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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 II**

**PROGRESS REPORT NO.7
JUNE 1983**



AMMANN & WHITNEY
CONSULTING ENGINEERS
NEW YORK

In association with



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WAREHOUSES PHASE III

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

724-2.1.1/443
06 July 1983

Subject : Monthly Report No.7
- June 1983

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 the Monthly Report No.7 are submitted to BADC and six (6) copies to USAID.

Very truly yours
AMMANN & WHITNEY



George A. Pecht
Project Manager

Encl: Eleven (11) Copies

GAI/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. Ralph Bird, AID/Dhaka w/encl. (6)
File 724-1.4.2 w/encl.

AMMANN & WHITNEY
Consulting Engineers

FERTILIZER WAREHOUSES - PHASE III

Monthly Progress Report No.7
Month of June 1983

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PROJECT SUMMARY

1. Project Designation : Construction of Bagged Product Fertilizer Warehouses in Bangladesh - Phase III
2. Financed by : Grant Funds : USAID Fertilizer Distribution Improvement I Project 388-0024
- Taxes and Duties : Government of Bangladesh
3. Owner : BADC (Facilities to be used by MS&S Division)
4. USAID Fund Allocation : a) \$ 1.95 million for consultancy
\$ 0.31 million for vehicles/equipment/supplies
b) Estimate for construction work is under process by Consultant
5. Proposed Warehouse Storage Capacity : 33,000 MT
6. Consultant : Ammann & Whitney
7. Consultant's Contract Duration: 9 December 1982 to 28 February 1985
8. Construction Contractor : Contractors to be prequalified
9. Construction Contract Period : 15 months (estimated)
10. Scheme/Contract Administration/ Commercial Aspects by : Manager (Storage) BADC, Dhaka
11. Time and Fund Spent:

<u>Consultant Services</u>		<u>Construction Works</u>	
<u>Time Elapsed</u>	<u>Estimated Cost Incurred</u>	<u>Time Elapsed</u>	<u>Estimated Cost Incurred</u>
6.75 month	\$486,570	-	-

12. Comments:

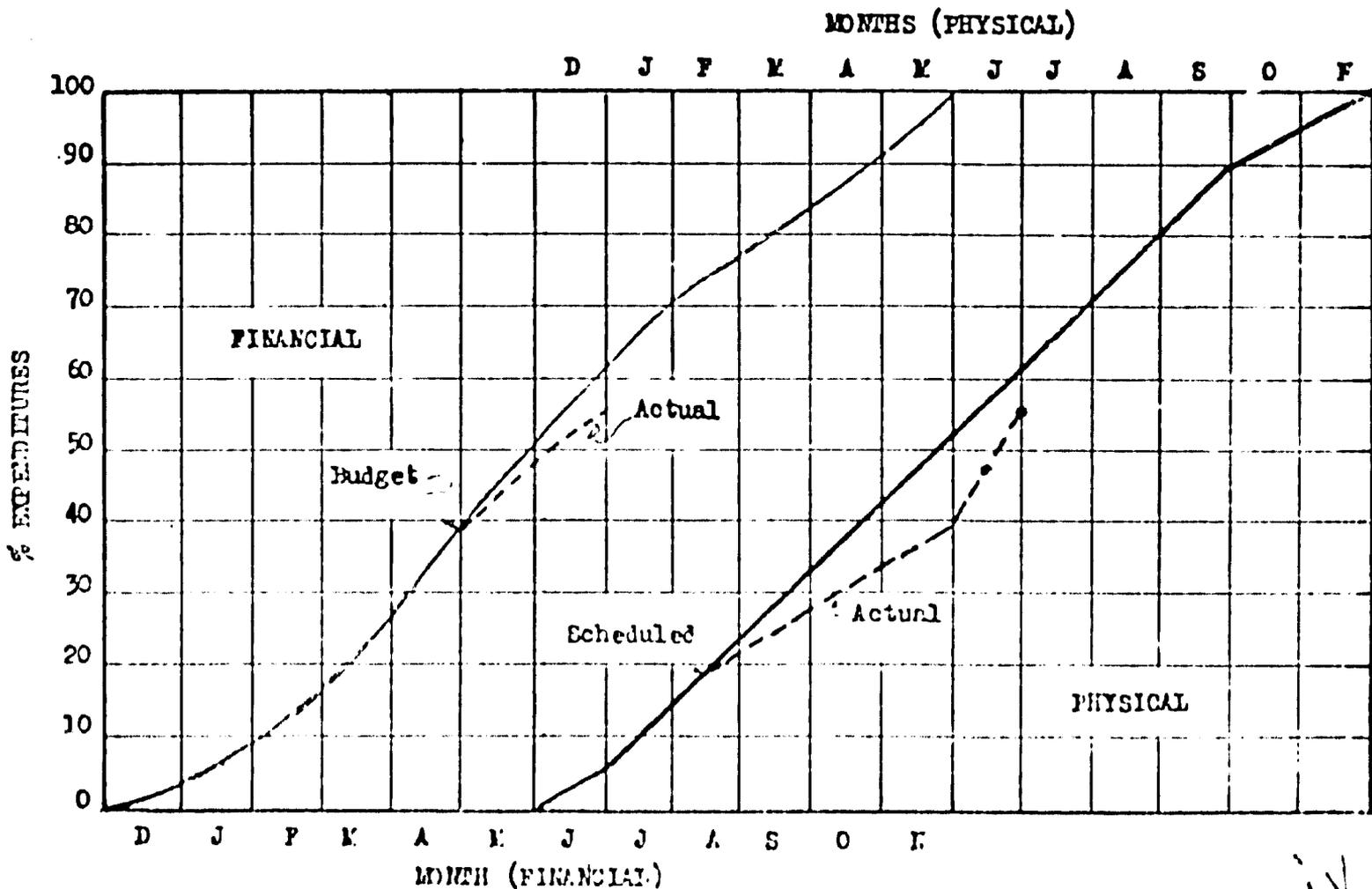
- The Consultant replied to Project Director's enquiry in his abstract, relating to project expenditures.
- BADC's attention is urgently required on following:
 - a. BADC's acquisition of land at Kishoreganj and Chowmahani and permission for the Consultant to carry out topographic surveys and/or soil exploration.
 - b. BADC's decision on location of godown within the "Dhaka" area.
 - c. BADC's decision on procurement of project vehicles.
 - d. Depositing funds in Taka imprest account for payment of duties and taxes.
 - e. BADC's decision on procurement of photo-copying machine.
 - f. BADC's releasing payments withheld and due to Consultant in accordance with the contract.
 - g. BADC scheduling of periodic coordination and project meetings.
 - h. BADC to obtain BR approval.

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WAREHOUSES PHASE III
FINANCIAL-PROGRESS SCHEDULES

PRE-CONSTRUCTION PHASE (PCP)
SCHEDULE FOR SEVEN AVAILABLE SITES

TOTAL PROJECT BUDGET ^x	\$1,953,445		THIS MONTH	TO DATE
ESTIMATED BUDGET FOR PRECONSTRUCTION PHASE	\$ 825,000	ELAPSED CONTRACT TIME (DAYS)	30	203
TOTAL EXPENDITURES TODATE ^{xx}	\$ 466,537	NO. PCP EVENTS SCHEDULED FOR COMPLETION	6	17
% EXPENDITURE TO TOTAL BUDGET	23.9 %	NO. OF PCP EVENTS COMPLETED	6	13
% EXPENDITURE TO PCP	56.5 %	PERCENT PCP COMPLETED	17%	59%
		PCP EVENTS REMAINING	-	16
		DAYS TO SCHEDULED PCP COMPLETION	-	147
^x Excludes \$306,620 for Special Project Activity		PROJECTED DAYS TO ACTUAL PCP COMPLETION		147
^{xx} Estimated and excludes \$19,103 for Special Project Activity		DAYS EARLY (LATE) PROJECTED PCP COMPLETION		0

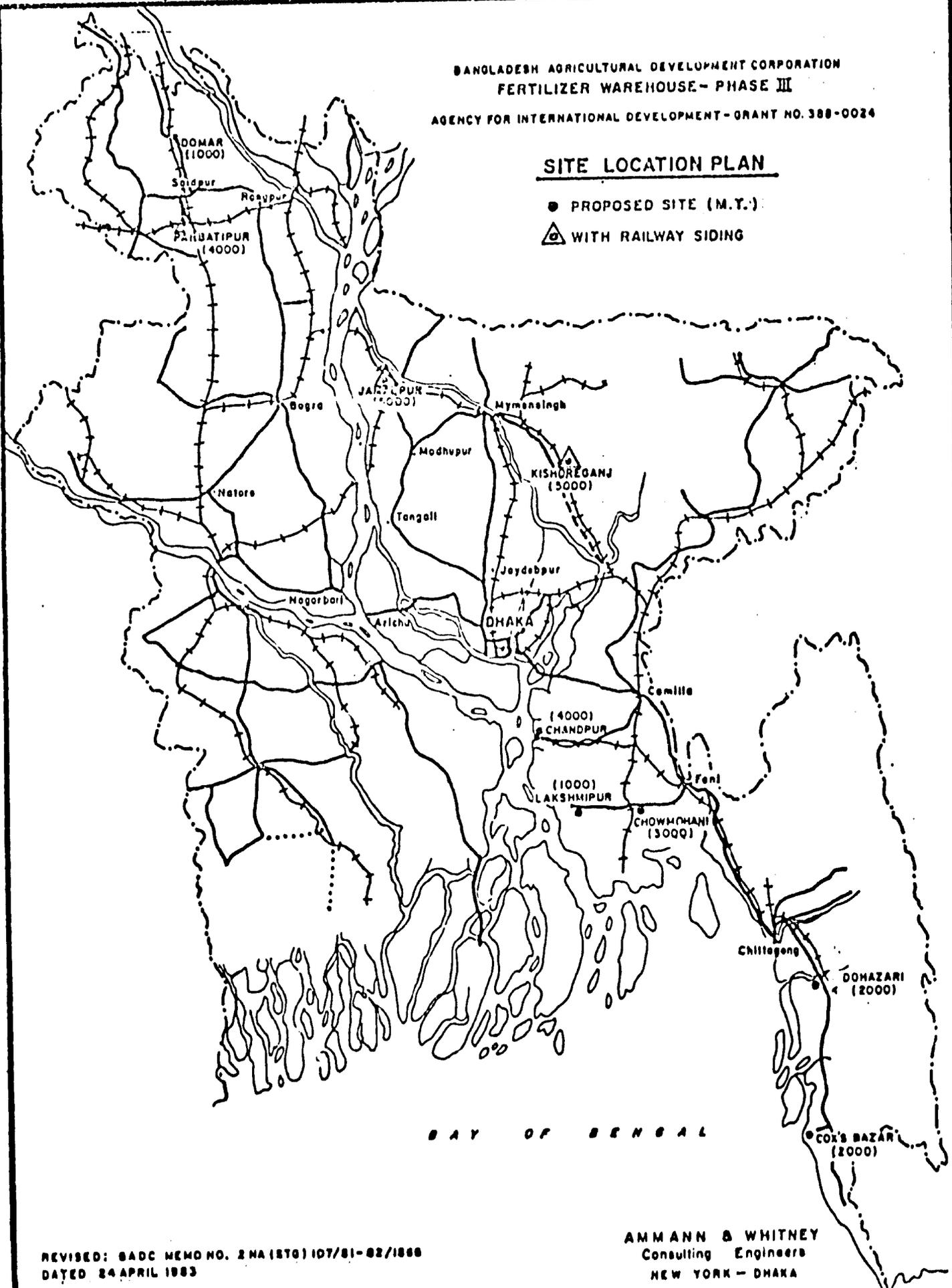


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BANGLADESH AGRICULTURAL DEVELOPMENT CORPORATION
FERTILIZER WAREHOUSE - PHASE III
AGENCY FOR INTERNATIONAL DEVELOPMENT - GRANT NO. 388-0024

SITE LOCATION PLAN

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



REVISED: SADC MEMO NO. 2 HA (STG) 107/81-82/1886
DATED 24 APRIL 1983

AMMANN & WHITNEY
Consulting Engineers
NEW YORK - DHAKA

1. ADMINISTRATION

1.1 The Consultant's Agreement

- . Contract Agreement Signed - 9 December 1982
- . Effective Date - 9 December 1982
- . AID Letter of Commitment
No. 388-0024-3-30381 - 15 December 1982
- . Duration - 28 February 1985

1.2 Expatriate Staff

The following expatriate personnel have been approved for the project by BADC and USAID and are in-country:

		<u>Man-Months</u>	
		<u>Allocated</u>	<u>Utilized</u>
George A. Pecht	- Project Manager	27	6.59
Harry S. Allen	- Chief Construction Engineer	25	4.70
Samuel Heyman	- Foundation Engineer	6	5.04
Colin G. Landrigan	- Structural Engineer	4	4.38

Due to BADC's delay in handing over sites the man-month requirement for the Structural Engineer has been extended to approximately 5.5 months. (/320, 01.06.83)

1.3 Contract Administration

1.3.1 For action by BADC:

- . Amendment No.1 to Consultant's Agreement extending duration to 30 June 1985.
- . Obtain T&T approval for wireless license for radio communication. (2NA(SFG)139/81-82/1776, 4 April 83)
- . Approval to procure project vehicles. Refer 724-1.1.11/397, 20.06.83.
- . Processing of payment for balance of invoices withheld. (/388, 15.06.83)
- . Approval of procurement of plain paper copier. (/396, 20.06.83)

1.4 Meetings

- . 01.06.83 Office of Chief Engineer (0) Invitation To Prequalify

1.5 Supporting Bangladeshi Personnel

1.5.1 WEL and SSL Personnel (Subcontract)

Designation	Man-Month	
	Allocated	Utilized
Deputy Project Manager	27	6.5413
S&M Engineer	24	5.6364
Structural Engineer	6	4.3500
Architect	4	3.8389
Electrical Engineer	6	1.0000
Railway Engineer	24	3.9565
Office Engineer	26	5.9091
Land Procurement Officer	12	4.7196
Surveyor	25	4.8500
Instrument Man	25	4.8500
Rodman	25	4.7000
Chairman	25	4.7000
Draftsman	54	23.6971
Laboratory Technician	56	7.8696
Laboratory Assistant	56	-
Estimator	48	3.6087
Senior Field Engineer	60	5.0000
Field Engineer	80	-
Inspectors	128	-
Drivers	94	-
Messenger	34	-
Peon	34	-
Guard	68	-
Office Superintendent/Accountant	34	-
Clerk	34	-
Typist	34	-

1.5.2 Administrative Personnel

Administrative Manager	27	6.4546
Senior Accountant	27	6.7273
Assistant Accountant	44	5.3636
Secretary	27	6.7273
Printer	27	5.0000
Typist	72	16.1319
Clerk	45	6.7273
Drivers	103	23.6162
Messenger	45	3.9091
Peon	72	11.6364
Guard	90	26.9091
Radio Operator	48	-

1.6 Project Expenditures
(Estimated Project Cost Incurred)

<u>Item</u>	<u>Budget</u>	<u>This Month</u>	<u>Cumulative</u>
Services in Bangladesh	\$ 746,188	\$ 38,226	\$ 196,944
Services in Home Office	176,178	880	101,753
International Travel, etc.	85,740	-	5,937
Housing Allowances Per Diem, etc.	91,075	5,220	27,068
Logistic Costs	223,400	4,238	31,461
Supporting Staff	382,404	8,841	44,776
Misc. Direct Costs	43,000	41	5,328
Fixed Fee	205,460	7,610	53,270
	\$ 1,953,445	\$ 63,056	\$ 466,537
Percent of Estimated Budget		3.23%	23.88%
Percent Contract Time		3.22%	21.77%
Special Project Activity	\$ 306,620	\$ 930	\$ 20,033

1.7 Billing and Payments

<u>Invoice No.</u>	<u>Period Ending</u>	<u>Letter No. & Date</u>	<u>Billing</u>	<u>Payment</u>
01 - 02	28 Feb 83	-	\$ 97,777.54	\$ 95,117.01
03	31 Mar 83	266, 4 May 83	\$ 90,180.24	\$ 89,289.35

1.8 Reports

- Monthly Progress Report No.6 for May 1983 submitted by letter /332, 06.06.83.

1.9 General

BADC's attention was called (724-2.1.1/408, 26.06.83) to lack of periodic coordination and project meetings to discuss various technical aspects of the project. The Consultant requested that these meetings between BADC and the Consultant (and USAID) should be convened on a weekly basis.

1.10 Progress Schedule

The Financial - Progress Schedule" and "Activity Schedule" included in this report is based on the seven sites made available to date by BADC. The elapsed time expended on the project by the Consultant shown in the Activity Schedule and reflected in the Financial-Progress Schedule includes:

- 1) land/topographic surveys and soil borings at Gaibandha site which was excluded from the project by BADC;
- 2) land/topographic survey and preparation of land plan and site layout at Kishoreganj site (soil borings are held pending acquisition/purchase of site by BADC); and,
- 3) land/topographic surveys and soil borings at Parbatipur site at location of godown selected under Phase II which has now been discarded.

When BADC makes the other sites available a supplementary schedule for each of these sites will be prepared.

1.11 Activity Schedule

Note 1:

As per the Consultant's contract, BADC confirmed that ten sites have been acquired in December 1982 for the planned construction. As of 30 June 1983, the following sites were made available to the Consultant by BADC for topographic and land surveys and soil investigation:

C3 Jamalpur
F1 Dohazari
F3 Cox's Bazar
H3 Lakshampur
I4 Chandpur
L4 Domar
O5 Parbatipur

Refer to paragraph 2.1.2, Site Status, of this report for update information of each site.

Note 2:

Topographic and land surveys were completed at Gaibandha and Kishoreganj sites. Gaibandha site was subsequently deleted from the program.

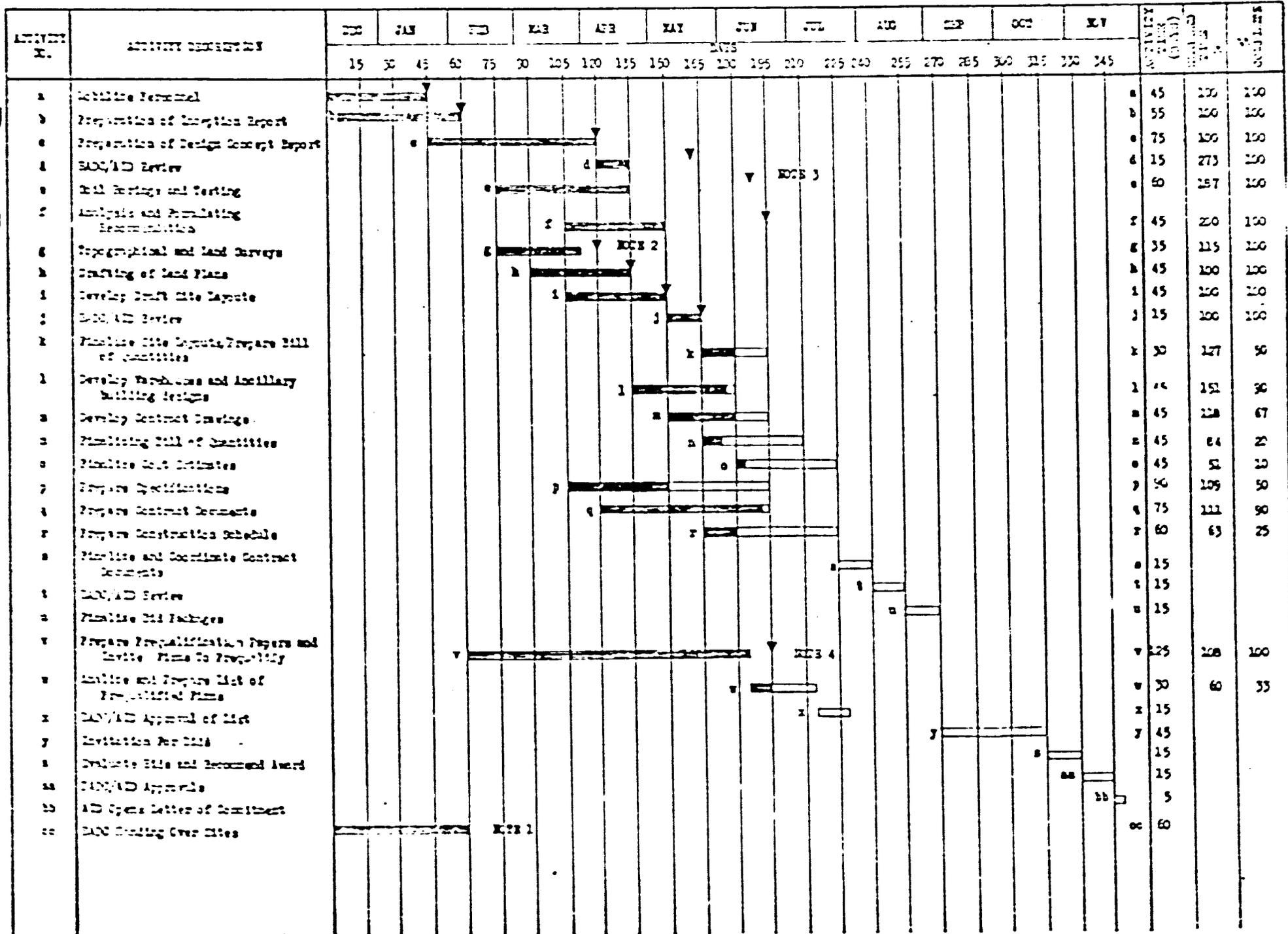
Note 3:

- a. Soil borings were completed at Gaibandha site prior to BADC deleting this site from program.
- b. Soil borings at Parbatipur site were taken in the area designated under Phase II for the location of the godown. Subsequently, the planned godown was relocated to a more desirable location within the Parbatipur site which provides for the existing godowns to be served by the proposed railway sidings.

Note 4:

Time extended from 15 June to 22 June for interested firms to submit prequalification questionnaire due to issuing of clarification to invitation to prequalify.

ACTIVITY SCHEDULE (FOR 7 SITES)



2. PLANNING/DESIGN/PRODUCTION

2.1 Site Development Phase

2.1.1 Identification of Sites

On 20 June 1983, representatives of BADC and A&W inspected a site located at West Muktarpur for construction of a 6000 ton warehouse. This site located across the Buriganga-Dhaleswari Rivers from Munshiganj and along a RHD brick road is BADC's possible candidate for the "Dhaka" site. The Consultant's observations on the site are outlined in Memorandum /400, 21 June 83.

Pending with BADC is permission to enter into Chowmuhani site for soil investigation and land survey and Kishoreganj for soil investigation.

BADC to transmit the mouza map and right of use documents to the Consultant for the Chowmuhani site to facilitate land surveys when the water recedes.

2.1.2 Site Status

B1 Kishoreganj (5000 MT)

The Consultant has been informed by Manager (Storage) to hold in abeyance soil investigation for this site until further instruction from BADC (/326, 5 June 1983). The delay to take up the work is affecting the Consultant's design work with probability of exclusion of this site from the scheduled Invitation For Bids (IFB) of September 1983.

The Consultant submitted to BADC (/404, 23 June 1983) seven copies of Lr. Plan, B1-001 (22.6.83) and Site Layout B1-002 (22.6.83) for action in obtaining permission and clearance from Bangladesh Railway on layout of railway siding and from Deputy Commissioner (Mymensingh) for finalizing acquisition of property.

BADC has been informed to take action to have telephone line within the property relocated.

C3 Jamalpur (5000 MT)

Seven copies of Land Plan, C3-001 (22.6.83) and Site Layout C3-002 (22.6.83) for this site have been transmitted to BADC for obtaining permits and clearance from Bangladesh Railway of layout of railway siding. The Consultant has been informed that BADC is in the process of purchasing plot 225 (Full) and 226 (Part) which are included in the Land Schedule.

Clearance is also required from owning agency for relocating the road presently within the property acquired.

F1 Dohazari (2000 MT)

The Consultant has submitted five copies of the Site Layout F1-002 R1 showing the mouza map and land schedule for acquisition of property to construct 2000 Ton godown at the site (/334, 7 June 1983). The location of the property as originally demarcated in the field by BADC (refer to May's report) did not conform to the property to be acquired and therefore the plan was revised. Informed that because the land is khas land special permission from Government to use this land must be obtained by BADC, which may be difficult.

The Consultant advised the Project Director BADC to investigate with BWDB, Directorate of Dredger, the possibility, timing, and cost of filling the area (1,000,000 cft) by dredging the river.

F3 Cox's Bazar (2000 MT)

By reference letters (/337, 12 June 1983, /284, 10 May 83, /235, 18 April 83, /216, 05 April 83) the Consultant brought to BADC's attention a) the necessity of relocating the power lines crossing the property, preferably by relocating outside of BADC's property; b) obtaining an area contiguous to the site for contractor's stacking yard, office and working area; c) obtaining 14 decimal of land as per ADC/S/Salon/30-5/69/1921, 11 May 1983 for access to river; d) access to road; and, e) removal of existing structures.

BADC received an estimate from S&E, PIB of Tk.41,700 for relocating the existing electric lines.

One bigha of land has been made available on "usual terms and conditions" by Airport Authority, Cox's Bazar, for stackyard etcetera.

H2 Chowmahani (3000 MT)

Verbally informed that District Manager (BADC) has taken possession of Chowmahani site on 30 June 1983. Since site is under water the Consultant is unable to carry out soil exploration or topographic/land surveys until water recedes.

H3 Lakshimpur (1000 MT)

No apparent problems.

I4 Chandpur (4000 MT)

BADC informed that agreement to construct bridge to Sen Gupta Road has been granted by Municipality.

BADC to take action to remove designated existing structures within the site.

L4 Domar (1000 MT)

BADC to take over physical possession of site and area for contractor's facilities from Seed Multiplication Farm.

05T Parbatipur (4000 MT)

Project Manager of the Consultant and Manager (Storage) BADC visited the site, (724-Parbatipur/401, 21 June 1983) and confirmed the physical location or property monuments No.9,10,11 & 12 are as shown on Land Plans, 05-001-1 and -2 and Site Layout 05-002. Though measurement of Mouza map would indicate Monument No.9 at different location it is accepted by BADC as correct as in field since it has been jointly established by Railway and BADC's Thana Inspector. The motor gauge dead-end track required for the train to enter into godown area would need to be rehabilitated and extended and permission is required from BR.

Seven copies of Land Plan and Site Layout were transmitted to BADC (/403, 23 June 1983) for obtaining BR clearance for railway sidings.

2.1.3 Land Plans and Site Layouts

Land plans were completed for Kishoreganj, Jamalpur, Chandpur, Lakshimpur, Dehazari, Cox's Bazar, Dohar and Parbatipur. Revised Site Layouts were completed for each of these sites and approved by BADC.

2.1.4 Soil Investigation and Topographic Surveys

All boring and testing works have been completed at sites which were made available to the Consultant. Permission to commence soil investigation at Kishoreganj and Chowadhani sites is being awaited from BADC. (Chowadhani is presently under water which precludes taking up wells exploration or surveys at this time).

The Consultant has determined that preloading of 9.5 feet would be required at Dehazari for 30 days, Jamalpur for 80 days, and Parbatipur for 90 days. At these site the godowns should have a brick floor. The other 4 sites where soil analysis have been made are being designed with a concrete floor.

Topographic and level surveys for all available sites have been completed and Land Plans drawn.

2.1.5 Railway Siding

The layout plans for railway siding at Kishoreganj, Jamalpur and Parbatipur have been finalized and submitted to BADC for taking necessary action in obtaining clearances from BR. The Consultant is preparing detailed layouts of railway sidings at each of these sites for estimating materials required. The estimate will be submitted to BADC/AID when completed for inclusion with Phase II procurement.

2.2 Design and Estimate Phase

2.2.1 Design

Detailed design and preparation of contract drawings for ancillary buildings and warehouses are under process and nearing completion for all available sites for which soils data is available.

Bill of Quantities

Detailed quantity take-off based on the contract drawings is in progress.

Construction Cost Estimates

Pending completion of Bill of Quantities.

Construction Scheduling

Preliminary construction schedules have been prepared and will be finalized when quantity take-off is nearing completion.

2.2.2 Contract Documents

The Consultant have reviewed BADC's and USAID's comments on Instruction to Bidders; Form of Tender, Form of Agreement and Conditions of Particular Application and resubmitted revision to documents. (/386, June 15, 1983; /391, 16 June 1983; and, /394, 19 June 1983).

Preparation of technical specification is in progress.

2.3 Construction Documents Plan

2.3.1 Prequalification Documents

The closing date for submittal of prequalification documents was extended from 15 June to 22 June due to issuing of clarification to documents.

Sixty-eight prequalification forms were received and are under review by the Consultant.

2.4 General

- BADC to take action in obtaining estimates from PDB on tapping points for supply of electricity to each site.
- The Consultant recommended to BADC to request USAID to include, under the grant, road improvements to Jamalpur, Domar and Parbatipur sites.