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GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH  
BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION

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AGENCY FOR INTERNATIONAL DEVELOPMENT

Grant Financed

FERTILIZER DISTRIBUTION IMPROVEMENT - I (388-0024)

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ENGINEER CONSULTANT SERVICES FOR CONSTRUCTION  
OF BAGGED PRODUCT FERTILIZER WAREHOUSES IN  
BANGLADESH-PHASE III

---

PROGRESS REPORT NO. 23

OCTOBER 1984



AMMANN & WHITNEY  
CONSULTING ENGINEERS  
NEW YORK

in association with



WORLDWIDE ENGINEERS LTD.  
ARCHITECT-ENGINEERS  
DHAKA



STHAPATI SANGSHAD LTD.  
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AMMANN & WHITNEY  
CONSULTING ENGINEERS

AMMANN & WHITNEY  
95, MOTIJHEEL C. A.  
P. O. BOX 348  
DHAKA, BANGLADESH

WAREHOUSES PHASE III

Project Director, BADC  
USAID Construction Project  
20, Outer Circular Road  
Rajarbagh, Dhaka-17

724-4.1.1/2505

06 November 1984

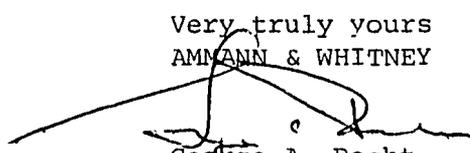
Subject : Monthly Progress Report No.23  
- October 1984

Dear Sir,

In compliance with paragraph B.2 of Appendix A, Scope of Work, of Agreement for Engineer Consultant Services - Warehouses Phase III, fifteen (15) copies of subject Monthly Report are submitted to BADC and six copies to USAID.

Very truly yours  
AMMANN & WHITNEY

Encl: Eleven (11) copies



George A. Pecht  
Project Manager

GAP/neh

cc: Chairman, BADC w/encl. (1)  
Member-Director (Irr) BADC w/encl. (1)  
Manager (Storage) BADC w/encl. (1)  
Chief Engineer (C) BADC w/encl.(1)  
Mr. David E. Warner, P.O. AID/Dhaka w/encl. (6)  
File 724-1.2.4 w/encl.

AMMANN & WHITNEY  
Consulting Engineers

FERTILIZER WAREHOUSES - PHASE III

Monthly Progress Report No.23  
Month of October 1984

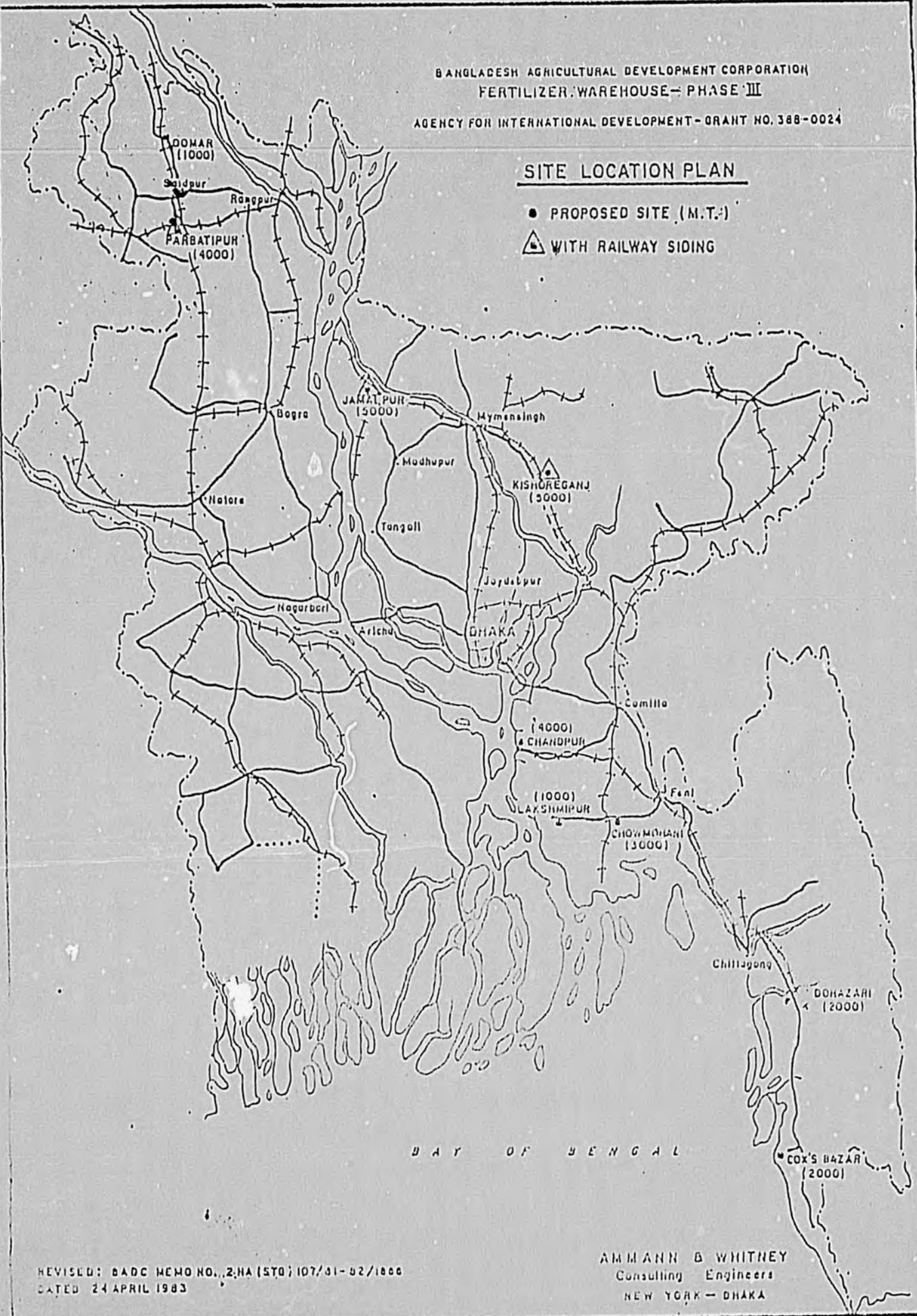
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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION  
 FERTILIZER WAREHOUSE - PHASE III  
 AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 388-0024

SITE LOCATION PLAN

- PROPOSED SITE (M.T.)
- ▲ WITH RAILWAY SIDING



REVISED: BADC MEMO NO. 2/HA (STO) 107/31-32/1800  
 DATED 24 APRIL 1983

AMMANN & WHITNEY  
 Consulting Engineers  
 NEW YORK - DHAKA

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PROJECT DESCRIPTION

PROJECT : Construction of Bagged Product Fertilizer Warehouses  
in Bangladesh - Phase III

EMPLOYER : Bangladesh Agricultural Development Corporation

FINANCED : United States Agency For International Development  
Under Grant  
Fertilizer Distribution Improvement-I (388-0024)

ENGINEER : Ammann & Whitney  
Consulting Engineers  
New York Dhaka

LIST OF SITES AND TONNAGE

<u>NAME OF SITE</u>	<u>TONNAGE</u>	<u>NAME OF DISTRICT</u>	<u>SIZE OF GODOWN</u>
B1 KISHOREGANJ	5000	MYMENSINGH	90'x 300' (27,000 sft)
C3 JAMALPUR	5000 (3500+1500)	JAMALPUR	120'x150'; 90'x90' (26,000 sft)
F1 DOHAZARI	2000	CHITTAGONG	90'x 120' (10,800 sft)
F3 COX'S BAZAR	2000	CHITTAGONG	90'x 120' (10,800 sft)
H2 CHOWMUHANI	3000	NOAKHALI	90'x 180' (16,200 sft)
H3 LAKSHMIPUR	1000	NOAKHALI	60'x 90' (5,400 sft)
I4 CHANDPUR	4000	COMILLA	120'x 180' (21,600 sft)
O5 PARBATIPUR	4000	DINAJPUR	90'x 240' (21,600 sft)
TOTAL	26,000 M.T.		139,500 sft
<u>Contract Terminated</u>			
L4 DOMAR	1000	RANGPUR	60'x 90' (5,400 sft)

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## I. CONTRACTORS' ACTIVITIES

### CONSTRUCTION PHASE

#### 1. Summary of Contractors' Activities

Some heavy rains still occurred in October and slowed the progress at some sites. In general the better weather speeded up the construction at most sites. The surcharge removal was in full progress at all sites where surcharge had to be placed.

The performance at different sites remains very uneven.

At Lakshmipur and Cox's Bazar the contractors may come close to meeting the February 1985 completion date.

At Dohazari, Chandpur and Jamalpur the contractors are proceeding in an organized fashion. The progress could be faster, the February completion date will not be met; There may be minor problems normally encountered in construction but no major problems are anticipated at this time.

Chowmuhani is the wettest construction site. Even during this month water delayed compaction of fill urgently required to start the construction of the ancillary buildings at this late date. The site is very restricted. The contractor's late start and unwillingness or inability to purchase the specified fill material on time contributed greatly to the delays at this site and still causes delay. Very little progress was achieved at this site in October. The completion of this project will be greatly delayed but the engineer at this time has no reason to doubt that the project eventually will be finished by mid-1985.

Parbatipur and Kishoreganj remain problem sites. The contractors at both sites are unable to organize the work in a satisfactory fashion and for this reason their progress remains slow. They have been constantly reminded by the Engineer in writing and in meetings to speed up their work; so far with little success. At Parbatipur the contractor has another job in the same town which seems to divert attention and resources from our project. At Kishoreganj the contractor seems to subcontract part of the work and is not able to supervise the subcontractors properly. The financial resources of both contractors seem to be taxed extensively.

#### Kishoreganj:

The surcharge was released for removal on 9-10-84 after about 60 days surcharge period. The settlement was upto 8 inch as anticipated. The surcharge removal proceeded slowly due to the use of subcontractors and fights between them. The work at ancillary buildings R2 and R3 was disorganized and lacked planning. The contractor's site engineer was not at the site for many days. Kishoreganj remains a problem site. All actions taken by the Engineer to force the contractor to speed up the work have been to little avail up to now.

. Jamalpur:

The Contractor progressed with godown and ancillary building construction. He finished all footings for the 3,500 T Godown and started the columns there. Most of the 1,500 T Godown surcharge was removed. Ancillary building structures R2 and R3 were finished upto the roof. R1 was started. In general this job is progressing even though the production does not equal the contractor's output or claims for time extension and extra cost - most of them rejected.

. Dohazari:

The filling with surcharge material continues. All godown column footings and grade beams were cast. The work on the ancillary buildings is progressing. R1 has advanced to the roof level; R2 is upto the lintel level on the ground floor, at R3 the foundations were laid and the walls advanced to the lintel level. Work on the boundary wall continued.

. Cox's Bazar:

Godown columns and most of the godown brickworks were finished. All canopies were cast. The structural work for ancillary buildings R2 and R3 was completed and R1 is close to completion. The roof slab for that building is formed and ready to be cast. Plastering of the interior of all ancillary buildings is in progress. The public toilet and the guard house are completed.

. Chowmuhani:

The surcharge had been finished on 25-9-84 and remained in place to 25-10.84. An access to the site of ancillary buildings R2 and R3 was built and filling there started. This site is the wettest site of Phase III. Only after dewatering could filling under R2 and R3 be done. Since no buildings had been started, very little work was accomplished during this month. Next month should bring the start of godown and R3 construction for which some preparation has been made during this month.

. Lakshmipur:

This relatively small project is progressing now. The godown columns are finished, the core walls are nearly upto their full height. Some roof reinforcing has been placed and the roof form is in preparation. In the one unit addition to the Darwan's quarter finishing work continued.

. Chandpur:

The contractor continued mainly the godown construction; finishing all columns and the filling. He worked on shear walls and cast two entrance canopies. The preparation for roof form and reinforcing was started. The excavation for all three Ancillary Buildings was started. The contractor excavated earth at the retaining wall at the river to continue its construction. The Change Order for fencing on west boundary was approved. The bridge and retaining wall at the canal C.Os. is under consideration.

Parbatipur:

The contractor finished the last part of the surcharge on 20-10-84. The first part of the surcharge was released for removal on 30-10-84 (45 days earlier than planned). The structural work on Ancillary Buildings R2 and R3 was basically finished.

The total work done this month was negligible. The purchase of fill material was slow and badly organized. Hardly any preparation for the Godown construction was made. The site management remains poor. All this occurred inspite of repeated written and oral urging by the Engineer. Parbatipur has to be considered a problem site.

Miscellaneous

Mr. Bashirul Alam took over as Project Director in-Charge on 9-10.84.

Mr. Delwar Hussain was appointed Project Director at 1-11-84.

2. Railway Siding

Kishoreganj

BR has approved the layout drawing for Kishoreganj. BADC is requested to send a copy of the approved plan for Engineer's record.

It appears from Manager (Storage) BADC's memo No.2NA(STG)84/81-82/1180/1(4) dated 12.7.84 that payment of licence fee is standing on the way of handing over the land to BADC for Kishoreganj siding by BR. BADC is requested to resolve the issue immediately. Construction of boundary wall is held up on account of non delineation of Rly property line. Reference is invited to letter No. 724-4.1.1/2206 dated 11.8.84.

Speed restriction boards are to be fixed at Kishoreganj by BR. Follow up by BADC is requested. Refer letter No. 724-4.1.1/2466 dated 27.10.84.

Jamalpur

Farmers have cultivated land for the Rly access to the BADC warehouse presumably under license from BR.

BADC to request BR to stop/cancel the lease of BR land to cultivators which has already been leased to BADC. Construction of Rly embankment for the siding cannot go on uninterrupted if farmers continue cultivation in the land leased to BADC effecting over all progress of the work.

Parbatipur

BADC is requested to resolve the issue arising out of lease of Rly land including existing dead end meter gauge track to coal Directorate. The existing dead end track is required for access to the BADC warehouse. Refer letter No. 724-4.1.1/2495 dated 3.11.84.

BADC to request BR to take action for removal of box cars, carriages etc. from portion of alignment of the proposed siding at Parbatipur to enable the contractor to do the embankment work uninterrupted.

Cost Estimates:

Cost Estimates for Jamalour and Parbatipur received from BR have been sent to BADC with Engineer's comments. BADC is requested to resolve the issues arising out of provisions made in the estimates to which Engineer could not agree since they were exorbitant.

Cost estimate for Parbatipur has not yet been received from BR. BADC is requested to obtain the estimate for Parbatipur from BR.

31 October 1984

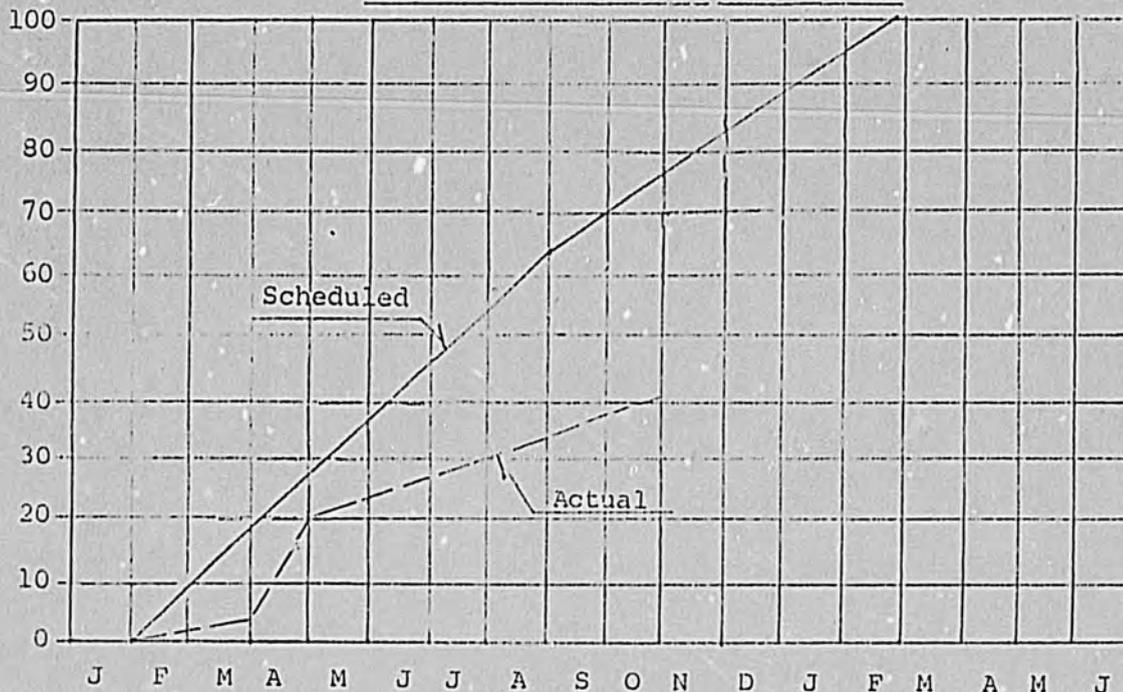
CONSTRUCTION  
CONTRACT AND FINANCIAL SUMMARY

Invitation No.	Site	Contractor	Contract Amount (Tk)	Retention	Accumulated Payments (Tk)
1	B1-Kishoreganj	National Construction & Consult Limited	1,98,40,012.82	3,51,995.02	49,89,730.22
2	C3-Jamalpur	Mostafa Bros (Pvt) Ltd.	1,76,94,451.01	4,79,990.86	49,39,482.57
3	F1-Dohazari	Eastern Engineers Consortium Ltd.	1,55,48,978.95	4,66,881.89	52,37,377.04
4	F3-Cox's Bazar	Builders the Best Ltd.	99,64,470.85	2,24,940.22	29,40,711.36
5	H2-Chowmuhani	Technocon Limited	1,41,20,342.60	1,85,339.79	48,07,208.16
6	H3-Lakshmipur	Technocon Limited	55,91,275.35	1,40,664.37	19,88,767.63
7	I4-Chandpur	Fazle Azim Engrs. Ltd.	1,70,67,822.35	4,32,665.83	65,47,742/48
9	O5-Parbatipur	Elite Engineers Ltd.	1,70,02,196.40	2,72,101.63	43,57,821.71
		Total	Tk. 11,68,29,550.33 (\$ 4,697,609.58)	25,54,579.61	3,58,08,841.17 30.65%
8	L4-Domar	M.S. Khan & Heirs Ltd.	74,99,255.58	Contract Terminated	

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A

CONSTRUCTION PROGRESS - ALL SITES



	F	M	A	M	J	J	A	S	O	N	D	J	F	Weighted Percent	Project % Complt
Kishoreganj	8	18	27	36	45	54	63	66	74	84	92	99	100	16.97	5.9
Jamalpur	8	18	27	36	45	54	63	66	74	84	92	99	100	15.35	6.1
Donazari	8	18	27	36	45	54	63	66	74	84	92	99	100	13.21	5.6
Cox's Bzr.	2	12	22	32	41	51	61	60	67	76	85	94	100	8.53	4.9
Nowmuhani	2	12	22	32	41	51	61	60	67	76	85	94	100	12.05	4.7
Samipur	2	12	22	32	41	51	61	60	67	76	85	94	100	4.79	2.6
Barisalpur	2	12	22	32	41	51	61	60	67	76	85	94	100	14.61	6.3
Barbatipur	2	12	22	32	41	51	61	60	67	76	85	94	100	14.55	4.4

Note: Schedule based on BADC allowing time extension to at least February 1985.

Total 40.5  
 Last Month 37.8

CONSTRUCTION PERCENT COMPLETION

Site	- A - SITE DEVELOPMENT	- B - WAREHOUSE	- C - ANCILLARY BUILDINGS	- D - WATER SUPPLY SANITARY	- E - ELECTRICAL	TOTAL
Kishoreganj	70%	-	23%	5%	5%	28%
Jamalpur	56%	13%	40%	3%	7%	29%
Dohazari	68%	14%	18%	3%	-	35%
Cox's Bazar	66%	44%	61%	18%	9%	52%
Chowmuhani	55%	-	-	5%	-	22%
Lakshmipur	48%	37%	85%	12%	7%	41%
Chandpur	43%	33%	-	3%	-	28%
Parbatipur	35%	-	37%	7%	2%	21%

Overall Project Completion - (Work Items only) : 30%

L-1

INVITATION NO. 1 : B1-KISHOREGANJ

CONTRACTOR : National Construction & Consult Ltd.

Total Contract Price : Tk.1,98,40,012.82

Change Order/Directives : -88,848.31

Revised Contract Price : Tk.1,97,51,164.51

L/Com No. : 388-002403

Date of L/Com. : 31.01.84

Amount of L/Com. : Tk.1,98,40,012.82  
(\$797,885.00)

L/Com. Amendment No.1 : 13.02.84

Performance Guarantee : BCCI LG 84/75  
Tk.19,84,002

CAR/PL Insurance : DAC/CAR/P-09/4/84  
30.04.84

Date of Contract : 16.01.84

Site Handed Over : 29.01.84

Notice To Proceed : 02.02.84

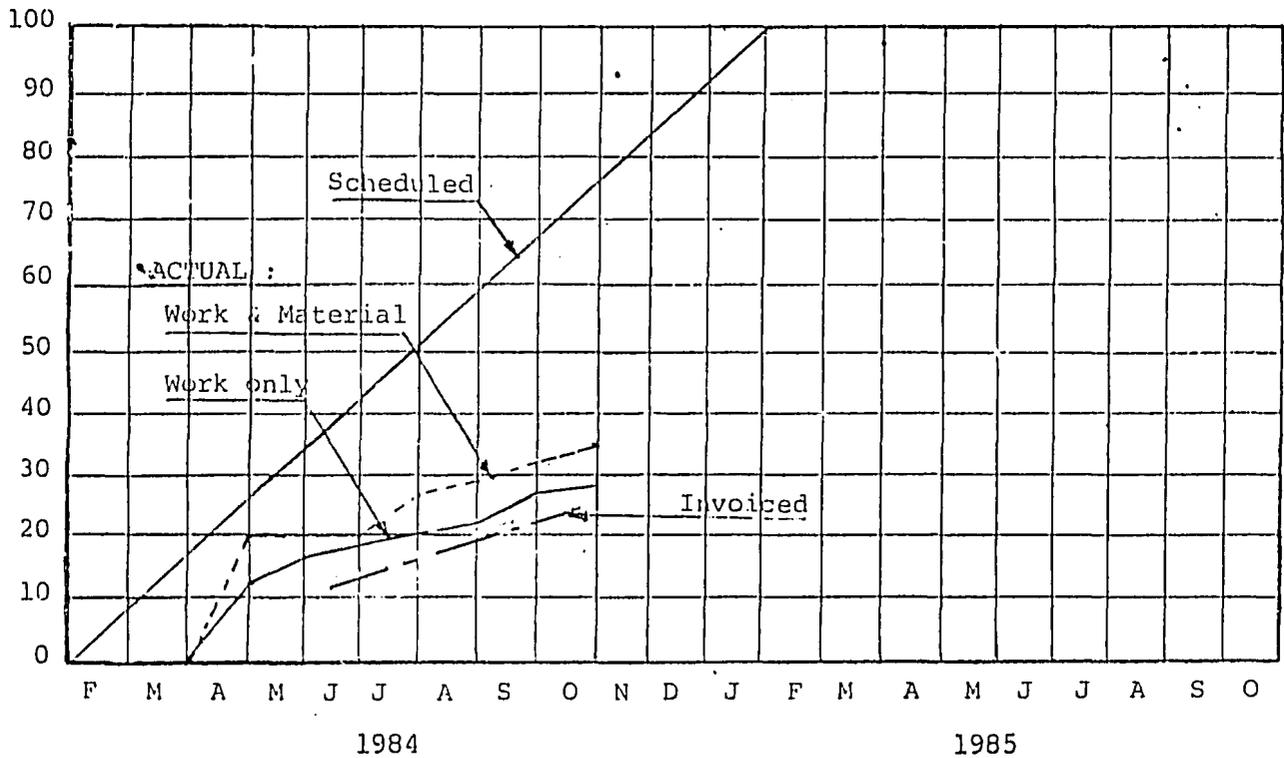
Scheduled Completion:02.02.85(365) \*

Elapsed Time :273 days 75 %

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	75%	2%	35%
Work	:	1%	28%
Material	:	1%	7%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	1%	70%
B. Warehouse	-	-
C. Ancillary Buildings	8%	23%
D. Water Supply, Sanitary, Plumbing	-	5%
E. Electrical	3%	5%

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### Activities

The surcharge was released for removal on 9-10-84 after a surcharge period of nearly 60 days as planned. The maximum settlement reached up to 8 inches. The contractor started the surcharge removal some days later. He apparently employed several sub-contractors who fought between themselves. For that reason the surcharge removal was stopped on some days. Most of 2/3 of the surcharge on the north side was removed and preparation for Godown foundation placement proceeded slowly. At Ancillary Building R2 the brick walls were laid from the first floor slab to the lintel level. On R3 the first floor slab was cast and the walls above the floor were started. The work on the boundary wall continued, the slabs for the Public Toilet and the Guard House were cast.

This project continues to be badly organised and badly run. All progress is slow. The contractor's site engineer was not present at the site for many days. The main reason for all this is the sub-contracting of most work by the contractor. He then apparently failed to pay his subcontractors and personnel at times. It is believed that the site manager does not dare to come to the site because he fears for his life. Various meetings were held by the engineer with the contractor, letters were written to force the contractor to improve the work. Up to now little change has been noticed in the contractor's attitude.

### Action Required

- BADC . Request BR to reduce speed of train approaching station during construction period.
- . To pursue the railway to officially turn over land to BADC. The boundary wall can not be build in part because BR does not establish the boundary. The site remains wide open and unprotected !
- . Pursue BR to remove abandoned rails and ties (their property) or remove them at BADC's cost.
- . To pay BR for land acquired.
- . Have BR reduce their cost estimate for railway siding (which is inflated).

### Work Schedule Next Month

Place godown footings and grade beams. Finish surcharge removal. Place roof slabs on Ancillary Buildings R2 and R3. Start construction of R1.

### Claims

Letter of 18.9.84 : Claim for time extension for various causes - still pending.

The following claims have all been rejected by the A&W letters indicated:

NCCL # 56 of 17.9.84 rejected A&W # 2410 of 15.10.84  
 " 58 " 19.9.84 " " " "  
 " 59 " 19.9.84 " " " "  
 " 61 " 23.9.84 " " 2391 of 09-10-84

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
B1-01	Material Prepayment	Tk.21,57,900.00	Tk.21,57,900	1451
B1-02	Progress Payment	Tk.28,31,830.22	-	-

Variations (Change Orders, Overruns, Underruns)

Total Contract Amount	Tk. 1,98,40,012.82
Directive 2472 (28.10.84)	- 88,848.31
New Estimated Contract Price	Tk. 1,97,51,164.51

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CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 1984

Site : Kishoreganj

	Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirements
A.	Select Fill	2E.01.a	3	3	0	Min. F.M. >1.5
B.	Mortar Sand	4A.03	4	4	0	F.M. 1.8 to 2.8
C.	Concrete Coarse Aggregate	3A.02-b.2	2	1	1	
D.	Field Density Tests: Select Fill	2E.01	10	9	1	90 & 95% MDD

No. of test at  
3 days 7 days 14 days 28 days

E.	Concrete: Compressive Strength Test	3A.03 3A.05	-	2	6	30
----	---	----------------	---	---	---	----

Average 28 day Strength of Concrete:

1. Boundary wall foundation c.c. - 3421 PSI (Average of 15 cylinders)
2. Public Toilet foundation c.c. - 3142 PSI (Average of 5 cylinders)
3. R3 Lintel G.F. 3618 PSI (Average of 5 cylinders)
4. R2 G.F. Lintel, R3 G.F. Stair and Guard house columns - 4788 PSI (Average of 5 cylinders)

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INVITATION NO. : C3-JAMALPUR

CONTRACTOR : Mostafa Brothers (Pvt) Ltd.

Total Contract Price : Tk.1,76,94,451.01  
 Change Order/Directives : 1,13,400.00\*  
 Revised Contract Price : Tk.1,77,81,051.01\*  
 L/Com No. : 388-002404  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.1,76,94,451.01  
 (\$711,599.00)

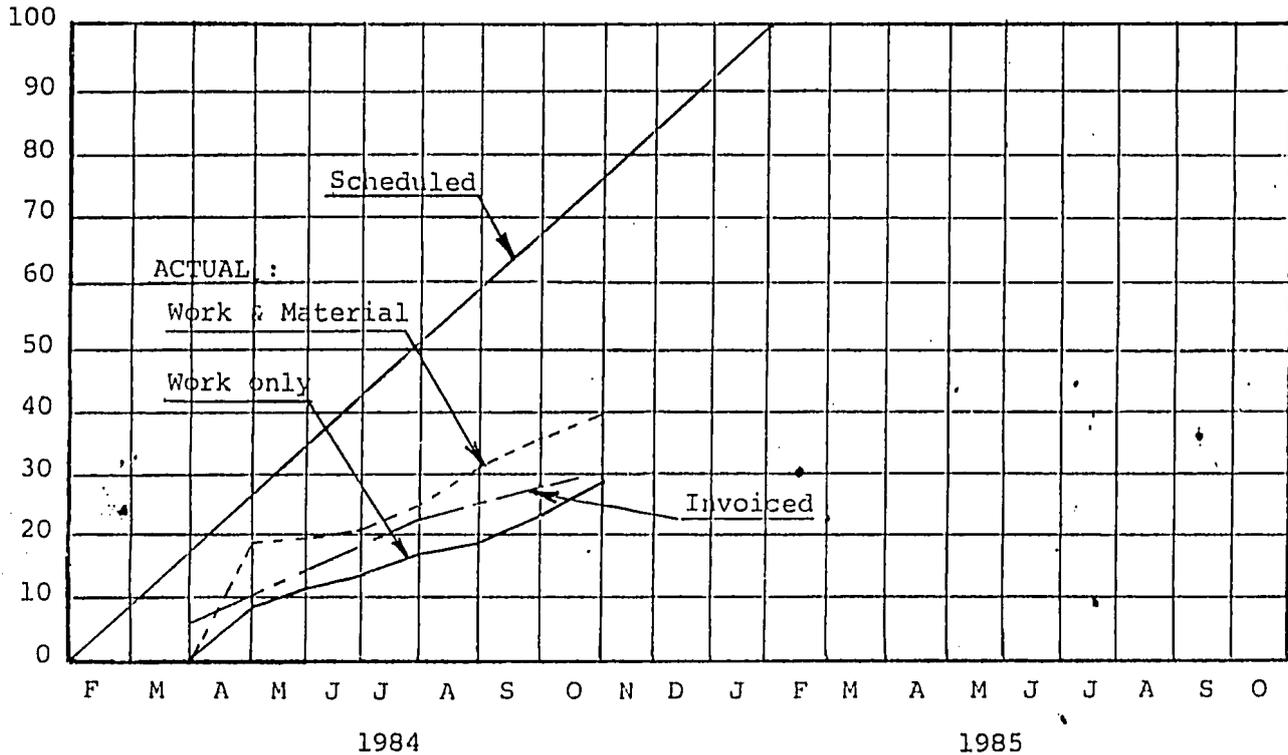
Date of Contract : 12.01.84  
 Site Handed Over : 19.01.84  
 Notice To Proceed : 02.02.84  
 Scheduled Completion: 01.02.85(365)\*  
 Elapsed Time :273 days 75 %

L/Com. Amendment No.1 :  
 Performance Guarantee : Indosuez PB/TK/010  
 Tk.17,69,446  
 CAR/PL Insurance : DAC/CAR/P-8/84  
 Fidelity Bond : Indosuez PG/TK/018  
 Tk. 8,84,720

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	75%	4%	40%
Work	:	6%	29%
Material	:	-2%	11%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	-	56%
B. Warehouse	8%	13%
C. Ancillary Buildings	12%	40%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	4%	7%

### Activities

The contractor has cast the rest of the 3,500 T godown footings and grade beam and started placing columns. 90% of the surcharge was removed from the 1,500 T godown. The footings for this godown area being prepared.

A good amount of work was done on all three Ancillary Buildings. R1 grew from footings to lintel level. At R2 and R3 the bricks for the top story were laid and the roof slabs for both buildings were cast.

### Action Required

BADC: . To stop any cultivation of land taken over from BR.  
. Obtain revised estimate for siding from BR

### Work Scheduled Next Month

At the 3,500 T godown columns will be cast and brick walls will be started. At the 1,500 T godown foundations and grade beams will be started. Interior finishing will proceed on Ancillary Buildings R2 and R3. The floor slab of the R1 building is scheduled to be cast.

### Claims

Letter 486 of 15.9.84 for time extension, still pending.  
Letter 489 of 17.9.84 time extension for bus & truck strike.  
A&W letter 2390 of 9.10.84 rejected.  
Letter 495 of 26.9.84 time extension due to disruption of road communication.  
A&W letter 2386 of 9.10.84 rejected.  
Letter 901 of 13.10.84 time extension for lack of bus and truck transportation due to Hartal.  
A&W letter 2416 of 16.10.84 rejected.  
Letter of 1.10.84 time extension due to Hartal, cost increase due to road disruption and floods.  
A&W letter 2435 of 18.10.84 rejected.

An excessive amount of unjustified claims indeed!

### Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice(Tk.)</u>	<u>Payment (Tk)</u>	<u>USAID Voucher No.</u>
-	Mobilization Advance	8,84,720.00	8,84,720.00	1059
C3-01	Material Payment	13,27,696.00	13,27,696.00	1226
C3-02	Progress Payment	18,64,836.23	18,64,836.23	1607
C3-03	Progress Payment	8,62,230.34		
		<u>Tk. 49,39,482.57</u>		

### Variations (Change Orders, Overruns, Underruns)

None this month.

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 1984

Site : Jamalpur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirements
A. Concrete Sand	3A.02-b.1	1	1	0	F.M. 2.3 to 3.1
B. Mortar Sand	4A.03	1	1	0	F.M. 1.8 to 2.8
C. Concrete Coarse Aggregate	3A.02-b.2	7	4	3	

No. of test at  
3 days 7 days 28 days

D. Concrete:					
Compressive Strength Test	3A.03 3A.05	-	33	9	

Average 28 day Strength of Concrete:

1. Godown columns footing - 3/49 PSI (Average of 6 cylinders)
2. R2 - 1st. floor slab - 3/07 PSI (Average of 3 cylinders)

INVITATION NO. 3 : F1-DOHAZARI

CONTRACTOR : The Eastern Engineers Consortium Ltd.

Total Contract Price	: Tk.1,55,48,978.95	Date of Contract	: 16.01.84
Change Order/Directives	: - 13,29,677.87*	Site Handed Over	: 26.01.84
Revised Contract Price	: Tk.1,42,19,301.08*	Notice To Proceed	: 02.02.84
L/Com No.	: 388-00205	Scheduled Completion:	01.02.85 (365)*
Date of L/Com.	: 31.01.84	Elapsed Time	: 272 days 75 %
Amount of L/Com.	: Tk.1,55,48,978.95		

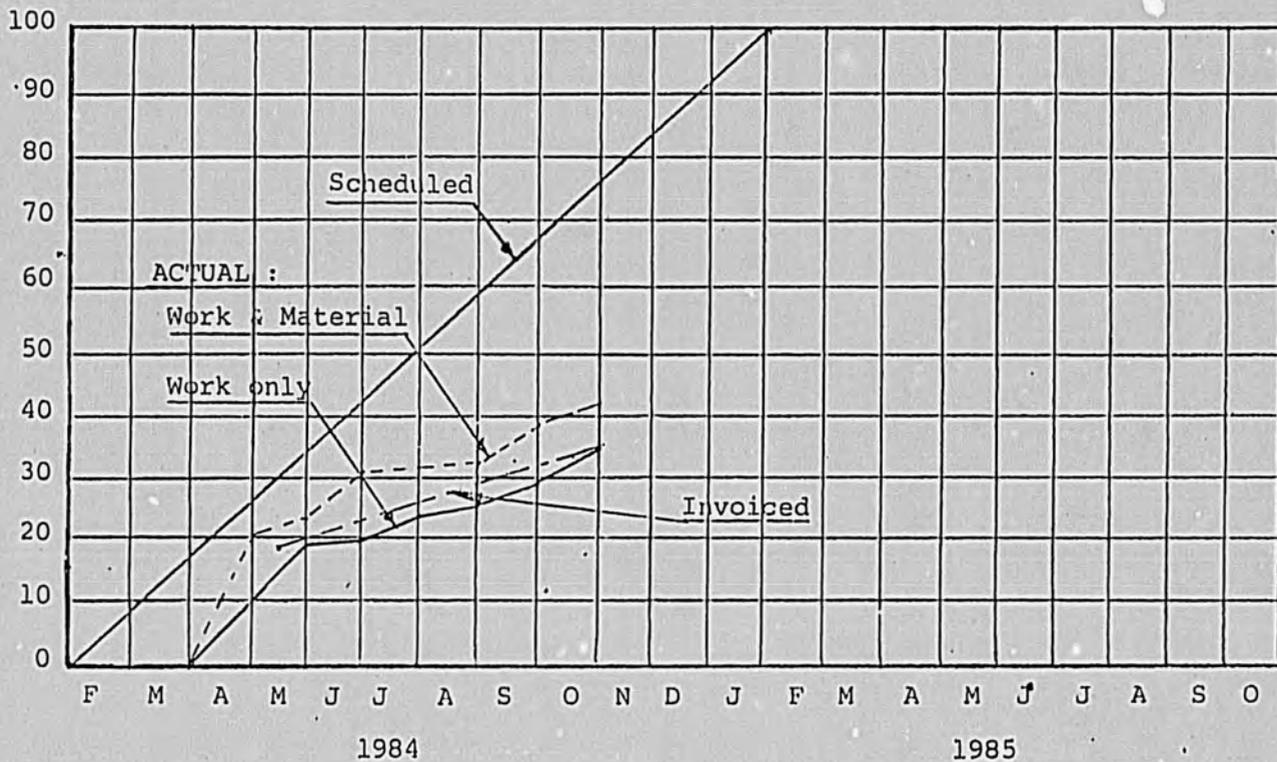
L/Com. Amendment No.1 : 13.02.84  
 Performance Guarantee : Agrani 001/84  
 Tk.15,54,900

CAR/PL Insurance :

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	75%	3%	42%
Work	:	+6%	35%
Material	:	-3%	7%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development.	10%	68%
B. Warehouse	11%	14%
C. Ancillary Buildings	9%	18%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	-	-

Activities

The areas for the Ancillary Buildings, the east and west parking as well as the access road were filled with material taken from the surcharge. All footings and grade beams for the godown were completed. At Ancillary Building R1 the brick walls were laid up to the roof level. At R2 the walls were brought up to lintel level on the ground floor. The R3 building foundations were cast this month and the wall were laid upto the lintel level. A good part of the boundary wall was finished.

Action Required

None

Work Schedule Next Month

The filling of the access road will continue. The columns for the godown will be cast. The work at Ancillary Buildings R1, R2 and R3 will continue.

Claims

Letter 65 of 15.9.84 claim for time extension due to late receipt of notice to proceed, rain, land problems, still pending.

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount</u> <u>Invoice</u>	<u>Payment</u>	<u>USAID</u> <u>Voucher No.</u>
F1-01	Material Prepayment	Tk. 27,15,000	Tk. 27,15,000	1281
F1-02	Progress Payment	Tk. 11,71,789.83	11,71,780	1853
F1-03	Progress Payment	13,50,596.94		

Variations (Change Orders, Overruns, Underruns)

None this month.

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 1984

Site : Dohazari

	Material/Test	Spec. No.	No. of Test	No. App- roved	No. Dis- Approved	Remarks/Requirement
A.	Concrete Sand	3A.02-b.1	3	3	0	F.N. 2.3 to 3.1
B.	Mortar Sand	4A.03	1	1	0	F.N. 1.8 to 2.8
C.	Concrete Coarse Aggregate	3A.02 b.2	1	1	0	
D.	Bricks: Frogmark:	4A.02	5	5	0	
E.	Field Density Tests: Select Fill	2E.01	210	194	16	90 & 95% MDD

No. of Test at  
3 days 7 days 28 days

F.	Concrete: Compressive	3A.03		14	14	
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Average 28 day Strength of Concrete:

- R2 Foundation CC - 4341 PSI (Average of 3 cylinders)
- Godown Footing B1,C1,D1 & D2 - 4241 PSI (Average of 6 cylinders)
- P1 Canshale & Col. C2 (3rd lift) - 4774 PSI (Average of 2 cylinders)

31 October 1984

INVITATION NO. 4 : F3-COX'S BAZAR

CONTRACTOR : Builders The Best Ltd.

Total Contract Price : Tk.99,64,470.85  
 Change Order/Directives : 4,25,365.22\*  
 Revised Contract Price : Tk.1,03,89,836.07\*  
 L/Com No. : 388-002406  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.99,64,470.85  
 (\$400,731.00)

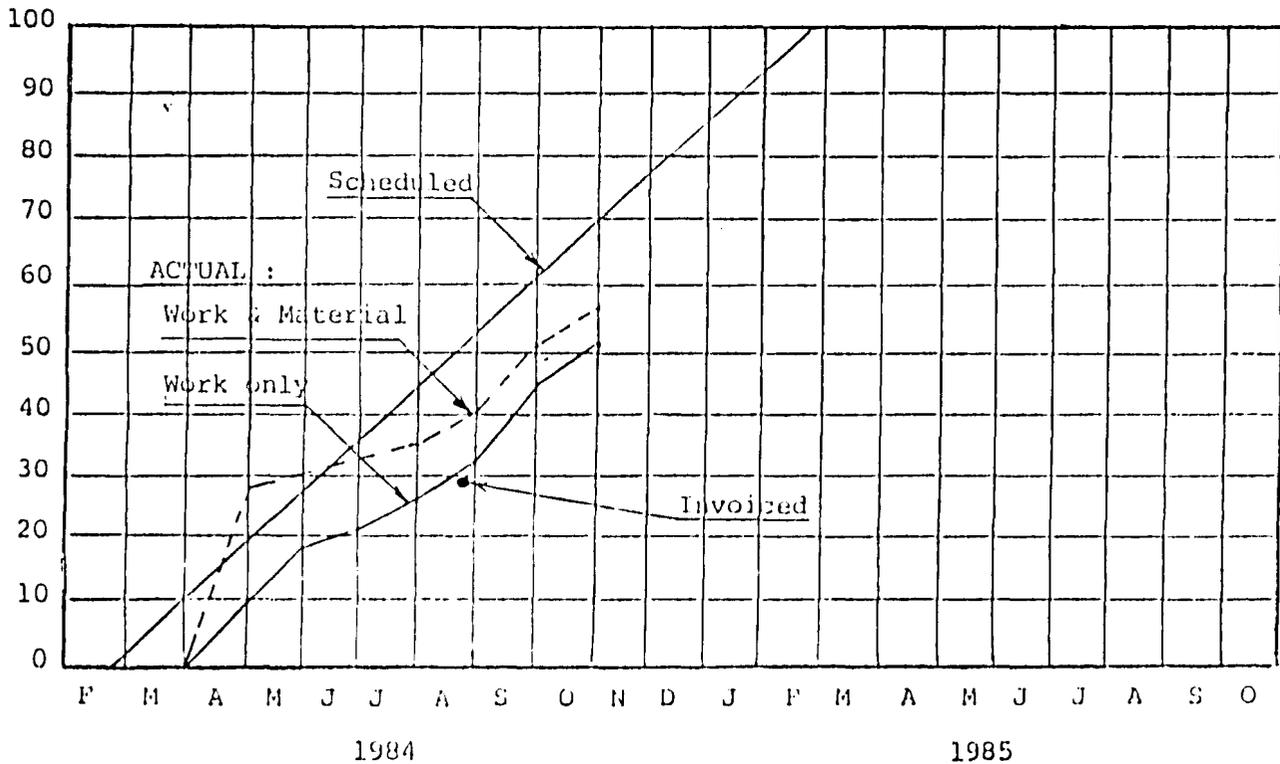
Date of Contract : 12.01.84  
 Site Handed Over : 26.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion:23.02.85(365)\*  
 Elapsed Time : days %

L/Com. Amendment No.1 :  
 Performance Guarantee : Indosuez PB/TK/009  
 Tk.10,00,000  
 CAR/PL Insurance : DAC/CAR/P-13/5/84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	69%	5%	57%
	Work :	5%	52%
	Material :	-	5%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	2%	66%
B. Warehouse	6%	44%
C. Ancillary Buildings	13%	61%
D. Water Supply, Sanitary, Plumbing	1%	18%
E. Electrical	1%	9%

22

Activities

All godown columns were finished and most of the brick work was done. All canopies and canopy beams were cast. The structural work for Ancillary Building R2 and R3 was finished. Interior plastering in both buildings is in progress. The roof of R1 has been formed and is ready to be cast. Public Toilet and guard house are completed.

Action Required

BADC: . The Regional Storage Manager's sanction for land aquisition for river ~~xxxx~~ access is urgently required.

Work Schedule Next Month

Start forming of godown roof slab. Finishing work for Ancillary Buildings.

Claims

None

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice</u>	<u>Amount Payment</u>	<u>USATD Voucher No.</u>
F3-01	Progress Payment	Tk. 29,70,417	Tk. 29,40,711	1854

Variations (Change Orders, Overrun, Underrun)

Total Contract price	Tk.	99,64,170.85
A4 Excavation	+	12,016.20
A6 Imported Select Fill	+	4,19,276.52
A5-b On Site Fill	-	35,927.50
Revised Estimated Total Contract Price	Tk.	1,03,89,836.07

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 1984

Site : Cox's Bazar

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	3	3	0	Min. F.M. > 1.5
B. Concrete Sand	3A.02-b.1	4	4	0	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	5	5	0	F.M. 1.8 to 2.8
D. Concrete Coarse Aggregate	3A.02-b.2	3	2	1	
E. Bricks: Frogmark: O&R'84	4A.02	15	15	0	Min. Av. Strength 2200 PSI
F. Pea Gravel	4A.05	1	1	0	
G. Field Density Tests: Select Fill	2E.01	15	15	0	95% MDD

No. of test at  
3 days 7 days 28 days

1. Concrete: Compressive Strength Test	3A.03 3A.05	-	33	31
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Average 28 day Strength of Concrete:

- Godown columns - 3586 PSI (Average of 20 cylinders)
- R3 Stair, R2 roof slab - 3714 PSI (Av. of 3 cylinders)
- R3 Lintel & Sunshade 1st floor - 3678 PSI (Av. of 3 cylinders)
- R2 Parapet, godown louver top sill, - 3419 PSI (Av. of 3 cylinders)
- R1 1st floor slab & stair 4th flight - 3560 PSI (Av. of 3 cylinders)
- R3 stair 4th flight - 3466 PSI (Av. of 3 cylinders)

24

INVITATION NO. : H2-CHOWMUHANI

CONTRACTOR : Technocon Limited

Total Contract Price : Tk.1,41,20,342.60  
 Change Order/Directives : -  
 Revised Contract Price : Tk.1,44,40,694.30\*\*  
 L/Com No. : 388-002407  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.1,41,20,342.60  
 (\$567,863.00)

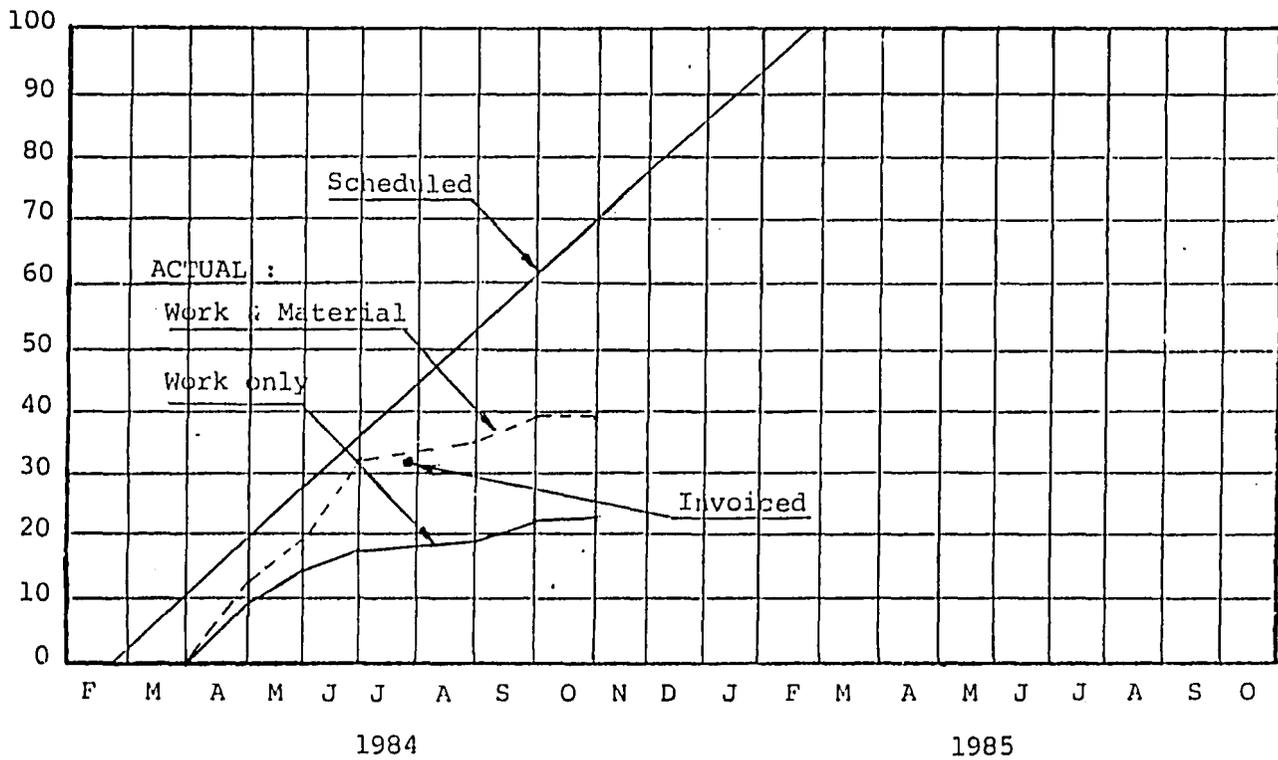
Date of Contract : 12.01.84  
 Site Handed Over : 31.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion:23.02.84(365)  
 Elapsed Time :252 days 69 %

L/Com. Amendment No.1 :  
 Performance Guarantee : Indosuez PB/TK/006  
 Tk.14,12,035  
 CAR/PL Insurance : DAC/CAR/P-07/84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	69%	0%	39%
Work	:	0%	22%
Material	:	0%	17%

\* Pending Approval  
 \*\* Overruns/Underruns

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	0	55%
B. Warehouse	-	-
C. Ancillary Buildings	-	-
D. Water Supply, Sanitary, Plumbing	0	5%
E. Electrical	-	-

25

Activities

After a surcharge period of 30 days the surcharge was ordered to be removed on 25-10-84. An access road around the godown was filled in to reach the Ancillary Building area in the back of the godown. The area for R2 and R3 was dewatered with the help of mud dikes and fill was started to be placed on top of existing fill for R2 and R3. The fact that the existing fill was still wet and further rain saturated new fill slowed down the operation and made proper compaction hard to accomplish. The fill material delivered to the site continues to have a low Fineness Modulus and had to be blended in site with coarser material which slowed down the operation further.

Preparation for Godown construction was made, reinforcing and forms were prepared and a cement shed with office for the contractor is under construction. Since no buildings had been started hardly any progress was accomplished during this month.

Action Required

None

Work Scheduled Next Month

Remove surcharge of godown and start footing and grade beam construction.

Continue filling for R2 and R3 and start their foundation.

Claims

Contractor's Claim for time extension and additional cost of 26.9.84 (TL-445/84) under assessment by the Engineer.

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk.)</u>	<u>Payment (Tk)</u>	<u>USAID Voucher No.</u>
H2-01	Progress Payment	48,07,208.61	48,07,208.61	1572

Variations (Change Orders, Overrun, Underrun)

No new changes. Refer to Report No.22

26

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 19 84

Site : Chowmuhani

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Select Fill	2E.01-a	47	39	8	Min. F.M. > 1.5
B. Concrete Sand	3A.02-b.1	1	1	0	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	7	5	2	F.M. 1.8 to 2.8
D. Concrete Coarse Aggregate	3A.02. b.2	1	1	0	
E. Field Density Tests: Select Fill	2E.01	18	14	4	90 & 95% MDD

No. of test at

3 days 7 days 28 days

F. Concrete:					
Compressive	3A.03				
Strength Test	3A.05	-	6	-	

INVITATION N                      H3-LAKSHMIPUR

CONTRACTOR :    Shnocon Limited  
 Total Contract Price       : Tk.55,91,275.35  
 Change Order,    Correctives   : Tk.     5,000.00  
 Revised Contract Price    : Tk.55,96,275.35  
 L/Com No.                 : 388-002408  
 Date of L/Com.            : 31.01.84  
 Amount of L/Com.         : Tk.55,91,275.35  
                                  (\$224,85E.00)

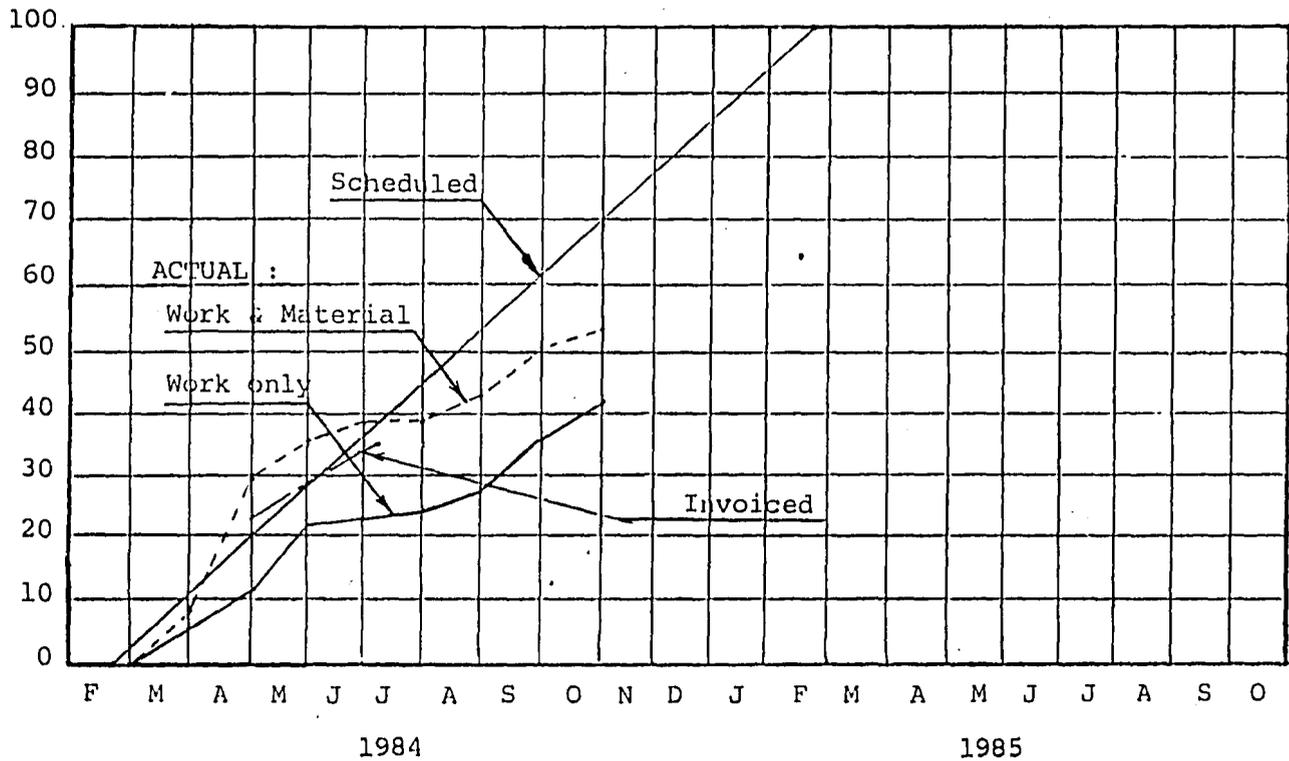
Date of Contract       : 12.01.84  
 Site Handed Over     : 31.01.84  
 Notice To Proceed    : 23.02.84  
 Scheduled Completion: 23.02.85(365)\*  
 Elapsed Time :252 days 69 %

L/Com. Amendment No.1    :  
 Performance Guarantee    : Indosuez PB/TK/007  
                                  Tk.5,59,130  
 CAR/PL Insurance         : DAC/CAR/P-06/4/84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	69%	3%	54%
Work	:	5%	41%
Material	:	-2%	13%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	6%	48%
B. Warehouse	7%	37%
C. Ancillary Buildings	5%	85%
D. Water Supply, Sanitary, Plumbing	2%	12%
E. Electrical	-	7%

*Handwritten mark*

Activities

The contractor finished the godown column casting and is not far away from finishing the masonry shear walls of the Godown. The fill in that building has been finished. Some reinforcing for the roof beam has been placed and the roof form work is in preparation.

On the Ancillary Building most of the plastering has been done, door frames have been installed, the flooring was placed and the piping is being tested.

Action Required

USAID: Concurrence with Change Order H3-02 pending.

Work Scheduled next month

Finish the Godown brick wall and form the roof.

Do lime terracing of the Ancillary Building. Finish piping there.

Claims

None

Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
H3-01	Material Prepayment	12,72,681.70	12,72,681.70	1248
H3-02	Progress to 16.06	7,16,085.93	7,16,085.93	1597

Variations (Change Orders, Overruns, Underruns)

H3-02 Boundary Wall pending USAID's concurrence. Tk. 80,700.00

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 1984.

Site : Lakshmipur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01-a	20	16	4	Min. F.M. > 1.5
B. Mortar Sand	4A.03	4	4	0	F.M. 1.8 to 2.8
C. Concrete Coarse Aggregate	3A.02-b.2	5	3	2	
D. Bricks: Frogmarks RBM	4A.02	5	5	0	
E. Pea Gravel	4A.05	2	1	1	

No. of test at  
3 days 7 days 28 days

F. Concrete:					
Compressive	3A.03	-	16	15	
Strength Test	3A.05				

Average 28 day Strength of Concrete:

1. Godown columns - 4,197 PSI (Average of 6 cylinder)
2. Canopy & Canopy beam - 3947 PSI (Average of 6 cylinder)
3. Godown interior footing - 3836 PSI (Average of 3 cylinder)

30



### Activities

In the godown all exterior and interior columns and 2 entrance canopies were cast. The brick work on shear walls continued. The filling of the godown was completed. Reinforcing and form work for the roof are in preparation.

The revised drawings for the Ancillary Buildings foundations were released and the excavation for the buildings was started. Some works on the boundary walls was done and the rest of the reinforcing was purchased. The contractor makes preparations to continue the work on the retaining wall along the river.

The boundary fence along the Mehta Road was approved by BADC. Negotiations are still in process for the Bridge across the canal for access road. The Engineer submitted a retaining wall design to BADC for the wall along the canal. It is pending review by BADC and discussion on design.

### Action Required

BADC: . Approve cost estimate of bridge providing access to site.

### Work Schedule Next Month:

On the godown work on the shear walls continues. Forming and placing of re-bars for beams and roof slab will be the main item of work. Work on all three Ancillary Building will start and the construction of the river retaining wall should continue after the monsoon flooding.

### Claims

The contractor's claim for the retaining wall at the old godown - letter 2511 of 19.9.84 was rejected by the Engineer - letter 2429 of 17.10.84.

### Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk.)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
-	Mobilization Advance	8,53,391.12	8,53,391.12	0097
14-01	Material Prepayment	14,06,400.00	14,06,400.00	1249
14-02	Material Prepayment	6,26,500.00	(-6,26,500.00)	1/ 1753
14-03	Progress Payment	24,68,664.86	24,68,664.86	1855
14-04	Progress Payment	18,19,286.50		

1/ Amount recovered against Mobilization Advance Interest, to be determined by USAID, payable by Contractor on outstanding advance and delayed repayment.

Variations (Change Orders, Overruns, Underruns)

Total Contract Price	Tk. 1,70,67,822.35
Change Order I4-01	(+) Tk. 11,440.00
Change Order I4-02	(+) Tk. 2,45,520.00
A3 + A4 Excavation - Overrun	(+) Tk. 10,650.00
A5 Filling with On-Site Material - Overrun	(+) Tk. 6,106.00

Revised Estimated Contract Price Tk. 1,73,41,538.35

Additional Variations under review:

- Construct bridge across canal.
- Construct retaining wall at canal.

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CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 1984

Site : Chandpur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-Approved	Remarks/Requirement
A. Select Fill	2E.01.a	17	13	4	Min. F.M. > 1.5
B. Concrete Sand	3A.02.b.1	2	2	0	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	1	1	0	F.M. 1.8 to 2.8
D. Concrete Coarse Aggregate	3A.02.b.2	10	6	4	
E. Bricks: Frogmark: CBM	4A.02	10	10	0	
F. Plaster Sand	9B.02	1	1	0	Min. F.M. > 1.6
G. Field Density Tests: Select Fill	2E.01	30	23	7	95% of MDD

No. of test at  
3 days 7 days 28 days

H. Concrete: Compressive Strength Test	3A.03 3A.05	-	30	26	
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Average 28 day Strength of Concrete:

1. Godown columns - 3501 PSI (Average of 15 cylinders)
2. R.B. Wall Conc. Core - 3659 PSI (Average of 8 Cubes)
3. Godown canopy - 3571 PSI (Average of 3 cylinders)  
Slab & Beam

INVITATION NO. : 05-PARBATIPUR

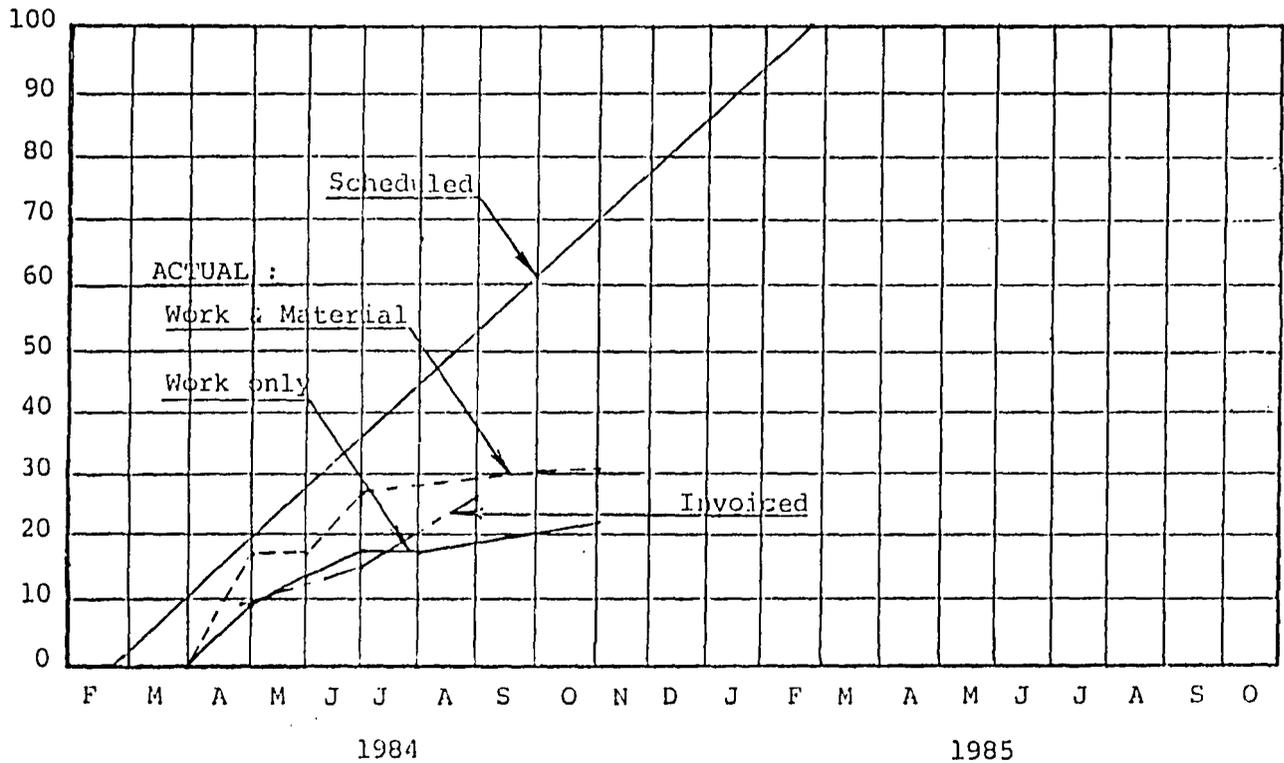
CONTRACTOR : The Elite Engineers Ltd.  
 Total Contract Price : Tk.1,70,02,196.40  
 Change Order Directives : -  
 Revised Contract Price : Tk.1,70,02,196.40  
 L/Com No. : 388-002411  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.1,70,02,196.40  
 (\$683,759.00)  
 L/Com. Amendment No.1 :  
 Performance Guarantee : LG 84/42 BCCI  
 Tk.17,00,220  
 CAR/PL Insurance : DAC/CAR/P-11/5/84

Date of Contract : 12.01.84  
 Site Handed Over : 26.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion: 22.02.85(365) \*  
 Elapsed Time : 252 days 69 %

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
0%	0%	0%	30%
Work	:	1%	21%
Material	:	-1%	9%

\* Pending Approval

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	1%	36%
B. Warehouse	-	-
C. Ancillary Buildings	8%	37%
D. Water Supply, Sanitary, Plumbing	-	7%
E. Electrical	1%	2%

35

### Activities

The contractor finished the last 1/3 part of the surcharge on 20.10.84. With this the total surcharge load was completed. The first 2/3 of the surcharge was completed on 16.9.84. On 30.10.84, the contractor was allowed to remove the first 1/2 of the surcharge after a loading period of 45 days since the settlement remained constant. The contractor placed the roofs for Ancillary Building R2 and R3 and started filling under Building R1. Work on the boundary wall continued. It took the contractor 6 weeks to finish the last 1/3 of the godown surcharge even though he was repeatedly reminded by the Engineer to speed up the work. The progress achieved this month was minimal and shows a net zero percent (for work and material) because the placing of surcharge was priced very low by the contractor. Rain and a fatal accident hampered the trucking. The preparation for the godown work is poor as was the planning for the work on the Ancillary Buildings.

### Action Required

- BADC: . Establish the boundary to the north or the boundary wall can not be build,  
    . Arrange with BR removal of condemned railway wagons, rails and coal from siding alignment or no siding will be build.

### Work Scheduled for next month

Remove first half of surcharge and start godown foundations and grade beams. Start Ancillary Building R1. Continue work on R2 and R3 and site filling.

### Claims

The claim for enhancement of rates of 25.9.84 was rejected by the Engineer (A&W letter 2423 of 16.10.84). The claim for time extension of 18.9.84 was considered incompletely documented. The contractor was asked for back-up data. (A&W letter 2425 of 17.10.84).

### Financial

<u>Invoice No.</u>	<u>I t e m</u>	<u>Amount Invoice (Tk.)</u>	<u>Payment(Tk.)</u>	<u>USAID Voucher No.</u>
05-01	Material Prepayment	14,96,000	14,96,000	1225
05-02	Material Prepayment	12,16,750	12,16,750	1571
05-03	Progress Payment	16,45,747	16,45,071.71	1875

### Variations (Change Orders, Overruns, Underruns)

None

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month October 1984

Site : Parbatipur

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Select Fill	2E.01-a	8	4	4	Min. F.M. > 1.5
B. Plaster Sand	9B.02	2	2	0	
C. Concrete Coarse Aggregate	3A.02 b.2	4	2	2	
D. Field Density Tests: Select Fill	2E.01	5	3	2	90% & 95% MDD
E. Surcharge Field Wet density		10	-	-	

No. of test at  
3 days 7 days 28 days

F. Concrete:					
Compressive	3A.03	-	12	3	
Strength Test	3A.05				

Average 28 day Strength of Concrete:

- R2 Lintel & Sunshade; R1- Column, Stair, Sunshade  
& Public Toilet C.C. floor - 3348 PSI (Average of 3 cylinder)

October 1984

INVITATION NO.8 : L4-DOMAR

CONTRACTOR : M.S. Khan &amp; Heirs Ltd.

Total Contract Price : Tk.74,99,255.00

Change Orders : Tk.

Revised Contract Price : Tk.74,99,255.00

Payments To Date : Tk.

Retention To Date : Tk.

L/Com. No. : 388-002410

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 02.02.84

Amount of L/Com. : Tk.74,99,255.00  
(\$301,590.00)

L/Com. Amendment No.1 : 14.02.84

Date of Contract : 12.01.84

Site Handed Over : 25.01.84

Notice To Proceed : 02.02.84

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CONTRACT TERMINATED by CE Memo No.2995, 04.03.84 under Clause 80 of Conditions of Contract.

The Engineer made his assessment which was disputed by the Contractor. Negotiation to reach an amicable settlement was held on 01/02 September between the Contractor and Engineer. On the basis of the negotiation the Engineer by letter 724-4.5.1/2477, 28 October 1984 informed the Contractor and the Employer of the Engineer's final assessment and award for settlement of all claims.

II. CONSULTANT'S ACTIVITIES

A. FINANCIAL - PROGRESS SCHEDULE

FINANCIAL

Total Procurement Budget	- \$ 2,014,567
Special Project Activity	- \$ 245,498
Total Contract Budget	- \$ 2,260,065
Estimated Expenditures To-Date	- \$ 1,414,237
% Expenditure to Total Contract Budget	- 62.6%

PROGRESS

Elapsed Contract Time	- 692 days
Remaining Contract Time	- 242 days
% Elapsed Time	- 74.1%

B. ADMINISTRATION

1. The Consultant's Agreement

- . Contract Agreement Signed - 09 December 1982
- . Effective Date - 09 December 1982
- . AID Letter of Commitment No.388-0024-3-30381 - 15 December 1982
- . Duration - 30 June 1985\*  
(30.74 mos.)
- . Months Completed - 22.74

\* Amendment No.1 dated 28.03.84

2. Expatriate Staff

		<u>Man-Months</u>	
		<u>Allocated</u>	<u>Utilized</u>
George A. Pecht	- Project Manager	27	19.98
Klaus Thieme	- Chief Construction Engineer	25	16.65
-	- Foundation Engineer	11	11.17
-	- Structural Engineer	6	4.91
Y.O. Kim	- Project Engineer	16	7.80

3. Contract Administration

- . USAID extending Project Assistance Completion Date (PACD) to July 28, 1986 (AID Letter No.671, 03.05.84)

4. Meetings

- . BADC/USAID/A&W monthly review meetings
- . Consultant's periodic staff review meetings
- . Meetings with construction contractors

5. Supporting Bangladeshi Personnel

5.1 WEL and SSL Personnel (Sub-Contractor)

<u>Designation</u>	<u>Man-Months</u>	
	<u>Allocated</u>	<u>Utilized</u>
Deputy Project Manager	27	21.7673
S&M Engineer	24	24.2728
Structural Engineer	9*	9.0388
Architect	4	3.8389
Electrical Engineer	6	6.0000
Railway Engineer	24	19.9089
Office Engineer	26	21.8656
Land Procurement Officer	24*	19.1366
Surveyor	25	20.3879
Instrument Man	25	18.5664
Rodman	25	12.8222
Chainman	25	20.0052
Draftsman*	69*	57.4025
Laboratory Technician	56	64.8082
Laboratory Assistant	56	40.1525
Estimator	48	26.8943
Senior Field Engineer	60	49.1809
Field Engineer	80	39.6931
Inspectors	128	61.8158
Drivers	94	36.9765
Messenger	34	-
Peon	34	-
Guard	68	-
Clerk	34	-
Typist	34	-

5.2 Administrative Personnel

Administrative Manager	27	22.2324
Senior Accountant	27	22.5844
Assistant Accountant	44	20.6849
Secretary	27	22.5368
Printer	27	20.9069
Typist	72	53.6054
Clerk	45	30.0015
Drivers	103	82.7469
Messenger	45	19.8160
Peon	72	59.5433
Guard	90	100.7518
Radio Operator	48	-
Office Superintendent/Asstt. Accountant	34	9.3478

\* Adjusted

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II. Consultant's Activities

6. Project Expenditures  
(Estimated Project Cost Incurred)

<u>I t e m</u>	<u>Agreement Budget</u>	<u>Adjusted Budget</u>	<u>This Month</u>	<u>Cumulative</u>
Services in Bangladesh	\$ 746,188	\$ 790,172	\$ 24,851	\$ 573,938
Services in Home Office	176,178	176,178	895	136,986
International Travel, etc.	85,740	85,740	-	29,031
Housing Allowances Per Diem etc.	91,075	102,775	1,595	69,152
Logistic Cost	223,400	223,400	2,638	100,806
Supporting Staff	382,404	387,842	12,040	209,480
Misc. Direct Costs	43,000	43,000	198	16,125
Fixed Fee	205,460	205,460	7,610	175,030
	<u>\$ 1,953,445</u>	<u>\$ 2,014,567</u>	<u>\$ 49,827</u>	<u>\$ 1,310,548</u>
Percent of Estimated Budget			2.47%	65.05%
Percent Contract Time (To 30.06.85)				73.98%
Special Project Activity	306,620	245,498	-	103,689
	<u>\$ 2,260,065</u>	<u>\$ 2,260,065</u>	<u>\$ 49,827</u>	<u>\$ 1,414,237</u>
	=====	=====	=====	=====

7. Billing and Payment

<u>Invoice</u>	<u>Period Ending</u>	<u>Billing</u>	<u>Payment</u>
01-17	31 July 84	\$ 1,199,334.41	\$ 1,189,676.20
18 & 19	30 Sept 84	\$ 105,140.42	Under Process

8. Reports

- Monthly Progress Report No.22 for September 1984 submitted by letter /2383, 08 October 1984.

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C. TECHNICAL

Summary of Consultant's Activities During This Month

The Engineer continued monitoring the construction work of the Contractors at each of the sites. Concrete cylinders were prepared from each concrete pour and tested at 7-day and 28-day to determine if strength conformed to specification requirements.

Testing of brick samples continues to determine if they meet specification requirements as to strength and dimensions.

Testing of other materials (select fill, mortar sand, cement) continues in the field and Dhaka laboratory to determine acceptance level for the project.

The Project Manager and Deputy Project Manager, supplement the site monitoring by the Chief Construction and Project Engineer by weekly site inspection trips.

The Engineer studied various designs of retaining walls for construction along the canal parallel to the Sen Gupta road.

In the office the Engineer is engaged in checking working (Shop) drawings submitted by the contractors, preparing supplemental and clarifying details, preparing Change Orders, and construction administrative functions. Work at each site is monitored by daily thru radio communication network and timely decisions made on site problems or questions raised.

Comments by BADC and USAID personnel on their site inspection visits receive immediate attention of the Project Manager.

- Analyzing contractor's claims and informing contractors of Engineer's decision.
- Preparing Change Orders as required.
- Determine variations (overruns and underruns) due to changed field conditions.
- Continuing testing at central laboratory and in field of materials to be incorporated in permanent work.
- Issued reminders to the contractors to comply with the Conditions of Contract and Technical Specifications by submitting required documents.
- Issued field message giving directions to contractors as required.
- Follow up on compliance with field message.
- Prepare instruction for contractors' and Engineer's personnel guidance in control of work and materials.

## II. Consultant's Activities

- Prepare and submit Monthly Progress Report.
- Monitoring resolution of site possession and removal of obstructions.
- Kept Manager(Storage) BADC, informed of obstructions and other problems at site.
- Held scheduled meetings with each of Contractos' and Consultant's key personnel.
- Continued site inspection, construction surveillance, and filing reports for action by key staff members.
- Continued monitoring availability of construction materials.
- Key staff members continuing inspecting sites and instructing Engineer's and Contractors' personnel on procedures.
- Spot checking materials and work approved by field staff.
- Checking shop drawings submitted.
- Monitoring contractors' progress against their construction schedules.
- Reviewing contractors' revised work schedule.
- Processing contractors' invoices for payments.
- Monitoring settlement platform elevations at sites surcharged.
- Items requiring follow-up:
  - . Monitoring field testing procedures and test results
  - . Monitoring activity and performance of field staff
  - . Monitoring compliance to field message issued by field staff
  - . Resolving of land problems by BADC
  - . Obtaining clearance from BR by BADC
  - . BADC action in obtaining incoming power line to sites
  - . Continue monitoring results of settlement platforms
  - . Review drainage design at each site on basis of experience during this monsoon period
  - . Review methods of stabilizing soils from erosion and rain-cuts.