	On duty,01/01-31/01.	-
Office Manager/ Accountant.	A.B.M.Kamaluddin.	On duty,01/01-31/01.	-
Secretary/Typist.	K.R.Faruk.	On duty,01/01-31/01.	-
Driver.	B.A.Molloh.	On duty,01/01-31/01.	-
Driver.	N.Ali.	On duty,01/01-31/01.	-
Messenger.	S. Alam.	On duty,01/01-31/01.	-

Contd..P/2

CURRENT STATUS OF PERSONNEL.

P A R I D P U R.			
Gardener.	J.K. Shill.	On duty,01/01-31/01.	-
Guard.	N.Khan.	On duty,01/01-31/01.	-
Guard.	I.Ali.	On duty,01/01-31/01.	-

R A N G P U R.			
Resident Engineer.	R.Andres Tavel.	Arrived Dhaka on January 11, 1985.	
Asstt.Resident Engineer.	S.S.Ahmed.	On duty,01/01-31/01.	-
Asstt.Engineer.	M.A.Samad.	On duty,01/01-31/01.	-
Inventory Engineer.	Aminul Islam.	On duty,01/01-31/01.	Transferred to Dhaka Laboratory.
Sub-Asstt.Engineer.	N.K.Das.	On duty,01/01-31/01.	-
Sub-Asstt.Engineer.	A.B.M.Zahiruddin.	On duty,01/01-31/01.	-
Sub-Asstt.Engineer.	Alauddin.	On duty,01/01-31/01.	-
Laboratory Technician.	B.Hossain.	On duty,01/01-31/01.	-
Surveyor.	Z.Abedin.	On duty,01/01-31/01.	-
Office Manager/ Accountant.	A.H.Majumdar.	On duty,01/01-31/01.	-
Typist.	R.Kabir.	On duty,01/01-31/01.	-
Messenger.	A.F.M.M.Haque.	On duty,01/01-31/01.	-
Driver.	Mahbubur Rahman.	On duty,01/01-31/01.	-
Guard.	A.Rahman.	On duty,01/01-31/01.	-
Guard.	M.Hossain.	On duty,01/01-31/01.	-
Caretaker.	G.C.Das.	On duty,01/01-31/01.	-
Cleaner/Gardener.	Rashida Begum.	On duty,01/01-31/01.	-

S Y L H E T.			
Resident Engineer.	Alex E. Neilson.	On duty,01/01 -31/01.	-
Asstt.Resident Engr.	K.M.Hossain.	On duty,01/01-31/01.	-
Sub-Assistant Engr.	N. Nabi.	On duty,01/01-31/01.	-
Sub-Assistant Engr.	M.A. Sobhan.	On duty,01/01-31/01.	-
Sub-Assistant Engr.	K.S.Ahmed.	On duty,01/01-31/01.	-
Surveyor.	Aminul Karim.	On duty,01/01-31/01.	-
Surveyor.	Abu Musa Mia.	On duty,01/01-31/01.	-
Laboratory Technician.	N.M.Siddique.	On duty,01/01-31/01.	-
Laboratory Technician.	Amjadul Haque.	On duty,01/01-31/01.	-
Dr.ftsman.	N. Giasuddin.	On duty,01/01-31/01.	-
Office Manager/ Account.	Azizul Haque.	On duty,01/01-31/01.	-
Typist.	A.K.H.Munir Ahmed.	On duty,01/01-31/01.	-
Driver.	Fakrul Islam.	On duty,01/01-31/01.	-
Messenger.	Elias Ali.	On duty,01/01-31/01.	-
Guard.	A.A.Jamadar.	On duty,01/01-31/01.	-
Guard.	S.Alam.	On duty,01/01-31/01.	-
Cleaner/Gardener/ Caretaker.	Mohmed Miah.	On duty,01/01-31/01.	-

APPENDIX - F

FINANCIAL STATEMENT

SUMMARY FISCAL REPORT

Wilbur Smith And Associates, Inc.
Zila Road Maintenance And Improvement Project.
US-AID Contract No. 388-0056-02-HCC

Project Components.	Budget amounts.		Previous expenditures.		Expenditures- Current reporting- Jan'85.		Cumulative expenditures.	
	\$Dollars.	Taka.	\$.	Taka.	\$.	Taka.	\$Dollars.	Taka.
	1. Technical Assistance.	2,709,030	22,715,634.	1,979,931	13,894,149	52,243	737,383	2,032,174
2. Equipment.	674,299	-	56,295	-	-	-	56,295	-
3. Training US-AID BDG.	300,000	<u>1,110,850</u> 394,500	63,240	1,017,818	-	-	63,240	1,017,818
4. Road Maintenance Financed by BDG.	-	23,095,800	-	-	-	-	-	-
5. Road Development Fund - US-AID BDG.	3,949,182	-	-	24,347,690	-	5,117,562	-	29,465,252
	-	35,629,050	-	-	-	-	-	-

* After reconciliation.