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



AGENCY FOR INTERNATIONAL DEVELOPMENT

Grant Financed

FERTILIZER DISTRIBUTION IMPROVEMENT - I (388-0024)

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

PROGRESS REPORT NO. 21

31 AUGUST 1984



AMMANN & WHITNEY
CONSULTING ENGINEERS
NEW YORK

in association with



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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

724-4.1.1/2326
10 September 1984

Subject : Monthly Report No.21
- August 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

GAP/neh

fa


George A. Pecht
Project Manager

cc: Chairman, BADC w/encl. (1)
Member-Director (Irrri), BADC w/encl. (1)
Manager (Storage) BADC w/encl. (1)
Chief Engineer (C) BADC w/encl. (1)
Mr. David E. Warner, PO, AID/Dhaka w/encl. (6)
File 724-1.4.2 w/encl.

AMMANN & WHITNEY
Consulting Engineers

FERTILIZER WAREHOUSES - PHASE III

Monthly Progress Report No. 21
Month of August 1984

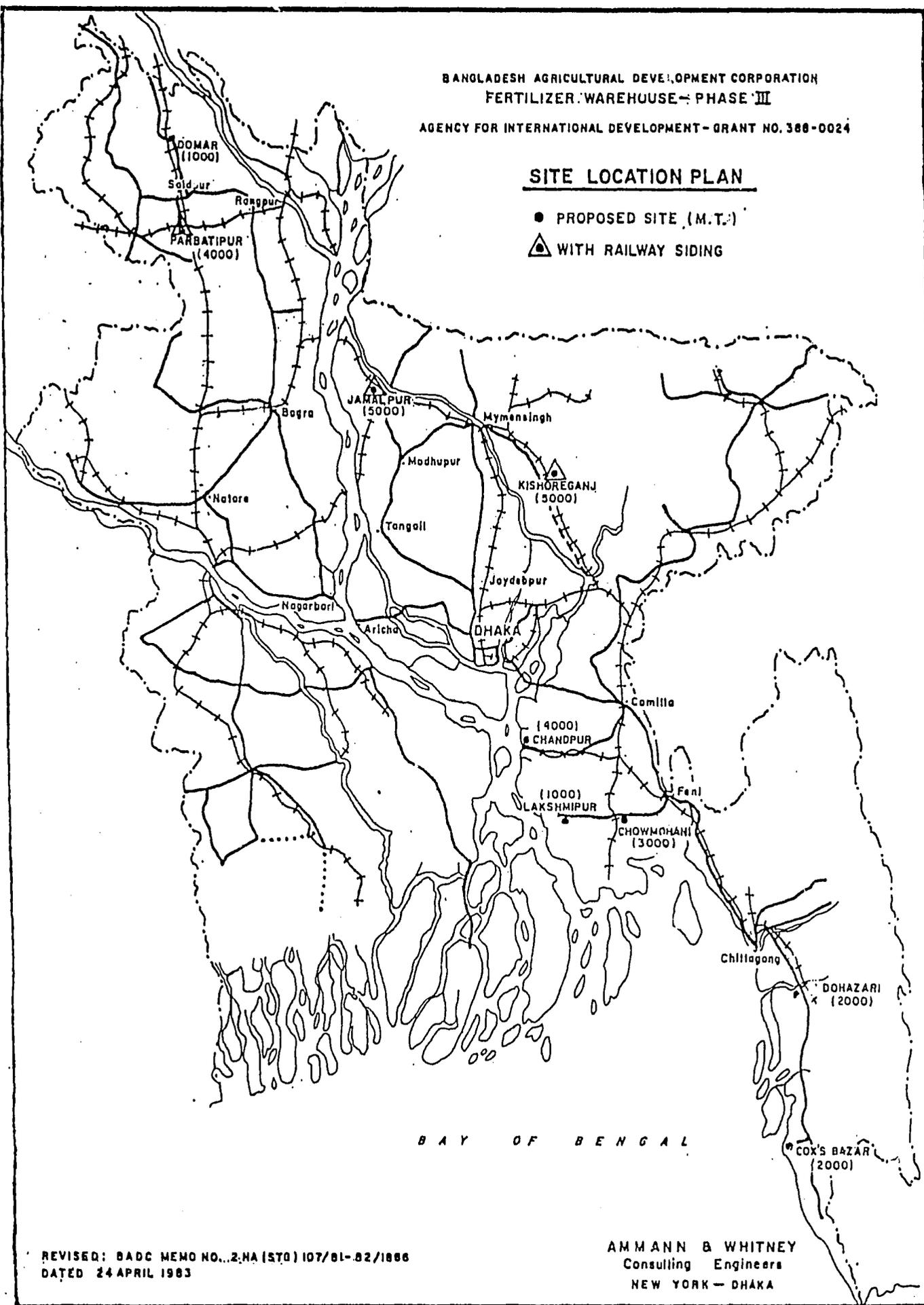
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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION
 FERTILIZER WAREHOUSE - PHASE III
 AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 388-0024

SITE LOCATION PLAN

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



REVISED: BADC MEMO NO. 2/HA (STG) 107/81-82/1986
 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)

I. CONTRACTORS' ACTIVITIES

CONSTRUCTION PHASE

1. Summary of Contractors' Activities

The progress at all sites continuous to be slowed by more rain than normal for August. At Chandpur the Meghna estuary rose to within 0.1 ft of the 30 year high water mark. Most sites were partly flooded. Obtaining or delivering fill material to sites was difficult at many jobs.

However the slow progress cannot be attributed to rain only and except for the Chandpur and Cox's Bazar sites there appears to be a lack of urgency on the part of the contractors to do the work even though they are behind the schedule.

- . Kishoreganj: The surcharge was finally finished on 11.8.84. The Contractor layed bricks on the boundary and buildings R2 and R3. The work on R2 stopped due to lack of carpenters and bar benders to do the lintel and floor slab. R3 was stopped due to lack of cement. The boundary wall coping is not done for the same reasons and for lack of angle irons at the site. Soil taken from the site is not replaced as requested and previously promised by the contractor. There is a total lack of urgency to do the work, even though the contractor is way behind schedule.
- . Jamalpur: Surcharge for the 1500 MT godown was finally completed on 25 August 1984. Placing surcharge on the 3500 MT had previously been completed on 20 July 1984. Estimated preloading time 80 days from the date of completion of surcharge filling. The Contractor paid attention to ancillary building works and completed brickwork of R2 upto first floor slab level and started formwork. First floor slab of R3 building was cast during the month. Concrete coping, placing M.S. angle and barbed wire fixing at boundary wall continued. There was activity at site during the month but not at a speed to make up time already lost.
- . Dohazari: The order for the surcharge removal was given after the anticipated 30 day surcharge period. The actual settlement was closely related to the one anticipated. The contractor filled the area for buildings R1 and R2. The foundations for R1 was then started and brought up to the plinth level. The boundary wall on the eastern side of the property was built. Boundary wall coping was placed on the north, west and south side of the existing wall. The contractor could have done more work during August. The contractor's activity during the coming month is expected to accelerate.
- . Cox's Bazar: The contractor managed to attain 33% completion for work in progress in spite of continual heavy rains. The rain here seems to have been heavier even than at other sites. The gain in work done was lower than expected. The contractor seems to have relaxed his efforts. Columns and brick walls were placed at the godown. The first floor slabs were placed for buildings R1 and R2. The completion of this project in February still seems obtainable.

. Chowmuhani: The select fill for the godown was finally finished. The surcharge is being placed but this work is done slowly. Only 25% of the surcharge was placed in 2 weeks. The rain has been a negative factor but the main reason for the slow progress is the disability of the contractor to obtain surcharge material in adequate quantities. Since the site is under water no other work could be done. There remains a lack of urgency on the contractor's part to speed up his operation.

. Lakshmipur:

Again this month the performance of Technocon Limited is less than satisfactory in all respects. Bricks were rejected at the site but no bricks meeting the specs were brought to the site. Fill material of the godown had to be replaced since the fineness ratio was not met. This operation was hampered by heavy rains and standing water of the site. Reinforced concrete columns were placed at the godown but walls and fill operations are near a stand still. Even at the Darwan's Quarter (a one story addition only) the work is delayed by the fact that the door frames are not made from seasoned and dry timber as specified and can not be installed. Theoretically the completion date can be met if effort and good management could only be applied by the contractor.

Chandpur: The Contractor made good progress in the godown construction and cast the third lifts of all exterior columns. All interior column footings were cast during the month and the contractor started pouring the first lift of the interior columns. Masonry wall work continued simultaneously but at a slow pace.

Fazle Azim Engineers Limited could not start work on the R1 building due to heavy rain and the high ground water level.

During the month the contractor collected sufficient quantities of bricks, boulders and filling sand.

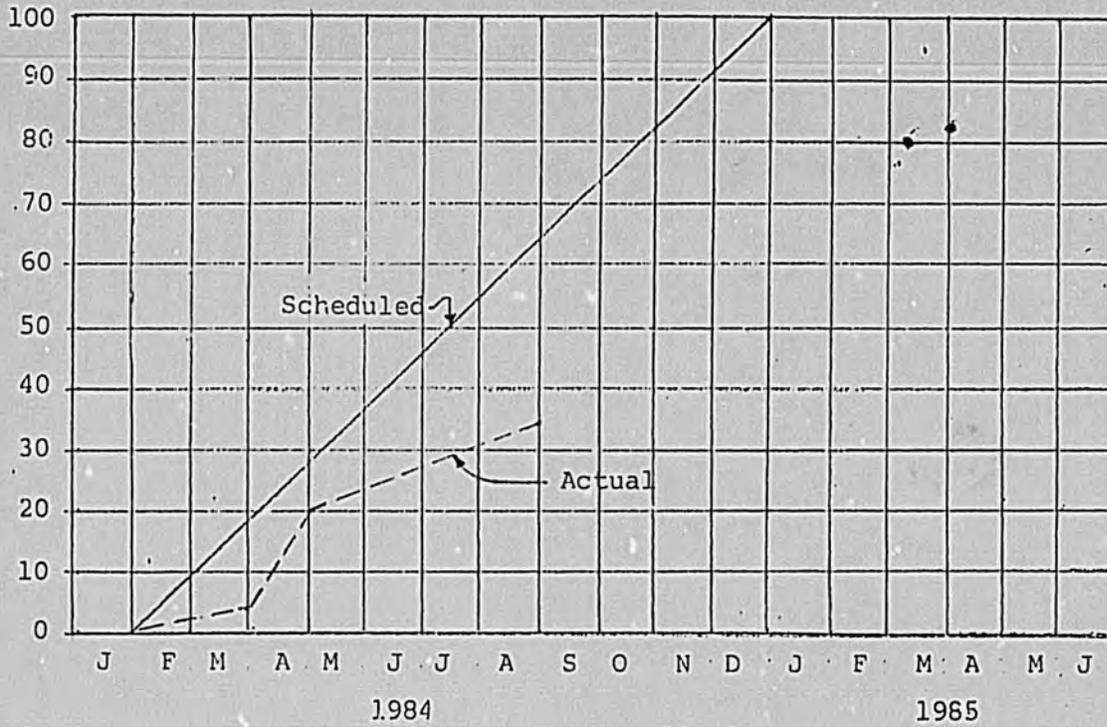
The outstanding issues described in July 1984 progress report are in the process of being resolved.

Parbatipur: The progress of this project was further delayed not only by bad management and rain which continued to hamper the job but by the closure of the road to the site by the Municipality for 8 days. The contractor's rate of collection of materials for use as surcharge was unsatisfactory. He could place only 50% surcharge in two months (July and August) with 90 days of preloading time the completion of the surcharge is very critical for this site. However some signs of work was seen in R1 and R2 buildings when the first floor slabs of R1 and R2 were cast during the month and the brickwork started on the first floor. 500 feet of boundary wall brickwork was done previously but no steps were taken to place coping, M.S. angle and barbed wire over it. There is a total lack of urgency to do the work at the site even though the contractor is way behind schedule.

Contractor's ActivitiesCONSTRUCTION
CONTRACT AND FINANCIAL SUMMARY

<u>Invitation No.</u>	<u>Site</u>	<u>Contractor</u>	<u>Contractor Amount (Tk)</u>	<u>Last Invoice No.</u>	<u>Accumulated Amount (Tk)</u>	<u>Accumulated Payments (Tk)</u>
1	B1-Kishoreganj	National Construction & Consult Limited	1,98,40,012.82	B1-1	21,57,900.00	21,57,900.00
2	C3-Jamalpur	Mostafa Brothers (Pvt) Ltd.	1,76,94,451.01	C3-02	40,77,252.23	20,77,252.23
3	F1-Dohazari	Eastern Engineers Consortium Limited	1,55,48,978.95	F1-02	38,86,789.83	38,86,790.10
4	F3-Cox's Bazar	Builders The East Ltd.	99,64,470.85	F3-01	29,70,416.94	29,40,711.36
I-4 5	H2-Chowmuhani	Technocon Limited	1,41,20,342.60	H2-01	48,07,208.16	48,07,208.16
6	H3-Lakshmipur	Technocon Limited	55,91,275.35	H3-02	19,88,767.68	19,88,767.68
7	I4-Chandpur	Fazle Azim Engrs. Ltd.	1,70,67,822.35	I4-03	47,28,455.98	22,59,791.12
9	O5-Parbatipur	Elite Engineers Ltd.	1,70,02,196.40	O5-02	43,58,496.72	43,57,821.71
		Total	Tk.11,68,29,550.33		289,75,287.54	264,76,232.36
			(\$ 4,697,609.58)		24.8%	
8	L4-Domar	M.S. Khan & Heirs Ltd.	74,99,255.58			Contract Terminated.

CONSTRUCTION PROGRESS - ALL SITES



																		Weighted Percent	Project % Complt.
Kishcreganj	8	18	27	36	45	54	63	72	82	91	100							16.97	4.8
	0	1	20	20	20	26	28												
Jamalpur	8	18	27	36	45	54	63	72	82	91	100							15.15	4.7
	0	2	18	19	21	25	31												
Dohazari	8	18	27	36	45	54	63	72	82	91	100							13.31	4.5
	0	1	21	24	32	32	34												
Cox's Bazar	2	12	22	32	41	51	61	71	80	90	100							8.53	3.5
	0	1	27	37	42	36	41												
Chowmuhani	2	12	22	32	41	51	61	71	80	90	100							12.09	4.8
	0	1	13	18	33	33	34												
Lakshmipur	2	12	22	32	41	51	61	71	80	90	100							4.79	2.1
	0	8	30	36	39	39	43												
Chandpur	2	12	22	32	41	51	61	71	80	90	100							14.61	5.0
	0	1	11	18	26	29	34												
Parbatipur	2	12	22	32	41	51	61	71	80	90	100							14.55	4.8
	0	1	17	17	31	32	33												
Total																		34.2	
Last Month																		30.4	

CONSTRUCTION PERCENT COMPLETION

Site	- A - SITE DEVELOPMENT	- B - WAREHOUSE	- C - ANCILLARY BUILDINGS	- D - WATER SUPPLY SANITARY	- E - ELECTRICAL	TOTAL	
Kishoreganj	60%	0%	8%	2%	0%	22%	3.7%
Jamalpur	48%	0%	16%	4%	0%	18%	2.7%
Dohazari	58%	0%	3%	3%	0%	25%	3.3%
Cox's Bazar	55%	22%	33%	13%	0%	33%	2.8%
Chowmuhani	47%	0%	0%	5%	0%	18%	2.2%
Lakshmipur	34%	20%	72%	8%	6%	28%	1.3%
Chandpur	38%	25%	0%	3%	0%	23%	3.4%
Parbatipur	44%	0%	22%	3%	0%	23%	3.3%

Overall Project Completion (Work Items Only) =

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31 August, 1984

INVITATION NO.1 : B1-KISHOREGANJ

CONTRACTOR : National Construction & Consult Ltd.

Total Contract Price	: Tk. 1,98,40,012.82	Date of Contract	: 16.01.84
Change Order	: Tk. -	Site Handed Over	: 29.01.84
Revised Contract Price	: Tk. 1,98,40,012.82	Notice To Proceed	: 02.02.84
Payments To Date	: Tk. 21,57,900.00	Scheduled Completion	: 31.12.84 (333)
Retention To Date	: Tk. -	Elapsed Time	: <u>212</u> days <u>64</u> %
L/Com. No.	: 388-002403	<u>% Completion</u>	
Date of L/Com.	: 31.01.84	Scheduled Actual	
Issue Date of L/Com.	: 02.02.84	This	This
Amount of L/Com.	: Tk. 1,98,40,012.82	Period	Period
	(\$797,885.00)	To Date	To Date
L/Com. Amendment No.1	: 13.02.84	10%	64 %
Performance Guarantee	: BCCI LG 84/75	Work	: 2%
	Tk.19,84,002	Material	: -
CAR/PL Insurance	: DAC/CAR/P-09/4/84		28 %
	30.04.84		22%
			6%

1.0 Site Key Personnel

Engineer	: Senior Field Engineer	- A.O. Khan
	Field Engineer	- A.H. Nazrul Islam
	Inspector	- Zulfikar Ali
	Ass. Technician	- Kamrul Hossain
Contractor	: Site Engineer	- Faizur Rahman
	SAE	- Abdul Zabbar
		Nur Mohammad
		Mostafa Kamal

2.0 Contractor's ActivitiesThis Period To date

The notable activity of the Contractor during the month was the completion of the surcharge filling on 11 August 1984. Brickwork of R3 building continued at a very slow rate and was completed upto ground floor lintel level. Foundation concrete for R2 building was placed on 20 August 1984 and brickwork done upto plinth level. Brickwork of boundary wall continued. After a long gap the contractor collected some bricks and was able to start brickwork of ancillary buildings and boundary wall.

A. Site Development	4%	60%
A1 Mobilization and Demobilization	2%	88%
A2 Preparation of Site	1%	100%
A4 Excavation	-	95%
A6 Filling with Imported Material (Select Fill) (Refer to Variation)	-	91%
A10 Boundary Wall - Type A	30%	45%
A21 Surcharge For Preloading	9%	100%

C. Ancillary Buildings	5%	8%
R2:		
C1 Brick Flat Soling	15%	15%
C2 Plain Concrete	16%	16%
C3 Brickwork in Foundation	18%	18%
R3:		
C1 Brick Flat Soling	15%	15%
C2 Plain Concrete	16%	30%
C3 Brickwork in Foundation	40%	62%
C4 DPC	32%	32%
C5 Brickwork above P.L.	10%	10%
D. Water Supply, Sanitary and Plumbing	-	2%
D7 Inspection Pit	-	20%
D8 Septic Tank	-	30%
D9 Soal Well	-	30%

2.1 Approved Materials On-Site

Portland Cement	-	-
Reinforcing Steel, Deformed	-	70 ton
Bricks, 1st Class	-	35,000 nos.
Boulders	-	8,000 cft
Sand, Coarse	-	1,000 cft
Sand, Fine (For Filling)	-	1,000 cft

2.2 Major Equipment On-Site

- 1- Concrete Mixer
- 2- Water Pump

3.0 Problems and Delays

- . Railway has agreed to hand over 0.62 acre of land to BADC. Require demarcation of the land by railway estate office. Boundary wall work pending along railway land.
- . Abandoned railway siding track to old Sugar Mill to be removed by BR.

4.0 Action Required

- BADC :
- . Finalize location of right-of-way with BR (/1610, 15.04)
 - . Follow-up with BR for removal of abandoned railroad ties and track.
 - . Approve insurance policy (/1752, 12.05)
 - . Obtain incomin power line
 - . Action on claim for time extension (/1840, 21.05)

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4.0 Action Required - cont'd

- Contractor : To arrange sufficient labour, material including formwork to expedite work.
- . Update construction schedule
 - . Comply with insurance warranty concerning fire fighting

5.0 Claims

Contractor submitted seven claims for various alleged difficulties. The Engineer has requested the Contractor to furnish particulars to substantiate two of his claims (Nos.3 and 7) and has made his decision on the remaining five.

6.0 Work Scheduled Next Month

- . Filling around and inside ancillary buildings
- . Continue work on buildings R2 and R3.
- . Continue work on boundary walls.
- . Start select fill for approach road.
- . Prepare forms and reinforcing for godown
- . Replace soils taken from site for surcharge

7.0 DELETED

8.0 Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice</u>	<u>Payment</u>	<u>USAID Voucher No.</u>
NCC-01/84	Material Prepayment	Tk.21,57,900	Tk.21,57,900	1451

9.0 General

Even though the contractor is way behind schedule he has no skilled workers on the job to form the slab for building R3 or the coping for the long boundary wall in place. No bar benders are on site for the above purpose, nor is there any cement at site. There is a total lack of urgency on the contractor's part.

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase-III

For the month August 1984

Site : B1-Kishoreganj

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Disapproved	Remarks/Requirement
A. Select Fill	2E.01-a	8	8	-	F.M. > 1.5
B. Concrete Sand	3A.02-b.1	1	-	1	
C. Mortar Sand	4A.03	3	3	-	
D. Bricks: Frogmark: GMB	4A.02	10	9	1	
E. Cement	3A.02-a	3	-	2	Five flag and Padang brand disapproved. Rebar brand approved.
F. Surcharge Field Wet density		7			
G. Concrete: Compressive Strength Test	3A.03 3A.05	10	13	9	

Average 28 day Strength of Concrete:

1. Mix design (Tong Yong cement) - 3103 PSI (av. of 9 cylinder)

INVITATION NO. : C3-JAMALPUR

CONTRACTOR : Mostafa Brothers (Pvt) Ltd.
 Total Contract Price : Tk. 1,76,94,451.01
 Change Order : Tk.
 Revised Contract Price : Tk. 1,76,94,451.01
 Payments To Date : Tk. 40,77,252.23
 Retention To Date : Tk. 1,86,051.47
 L/Com. No. : 388-002404
 Date of L/Com. : 31.01.84
 Issue Date of L/Com. : 02.02.84
 Amount of L/Com. : Tk. 1,76,94,451.01
 (\$711,599.00)
 L/Com. Amendment No.1 : 13.02.84
 Performance Guarantee : Indosuez PB/TK/010
 Tk.17,69,446
 Insurance: CAR/PL : DAC/CAR/P-8/4/84
 Fidelity Bond : Indosuez PG/TK/018
 Tk.8,84,720

Date of Contract : 12.01.84
 Site Handed Over : 19.01.84
 Notice To Proceed : 02.02.84
 Scheduled Completion : 31.12.85
 Elapsed Time: 212 days 64 %

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
10%	64%	6%	31%
	Work	2%	18%
	Material	4%	13%

1.0 Key Site Personnel

Engineer	: Senior Field Engineer	- A.O. Khan
	Field Engineer	- Mostahar Ali
	Inspector	- Sikander Ali
	Technician	- A. Rashid
Contractor	: Project Director	- A.B.M. Siddique Rahman
	Field Engineer	- Md. Atikulla

2.0 Contractor's Activities

	<u>This Period</u>	<u>To date</u>
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The Contractor finished the surcharge for the 1500 T godown on 25.8.84. He worked on the R2 and R3 building and on the boundary wall and makes preparation for the casting of the godown foundation.

A. Site Development	1%	48%
A1 Mobilization and Demobilization	6%	97%
A2 Preparation of Site	-	98%
A4 Excavation	-	80%
A6 Filling with Imported Material (Select Fill)	3%	91%
A10 Boundary Wall - Type A	16%	66%
A21 Surcharge For Preloading	13%	100%
C. Ancillary Buildings	6%	16%
R1: No work to date		
R2:		
C1 Brick Flat Soling	-	40%
C2 Plain Concrete including concrete floor slab	-	39%
C3 Brickwork in foundation	-	100%
C4 Damp-proof Course	-	100%
C5 Brickwork above P.L.	5%	40%

C. Ancillary Buildings - cont'd.

R3:

C1	—	43%
C2	—	46%
C3	—	100%
C4	—	100%
C5	3%	40%
C6 Reinforced Concrete	37%	37%
C9 Reinforcing steel	47%	47%

D. Water Supply, Sanitary

D6 R.C.C. Sewer Pipe	—	16%
D8 Septic Tank, Type B	—	33%
D9 Soak Well	—	16%

E. Electrical

E1 3/4" Ø Conduit	7%	7%
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2.1 Approved Materials On-Site

Portland Cement	- 20T
Reinforcing Steel, Deformed	- 107 T
Bricks, 1st Class	- 4,65,000 nos.
Boulders	- 3,400 cft
Sand, Coarse	- 20,500 cft
Sand, Fine (For Filling)	- 25,000 cft

2.2 Major Equipment On-Site

- 2- Water Pump (1-electrical; 1-diesel)
- 2- Concrete Mixer
- 2- Vibrator

3.0 Problems and Delays

Railway land not officially handed over to BADC.

4.0 Action Required

- BADC
 - . Process obtaining incoming power line
 - . Approve insurance policy
 - . Action on claim for time extension C3-1
 - . Take over land from BR for railway siding.
- Contractor
 - . Submit construction photographs
 - . Update construction schedule

5.0 Claims

- .Claim for time extension MBL/FWH-AID/84/405, 15.04.84.
- .Claim for disturbance by local people
- .Claim for time extension due to Hartal.

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6.0 Work Scheduled Next Month

Refer to contractor's work schedule submitted for September.

7.0 DELETED

8.0 Financial

<u>Invoice</u>	<u>Item</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 Prepayment	13,27,696.00	13,27,696.00	1226
C3-02	Progress Payment	18,64,836.23	18,64,836.23	1607
		<u>Tk.40,77,252.23</u>		

9.0 General

A requested breakdown for items claimed as stolen during riot has not yet been prepared by the contractor while another wildly inflated claim (for 4 weeks lost) due to Hartal was filed by him.

10.0 Variation (Overrun or Underrun)

Total contract amount	Tk. 1,76,94,451.00
A10 Boundary Wall Type A	Tk. <u>1,13,400.00</u>
Revised Estimated Total Contract Price	Tk. 1,77,81,051.00

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase-III

For the month August 1984

Site : C3-Jamalpur

Material/Test	Spec. No.	No. of Tests	No. of test at			Remarks/Requirements
			3-days	7-days	28-days	
A. Select Fill	2E.01-a	1	1	-	-	F.H. > 1.5
B. Concrete Coarse Aggregate	3A.02-b.2	4	2	2	-	
C. Cement	3A.02-a	1	1	-	-	Brand Name: Rebar
D. Surcharge Field Wet density		11				Av. unit wt. of sand is 112 pcf.
E. Concrete: Compressive Strength Test	3A.03 3A.05	2	10	3		

Average 28 day Strength of Concrete:

1. Boundary Wall Foundation (East Side) - 3515 PSI (av. of 3 cylinders)

SCHEDULE OF EVENTS

Period from 1-9-84 to 30-9-84.

MOSTAFA BROTHERS (PVT) LTD
271/1, Elephant Road,
1st fl. Dhaka. -5

Project : WAREHOUSE PHASE - III
INVITATION NO. - 2
SITE LOCATION : C₃ - JAMALPUR

Work of item : Site Development , Warehouse, Ancillary Building , Sanitary & Lrbbing etc.

Item No.	Description of works	Time Estimate	Schedule		Actual		Remarks
			Start / Finish	Start / Finish	Start / Finish	Start / Finish	
<i>Spec</i>							
<i>N2</i> Site development							
A1	1A Mobilisation & Demobilisation : (a) ENGINEERS FIELD OFFICE (a) Replacement of Air cooler 1 No.	3 days	1.9.84 / 3.9.84	-			
	(b) Electric Fittings (light) Shawash & Crescent	3 days	4.9.84 / 6.9.84	-			
A11	21 BOUNDARY WALL	1150 rft has been completed					572 Rft of Eastern site cannot be taken layout due to disputed land 3 days Holiday for Eidul AZha.
A12	2L Entrance Gate (Back side)	15 days	1.9.84 / 18.9.84	-			
A15	2V Guard House	Lay out of all the buildings has not yet been finalised.					
A16	2W Public Toilet						
A17	2X Tally Office						
D3	15D Pump House						
<u>WAREHOUSE</u>							
Preparation and making of form work for column base (Exterior, Corner & middle. Preparation of making form work for Column : Exterior Corner - 4, Middle - 4, Interior - 3 & Gate - 2							
		7 days	9.9.84 / 15.9.84	-			

Spec
No

Spec
No

B11

3A Fabrication of Reinforcing Steel
for column footing & Gradebeam of
3500 MT Warehouse

27 days

1.9.84 / 30.9.84 -

3 days Eid Holiday

ANCILLARY BUILDINGS

C5

4A Brick work above plinth level R₃
1st floor upto lintel

12 days

1.9.84 / 15.9.84

"

4A - do - R₂

11 days

9.9.84 / 20.9.84

"

4A Brick work above lintel R₃

5 days

20.9.84 / 25.9.84

"

4A -do - R₂

5 days

25.9.84 / 30.9.84

C9

3A Reinforcing steel Deformed
Bars for lintel R₃

3 days

16.9.84 / 18.9.84

"

3A - do - R₂

3 days

21.9.84 / 23.9.84

C6

3A Rein forced Concrete R₃

1 days

19.9.84 -

"

3A - do - R₂

1 days

23.9.84 -

C10

6A Wooden Door Frames Collection
R1 + R2 + R3 Buildings

22 days

9.9.84 / 30.9.84

C11

6A Wooden Door Shutters
R1 + R2 + R3 "

22 days

9.9.84 / 30.9.84

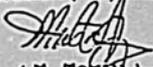
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COLLECTION OF MATERIALS

1. Bricks 1st class	-	3 Lac
2. Boulders	-	10,000 cft
3. Coarse Sand	-	3,000 cft
4. Steel Form for different types of column & Beams	-	15 columns 2 grade Beam
5. Wooden Form	-	200 cft
6. Wooden Frame & Shutters	-	275 cft.

This programme will remain valid if nature permits and the progress payment made well in time.

for Mostafa Brothers (Pvt.) Ltd.


(M. Mostafa)
Managing Director

4/9/8

10

TOTAL PERCENT SITEWISE PROJECT COMPLETION

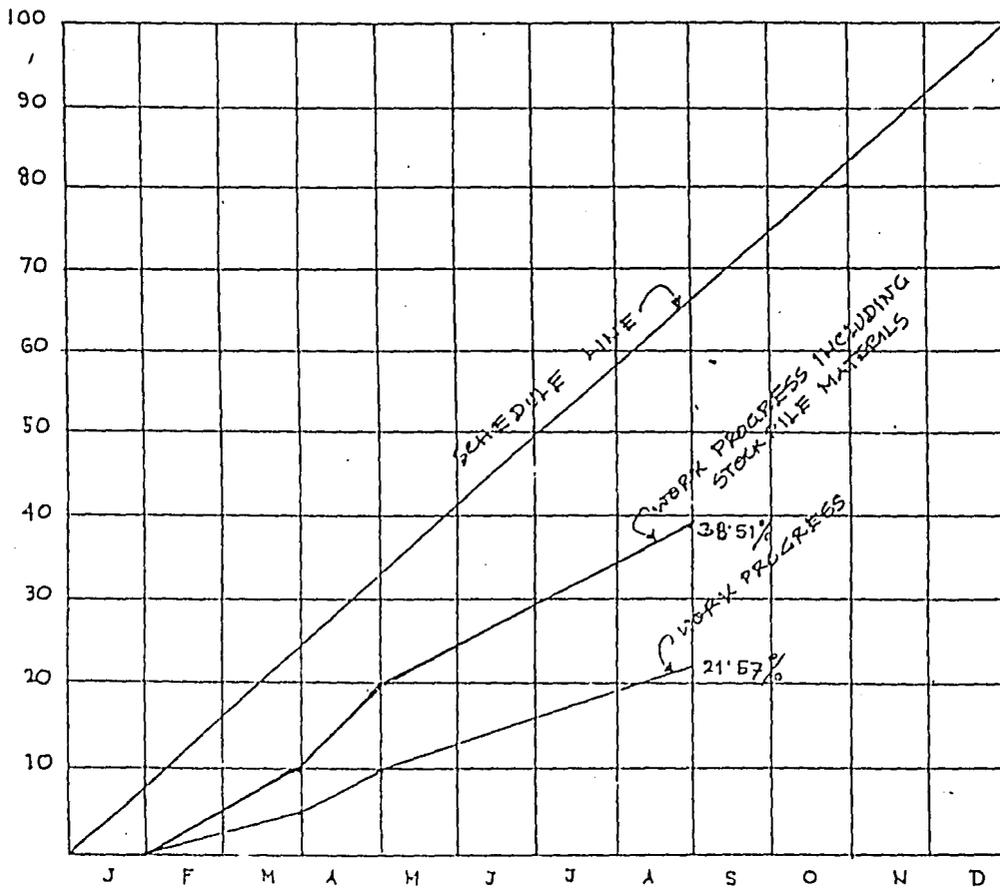
Contractor

Month Ending AUGUST 1984

Invitation No. :

Site Location :

<u>Schedule</u> (1)	<u>Description</u> (2)	<u>Weighted</u> <u>Percent</u> (3)	<u>Percent</u> <u>Completed</u> (4)	<u>To Date</u> <u>Completion</u> (5)
A	Site Development.	31'14	52'41	16'32
B	Warehouse.	45'02	-	-
C	Ancillary Buildings.	14'29	30'26	4'32
D	Water supply, sanitary and Plumbing.	5'43	3'96	0'21
E	Electrical.	4'12	17'48	0'72
Total % Sitewise Project Completion		100.00		21'57



1. WORK PROGRESS : 21.57%
2. WORK PROGRESS INCLUDING STOCK PILE MATERIALS : 38.51%

31 August 1984

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 Orders	: Tk. -	Site Handed Over	: 26.01.84																				
Revised Contract Price	: Tk. 1,55,48,978.95	Notice To Proceed	: 02.02.84																				
Payments To Date	: Tk. 38,86,780.10	Scheduled Completion	: 31.12.84 (333)																				
Retention To Date	: Tk. 1,86,051.47	Elapsed Time	: <u>211</u> days <u>63</u> %																				
L/Com. No.	: 388-002405	<u>% Completion</u>																					
Date of L/Com.	: 31.01.84	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;">Scheduled</th> <th colspan="2" style="text-align: center;">Actual</th> </tr> <tr> <th style="text-align: center;">This Period</th> <th style="text-align: center;">To Date</th> <th style="text-align: center;">This Period</th> <th style="text-align: center;">To Date</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">9 %</td> <td style="text-align: center;">63 %</td> <td style="text-align: center;">0 %</td> <td style="text-align: center;">34 %</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">Work</td> <td style="text-align: center;">: 2%</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">Material</td> <td style="text-align: center;">: - 9%</td> </tr> </tbody> </table>		Scheduled		Actual		This Period	To Date	This Period	To Date	9 %	63 %	0 %	34 %			Work	: 2%			Material	: - 9%
Scheduled		Actual																					
This Period	To Date	This Period	To Date																				
9 %	63 %	0 %	34 %																				
		Work	: 2%																				
		Material	: - 9%																				
Issue Date of L/Com.	: 02.02.84																						
Amount of L/Com.	: Tk. 1,55,48,978.95 (\$625,317.00)																						
L/Com. Amendment No.1	: 13.02.84																						
Performance Guarantee	: Agrani 001/84 Tk.15,54,900																						
Insurance	:																						

1.0 Key Site Personnel

<p>Engineer</p> <p>Contractor</p>	<p>: Project Engineer</p> <p>Field Engineer</p> <p>Technician</p> <p>Inspector</p> <p>? Project Engineer</p> <p>Site Manager</p> <p>Site Supervisor</p> <p>Site Supervisor</p> <p>Site Supervisor</p> <p>Asst. Technician</p>	<p>- Y.O. Kim</p> <p>- Shahid Uddin Ahmed</p> <p>- Meer Khurshid Ali</p> <p>- Amirul Islam</p> <p>- Khondakar Anwar Hossain</p> <p>- Afzal Hossain Khan</p> <p>- Abdul Jalil</p> <p>- Motahar Hossain</p> <p>- Hossainuddin Ahmed</p> <p>- Rezaul Karim Salim</p>
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2.0 Contractor's ActivitiesThis Period To Date

The Contractor was informed to remove the surcharge after the 30-day period specified at the end of this month since the actual settlement closely relates to the one anticipated in the soil report.

The Contractor prepared footing forms and rebars for the godown foundation.

Select fill was placed under building R1 and its foundation built upto plinth level.

The construction of the boundary wall continued.

A. Site Development. (Adjusted % due to variations)	8 %	58%
A1 Mobilization & Demobilization	2%	86%
Completed: Engineer's Field Office, temporary access road, electrical & water, labor shed, labor toilet, cement storage, contractor's temporary office. Mobilization of equipment.		
A2 Preparation of Site	-	95%

A4 Excavation (60,890 cft)	2%	78%
. Topsoil excavation completed except river acces.		
A6 Filling with Imported Materials (Select Fill)	17%	75%
A10 Boundary Wall, Type A	19%	65%
A21 Surcharge For Preloading		100%
 C. Ancillary Buildings	3%	3%
C1 Brick Flat Soling	12%	12%
C2 Plain Concrete	11%	11%
C3 Brick Work in Foundation	25%	25%
C4 Damp Proof Course	28%	28%
C6 Reinforced Concrete	2%	2%
C9 Reinforcing Steel	2%	2%
 D. Water Supply, Sanitary and Plumbing	-	3%
D8 Septic Tank	-	1
D9 Soak Well	-	1

2.1 Approved Materials On-Site

- Portland Cement - 35 bags
- Reinforcing Steel, Defórméd - 60 ton
- Bricks, 1st Class - 2,10,000 nos.
- Boulders - 4,450 cft
- Sand, Coarse - 860 cft
- Sand, Fine (For Filling) - 20,000 cft

2.2 Major Equipment On-Site

- 1- Bulldozer (not operable)
- 2- Pumps
- 1- Concrete Mixer (7.5 cft)
- 2- Vibrators
- 1- Tire Roller

3.0 Problems and Delays

Not enough workers at site.

4.0 Actions Required

- BADC : . Take action to obtain incoming power line.
- . Take action on Amendment No.F1-1, Contract Time Extension.
- . Take action on approval of insurance policy.

- Contractor : . Submit time vs. completion curve with break-up calculations.
- . Comply with insurance warranty concerning fire fighting.
- . Update construction schedule.

5.0 Claims

Time extension due to late receipt of Notice To Proceed and land problems.

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6.0 Work Scheduled Next Month

Refer contractor's schedule submitted for September.

7.0 DELETED

8.0 Financial

<u>Invoice No.</u>	<u>Item</u>	<u>Amount Invoice</u>	<u>Payment</u>	<u>USAID Vr. No.</u>
F1-01	Material Prepayment	Tk.27,15,000	Tk.27,15,000	1281
F1-02	Progress Payment	Tk.11,71,789.83	Tk.11,71,780	1853

9.0 General

The total settlement on 29.8.84 was:

at the center 0.73'

at the corners 0.58' to 0.47'

close enough to the values of the soil report to allow the removal of the surcharge.

10.0 Variation (Overruns and Underruns)

Estimated Total Contract Price	Tk. 1,55,48,978.95
A3 Excavation To Waste	(- 1,06,874.50)
A4 Excavation	(- 89,830.87)
A6 Filling with Imported Material (Select)	(- 10,86,002.50)
Revised Total Contract Price	Tk. 1,42,66,271.08
A21 Surcharge For Preloading (REVISED)	
Original Quantity	1,22,650 cft
Estimated Quantity	1,14,950 cft
Amount Variation	7,700 cft
Percent Variation	6.3%
Cost Decrease	(- 46,970.00)
Revised Total Contract Price	Tk. 1,42,19,301.08

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month August 1984

Site : F1-Dohazari

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- approved	Remarks/Requirement
A. Select Fill	2E.01-a	2	2	-	Min. F.M. > 1.5
B. Concrete Sand	3A.02-b.1	1	1	-	
C. Mortar Sand	4A.03	1	1	-	
D. Concrete Coarse Aggregate	3A.02-b.2	3	2	1	
E. Bricks: Frogmark:	4A.02				
F. Field Density Tests: Select Fill	2E.01	65	61	4	90% & 95% MDD
G. Surcharge Field Wet density		4	-	-	Av. unit wt. 98.09 pcf

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

H. Concrete: Compressive Strength Test	3A.03 3A.05		8	3	
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Average 28 day Strength of Concrete:

1. South side boundary wall foundation 3413 PSI (av. of 3 cylinders)

CONTRACTOR'S MONTHLY REPORT
FERTILIZER WAREHOUSES - PHASE-III 31st August, 1984
 Month Ending

INVITATION NO. 3 : SITE: DOHAZARI-F1 CONTRACTOR: THE EASTERN ENGINEERS CONSORTIUM LTD.

I. GENERAL STATEMENT OF PROGRESS:

Boundary Wall: North and West side boundary wall is complete except barbed wire fixing. South side boundary wall brick work is complete. 100'-0" copping with M.S. angle fixing is also complete w in the South side boundary wall. 258'-8" brick works including 100'-0" copping casting with M.S. Angle fixing have been completed in the East side boundary line.

SELECT FILLS: During the month 22,000 cft of select fills have been compacted in the R-1 building area, addition of which becomes 3,62,000 cft of compacted select fills upto date.

PRE-LOADING SURCHARGE: On the 30th August, 1984 30 days pre-loading period was complete.

ANCILLARY BUILDINGS (R-1 and R-2): Brick works upto D.L. including D.P.C. of R-1 building have been completed. All the columns of R-1 building have been casted upto 5'-0" above P.L. Foundation trench back filling of R-1 building is also complete. Select fill is in progress in the R-2 building area.

II. FINANCIAL: AMOUNT INVOICE TO DATE

PAYMENTS TO DATE

III. MANPOWER:

1. Engineer	1 No. ' 9 hours	8. Welder	2 Nos.	} 9 hrs } 10 hrs
2. Manager	1 No. ' work.	9. Carpenter	3 Nos.	
3. Supervisor	3 Nos. ' 1	10. Bar binder	3 Nos.	
4. Lab. technician	1 No. ' 1	11. Mason with helper	16 Nos.	
5. Storeman	1 No. ' 1	12. Security guard	4 Nos.	
6. Mechanic	1 No. ' 1	13. Painter	1 No.	
7. Electrician	1 No. ' 1	14. Daily labour	1122 Nos.	

IV. EQUIPMENT:

1. Bull dozer(operable) - 1 No.	6. Cylinder mold	5 Nos.	
2. Water pump	2 Nos.	7. Sand cone apparatus (One set)	
3. Concrete Mixture machine	1 No.	8. Slump cone apparatus(One set)	
4. Vibrator	1 No.	9. Welding machine	1 No.
5. Survey instruments		10. Balance	

V. MATERIALS: LOCAL SAND | COARSE SAND | CEMENT | BRICKS | BOULDER | REBAR

	LOCAL SAND	COARSE SAND	CEMENT	BRICKS	BOULDER	REBAR
Opening stock at site	108542 cft	604 cft	115 bags	276500 Nos.	2200 cft	60 M.T.
Procured during month	9500 cft	458 cft	100 bags	Nil	2804	Nil
Used during month	78000 cft	200 cft	180 bags	26500 Nos.	554 cft	0.50 M.T.
Closing stock at site	40042 cft	862 cft	35 bags	250,000 Nos.	4450 cft	59.50

VI. THIS PERIOD PROGRESS: According to our previous schedule, progress was 77.36% But actually 23.36% have been done (considering only work) and 32.16% (considering actual work done + stock pile materials.)

VII. BOTTLE NECKS AND DELAYS: During the month averagely one week was lost due to rain, Considering accumulation of accidental rain almost every day and full rainy day on the 24th August, 1984. It is remarkable that during the month very few days were observed without raining. Almost every day it was raining more or less which disturbed our normal flow of the work and caused delays and as a result scheduled programme could not be followed properly.

Cont'd...

VII. CLAIMS FILED:

Time extension due to late receipt of notice to proceed and land problems.

IX. NEXT MONTH SCHEDULED PROGRAMME:

1. Boundary wall remainig brick works, copping casting with M.S.angle fixing and barbed wire fixing complete. 11.9.84 to 30.9.84.
2. Select fills in the East, West and North side road and parking area upto EL-28.00 and remaining filling of the R-2 and R-3 building area upto finished EL. Expected to be completed by 30.9.84.
3. Layout and foundation excavation of Godown complete by 30th Sept.8
4. Brick works and column upto lintel level inc uding lintel, sun-shade complete of R-1 building. 11.9.84 to 30;9;84.
5. Layout and foundation excavation including cement concrete in foundation of R-2 building complete. 16.9.84 to 20.9.84.
6. Brick work in foundation upto PL. including D.P.C. and foundation back filling of R-2 building complete by 30.9.84.
7. Removal of surcharge materials complete by 25th Sept.1984.

X. PROGRESS CHART: ATTACHED

XI. PHOTOGRAPHS: ATTACHED

Date:- 31 August, 1984.


Submitted by: KH. ANWAR HOSSAIN
Title : Project Engineer, EEC Ltd.
Fertilizer Warehouse
Phase-III.
Site:Dohazari F-1,
Chittagong.

SCHEDULE OF EVENTS
FOR SEPTEMBER, 1984

PROJECT: FERTILIZER WAREHOUSES PHASE-III

SITE LOCATION: DOHAZARI-F1

SCHEDULE-A: SITE DEVELOPMENT, B-WAREHOUSE AND C-ANCILLARY BUILDINGS

EVENTS	DESCRIPTION OF WORKS	TIME ESTIMATE	SCHEDULE		ACTUAL		REMARKS
			START	FINISH	START	FINISH	
1.	<u>A-SITE DEVELOPMENT</u> Boundary Wall:- Remaining brick works.Copping casting with M.S.Angle fixing and barbed wire fixing complete.	20 days	11.9.84	30.9.84			65% of this item of works has been completed earlier.
2.	<u>SELECT FILLS:</u> in the West and North side ROAD AND PARKING AREA upto EL.28.00 AND remaining fillings of R-2 and R3 Building area upto finished EL. Complete.	20 days	11.9.84	30.9.84			
3.	<u>B-WAREHOUSE</u> (a) Layout and foundation excavation of godowns complete. (b) Pre-loading of surcharge area removal.	6 days 20 days and	25.9.84 1.9.84 11.9.84	30.9.84 5.9.84 25.9.84			
4.	<u>C-ANCILLARY BUILDINGS</u> (a) Brick works and column upto lintel level including lintel and sunshade complete of R-1 Building. (b) Layout and foundation excavation including cement concrete in foundation complete of R-2 building. (c) Brick work in foundation upto PL. including D.P.C. and foundation back filling of R-2 building complete.	20 days 5 days 10 days	11.9.84 16.9.84 21.9.84	30.9.84 20.9.84 30.9.84			This work was started on the last 19-8.84.
5.	Preparation of form and re-bar of ancillary building R-2 and column, footing and grade beam of warehouse complete.	20 days	11.9.84	30.9.84			This work has been started earlier.

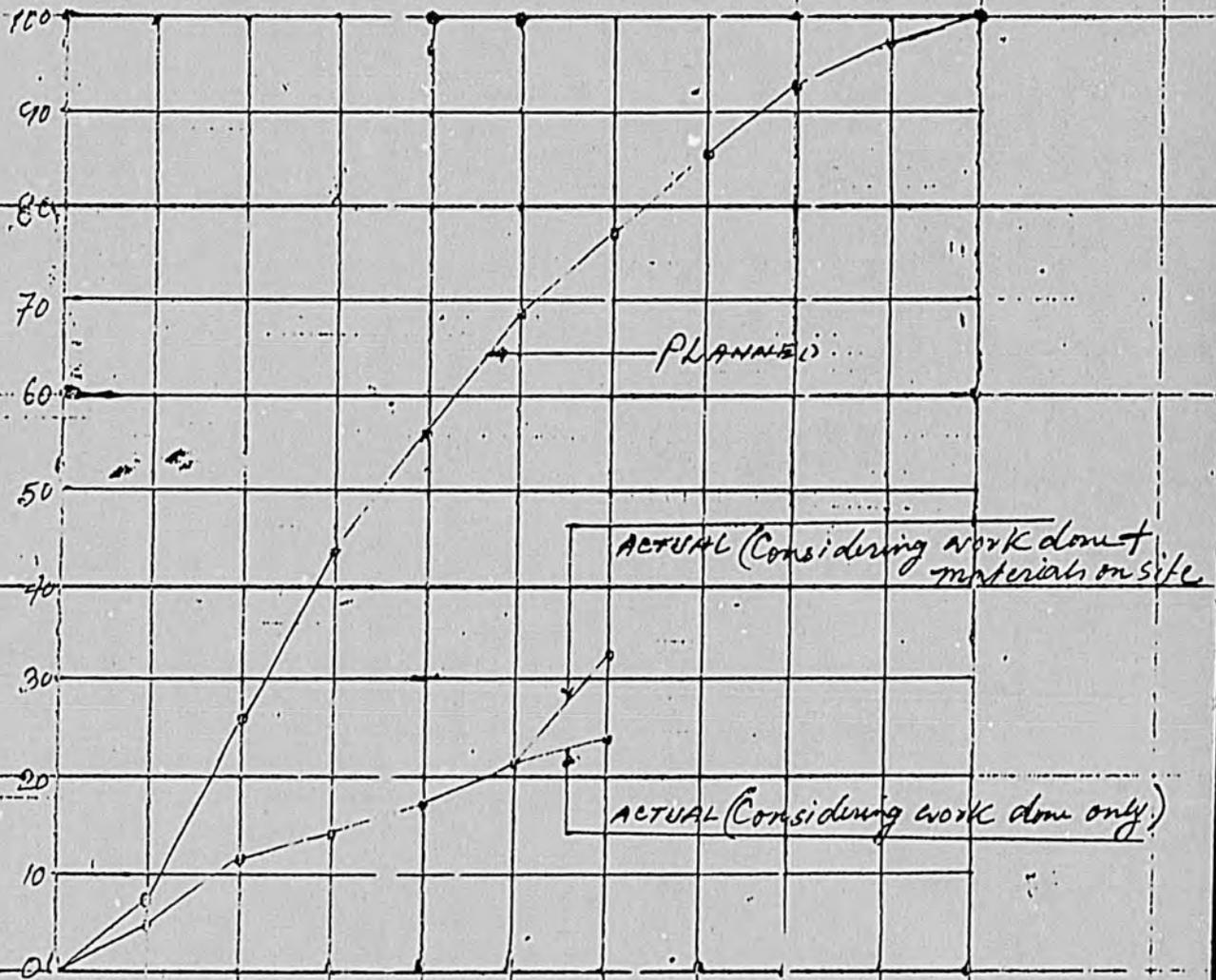
Submitted by: THE EASTERN ENGINEERS
CONSORTIUM LTD.

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TIME VS. COMPLETION CHART

FERTILIZER WARE HOUSES - PHASE - III

31st August 1984
MONTH ENDING



<u>SCHEDULED</u>	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPT.	OCT.	NOV.	DEC.
MONTHLY PROGRESS %	6.5%	19.4%	17.4%	12.8%	12.0%	9.1%	8%	7%	5%	3%
CUMULATIVE PROGRESS %	6.5%	25.9%	43.3%	56.1%	68.1%	77.3%	86.3%	92.3%	97.3%	100%
ACTUAL CUMULATIVE %	11%	26.9%	44.0%	56.0%	68.0%	77.3%				

INVITATION NO.4 : F3-COX'S BAZAR

CONTRACTOR : Builders The Best Ltd.

Total Contract Price : Tk. 99,64,470.85

Change Orders : Tk. -

Revised Contract Price : Tk. 99,64,470.85

Payments To Date : Tk. 29,70,416.94

Retention To Date : Tk. 2,24,940.22

L/Com. No. : 388-002406

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 23.02.84

Amount of L/Com. : Tk. 99,64,470.85
(\$400,731.00)

Performance Guarantee : Indosuez PB/TK/009
Tk.10,00,000

Insurance : DAC/CAR/P-13/5/84

Date of Contract : 12.01.84

Site Handed Over : 26.01.84

Notice To Proceed : 23.02.84

Scheduled Completion: 31.12.84(312)

Elapsed Time: 191 days 61.2%

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
10%	61%	(. 5 %)	41%
Work		: 7%	33%
Materials		(-2%)	8%

1.0 Key Site Personnel

Engineer	: Project Engineer	- Y.O. Kim
	Field Engineer	- M.M. Matiur Rahman
	Inspector	- Md. Serajul Islam Khan
	Technician	- A. Rashid
Contractor	: Site Engineer	- Zahidul Islam
	Field Engineer	- Abdul Baki Miah

2.0 Contractor's Activities

This period To date

The Godown exterior columns were cast to + 13 ft. The reinforced masonry wall was brought to + 12 ft on the south, + 8 ft on the north and + 6 ft on the east and west. The buildings R1, R2, R3 were completed upto 1st floor lintel level. The brick work and slab casting for the Public Toilet & the Guard House were completed.

A. Site Development	3%	55%
A1 Mobilization and Demobilizat.	-	95%
A2 Preparation of Site	-	95%
A4 Excavation	-	92%
A6 Filling with Imported Materials: (Select Fill)	3%	73%

	<u>This period</u>	<u>To date</u>
A10 Boundary Wall	1%	88%
A15 Guard House	40%	70%
A16 Public Toilet	25%	50%
B. Warehouse	9%	22%
B2 R.C. Footing, Footing Tie Beam and Grade Beam	-	67%
B3 R.C. Column	28%	46%
B7 Reinforced Masonry Wall	34%	40%
B11 Reinforcing Steel	9%	29%
C. Ancillary Buildings (R1,R2 and R3)	10%	33%
C1 Brick Flat Soling	-	43%
C2 Plain Concrete incl	-	45%
C3 Brickwork in Foundation	-	94%
C4 Damp Proof Course	-	95%
C5 Brickwork above P.L.	23%	63%
C6 Reinforced Concrete	15%	38%
C9 Reinforcing Steel	20%	40%
	...	
D. Water Supply, Sanitary and Plumbing	-	13%
D7 Inspection pits (3 completed)	-	15%
D8 Septic Tank 1 Type A	-	100%
1 Type B	-	50%
D9 Soak Well (3)	-	85%

2.1 Approved Materials On-Site

Portland Cement	- 50 bags
Reinforcing Steel, Deformed	- 45 tons
Bricks, 1st Class	- 20,000 Nos.
Boulders	- 2,000 cft.
Sand Coarse	- -
Sand, Fine (For Filling)	- 15,000 cft.
Pea Gravel	- 200 cft.
Lime	- 8 ton

2.2 Equipment On-Site

- 1- Concrete Mixer (8 cft)
- 1- Vibrator
- 1- Water Pump (1 HP)
- 1- Compactor (Tampers) Not operable

3.0 Problems and Delays

- . Delay in work due to rain.

4.0 Actions Required

- BADC : . Negotiate land for access to river.
. Obtain incoming power line. (1511, 29.03)
. Action on Amendment F3-1, Contract Time Extension (1841, 21.05)
. Approval of insurance policy (1889, 27.05)
- Contractor : . Submit construction photographs and monthly report
. Update construction schedule
. Comply with insurance warranty concerning fire fighting.

5.0 Claims

- . Claim for time extension

6.0 Work Scheduled Next Month

The contractor has failed to maintain the work schedule submitted by him and the Engineer is unable to determine the contractor's schedule for next month until a revised schedule is submitted as per clause 14 of conditions and request of the Engineer.

7.0 Deleted

8.0 Financial

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

9.0 General

The work was delayed due to rainy weather. About 11 work days were lost due to rain.

10.0 Variation(Overrun and Underrun)

Total contract price	Tk.	99,64,470.85
A4 Excavation		+ 12,015.20
A6 Imported Select Fill		+ 2,76,396.12
Revised Estimated Total Contract Price		1,02,52,883.17

CONSOLIDATED MATERIALS TESTING REPORT

Project: Fertilizer Warehouses Phase III

For the month August 1984

Site : Cox's Bazar

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- approved	Remarks/Requirement
A. Concrete Sand	3A.02-b.1	2	2	-	3 part Sylhet Sand blended with 1 part Local Sand
B. Mortar Sand	4A.03	3	3	-	2 part Sylhet Sand blended with 1 part local sand
C. Concrete Coarse Aggregate	3A.02-b.2	2	2	-	
D. Bricks: Frogmark:	4A.02				
E. Cement	3A.02-a				
F. Field Density Tests: Select Fill	2E.01	7	7	-	95% MDD
G. Pea Gravel	4A.05	1	1	-	
<u>No. of test at</u> <u>3-days 7-days 28-days</u>					
H. Concrete: Compressive Strength Test	3A.03 3A.05		30	27	

Average 28 day strength of concrete:

- R2 stair 1st flight & R3 lintel (G.F.) - 3520 PSI (av. of 3 cylinder)
- Godown Column A1 (1st Lift) & R1 lintel (G.F.) - 3714 PSI (av. of 3 cylinder)
- R3 Stair cast (G.F.) - 3148 PSI (av. of 3 cylinder)
- R1 Roof Slab and Godown Col. A3 & A5 (1st Floor) - 4186 PSI (Av. of 4 cylinders)
- R1 Staircase (2nd Flight) & R3 lintel (G.F.) - 3802 PSI (av. of 4 cylinders)
- Godown Column A2 & A4 (1st lift) - 3419 PSI (av. of 4 cylinders)
- Godown column C5, B5 & D1 (1st lift) - 3478 PSI (av. of 3 cylinders)
- Godown column D3, D4 & D5 (1st lift) - 3537 PSI (av. of 3 cylinders)
- Godown column B1 & C1 and R2 staircase (2nd Flight) - 3490 PSI (av. of 3 cylinders)

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INVITATION NO.5 : H2-CHOWMUHANI

CONTRACTOR : Technocon Limited

Total Contract Price : Tk.1,41,20,342.60

Change Orders : Tk.

Revised Contract Price : Tk.1,41,20,342.60

Payments To Date : Tk. 48,07,208.16

Retention To Date : Tk. -

L/Com. No. : 388-002407

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 23.02.84

Amount of L/Com. : Tk.1,41,20,342.60
(\$567,863.00)

Performance Guarantee : Indosuez PB/TK/006
Tk.14,12,035

Insurance : DAC/CAR/P-07/84

Date of Contract : 12.01.84

Site Handed Over : 31.01.84

Notice To Proceed : 23.02.84

Scheduled Completion: 31.12.84(312)

Elapsed Time: 191 days 61 %

% Completion

<u>Scheduled</u>		<u>Actual</u>	
<u>This Period</u>	<u>To Date</u>	<u>This Period</u>	<u>To Date</u>
10 %	61 %	%	34%
Work	:	1%	18%
Material	:	-	16%

1.0 Key Site Personnel

Engineer : Project Engineer - Y.O. Kim
Senior Field Engineer - M.J. Alam
Inspector - A.C. Banik
Technician - K.L. Nath

Contractor : Project Engineer - L.A. Sikdar (Dhaka)
Site Engineer - Sk. Rezaul Hoque
Asstt. Site Engineer - Md. Jahangir Alam
Site Manager - Abul Kashem

2.0 Contractor's Activities

This Period To Date

The Contractor finished the select fill for the godown and is slowly placing the surcharge.

A. Site Development	2%	47%
A1 Mobilization and Demobilization	2%	74%
. Engineer's Field Office:		
Testing of water supply and sanitary system pending	-	92%
A2 Preparation of Site	-	100%
A4 Excavation (Refer to 10. Variation)	-	100%
A56 Filling with on site material	31%	34%
A66 Filling with imported material	-	100%
A10 Boundary Wall	2%	55%
A16 Public Toilet	-	70%
A21 Surcharge for Preloading	21%	21%
A23 48 inch R.C. Pipe Culvert 6-8 ft. lengths on site	0%	0%

	<u>This Period</u>	<u>To Date</u>
D. Water Supply, Sanitary and Plumbing	-	5%
D7 Inspection Pit	-	7%
D8 Septic Tank	-	50%
D9 Soak Well	-	25%

2.1 Approved Material On-Site

Portland Cement	- 7 bags
Reinforcing Steel, Deformed	- 110 M.T.
Bricks, 1st Class	- 1,50,000 Nos.
Boulders	- 14,000 cft.
Sand, Coarse	- 7,000 cft..
Sand, Fine(For Filling)	- 40,000 cft.(to be blended)

2.2 Major Equipment On-Site

- 1- Concrete Mixers
- 1- Vibrator
- 2- Water Pumps

3.0 Problems and Delays

- . The Contractor continues to have difficulties in obtaining surcharge (fill) material.
- "Sweet" water not available at site. Contractor required to sink deep tubewell.

4.0 Actions Required

- | | |
|------------|--|
| BADC | : . Approval of insurance policy (1601, 12.04)
. Claim for Time Extension (1834, 20.05) -
. Obtain incoming power line (1358, 14.03) |
| Contractor | : . Arrange pressure testing of water supply and sanitary plumbing system.
. Develop passage for truck to Ancillary Building at the time of surcharge |

5.0 Claims

Time extension due to late issuance of Notice to Proceed.

6.0 Work Scheduled Next Month

- Finish surcharge.
- Correct items on punch list for EFO.
- Continue with boundary wall.

7.0 Deleted

35

8.0 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

9.0 General

Some rain slowed the progress. The contractor continuous to claim that he can not obtain surcharge material. He does not seem to understand that he committed himself to a time schedule which he has to fulfill.

10.0 Variation (Overruns or Underruns)

Estimated Total Contract Price	Tk. 1,41,20,342.60
A4 Excavation	+ 21,431.70
Revised Estimated Total Contract Price	1,41,41,774.30

CONSOLIDATED MATERIALS TESTING REPORT

Site: H2-Chowmuhani

For the month August 1984

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- approved	Remarks/Requirement
A. Select Fill	2E.01-a	132	125	7	Min. F.M. > 1.5
B. Bricks:					
Nirman		7	7	-	
A & Co.	4A.02	5	5	-	
C. Field Density Tests:					
Select Fill	2E.01	130	72	58	95% MDD

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

D. Concrete:					
Compressive	3A.03			3	
Strength Test	3A.05				

Average 28 day Strength of Concrete:

1 Roof slab of public toilet - 4381 PSI/av.(3 cylinder)

INVITATION NO.6 : H3-LAKSHMIPUR

CONTRACTOR : Technocon Limited

Total Contract Price : Tk.55,91,275.35

Change Orders : Tk. 5,000.00

Revised Contract Price : Tk.55,96,275.35

Payments To Date : Tk. 19,88,767.68

Retention To Date : Tk. 1,13,343.07

L/Com. No. : 388-002408

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 23.02.84

Amount of L/Com. : Tk.55,91,275.35
(\$224,858.00)Performance Guarantee : Indosuez PB/TK/007
Tk. 5,59,130

Insurance : DAC/CAR/P-06/4/84

Date of Contract : 12.01.84

Site Handed Over : 31.01.84

Notice To Proceed : 23.02.84

Scheduled Completion: 31.12.84 (312)

Elapsed Time: 191 days 61 %

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
10%	61%	4%	43%
Work	:	4%	28%
Material	:	-	15%

1.0 Key Site Personnel

Engineer	: Project Engineer	- Y.O. Kim
	Field Engineer	- M. Hassan
	Inspector	- Mozaharul Islam
	Technician	- S. Khan
Contractor	: Project Engineer	- Liakat Ali Sikder
	Asst. Site Engineer	- J. Alam
	Site Manager	- M.H. Bahar
	Foreman	- M.M. Hossain

2.0 Contractor's Activities

	<u>This Period</u>	<u>To Date</u>
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The contractor continued work on Darwan's Quarters and columns. A part of the fill in the godown had to be removed. Hardly any bricks were laid because the contractor failed to purchase acceptable bricks.

Rain contributed to hinder the progress of work.

A. Site Development	4%	34%
A1 Mobilization and Demobilization	5%	78%
A2 Preparation of Site	-	86%
A3 Excavation of Waste	-	36%
A4 Excavation	-	36%
A6 Filling with Imported Material, Select Fill	4%	20%
A10 Boundary Wall	6%	68%
A15 Guard House	20%	60%
A16 Public Toilet	-	90%
B. Warehouse	2%	20%
B2 RCC in Footing and Grade Beam	-	78%
B3 R.C. Column	25%	55%
B7 Reinforced brick masonry wall	10%	10%
B11 Reinforcing Steel	1%	27%
B16 Cement Plaster	22%	22%

	<u>This Period</u>	<u>To Date</u>
C. Ancillary Building (Adjusted percentage)	7%	72%
C4 Damp Proof Course	-	100%
C5 Brickwork above Plinth Level	2%	100%
C6 Reinforced Concrete	10%	100%
C9 Reinforcing Steel	17%	100%
C14 Cement Plaster	12%	90%
C15 Cement Plaster	20%	88%
C17 Neat Cement Finishing	7%	9%
C23 Removal Lime Terracing	-	100%
D. Water Supply, Sanitary and Plumbing	3%	8%
D8 Septic Tank, Type B	-	100%
D9 Soak Well	-	30%
D10 W.C. Pan Install	50%	50%
D17 Install H.C.T. Pipe (4" dia)	75%	100%
D19 Install G.I. Water supply Pipe	28%	40%
E. Electrical	3%	6%
E1 Pipe work	40%	50%
E2 Cable work	-	90%
E6 Switch board	-	50%
2.1 Approved Materials On-Site		
Portland Cement	-	60 bags
Reinforcing Steel, Deformed	-	38 MT
Bricks, 1st Class	-	2,000 (To be sorted)
Boulders	-	13,000 cft.
Sand, Coarse	-	4,000 cft.
Sand, Fine (For Filling)	-	6,000 cft.
Wood	-	120 cft.
Pea Gravel	-	600 cft.
2.2 Major Equipment On-Site		
1- Concrete Mixer		
2- Vibrators (one out of order)		
1- Pick-up Truck		
1- Truck		
3.0 <u>Problems and Delays</u>		
No approved bricks at site		
Wood not seasoned		
Fill material partly not of specified Gradation.		

4.0 Action Required

BADC : . Approve insurance policy (/1603, 12.04)
. Action on claim for time extension (/1835, 21.05)

Contractor : . Install deep tubewell

5.0 Claims

Time extension.

6.0 Work Scheduled Next Month

The Contractor is progressively falling behind his 07.06.84 (Drg. No. 06R and 08R) construction schedule. There basically is no schedule being followed any more.

7.0 Deleted

8.0 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

9.0 General

There is a chronic shortage of specified materials and this coupled with minimal site planning and ineffective site management is a major cause for the slow progress. The workmanship must be monitored very carefully since the laborers/mistries engaged have marginal ability. (This is exactly the same remark as for the month of July)

10.0 Variation

Change Orders

H3-01	31.05	Provide Kitchen Chimney Complete	Tk. 5,000.00
H3-02	12.06	Construct Type B Boundary Wall	Pending BADC's approval.

CONSOLIDATED MATERIALS TESTING REPORT

Site: H3-Lakshmipur

For the month August 1984

Material/Test	Spec. No.	No. of Tests	No. App- roved	No. Dis- approved	Remarks/Requirement
A. Select Fill	2E.01-a	12	7	5	Min. F.M. > 1.5
B. Mortar Sand	4A.03	3	2	1	
C. Pea Gravel	3A.02-b.2	4	2	2	Size No.8
D. Bricks: Frogmark: BRS	4A.02	14	6	8	Disapproved bricks ¹ removed from site
<u>No. of test at</u> <u>3 days 7 days 28 days</u>					
E. Concrete: Compressive Strength Test	3A.03 3A.05	7	8		

Average 28 day Strength of Concrete:

1. Godown Columns A2, A3 - 3009 psi (av. of 2 cylinder)
2. Pent house roof slab - 3352 psi (av. of 3 cylinder)
3. C.C. of boundary wall west side - 4007 psi (av. of 3 cylinder)

31 August 1984

INVITATION NO.7 : I4-CHANDPUR

CONTRACTOR : Fazle Azim Engineers Ltd.

Total Contract Price : Tk.1,70,67,822.35

Change Orders : Tk.11,440.00

Revised Contract Price : Tk.1,70,79,262.35

Payments To Date : Tk. 22,59,791.12

Retention To Date : Tk. -

L/Com. No. : 388-002409

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 23.02.84

Amount of L/Com. : Tk.1,70,67,822.35
(\$686,398.00)Performance Guarantee : Janata MCK/002/84
Tk.17,10,000Insurance : DAC/CAR/P-10/5/84
dt. 12.05.84Fidelity Bond : MCK:004:84, 06.03.84
Tk.8,53,400

Date of Contract : 16.01.84

Site Handed Over : 31.01.84

Notice To Proceed : 23.02.84

Scheduled Completion:31.12.84 (312)

Elapsed Time: 191 days 61 %

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
10 %	61%	5%	34%
Work	:	5%	23%
Material	:	-	11%

1.0 Key Site Personnel

Engineer	: Project Engineer	- Y.O. Kim
	Field Engineer	- Alangir Bhuiyan
	Inspector	- G. Mohammed
	Asstt. Technician	- A. Nader
Contractor	: Project Engineer	- Nazimul Huq Bhuiyan
	Field Engineer	- Asadur Rahman
	Inspector	- Tajul Islam Bhuiyan
		Mustafizur Rahman

2.0 Contractor's Activities

The godown construction continued with selected fill brought upto place all foundations in many areas higher. Most column foundations were finished this month good progress was made pouring exterior columns. Work on masonry shear walls continues.

	<u>This Period</u>	<u>To Date</u>
A. Site Development	4%	38%
A1 Mobilization and Demobilization	2%	92%
Engineer's Field Office		
Work remaining: Final painting, glazing sanitary, water and electrical		
A2 Preparation of Site	-	90%
A3 Excavation To Waste	-	95%
A4 Excavation	-	85%
A6 Filling with Imported Material (Select)	13%	86%
A10 Boundary Wall	7%	55%
A22 Retaining Wall and Steps	-	15%

B. Warehouse

2 RCC Footing	8%	25%
5 RC Columns	29%	46%
7 Reinforced brick wall	7%	16%
11 Reinforcing Steel	8%	35%
B13 Bottom Vent	20%	20%

C. Ancillary

- -

Work held in abeyance. Refer to Problems and Delays

D. Water Supply, Sanitary and Plumbing

- 3%

D8 Septic Tank

- 24%

D9 Soak Well

- 25%

2.1 Approved Material On-Site

Portland Cement	- 25 MT
Reinforcing Steel, Deformed	- 78 MT
Bricks, 1st Class	- 185,000 Nos.
Boulders	- 17,300 cft
Sand, Coarse	- 16,000 cft
Sand, Fine (For Filling)	- 10,000 cft

2.2 Major Equipment On-Site

- 2- Concrete Mixer
- 3- Vibrator
- 2- Water Pump
- 1- Welder
- 2- Drill Machine

3.0 Problems and Delays

- Work on ancillary buildings R2 and R3 held in abeyance pending removal of existing structures by others.

4.0 Action Required

- BADC
- Approve insurance policy
 - Approve cost estimate of bridge providing access to site

- Contractor
- Action on providing incoming power line

5.0 Claims

- Contract time extension (FAEL-ADC/AM/84/2388, 23.04.84)

6.0 Work Scheduled Next Month

We are awaiting Contractor's schedule for September.

7.0 Deleted

8.0 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) 1/	1753
I4-03	Progress Payment	24,68,664.86		

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

9.0 General

- . Monsoon rains and high water level has effected the progress of work.
- . Delay in issuing of Work Order by BADC in removal of existing buildings will effect construction completion.
- . Delay in removal of existing buildings at the site of R2 & R3 will effect the completion of this contract.
- . Design of retaining wall along existing canal (extra work) is in progress.

10.0 Variations (Overruns and Underruns)

Total Contract Price	Tk. 1,70,67,822.35
Change Order I4-01	(+) 11,440.00
Revised Contract Price	1,70,79,262.35
A4 Excavation - Overrun	(+) 10,650.00
A5 Filling with On-Site Material - Overrun	(+) 6,106.00
Revised Estimated Contract Price	Tk. 1,70,96,018.35

Additional Variations under review:

- . Construct bridge across canal
- . Purchase 48" R.C. culvert pipe
- . Construct barbed wire fence
- . Repair/rebuild existing boundary wall at canal
- . Construct retaining wall at canal

CONSOLIDATED MATERIALS TESTING REPORT

Site: I4-Chanapur

For the month August 1984

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Select Fill	2E.01-a	5	3	2	Min. F.M. > 1.5
B. Concrete Sand	3A.02-b.1	2	2	-	
C. Mortar Sand	4A.03	2	1	1	
D. Concrete Coarse Aggregate	3A.02-b.2	6	2	4	
E. Bricks: Frogmark: CBH	4A.02	10	10	-	Requiring sorting at site
F. Plaster Sand	9B.02	1	1	-	Min. F.M. = 1.6
G. Field Density Tests: Select Fill	2E.01	54	44	10	95% of MDD
		<u>No. of test at</u>			
		<u>3 days 7 days 28 days</u>			
H. Concrete: Compressive Strength Test	3A.03 3A.05	32	32		
I. 2" Mortar Cube	4A.03		3		

Average 28 day Strength of Concrete:

1. Godown Columns - 3490 PSI (av. of 20 cylinders)
2. Reinforced brickwall
Concrete Core - 3368 PSI (av. of 4 cylinders)

31 August 1984

INVITATION NO.9 : 05-PARBATIPUR

CONTRACTOR : The Elite Engineers Ltd.

Total Contract Price : Tk.1,70,02,196.40

Change Orders : Tk.

Revised Contract Price : Tk.1,70,02,196.40

Payments To Date : Tk. 43,57,822.71

Retention To Date : Tk. 2,72,101.63

L/Com. No. : 388-002411

Date of L/Com. : 31.01.84

Issue Date of L/Com. : 23.02.84

Amount of L/Com. : Tk.1,70,02,196.40

Letter of Guarantee : LG 84/42 BCCI

CAR/PL Insurance : DAC/CAR/P-11/5/84

Date of Contract : 12.01.84

Site Handed Over : 26.01.84

Notice To Proceed : 23.02.82

Scheduled Completion: 31.12.84

Elapsed Time: 191 days 61 *

% Completion			
Scheduled		Actual	
This Period	To Date	This Period	To Date
10%	6%	1%	33%
Work	:	2%	23%
Material	:	-1%	10%

1.0 Key Site Personnel

Engineer	: Sr. Field Engineer	- M.A. Hannan
	Inspector	- N. Islam
	Lab. Assistant	- S. Rahman
Contractor	: Project Engineer	- A.K.M.A. Rashid
	Structural Engineer	- S. Hossain
		- M.R. Khan

2.0 Contractor's ActivitiesThis Period To Date

The Contractor placed 72,700 cft. of surcharge. The first floor slabs have been cast at the R1 & R2 building. The brickwork is in progress to the roof level on both buildings.

A. Site Development	1%	44%
A1 Mobilization & Demobilization	1%	75%
A2 Preparation of Site	-	70%
A4 Excavation	-	70%
A6 Filling with Imported Material(Select Fill)	-	57%
A10 Boundary Wall Type A	2%	13%
A16 Public Toilet	2%	62%
A21 Surcharge For Preloading	30%	68%
C. Ancillary Buildings	16%	22%
R1: C1 Brick Flat Solind	-	42%
C2 Plain Concrete Fdn.	-	43%
C3 Brickwork to P.L.	-	100%
C4 Damp Proof Course	-	100%
C5 Brickwork above P.L.	31%	67%
C6 Reinforced Concrete	20%	41%
C7 Reinforcing Steel	19%	37%

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C. Ancillary Buildings - cont'd.	<u>This Period</u>	<u>To Date</u>
R2: C1 Brick flat soling	2%	36%
C2 Plain Concrete Fdn.	-	35%
C3 Brickwork to P.L.	1%	89%
C4 Damp Proof course	-	100%
C5 Brickwork above P.L.	16%	45%
C6 Reinforced Concrete	31%	39%
C9 Reinforcing Steel	29%	37%
 D. Water Supply, Sanitary and Plumbing	 -	 3%
D6 Concrete Sewer Pipe		
a) 6" dia.	-	6%
b) 4" dia.	-	88%
D7 Inspection Pit	-	10%
D8 Septic Tank	-	2%
D9 Soak Well	-	10%

2.1 Approved Materials On-Site

Portland Cement	- 5 bags
Reinforcing Steel	- 74 Tons.
Bricks, 1st Class	- 49,000 Nos.
Boulders/Crushed Aggregate	- 14,000 cft.
Sand, Coarse	- 31,000 cft.
Select Fill	} - 12,000 cft.
Ordinary Fill	
Mortar Sand	- 12,000 cft.

2.2 Major Equipment On-Site

1- Concrete Mixer
1- Water pump (Diesel)
1- Water pump (Electric)
2- Vibrators (Electric)
1- Vibrator (Diesel)
1- 1350 kg. steel roller

3.0 Problems and Delays

- The Municipality of Parbatipur closed the only access road to the job site for repairs. No trucks could proceed to the site. The surcharge operation was stopped by this action.
- Shortage of construction and surcharge material.
- Lack of management at site.

4.0 Action Required

- BADC : . Arrange with BR removal of condemned railway wagons, rails and coal from the siding alignment.
. Arrange for incoming electric power line.
. Approve insurance policy.
. Action on claim for time extension
. Settle north boundary line.
- Contractor : . Submit working (shop) drawings sufficiently in advance to construction
. Submit Schedule of Events for godown and ancillary buildings.
. Submit concrete mix design.
. Submit time vs. percent completion schedule.
. Submit construction photographs.
. Improve site management.

5.0 Claims This Month: Claim for delay due to closure of access road by Municipality.

6.0 Work Schedule for Next Month

Completion of surcharge, Casting of roofs for building R1 & R2.

7.0 Eliminated

8.0 Financial

<u>Invoice No.</u>	<u>Item</u>	Amount <u>Invoice (Tk.)</u>	<u>Payment (Tk)</u>	USAID <u>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	16,45,072	1875

9.0 General

New delays were caused by the closure of the access road for repairs by the Municipality of Parbatipur. The road was closed 8 days and was opened again after BADC's intervention with the Municipality. Placement of the surcharge and other work was further delayed by this, bad weather and poor management.

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CONSOLIDATED MATERIALS TESTING REPORT

Site: 05-Parbatipur

For the month August 1984

Material/Test	Spec. No.	No. of Tests	No. Approved	No. Dis-approved	Remarks/Requirement
A. Select Fill	2E.01-a	2	1	1 -	F.M. > 1.5
B. Plaster Sand	9B.02	1	1	-	
C. Concrete Coarse Aggregate	3A.02-b.2	4	3	1	
D. Bricks: Frogmark: W-B	4A.02	5	3	2	
E. Cement	3A.02-a	1	-	1	Five Flag brand disapproved.
		1	-	1	Olympia brand approved
F. Surcharge Field Wet density		19			

No. of test at
3 days 7 days 28 days

G. Concrete: Compressive Strength Test	3A.03 3A.05		18	24	
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Average 28 day Strength of Concrete:

1. E.F.O. Verandah - 3124 PSI (Av. of 3 cylinder)
2. R1 Lintel & Sunshade (1st Floor) - 4710 PSI (Av. of 3 cylinder)
3. R1 Column, 4th Pour - 4716 PSI (Av. of 3 cylinder)
4. Public Toilet roof slab - 3254 PSI (Av. of 3 cylinder)
5. R1 Staircase (1st Flight) and Porch Slab - 3743 PSI (Av. of 3 cylinder)
6. R2 Lintel & Sunshade & R1 False slab - 4433 PSI (Av. of 3 cylinder)

INVITATION NO.8 : L4-DOMAR

CONTRACTOR : M.S. Khan & 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 Contract Terminated : 04.03.84
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

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

By letter /2222 dated 12 August 1984 the Engineer informed the Contractor of his (Consultant's) assessment of claim.

By letter No. nil dated 22 August 1984 the Contractor informed the Engineer of his (Contractor's) disagreement of the amount assessed by the Engineer and served notice for arbitration as per Clause 67(1) of the Conditions of Contract. Clause 67(4) of the Conditions the Contractor suggests to settle the dispute amicably before referring the matter to Arbitration. By letter /2279 dated 28 August 1984 the Engineer scheduled dates for discussion with the Contractor to attempt an amicable settlement.

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	- \$ 1,315,001
% Expenditure to Total Contract Budget	- 58.2%

PROGRESS

Elapsed Contract Time	- 631 days
Remaining Contract Time	- 303 days
% Elapsed Time	- 67.6%

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 - 20.74

* 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	18.96
Klaus Thieme - Chief Construction Engineer	25	14.78
- - Foundation Engineer	11	11.17
- - Structural Engineer	6	4.91
Y.O. Kim - Project Engineer	16	5.93

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 meeting
- . Consultant's periodic staff review meetings.
- . Meetings with construction contractors.

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5. Supporting Bangladeshi Personnel

5.1 WEL and SSL Personnel (Sub-Contractor)

<u>Designation</u>	<u>Man-Month</u>	
	<u>Allocated</u>	<u>Utilized</u>
Deputy Project Manager	27	19.8072
S&M Engineer	24	22.2728
Structural Engineer	9*	9.0388
Architect	4	3.8389
Electrical Engineer	6	6.0000
Railway Engineer	24	17.9089
Office Engineer	26	19.8656
Land Procurement Officer	18*	17.1366
Surveyor	25	18.6096
Instrument Man	25	18.5664
Rodman	25	12.8222
Chainman	25	18.2215
Draftsman	69*	54.8458
Laboratory Technician	56	52.1569
Laboratory Assistant	56	30.6474
Estimator	48	24.8943
Senior Field Engineer	60	40.1809
Field Engineer	80	29.6931
Inspectors	128	48.1951
Drivers	94	27.4000
Messenger	34	-
Peon	34	-
Guard	68	-
Clerk	34	-
Typist	34	-

5.2 Administrative Personnel

Administrative Manger	27	20.2324
Senior Accountant	27	20.5844
Assistant Accountant	44	18.8839
Secretary	27	20.5368
Printer	27	18.9069
Typist	72	49.6054
Clerk	45	26.1291
Drivers	103	76.8601
Messenger	45	17.8160
Peon	72	53.5433
Guard	90	90.7518
Radio Operator	48	-
Office Superintendent/Asst. Accountant	34	7.3478

* 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	\$ 24,071	\$ 533,123
Services in Home Office	176,178	176,178	1,722	135,221
International Travel, etc.	85,740	85,740	-	24,158
Housing Allowances				
Per Diem etc.	91,075	102,775	5,149	66,168
Logistic Cost	223,400	223,400	3,198	95,062
Supporting Staff	382,404	387,842	13,205	184,226
Misc. Direct Costs	43,000	43,000	5,914	15,430
Fixed Fee	205,460	205,460	7,610	159,810
	<u>\$ 1,953,445</u>	<u>\$2,014,567</u>	<u>\$ 60,869</u>	<u>\$ 1,213,198</u>
Percent of Estimated Budget			3.02%	60.22%
Percent Contract Time (To 30.06.85)				67.47%
Special Project Activity	306,620	245,498	3,010	101,803
	<u>\$ 2,260,065</u>	<u>\$2,260,065</u>	<u>\$ 63,879</u>	<u>\$ 1,315,001</u>
	=====	=====	=====	=====

7. Billing and Payment

<u>Invoice</u>	<u>Period Ending</u>	<u>Billing</u>	<u>Payment</u>
01-15	31 May 84	\$ 1,082,039.61	\$ 1,075,586.43
16&17	31 July 84	\$ 117,294.80	Under Process

8. Reports

- . Monthly Progress Report No.20 for July 1984 submitted by letter /2202, 09 August 1984

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C. TECHNICAL

1. 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 relocation of R2 and R3 buildings necessitate the construction of a retaining wall at the canal along Sen Gupta road at Chandpur site. The Engineer looked into various types of retaining walls and during the month was engaged to design a reinforced-earth retaining wall.

At the request of BADC the Engineer reviewed the boundary fence design along Mehta road to find out a solution of encroachment of BADC land and also to provide security at site.

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.

- 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-cunts.

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2. Railway Siding

BR proposed to hand over 0.62 acres of land to BADC for the construction of railway siding at Kishoreganj. The proposal was looked into and the Engineer demarcated area to be taken over by BADC from BR. Follow up by BADC is required (/2003, 16.6.84).

BR's estimates for Jamalpur siding has been sent to BADC with Engineer's comments. (/2260, 26.8.84).

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

Summarizing outstanding issues:

1. Approval of Kishoreganj siding layout plan
(/2003, 16.06.84)
2. Cost estimate for three phase III sidings.
(/1712, 07.05.84)
3. Materials/equipment to be furnished by BR.
(/1712, 07.05.84)
4. Resolve issue at Parbatipur site noted above.
(/2059, 03.07.84)