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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION

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AGENCY FOR INTERNATIONAL DEVELOPMENT

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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. 24

NOVEMBER 1984



AMMANN & WHITNEY  
CONSULTING ENGINEERS  
NEW YORK

in association with



WORLDWIDE ENGINEERS LTD.  
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AMMANN & WHITNEY  
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P. O. BOX 348  
DHAKA, BANGLADESH

WAREHOUSES PHASE III

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

724-4.1.1/2606

05 December 1984

Subject : Monthly Progress Report No.24  
- November 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



George A. Pecht  
Project Manager

Encl: Eleven (11) copies

GAP/neh

cc: Chairman, BADC w/encl. (1)  
Member-Director (Irri) 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. 24  
Month of November 1984

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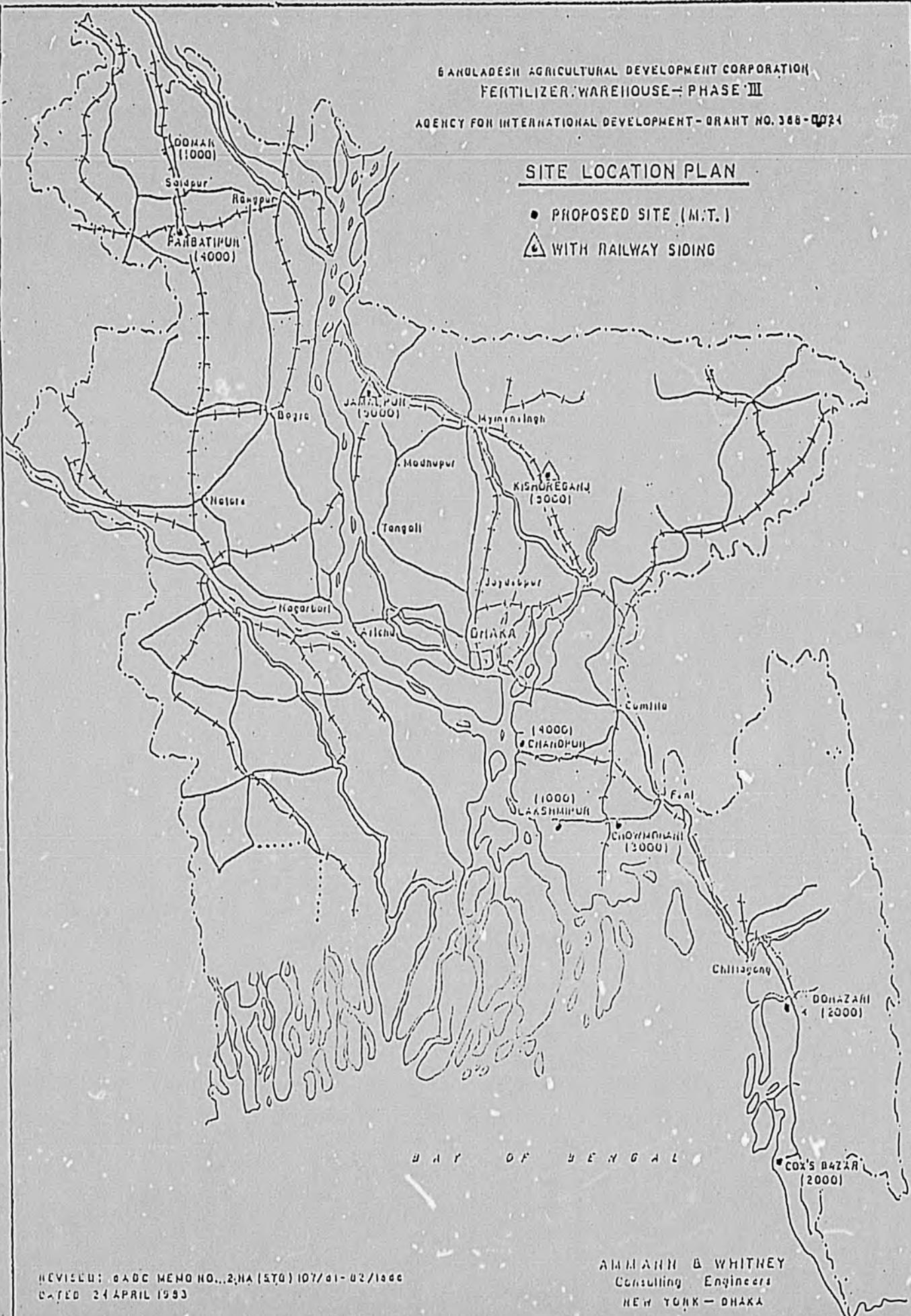
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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION  
 FERTILIZER WAREHOUSE - PHASE III  
 AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 388-0024

**SITE LOCATION PLAN**

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



REVISION: 02DC MEMO NO. 2, HA (570) 107/01-02/1960  
 DATED 24 APRIL 1963

AMMANN & WHITNEY  
 Consulting Engineers  
 NEW YORK - DHAKA

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)

## I. CONTRACTOR'S ACTIVITIES

### CONSTRUCTION PHASE

#### 1. Summary of Constructor's Activities

The surcharge removal was finished at all sites, except Parbatipur. The godown construction is now in progress at all sites. The last ancillary buildings are in the process of being started at Chandpur, Chowmuhani and Kishoreganj. The darwan's quarter at Lakshmipur is nearly completed. At the same site the first godown roof may be cast in December.

The total amount of work completed during this month was 5% of the contract value.

Except for Parbatipur a certain amount of progress was achieved at all sites. The work done during this month varied from 15% for Lakshmipur to 2% for Parbatipur.

At three sites (Jamalpur, Chandpur and Dohazari) the work apparently slowed down to some degree due to a lack of funds on the contractor's part; at a fourth (Cox's Bazar) due to the inability of the contractor to obtain timber for the godown roof forms.

The progress at Parbatipur is extremely slow. The site remains disorganized. The contractor's disability to manage the site properly must have cost him a great deal of money. There has been no sign to date that the Contractor intends to improve and accelerate the progress of work.

BADC granted all contractors a time extension. The contractual completion date will be amended to 28th February for Lakshmipur; to 30th April for Cox's Bazar; and, to 30th of June 1985 for all other sites.

For a comparison between actual work done for each site and the Engineer's projected schedule refer to graphs for each site.

#### Kishoreganj

The surcharge was removed; a good part of the godown footings and grade beams were cast. The columns were started. The roof slab of ancillary building R3 was cast. R2 was built up to the first floor lintel. The interior work on both buildings continues. Some coping was placed at the boundary wall. The work at this site seems to have got going this month.

#### Jamalpur

The godown footings, columns and walls are in process. The structural work on ancillary building R1 continues with the casting of the floor slab. At R2 and R3 the interior work is in progress. Although this project continues without major difficulties it has to be stated that the work progress is only 5% as against 7% scheduled by the Engineer in his revised estimated.

### Dohazari

The godown construction continues with grade beams and first lifts of columns being cast and the brick walls being started. On all three ancillary buildings good progress was made; floor slabs were cast and brick walls continued. The placing of select fill as well as the brick work at the godown was slowed down by a lack of workers/funds. The work is 39% complete compared with 55% scheduled by the Engineer in accordance with the extended construction time.

### Cox's Bazar

Most of the godown brick work was completed. The contractor is forming half of the roof and plans to cast this half in December. The finishing of ancillary buildings continues. The contractor's work was slowed down by purchasing problems of form timbers because the timber mills in the area were fully booked. Work done this month was 3% as against 8% per Engineer's schedule but the work done up to now is 55% as against 59% per Engineer's estimate for the extended completion time.

### Chowmuhani

The surcharge was removed and the godown construction started. The surcharge was worked into the fill. Ancillary buildings R2 and R3 grew from foundation to lintel level. R1 is close to being started. The access road is under construction and its culvert is placed.

After a very slow start this project is finally moving. With 6% of work completed during this month the total amount of work completed is 28% as against 57% for the revised schedule.

### Lakshmipur

The godown floor slab was placed. The roof forms are being erected. The site work proceeds. The darwan's quarters have been substantially finished. 56% of all work was finished as against 76% scheduled by the Engineer. A substantial amount of work should be finished by next month. If the contractor keeps working with the speed shown this month the contract should be finished as scheduled.

### Chandpur

The contractor's work on the godown slowed down considerably. Work on the ancillary buildings started. Construction of boundary and retaining wall continues. The contractor's activities slowed down apparently due to a lack of funds. Work done this month was 4% as against 7% per Engineer's schedule.

Bridge and retaining wall change orders are under consideration by BADC.

### Parbatipur

The second half of the surcharge was released during this month. The surcharge removal continues. The contractor is putting the surcharge material onto temporary stockpiles instead of blending the material with coarser sand as required and placing it as compacted fill.

Footings for the godown are being cast. The work was slowed down due to insufficient stone aggregate. Ancillary buildings R1 and R2 are being plastered. Work on R3 stopped due to lack of bricks. Work on the boundary wall stopped due to lack of skilled labor and bricks.

The progress remains slow. The work is badly organised. Work done this month was 2% as against 6% per Engineer's schedule.

## 2. Railway Siding

### Kishoreganj

BADC has deposited Tk.1,35,150.00 toward license fee for 0.61 acres of land at Kishoreganj. Physical demarcation of the area is to be done by the Estate office of BR so that the boundary wall can be constructed by the contractor. BADC to follow up.

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/cancell 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 Jamalpur and Kishoreganj 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.

Contractor's Activities

30 November 1984

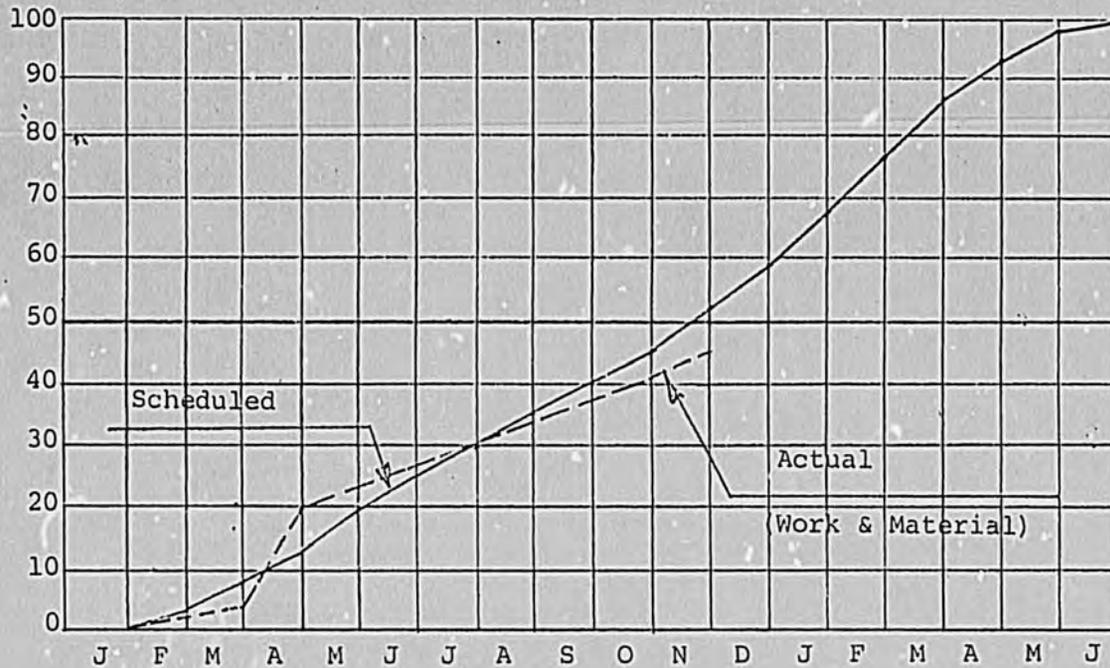
CONSTRUCTION  
CONTRACT AND FINANCIAL SUMMARY

<u>Invitation No.</u>	<u>Site</u>	<u>Contractor</u>	<u>Contract Amount (Tk)</u>	<u>Retention</u>	<u>Accumulated Payments (Tk)</u>
1	B1-Kishoreganj	National Construction & Consult Limited	1,98,40,012.82	3,51,995.02	49,89,720.22
2	C3-Jamalpur	Mostafa Brothers (Pvt) Ltd.	1,76,94,451.01	4,25,371.96	58,52,634.69
3	F1-Dohazari	Eastern Engineers Consortium Limited	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	1,13,343.07	19,88,767.63
7	I4-Chandpur	Fazle Azim Engineers 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)	24,72,639.41	3,67,21,993.29 31.43%
8	L4-Domar	M.S. Khan & Heirs Ltd.	74,99,255.58	Contract Terminated	

H-4

B

CONSTRUCTION PROGRESS - ALL SITES



	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	Weighted Percent	Project % Complt.
Kishoreganj	5	11	16	20	25	29	33	35	39	47	56	64	73	82	91	98	100	16.97	7.6
	0	1	20	20	20	26	28	33	35	45									
Jamalpur	3	8	14	19	23	27	31	34	39	46	55	63	72	81	90	98	100	15.35	6.8
	0	2	18	19	21	25	31	36	40	44									
Dohazari	4	10	16	22	30	38	43	48	51	55	60	69	79	87	94	99	100	13.31	6.3
	0	1	21	24	32	32	34	39	42	47									
Cox's Bzr	2	7	12	18	24	32	40	50	59	67	76	85	93	98	100			8.53	5.1
	0	1	27	37	42	36	41	51	57	60									
Gnowmuhani	2	8	15	21	28	33	37	40	43	48	54	65	75	84	92	98	100	12.09	5.0
	0	1	13	18	33	33	34	39	39	41									
Lakshmipur	2	9	16	22	30	37	46	56	67	77	88	98	100					4.79	3.3
	0	8	30	36	39	39	43	51	54	68									
Chandpur	1	4	9	14	19	24	30	35	41	48	56	65	74	84	93	98	100	14.61	6.9
	0	1	11	18	26	29	34	38	43	47									
Parbatipur	2	9	16	23	30	33	36	39	42	48	56	65	74	83	92	98	100	14.55	4.7
	0	1	17	17	27	28	29	30	30	32									

Note : Schedule based on BADC allowing time extension to February/April/June 1985

Total : 45.7  
 Last Month : 40.5

CONSTRUCTION PERCENT COMPLETION

Site	- A - SITE DEVELOPMENT	- B - WAREHOUSE	- C - ANCILLARY BUILDINGS	- D - WATER SUPPLY SANITARY	- E - ELECTRICAL	TOTAL
Kishoreganj	70%	14%	33%	5%	5%	36%
Jamalpur	56%	22%	45%	3%	8%	34%
Dohazari	68%	19%	33%	3%	2%	39%
Cox's Bazar	67%	45%	66%	27%	19%	55%
Chowmuhani	59%	8%	7%	10%	-	28%
Lakshmipur	61%	54%	93%	20%	8%	56%
Chandpur	47%	36%	9%	3%	-	32%
Parbatipur	37%	3%	45%	7%	2%	23%

Overall Project Completion - (Work Items Only) : 35%

INVITATION NO. : B1-KISHOREGANJ

CONTRACTOR : National Construction & Consult Ltd.

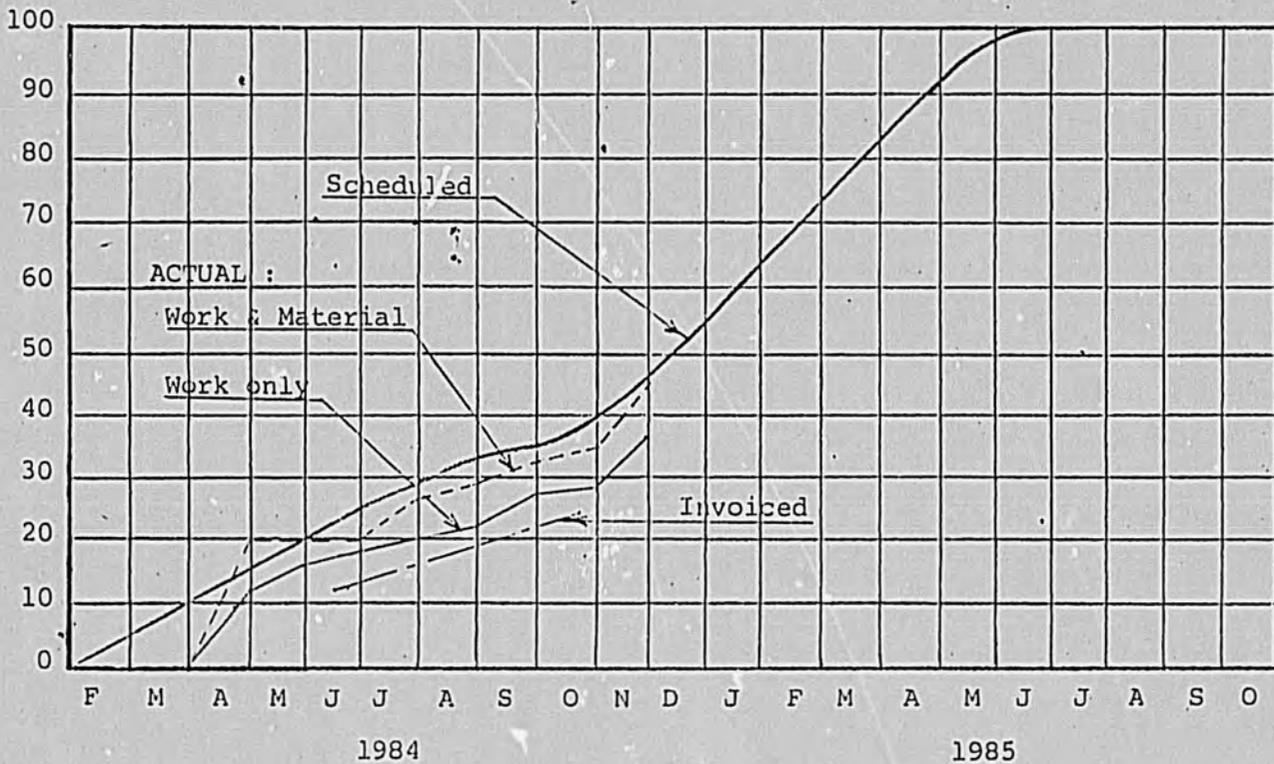
Total Contract Price	: Tk.1,98,40,012.82	Date of Contract	: 16.01.84
Change Order/Directives	: (-) 88,848.31*	Site Handed Over	: 29.01.84
Revised Contract Price	: Tk.1,97,51,164.51*	Notice To Proceed	: 02.02.84
L/Com No.	: 388-002403	Scheduled Completion	: 30.06.85 (494)
Date of L/Com.	: 31.01.84	Elapsed Time	: 303 days .61 %
Amount of L/Com.	: Tk.1,98,40,012.82 (\$797,885.00)		

L/Com. Amendment No.1 :  
Performance Guarantee : BCCI LG 84/75  
Tk.19,84,002  
CAR/PL Insurance : DAC/CAR/P-09/4/84  
30.04.84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
8%	47%	10%	45%
Work	:	8%	36%
Material	:	2%	9%

\* Change Order B1-01 pending BADC approval.

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	-	70%
B. Warehouse	14%	14%
C. Ancillary Buildings	10%	33%
D. Water Supply, Sanitary, Plumbing	-	5%
E. Electrical	-	5%

Activities

At the godown the surcharge removal was completed. All footings and grade beams for the first half are completed, they are in progress at the second half. The column casting has started. The work on ancillary buildings R2 and R3 continues. The roof slab of R3 was cast as well as the first floor lintel for R2. The plastering of these buildings progresses. Some coping work on the boundary was done.

BADC extended the construction period to 30.06.85.

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 built 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).
- . Have BR review their cost estimate for railway siding (which is inflated).

Work Scheduled Next Month

At the godown all footings, grade beams and columns are to be cast and the brick walls are to be started. The interior work on R2 and R3 will continue. The foundation of R1 should be started.

Claims

Contractor's letter of 18.9.84: Claim for time extension. BADC granted time extension with letter 2067 of 27.11.84

Contractor's letter #70 of 11.11.84: Claim for time extension due to transport strikes. Rejected by A&W letter #2543 of 19.11.84.

Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
Bl-01	Material Prepayment	21,57,900.00	Tk. 21,57,900	1451
Bl-02	Progress Payment	28,31,830.22	28,31,830.22	

Variations (Change Orders, Overruns, Underruns)

None this month.

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CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouse Phase III

For the month November 1984

Site : Kishoreganj

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Select Fill	2E.01-a	6	6	-	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	1	1	-	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	2	2	-	F.M. 1.8 to 2.8
D. Concrete Coarse Aggregate	3A.02-b.2	2	1	1	
E. Bricks: Frogmark: G.M.B.	4A.02	10	9	1	Min. av. strength is 2200 PSI
F. Field Density Tests: Select Fill	2E.01	11	11	-	95% MDD

No. of test at  
7 days 14 days 28 days

G. Concrete: Compressive Strength Test	3A.03 3A.05	30	10	34	
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Average 28 day Strength of Concrete:

1. Godown footings 4420 PSI (av. of 3 cylinders)
2. R3, 1st Floor Slab with Stair 2nd Flight 4556 PSI ( " " 5 " )
3. R2, Column 4493 PSI ( " " 6 " )
4. Public Toilet & Guard House Roof Slab 5135 PSI ( " " 5 " )
5. R2, 1st Floor Slab with Column & Stair 2nd Flight 3997 PSI ( " " 3 " )

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INVITATION NO. : C3-JAMALPUR

CONTRACTOR : Mostafa Brothers (Pvt) Ltd.

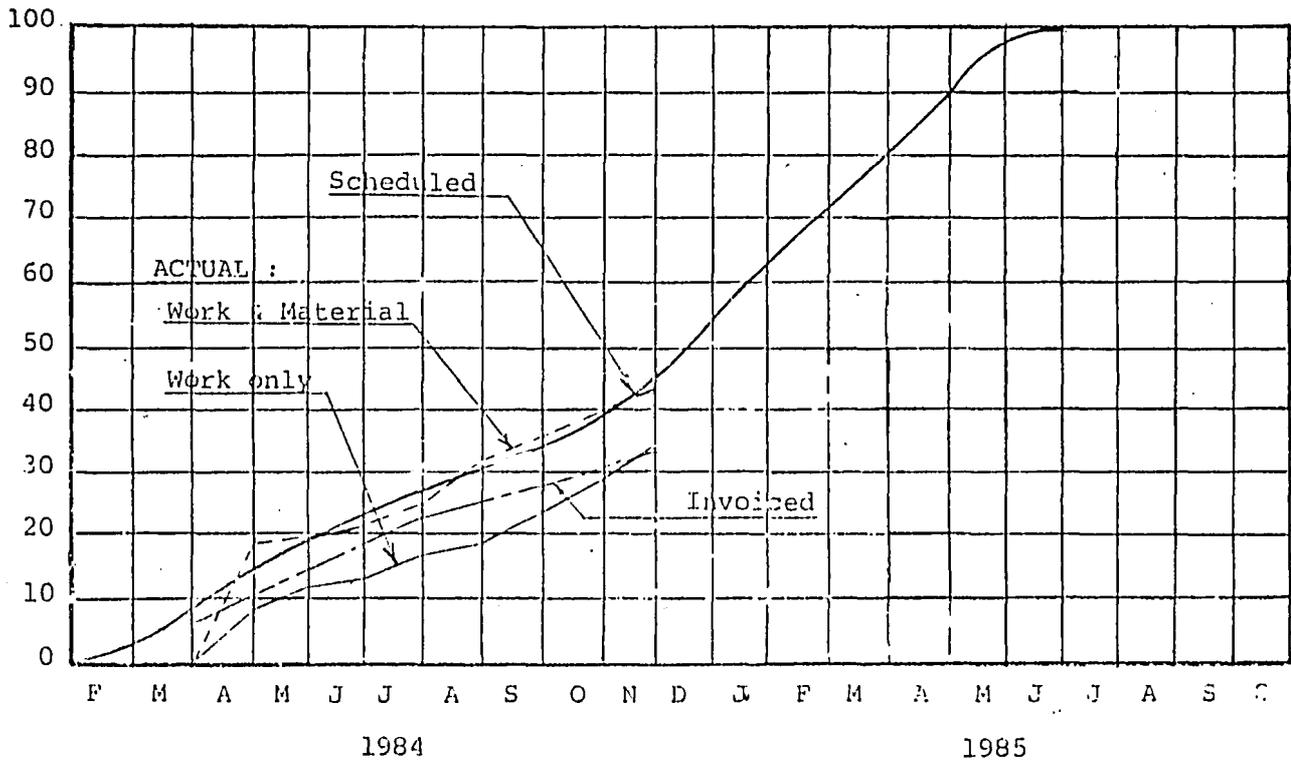
Total Contract Price : Tk.1,76,94,451.01  
 Change Order/Directives :  
 Revised Contract Price :  
 L/Com No. : 388-002404  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.1,76,94,451.01  
 (\$711,599.00)

Date of Contract : 12.01.84  
 Site Handed Over : 19.01.84  
 Notice To Proceed : 02.02.84  
 Scheduled Completion: 30.06.85 (494)  
 Elapsed Time : 303 days : 61 %

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
7%	46%	4%	44%
Work	:	5%	34%
Material	:	-1%	10%

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	-	56%
B. Warehouse	9%	22%
C. Ancillary Buildings	5%	45%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	1%	8%

Activities

At the 3500T godown columns are being cast and brick walls are laid. At the 1500T godown all foundations have been cast. On ancillary building R1 the brick walls are being laid and the floor slab was cast. R2 and R3 are structurally finished, the interior work continues here.

BADC granted an extension of the construction time to 30.06.85.

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 godowns the column and brick work will continue. The structural work on R1 should be finished and the roof slab should be placed. The interior work at R2 and R3 will continue.

Claims

Mostafa Brother's letter 486 of 15.9.84 for time extension. BADC granted time extension with letter 2068 of 27.11.84

Mostafa Brother's letter 510 of 18.11.84 for time extension due to Bus, Truck strike. Rejected by A&W letter 2541 of 18.11.84.

Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
-	Mobilization Advance	8,84,720.00	8,84,720.00	1059
C3-01	Material Prepayment	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	8,62,230.34	
C3-04	Progress Payment	9,13,152.12	9,13,152.12	
		Tk. 58,52,634.69		

Variations (Change Orders, Overruns, Underruns)

None this month.

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month November 1984

Site : Jamalpur

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- Approved	Remarks/Requirement
A. Concrete Sand	3A.02- b.1	2	2	—	F.M. 2.3 to 3.1
B. Mortar Sand	4A.03	2	2	—	F.M. 1.8 to 2.8
C. Concrete Coarse Aggregate	3A.02- b.2	4	3	1	
D. Bricks: Frogmark: RBC	4A.02	5	4	1	Min. av. comp. strength is 2200 PSI
E. Pea Gravels	4A.05	3	2	1	
F. Field Density Tests: Select Fill	2E.01	95	84	11	95% MDD

No. of test at  
3 days 7 days 28 days

G. Concrete: Compressive Strength Test	3A.03 3A.05		32	49	
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Average 28 day Strength of Concrete:

1. 3500 MT Godown Column Footings	3420 PSI (av. of 21 cylinders)
2. 3500 MT Godown Columns	3700 PSI ( " " 9 " )
3. 3500 MT Godown Grade Beams	3989 PSI ( " " 7 " )
4. 3500 MT Godown Door Columns	3403 PSI ( " " 5 " )
5. R3 Roof Slab	3905 PSI ( " " 3 " )
6. R2 Roof Slab	3540 PSI ( " " 3 " )

INVITATION NO. : 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	:	Site Handed Over	: 26.01.84
Revised Contract Price.	:	Notice To Proceed	: 02.02.84
L/Com No.	: 388-002405	Scheduled Completion:	30.06.85(494)
Date of L/Com.	: 31.01.84	Elapsed Time	: 303days .61 %

Amount of L/Com. : Tk.1,55,48,978.95  
(\$625,317.00)

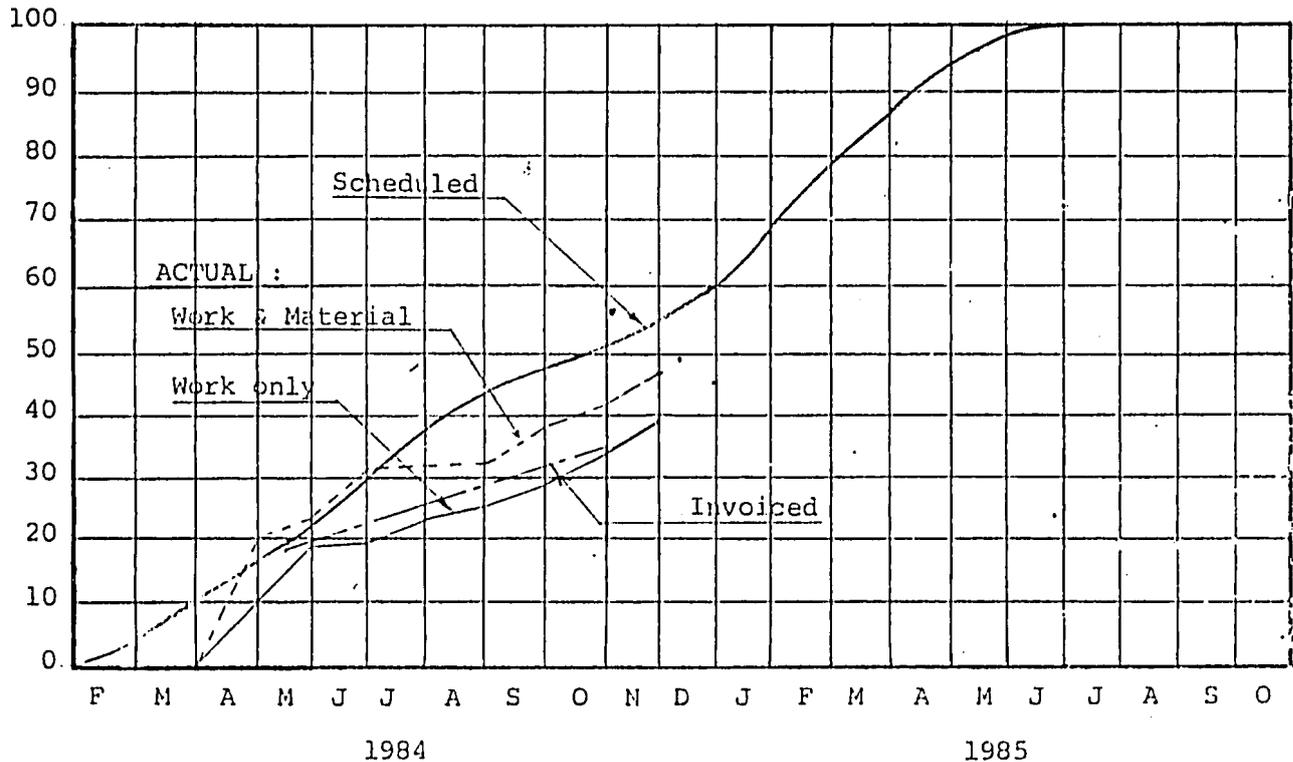
L/Com. Amendment No.1 :  
Performance Guarantee : Agrani 001/84  
Tk.15,54,900

CAR/PL Insurance : DAC/CAR/P-12/5/84

%Completion

Scheduled		Actual	
This Period	To Date	This Period	To Date
4%	55%	5%	47%
Work	:	4%	39%
Material	:	1%	8%

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	10%	68%
B. Warehouse	5%	19%
C. Ancillary Buildings	15%	33%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	2%	2%

Activities

All grade beams were completed at the godown, the first lift of all columns was placed and the brick walls were started. The construction of all three ancillary buildings continued. At all buildings the floor slabs were cast the brick work continues. The filling at the site slowed down because - apparently - the contractor was low on funds.

BADC granted an extension of the construction time to 30.06.85.

Action Required:

None

Work Scheduled Next Month

Column and wall construction at the godown will proceed. The brick work and casting of roof slabs at the ancillary buildings will continue. Hopefully the access road construction will be taken up again.

Claims

Letter 65 of 15.9.84 claims for time extension granted by BADC letter #2069 of 27.11.84.

Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
F1-01	Material Prepayment	27,15,000	Tk. 27,15,500	1281
F1-02	Progress Payment	11,71,789.83	11,71,780	1853
F1-03	Progress Payment	13,50,596.94	13,50,596.94	

Variations (Change Orders, Overruns, Underruns)

None this month.

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month November 1984

Site : Dohazari

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Concrete Sand	3A.02-b.1	1	1	-	F.M. 2.3 to 3.1
B. Mortar Sand	4A.03	2	2	-	F.M. 1.8 to 2.8
C. Concrete Coarse Aggregate	3A.02-b.2	1	1	-	
D. Bricks: Frogmark:	4A.02	5	4	1	
E. Field Density Tests: Select Fill	2E.01	36	36	-	90% & 95% MDD

No. of test at  
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05		14	27	
--	----------------	--	----	----	--

Average 28 day Strength of Concrete

1. Godown Columns	4056 PSI (Av. of 12 cylinders)
2. Godown Grade Beam, Col. A, to A5	4397 PSI ( " " 3 " )
3. R1 Column C2	3047 PSI ( " " 3 " )
4. R1 False Slab, R2 Staircase & Porch	3726 " ( " " 3 " )

INVITATION NO. : F3-COX'S BAZAR

CONTRACTOR : Builders The Best Ltd.

Total Contract Price : Tk.99,64,470.85  
 Change Order/Directives : 5,01,819.78\*  
 Revised Contract Price : Tk.1,04,66,290.63\*  
 L/Com No. : 388-002406  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.99,64,470.85  
 (\$400,731.00)

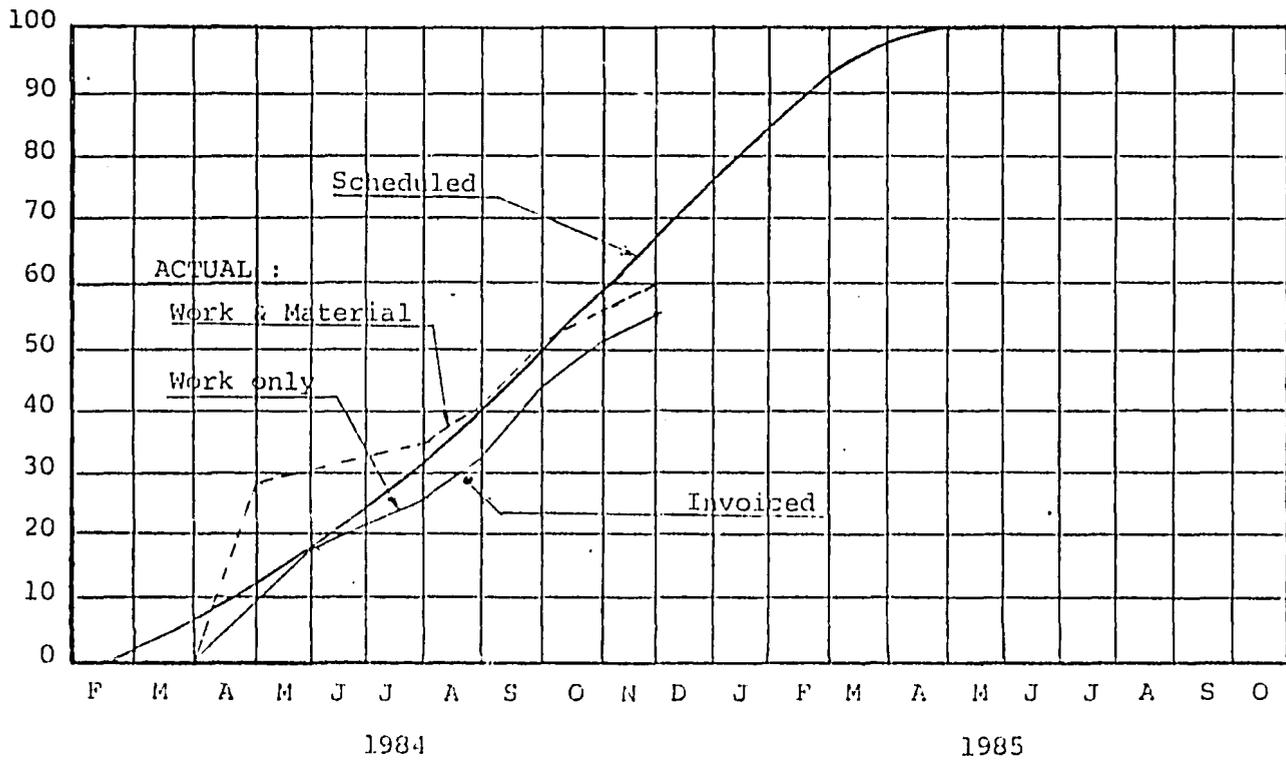
Date of Contract : 12.01.84  
 Site Handed Over : 26.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion:30.04.85(433)  
 Elapsed Time :282 days . 65 %

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%	59%	3%	60%
	Work :	3%	55%
	Material :	-	5%

\* Pending Approval of Change Order F3-01

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	1%	67%
B. Warehouse	1%	45%
C. Ancillary Buildings	5%	66%
D. Water Supply, Sanitary, Plumbing	9%	27%
E. Electrical	10%	19%

Activities

Most of the godown brick work is completed. The form work for the roof is in progress. All ancillary building structural work was completed. The plastering, piping, drainage, electrical work is in process. The contractor's progress slowed down some. More work should have been accomplished. The contractor had problems purchasing form timber apparently because the timber mills in the area were fully booked.

BADC extended the completion time to 30.04.1985.

Action Required

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

. Approval of new river access design.

Work Schedule Next Month

Forming of godown roof slab. Finishing work for Ancillary Buildings.

Claims:

None

Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice (Tk)</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
F3-01	Progress Payment	Tk. 29,70,417	Tk. 29,40,711	1854

Variations (Change Orders, Overrun, Underrun)

Refer to Change Order F3-01, 15.11.84

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month November 1984

Site : Cox's Bazar

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Concrete Sand	3A.02-b.1	3	3	-	F.M. 2.3 to 3.1
B. Mortar Sand	4A.03	5	5	-	F.M. 1.8 to 2.8
C. Plaster Sand	9B.02	2	2	-	Min. F.M. = 1.6
D. Bricks: Frogmark: O & R 84	4A.02	10	10	-	Min. av. strength 2200 PSI
E. Field Density Tests: Select Fill	2E.01	2	2	-	95% MDD
<u>No. of test at</u> <u>3 days 7 days 28 days</u>					
F. Concrete: Compressive Strength Test	3A.03 3A.05		22	48	

Average 28 day Strength of Concrete:

1. Godown Columns & Canopy 3755 PSI (Av. of 29 cylinders)
2. R3 Stair, Roof Slab, Pent House Roof Slab 3521 PSI (Av. of 9 Cylinders)
3. R2, Pent house roof slab 4244 PSI (Av. of 2 Cylinders)
4. R1 Stair 5th flight, sunshade & Columns 4090 PSI (Av. of 5 Cylinders)
5. Conc. Core of godown R.B.wall 3391 PSI " " 6 " )

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INVITATION NO. : H2-CHOWMUHANI

CONTRACTOR : Technocon Limited

Total Contract Price : Tk. 1,41,20,342.60  
 Change Order/Directives : 3,86,779.25\*  
 Revised Contract Price. : Tk. 1,45,07,121.85  
 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)

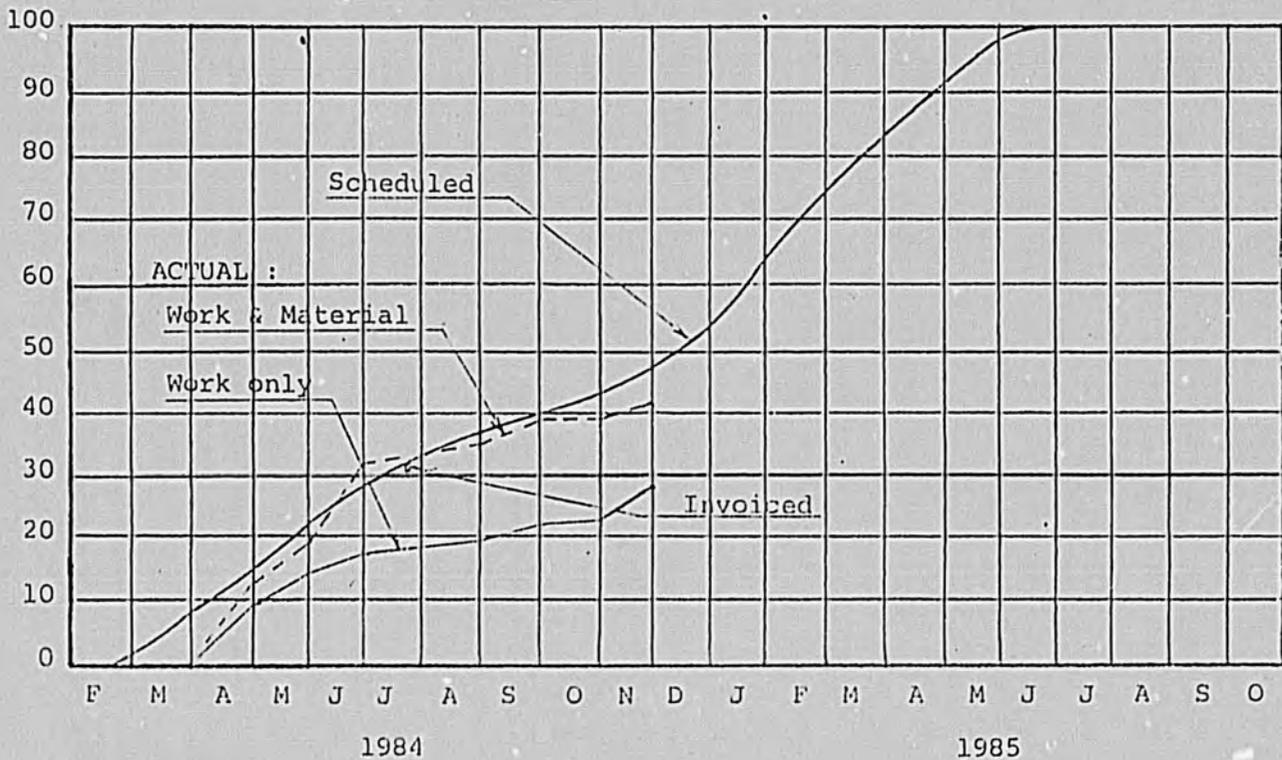
Date of Contract : 12.01.84  
 Site Handed Over : 31.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion: 30.06.85(494)  
 Elapsed Time : 282 days 57 %

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
5%	48%	2%	41%
Work		6%	28%
Material		-4%	13%

\* Pending Approval Change Order H2-02

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	4%	59%
B. Warehouse	8%	8%
C. Ancillary Buildings	7%	7%
D. Water Supply, Sanitary, Plumbing	5%	10%
E. Electrical	-	-

Activities

The surcharge was removed from the godown area. All exterior footings were cast. The surcharge material was placed in north and south parking area, the access road and under ancillary building R1, R2 and R3. The placement of compacted fill in these area was completed or is in process. Ancillary building R3 was built from foundation to lintel level, R2 up to close to lintel level. The culvert under the access road was placed.

This site is far behind schedule but it is finally getting off the ground. Even during this month there were difficulties (by now overcome) in compacting the fill under R1 due to the high ground water level.

BADC granted an extension of the construction period to 30.06.85.

Action Required

None

Work Scheduled Next Month

Continue footing and grade beam construction at the godown. Laying of bricks and casting of floor slab at R3 and R2. Start construction of R1. Continue fill under R1 and at the access road.

Claims

Contractor's claim for time extension granted by BADC.  
Construction time extended to 30.06.85.

Financial

<u>Invoice No.</u>	<u>Item</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

Refer to Change Orders

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month November 1984

Site : Chowmuhani

Materials/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- approved	Remarks/Requirement
A. Select Fill	2E.01-a	102	84	18	F.M. > 1.5
B. Mortar Sand	4A.03	6	5	1	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	47	43	44	90 & 95% MDD

No. of test at  
3 days 7 days 28 days

E. Concrete:					
Compressive	3A.03		6	9	
Strength Test	3A.05				

Average 28 day Strength of Concrete:

- |  |                              |
|--|------------------------------|
| 1. Public Toilet Floor & Septic Tank Bed | 3238 PSI (av. of 3 cylinder) |
| 2. Pipe Culvert & S. Boundary Wall       | 3638 PSI ( " " 3 " )         |

INVITATION NO. : H3-LAKSHMIPUR

CONTRACTOR : Technocon Limited

Total Contract Price : Tk. 55,91,275.35  
 Change Order/Directives : 52,885.00\*  
 Revised Contract Price : Tk. 56,44,160.35\*  
 L/Com No. : 388-002408  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk. 55,91,275.35  
 (\$224,858.00)

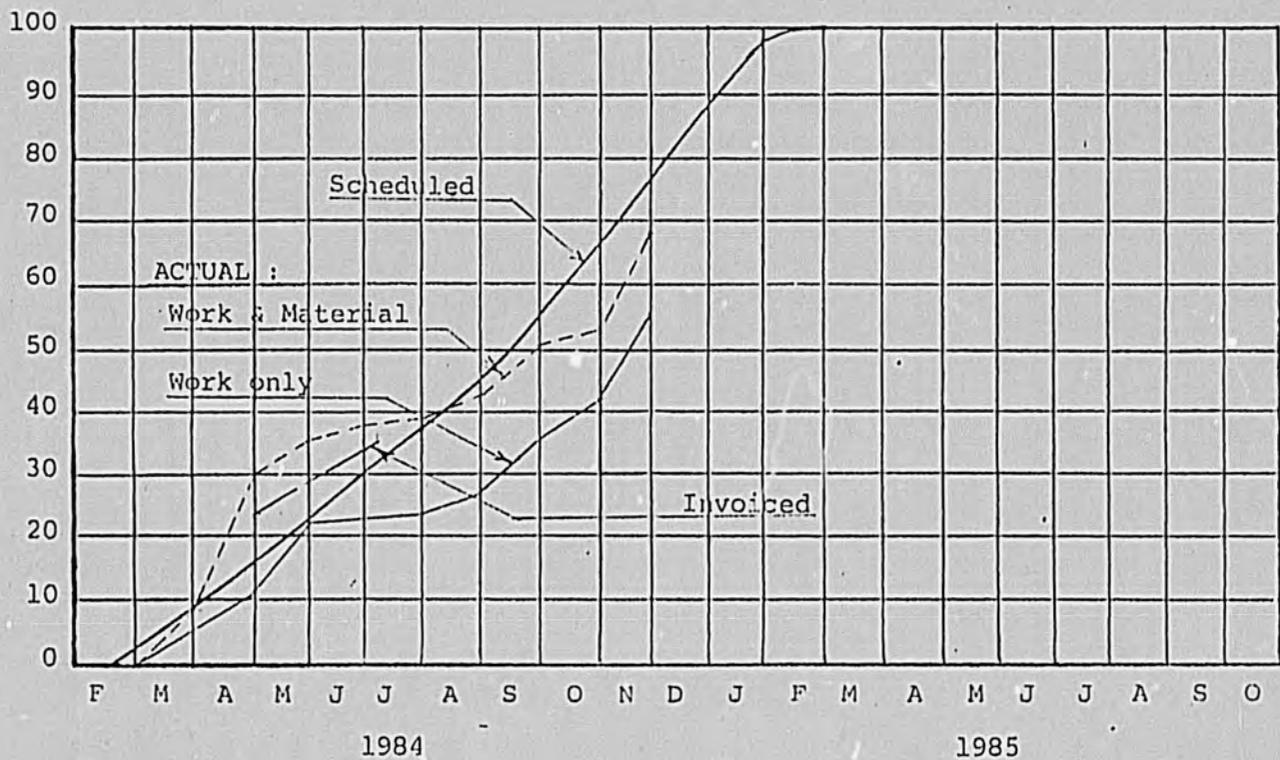
Date of Contract : 12.01.84  
 Site Handed Over : 31.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion : 28.02.85 (271)  
 Elapsed Time : 282 days 76 %

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
10%	77%	14%	68%
Work	:	15%	56%
Material	:	-1%	13%

\* C.O. H3-03 pending approval BADC (/2537, 15.11.84)

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	21%	69%
B. Warehouse	17%	54%
C. Ancillary Buildings	6%	93%
D. Water Supply, Sanitary, Plumbing	8%	20%
E. Electrical	1%	8%

26

Activities

The godown floor slab was placed. The forms and reinforcing for the roof are being installed. Concrete aprons and walkways were cast. Brick pavement was laid. In the darwan's quarter doors and windows were installed, the cement flooring was done and the lime terracing was finished. The deep tube well drilling was started.

Good progress was accomplished at this site. This site will be substantially complete at the scheduled completion date.

BADC extended the completion time to 28.02.1985.

Action Required

USAID : Concurrence with Change Order H3-03 pending.

Work Scheduled Next Month

The godown roof is to be poured this month. The concrete paving will be started. The darwan's quarter should be finished. Drilling of the deep tube well will continue.

Claims

Letter TL-490/84 of 5.11.84 claims for time extension. Answered by BADC letter /2073 of 27.11.84.

Financial

<u>Invoice No.</u>	<u>Item</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)

H3-01	Kitchen Chimney		+ Tk. 5,000.00	
H3-02	Boundary Wall pending USAID's concurrence		+ Tk. 80,700.00	
H3-03	Change Order - Underrun Pending		- Tk. 32,815.00	

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month November 1984

Site : Lakshnipur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Select Fill	2E-01-a	15	8	7	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	3	2	1	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	3	2	1	
E. Field Density Tests: Select Fill	2E.01	28	19	9	95% M.D.D.

No. of test at  
3 days 7 days 28 days

F. Concrete: Compressive Strength Test	3A.03 3A.05		39	32	
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Average 28 day Strength of Concrete:

1. Godown Canopy 3856 PSI (Av. of 3 cylinder)
2. Godown Footing B2 & B3 3836 PSI ( " " 3 cylinder)
3. Godown Columns 4128 PSI ( " "15 " )
4. Conc. Core of Godown R.B.Wall 2772 PSI ( " "11 " )

INVITATION NO. : I4-CHANDPUR

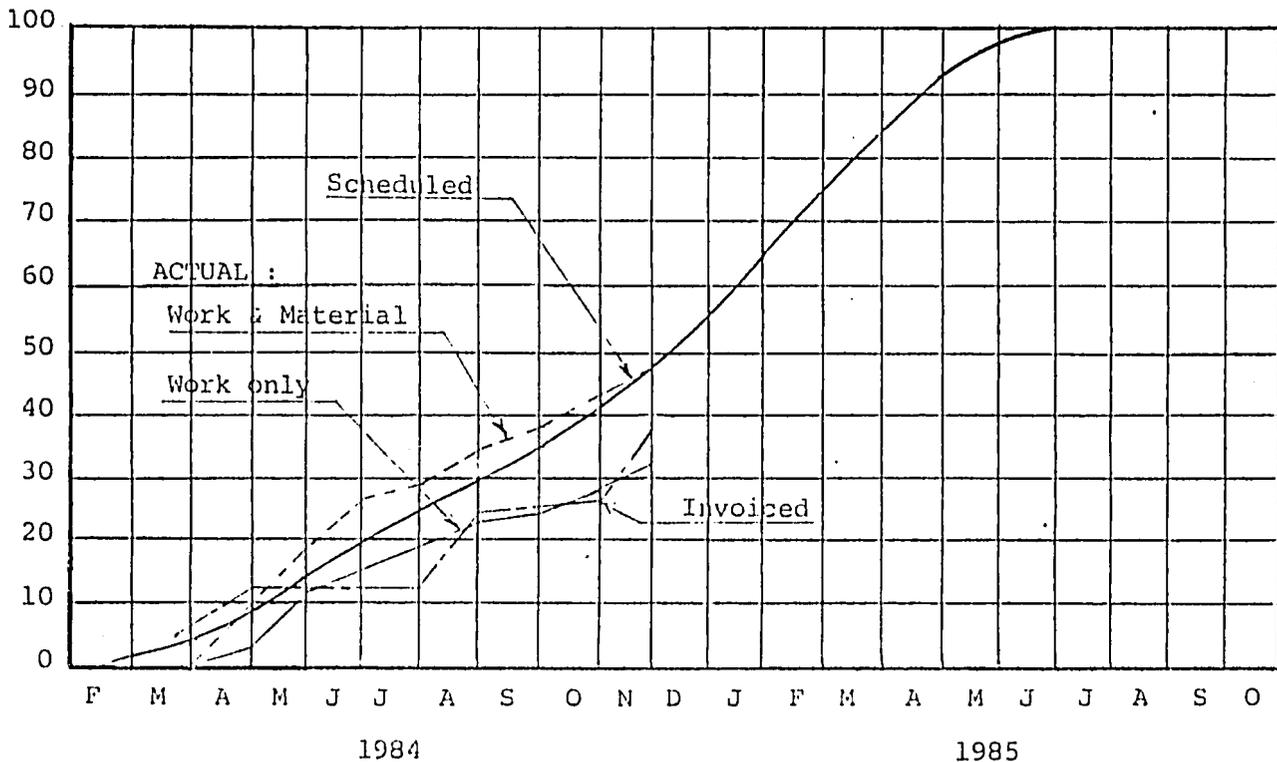
CONTRACTOR : Fazle Azim Engineers Ltd.

Total Contract Price	: Tk.1,70,67,822.35	Date of Contract	: 16.01.84
Change Order/Directives	: Tk. 17,03,243.50*	Site Handed Over	: 31.01.84
Revised Contract Price.	: Tk.1,87,71,065.85*	Notice To Proceed	: 23.02.84
L/Com No.	: 388-002409	Scheduled Completion:	30.06.85 (494)
Date of L/Com.	: 31.01.84	Elapsed Time	: 282days .57. %
Amount of L/Com.	: (\$686,398.00)		

		<u>%Completion</u>			
		<u>Scheduled</u>		<u>Actual</u>	
		<u>This</u>	<u>To Date</u>	<u>This</u>	<u>To Date</u>
		<u>Period</u>	<u>Period</u>	<u>Period</u>	<u>Period</u>
L/Com. Amendment No.1	:	7%	48%	4%	47%
Performance Guarantee	: Janata MCK/002/84 Tk.17,10,000				
CAR/PL Insurance	: DAC/CAR/P-10/84	Work	:	4%	32%
Fidelity Bond	: MCK:004:84,06.03.84 Tk.8,53,400	Material	:	-	15%

\* Pending Approval of Change Orders. Refer Page I4-3

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	4%	47%
B. Warehouse	3%	36%
C. Ancillary Buildings	9%	9%
D. Water Supply, Sanitary, Plumbing	-	3%
E. Electrical	-	-

### Activities

The contractor finished the brick wall for the eastern half of the godown. The filling under the ancillary building R1 was completed. On R2 and R3 the foundations were finished and the brick work is up to plinth level. The boundary wall construction continues. Concrete was placed at the retaining wall at the river and the excavation for further sections there is in process.

The work has slowed down apparently due to shortage of funds on the contractors part. Godown roof forming should be in process since over a month but it has not been started due to lack of material and labor. A lack of good bricks for the godown stopped the brick work there. There are not enough masons to work on the ancillary building and the boundary walls simultaneously.

The change order for the bridge over the canal along the Sen Gupta road has to be approved by BADC. The engineer submitted a retaining wall design and cost estimate to BADC and USAID.

BADC extended the completion time to 30.6.84.

### Action Required

BADC abd USAID : Approve cost estimate and retaining wall at Sen Gupta road.

### Work Schedule Next Month:

Formwork for the eastern half of the godown. Brick work of ancillary buildings R1, R2 and R3. Boundary wall and retaining wall at river to continue.

### Claims

None

### Financial

<u>Invoice No.</u>	<u>Item</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
I4-01	Material Prepayment	14,06,400.00	14,06,400.00	1249
I4-02	Material Prepayment	6,26,500.00	(-6,26,500.00) <u>1/</u>	1753
I4-03	Progress Payment	24,68,664.86	24,68,664.86	1855
I4-04	Progress Payment	18,19,286.50	18,19,286.50	0209

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
Change Order I4-03	(+) Tk.	5,39,043.50
Change Order (Bridge) (Pending)		9,07,240.00
Change Order Variation (Under Preparation)		<hr/>
Revised Estimated Contract Price		Tk. 1,87,71,065.85

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CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month November 1984

Site : Chandpur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Disapproved	Remarks/Requirements
A. Select Fill	2E.01-a	12	9	3	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	2	1	1	F.M. 2.3 to 3.1
C. Mortar Sand	4A.03	1	1	-	F.M. 1.8 to 2.8
D. Concrete Coarse Aggregate	3A.02-b.2	1	1	-	
E. Bricks: Frogmark: CBM, GCL & SBF	4A.02	20	17	3	Min. av. comp. strength is 2200 PSI
F. Field Density Tests: Select Fill	2E.01	87	54	33	95% MDD

No. of test at  
3 days 7 days 28 days

G. Concrete: Compressive Strength Test	3A.03 3A.05		25	53	
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Average 28 day strength of Concrete:

1. Godown Columns 3591 PSI (av. of 31 cylinders)
2. Godown Canopy Slab 3430 PSI ( " " 6 " )
3. Concrete Core of Godown R.B. Wall 3413 PSI ( " " 16 Cubes)

INVITATION NO. : 05-PARBATIPUR

CONTRACTOR : The Elite Engineers Ltd.

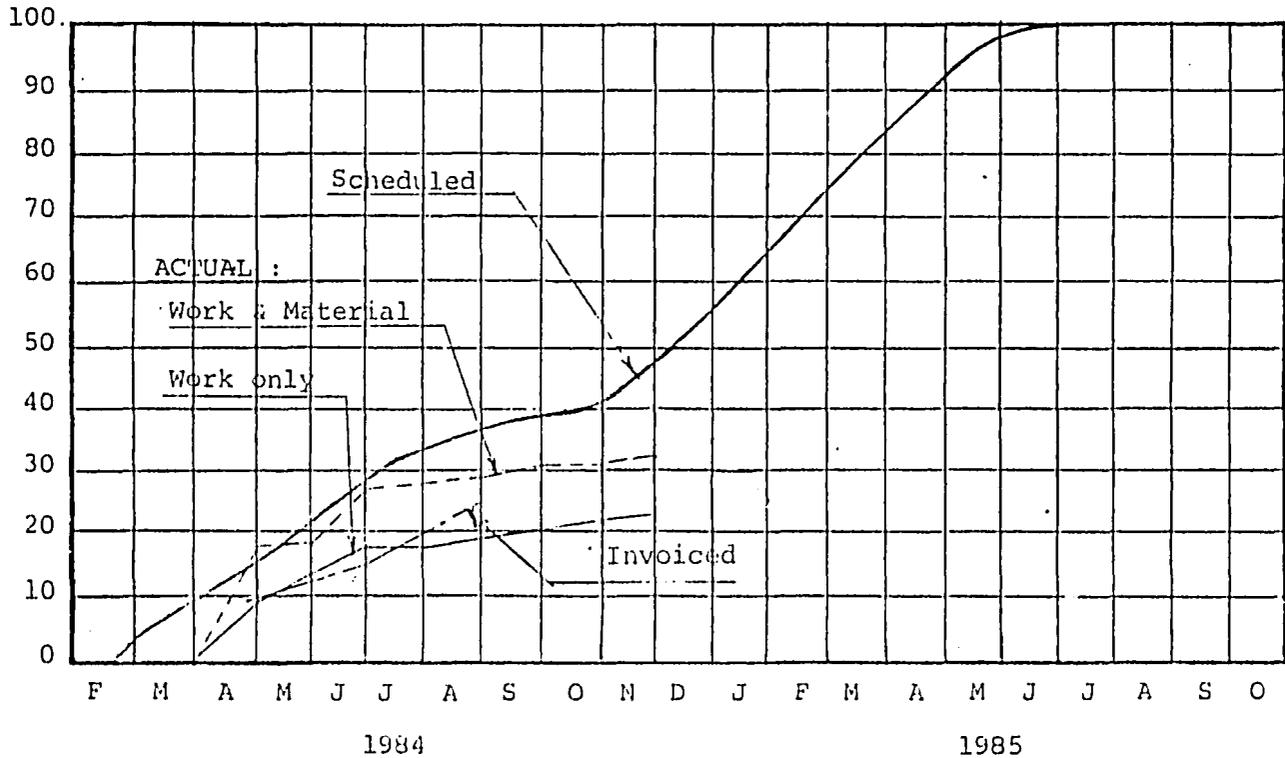
Total Contract Price : Tk.1,70,02,196.40  
 Change Order/Directives : -  
 Revised Contract Price : Tk.1,70,02,196.40  
 L/Com No. : 388-002411  
 Date of L/Com. : 31.01.84  
 Amount of L/Com. : Tk.1,70,02,196.40  
 (\$683,759.00)

Date of Contract : 12.01.84  
 Site Handed Over : 26.01.84  
 Notice To Proceed : 23.02.84  
 Scheduled Completion: 30.06.85 (494)  
 Elapsed Time : 282 days . 57 %

L/Com. Amendment No.1 :  
 Performance Guarantee : LG 84/42 BCCI  
 Tk.17,00,220  
 CAR/PL Insurance : DAC/CAR/P-11/5/84

%Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
6%	48%	2%	32%
Work	:	2%	23%
Material	:	-	9%

CONSTRUCTION PROGRESS



	<u>This Period</u>	<u>To Date</u>
A. Site Development	1%	37%
B. Warehouse	3%	3%
C. Ancillary Buildings	8%	45%
D. Water Supply, Sanitary, Plumbing	-	7%
E. Electrical	-	2%

13/2

Activities

The second half of the surcharge was released for removal on 15.11.84.

The contractor removed the surcharge from the eastern half of the godown and started the removal of the second half. 14 column footings for the godown were cast. Grade beams and godown footings are in progress. Plastering of R1 and R2 is being done. Foundations of R3 were laid and backfilled.

The progress at the site is extremely slow. A lack of brick stopped the construction of R3. Insufficient quantity of broken stones at the site slowed down the casting of godown footings. The surcharge is removed and placed onto temporary stockpiles because the Fineness Modulus is too low. It should be blended with coarser sand and placed as select fill right away but the contractor does not purchase coarse sand. There are not enough skilled workers to work at the very large boundary wall. The contractor does not seem to understand that he has to keep a couple of operations going at the same time.

BADC extended the completion time to 30.06.85.

Action Required

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

Work Scheduled for Next Month

Remove second half of surcharge and continue godown foundations and grade beams. Continue ancillary building R1. Continue work on R2 and R3 and site filling.

Claim

None

Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice (Tk)</u>	<u>Payments (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

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CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month November 1984

Site : Parbatipur

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Select Fill	2E.01-a	2	-	2	F.M. > 1.5
B. Concrete Coarse Aggregate	3A.02-b.2	5	5	-	
C. Bricks: Frogmark BBL, RV84, WB	4A.02	20	16	4	Min. av. comp. strengt 2200 PSI
D. Field Density Tests: Select Fill	2E.01	43	35	8	90% & 95% MDD
<u>No. of test at</u> <u>3 days 7 days 28 days</u>					
E. Concrete: Compressive Strength Test	3A.03 3A.05		12	12	

Average 28 day Strength of Concrete:

- |   |                               |
|---|-------------------------------|
| 1. R2 Column & Porch Beam                                       | 3436 PSI (av. of 3 cylinders) |
| 2. R2 Roof Slab & Stairway, 4th Flight                          | 3737 PSI ( " " 3 " )          |
| 3. R1 Roof Slab, Stairway 4th flight,<br>R2 Stairway 3rd flight | 3525 PSI ( " " 3 " )          |

INVITATION NO.8 : L4-DOMAR

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

Total Contract Price : Tk.74,99,255.00

Date of Contract : 12.01.84

Change Orders : Tk.

Site Handed Over : 25.01.84

Revised Contract Price : Tk.74,99,255.00

Notice To Proceed : 02.02.84

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

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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.

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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	- \$ 1,473,407
% Expenditure to Total Contract Budget	- 65.2%

PROGRESS

Elapsed Contract Time (30.11.84)	- 722 days
Remaining Contract Time (30.06.85)	- 212 days
% Elapsed Time	- 77.3%

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 - 23.74

\* 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	20.75
Klaus Thieme - Chief Construction Engineer	25	17.61
- - Foundation Engineer	11	11.17
- - Structural Engineer	6	4.91
Y.O. Kim - Project Engineer	16	8.76

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 Personnel5.1 WEL and SSL Personnel (Sub-Contractor)

<u>Designation</u>	<u>Man-Months</u>	
	<u>Allocated</u>	<u>Utilized</u>
Deputy Project Manager	27	22.7350
S&M Engineer	24	25.2728
Structural Engineer	9*	9.0388
Architect	4	3.8389
Electrical Engineer	6	6.0000
Railway Engineer	24	20.9089
Office Engineer	26	22.8656
Land Procurement Officer	24*	20.1366
Surveyor	25	20.3879
Instrument Man	25	18.5664
Rodman	25	12.8222
Chainman	25	21.0939
Draftsman*	69*	59.4025
Laboratory Technician	56	71.1432
Laboratory Assistant	56	45.1202
Estimator	48	27.8943
Senior Field Engineer	60	53.1486
Field Engineer	80	44.6931
Inspectors	128	69.8158
Drivers	94	41.9765
Messenger	34	-
Peon	34	-
Guard	68	-
Clerk	34	-
Typist	34	-

5.2 Administrative Personnel

Administrative Manager	27	23.2324
Senior Accountant	27	23.5844
Assistant Accountant	44	21.6849
Secretary	27	23.5368
Printer	27	21.9069
Typist	72	55.6054
Clerk	45	32.0015
Drivers	103	85.7091
Messenger	45	20.8160
Peon	72	62.5110
Guard	90	105.7518
Radio Operator	48	-
Office Superintendent/Asst. Accountant	34	10.3478

\* Adjusted

II. Consultant's Activities

6. Project Expenditures  
(Estimated Project Cost Incurred)

<u>Item</u>	<u>Agreement Budget</u>	<u>Adjusted Budget</u>	<u>This Month</u>	<u>Cumulative</u>
Services in Bangladesh	\$ 746,188	\$ 790,172	\$ 23,949	\$ 597,887
Services in Home Office	176,178	176,178	4,494	141,480
International Travel, etc.	85,740	85,740	2,996	32,027
Housing Allowance Per Diem etc.	91,075	102,775	1,395	70,547
Logistic Cost	223,400	223,400	4,492	105,298
Supporting Staff	382,404	387,842	13,023	222,503
Misc. Direct Costs	43,000	43,000	78	16,203
Fixed Fee	205,460	205,460	7,610	182,640
	<u>\$ 1,953,445</u>	<u>\$ 2,014,567</u>	<u>\$ 58,037</u>	<u>1,368,585</u>
Percent of Estimated Budget			2.88%	67.93%
Percent Contract Time (To 30.06.85)				77.23%
Special Project Activity	306,620	245,498	1,133	104,822
	<u>\$ 2,260,065</u>	<u>2,260,065</u>	<u>59,170</u>	<u>1,473,407</u>
	=====	=====	=====	=====

7. Billing and Payment

<u>Invoice</u>	<u>Period Ending</u>	<u>Billing</u>	<u>Payment</u>
01-19	30 Sept 84	\$ 1,305,235.83	\$ 1,293,294.62
20	31 Oct 84	\$ 55,007.64	Under Process

8. Reports

Monthly Progress Report No.23 for October 1984 submitted by letter /2505, 06 November 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 Contractors' 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.