# DEVELOPMENT CONSTRUCTIONS LTD.



#### **OUR ASSOCIATES**

- 1. CCL SYSTEMS LTD., LEEDS, UK.
- CANDY FILTERS LTD., BOMBAY, INDIA.
- 3. EARTH MECHANICS AND SITE ENGINEERING, CALIFORNIA, USA.
- 4. USHA MARTIN INDUSTRIES LIMITED, INDIA.
- URKKADA, GEOTECHNICAL ENGINEERING SERVICES, ONTARIO, CANADA.
- 6. THE FREYSSINET PRESTRESSED CONCRETE CO. LTD., INDIA.
- 7. IRCON INTERNATIONAL LTD., INDIA.

#### **OUR CLIENTS**

- Bangladesh Textile Mills Corporation
- Military Engineering Services
- Bangladesh Power Development Board
- Bangladesh Public Works Department.
- Bangladesh T & T Board, Dhaka.
- The Royal Embassy of Nepal
- Department of Public Health Engineering.
- Chittagong Water Supply & Sewerage Authority
- Toyomenka Kaisha Ltd.
- Bangladesh Chemical Industries Corporation
- Chittagong Urea Fertilizer Ltd.
- Bangladesh Railway
- The Embassy of United States of America
- Daelim Industrial Co. South Korea
- Daewoo Corporation, South Korea
- Mitsui Construction Co. Ltd., Japan
- TEPSCO Ltd., Japan
- Indian Railway Construction Company Ltd., (IRCON) India
- RDC-TPL Consortium
- Electrowatt Engineering Services
- TOA-DECORIENT
- Mitsubishi Heavy Industries Ltd., Japan
- China Harbours Engineering Co.
- China National Complete Plant Export Corporation.
- SAMWHAN CORPORATION.
- HYUNDAI Engineering & Construction Ltd.

# **DEVELOPMENT CONSTRUCTIONS LTD.**



#### **ESTABLISHED IN 1972**

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#### **INTRODUCTION**

Development Constructions Ltd., is a reputed name in the field of foundation and geotechnical engineering as well as construction. The organization came into being in 1972, soon after the emergence of Bangladesh as an independent and sovereign nation. During the initial period of its inception, the company's field of activities was mainly limited to geotechnical investigation and pile foundation. It made its mark in the relevant arena in a very short time and never looked back thereafter. With the passage of time, the company increased its activities progressively in terms of volume and discipline and rose to its present position as highly reputed multidiscipline engineering enterprise in the country. To cope with its ever-expanding activities, a subsidiary company, namely, Development Constructions Ltd., was set up subsequently.

Development Constructions Ltd., with its team of highly trained, experienced and skilled professionals comprising engineers, geologists, hydrologists, supported by up-to-date equipment, stands out from the others in the respective field for its outstanding performance. During last 28 years it has accomplished innumerable challenging jobs which include Railway Bridges, Highway Bridges with Pre-stressed Concrete Girders, Jetties with large diameter piles and Pre-stressed Concrete Girders/RCC Girder and Deck Slab both for Ocean Going Vessels and in land River Ports, Dolphin Jetty for LPG Terminal, Multi-storey Factory Building with Pre-Cast RCC Drilled shaft foundation and pre-stressed concrete Flat Slab concept, Clinker SILO and Cement SILO with RCC and pre-stressed Concrete shell using slipform. Massive Overhead R.C.C Water Reservoirs, Large Diameter Water Mains, Water Treatment Plant, Pre-cast R.C.C Piles and Large Diameter Bored Cast–in-situ R.C.C Piles etc. Its achievements also include providing perfect foundations and geotechnical service to lots of bridges, industrial installations, deep tubewells, pump houses, regulators etc. In fact, creditable entries in the record of performance of the company are countless.

The company has also made innovative contribution to the faculty of foundation engineering through continuous research and analysis. In this connection, the know-how of "Compaction sand Pile Foundation" in multistoried building construction and "Confined Sand Column with Grouted Tips for Foundation in Soft Ground" evolved by the company may, particularly, be referred to. The Managing Director of the company, on various occasions, presented a number of papers on the subject in different international forums where the same were highly appreciated as basic conceptual contribution to the faculty.

The company is known for its pioneering role in introducing up-to date equipment and advanced know how in Bangladesh. It has introduced masonry well in building foundations in weak ground in Bangladesh. It has recently introduced Electronic Cone Penetration test for Soil using 40 Ton Hydraulic Thrust Machine, Computerized Pile Integrity Test and Dynamic Load Testing of pile in Bangladesh with the co-operation of Pile Dynamic Inc., USA. This has given a new dimension to geotechnical and foundation engineering in Bangladesh. Besides, the company is soon going to further strengthen its capability through introduction of know-how like "Prestressed Concrete in Silo Construction" and "Pre-stressed Concrete in Railway Bridge Girders". All these, combined with dynamic and efficient management are bound to usher greater success to the company in the coming days.

#### **SCOPE OF SERVICE**

- Collection, review and interpretation of geotechnical information at project feasibility, design and construction stages.
- Site investigation planning, implementation and supervision.
- Preparation of geotechnical reports including planing and structural submission.
- In-situ and laboratory testing which include determination of physio-mechanical properties of soil and rock, analysis of the parameters, evaluation of bearing capacity, settlement, swelling and collapsing characteristics of soil.
- Investigation and design of structures foundation.
- Detailed engineering geological and regional geological investigation for engineering purposes.
- Investigation for ground water, design and installations of deep tubewells.
- Construction of 400 mm to 2500 mm diameter cast –in-situ, pre cast R.C.C. and Franki pile foundation.
- Construction of highway & railway bridges, regulators, pump houses, factories and multistoried buildings.
- Ground water table lowering, drainage, and water supply projects.
- Design and construction of cement silo with slip form and pre-stressed concrete shell wall.
- Design and construction of road and railway bridge with pre-stressed concrete girder.
- Design and construction of Multi-storey Commercial/Factory Buildings with pre-stressed concrete Flat Slab concept.
- Special repair work.

# SOME PHOTOGRAPHS OF OUR PROJECT ACTIVITIES

#### FLYOVER AT KHILGAON RAIL & ROAD INTERSECTION IN DHAKA CITY



**Project:** Design Build Turnkey Project of 1.9km long Flyover at Khilgaon, Dhaka City.

**Project Cost:** 627 million taka.

View of the Flyover from the Malibagh end.

#### The Loop:

- 465m long RCC box, 47m radius of curvature at an average elevation 14.5m above surface road
- Constructed over running railway track and surface roads allowing flow of normal traffic.
- Longest curved RCC box span constructed in Bangladesh



Malibagh loop of the Flyover with passenger train passing underneath



#### **Reinforced earth ramps:**

• Reinforced earth ramps of 9.6m, 7.8m, and 7.4m height.

• Vertical segmental retaining wall.

• Ground improvement was performed along the ramp using deep soil densification in the soft soil below the ramp to control the settlement. Densification was done using vibro-compaction.

Ground improvement using vibro-compaction for reinforced earth ramp at Malibagh



Segmental retaining wall at Saidabad ramp

Main BridgeElevated 804m long 4-lane carriageway



Main Bridge



Main Bridge

# Construction of 450m long Arial Khan Bridge



Lifting of 45m long PSC Girders from floating barge

"The Mission took note of the contractors innovative. and more cost effective way of placing the 110-ton bridge girders in place using a 600-ton capacity barge mounted crane. The crane was designed, and manufactured in Bangladesh using local engineering capacity, and with input from the contractor [Development Constructions Ltd.]. As a result Bangladesh has now national capacity in form of a 600-ton capacity barge crane, this equipment was earlier only available regionally from Singapore." Source: Asian Development Bank (ADB)



Erection of PSC Girders on bridge piers



Project: 450m long Pre-stressed Concrete Bridge over the River Arial Khan under SRNDP Contract – 2 Main Contractor: Hanil Construction Co., Korea. Authorized Sub Contractor: Development Constructions Ltd.

**Development Constructions Ltd.** 

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#### Lafarge Surma Cement Plant at Chattak, Sylet



Construction of 36 MW Power Plant.

**Project:** Constrictoion of pile and substructure for Surma Energy Power plant at Chattak, Sylet

• Work includes construction of cast-insitu pile of 32m length, The last 8 meters of the piles are embeded in a hard Shale layer.

**Project Cost:** Tk. 67 million.



Construction of the cooling tower for the power plant



**Project:** Construction of pilling for the plant and Jetty for the Lafarge Surma Cement Plant at Chatak, Sylet.

**Project Cost:** Tk. 230 million

Construction of the Jetty



Construction of cast-in-situ piles with 1.4m diameter and 40m length for the jetty



Design and Construction of Floating Steel Bridge



Cement and Clinker Loading Jetty



Offshore Drilling

Project: Construction of 1200mm diameter 38m long Bored Cast in-situ Pile from offshore by Rotary Drilling Method for 3<sup>rd</sup> Buriganga Bridge near Dhaka.

Project Cost: Tk. 12.3 Million

Project Name: Construction of Shore Piling for GrameenPhone Corporate Head Quarter at Baridhara, Dhaka by Rotary Drilling Method.

Project Cost: Tk 28.1 Million



Piling Works



Reverse Circulation Drilling

Project Name: Construction of 1000mm diameter 47m long bored piles by Reverse Circulation Drilling method for Meteorological Weather Station at Moulovibazar, Sylhet.

Project Cost: Tk. 5 Million (w/o cost of material)

Employer: Fuk<mark>uda</mark>-Mitshubishi JV, Japan



Reverse Circulation Drilling



Rocks Recovered during Reverse Circulation Drilling



Lowering of Rebar Cage



Dynamic Load Testing using Pile Driving Analyzer (PDA) by Pile Dynamics Inc, USA.



Free Fall Drop of 10Ton Ram.



Main Factory Building

Project: Construction of 2<sup>nd</sup> Unit for Seven Rings Cement Factory for Seven Circles (Bangladesh) Ltd, at Kaliganj, Gazipur.

Project Cost: Tk. 14.3 Million



Ball Mill



Fly Ash Silo



Bin for Conveyance System



Construction of Tunnel for Conveyance System



Construction of Tunnel 9m below Existing Ground



Project: Construction of 312m long Prestressed Girder Bridge at Shekhpur, Madaripur over Arial Khan River.

Project Cost:Tk.70.5 Million

Construction of 38m long Pre-stressed Girder



Construction of 1200mm diameter 38m long bored piles using rotary drilling method



Project: Construction of 16 Storied Commercial Building with Two Basements at Kawran Bazar Dhaka

Estimated Cost: Tk. 19.2 Million (Excluding Cost of Material)

Construction of Shore Piling for the two basements.

Project: Construction of 8 Story Factory Building is Prestressed Flat Slab Concept for Medlar Fashion, Asulia, Dhaka

Project Cost: 80 Million.



Construction of 20ft Cantilever Slab at 70ft elevation



Project: 800Ton Maintained Load Test for Construction of Bridge at Kanaighat.

Project Cost: Tk. 1.2Million

Maintained Load Test

Project: Drilling and Installation of 5 Nos. 450mmx200mm, 200m Deep Gravel Packed Deep Tube Well for Universal Jeans in Chittagong EPZ, Chittagong

Project Cost: 2.5 Million (Excluding Materials)



Drilling of 200m Deep Well

#### **GEOTECHNICAL INVESTIGATION**

Drilling of Exploratory Boreholes, including rock coring for geotechnical investigation and insitu testing by Hydraulic Drive Tone Boring Rotary Rig.

- Project : 125 MW Hydroelectric Power Station, Kaptai, Chittagong.
- Employer : Power Development Board, Bangladesh.
- Consultant : Tokyo Electric Power Services Co. Ltd., Japan.





Drilling of Exploratory Boreholes in Meghna River by Hydraulic Drive Heavy Duty Koken Rotary Boring Rig.

Project		1200 MW Power Station at Meghna Ghat, Dhaka.
Employer	3	Electrowatt Engineering Ser- vices Ltd.
Consultant		Dames and Moore Inter- national, Australia.

# Static Cone Penetration Test in ProgressProjectJamuma Multipurpose Bridge<br/>Works Harbour AreaLocationBhuapure, TangailEmployerHyundai Engineering and Con-<br/>struction JV.ConsultantRendel Palmer and Tritton,<br/>Nedeco and Bangladesh Con-<br/>sultants Ltd.



Drilling (	of Onshor	re Explora	atory Borel	oles,	depth	120
metres a	and insitu	testing by	y Hydraulic	Drive	Tone	Bor-
ing Rota	ry Rig.					

Project

Construction of Proposed Paksey Road Bridge on the river Padma, Bheramara.

Employer : Design Development Consultants Ltd.

Otfshore Exploratory Boring by Hydraulic Drive Tone Boring Rotary Rig at proposed Paksy Road Bridge on the river Padma, Bheramara.





Drilling of Offshore Exploratory Boreholes, depth 70 metres, Sampling and Insitu Testing by Hydraulic Drive Koken Boring Rig in Pasur river.

Project : Construction of 15,000 DWT Jetty & LPG Plant, Mongla.

Employer

EXXON International.

Drilling of On-shore Exploratory Boreholes, Sampling and Insitu testing by Hydraulic Drive Koken Boring Rig in Pasur river.

- Project
- Construction of 3,000 DWT Jetty & LPG Plant, Mongla.

Employer

: ELPIJI, Malaysia Bangladesh Limited.



# 1.8 Km long Paksey Bridge Construction Project over River Padma for Geotechnical Investigation



Electric Cone Penetration Test for Paksey Bridge Construction Project.

#### Project :

Paksey Bridge Construction Project in Ishardi, Pabna.

#### Principal Contractor :

Major Bridge Engineering Bureau, P.R. China.

**Contractor**:

Foundation Consultants Ltd.



Electric Cone Penetration Test for Paksey Bridge Construction Project.

# **1.8 Km long Paksey Bridge Construction Project**



Exploratory Bore Holes by use of Rotary Drill Rig on Land at Paksey Bridge Construction Project.

#### **Project** :

Geotechnical Investigation comprising 50 Nos. exploratory boreholes upto 50 to 140 m depth on-shore and off-shore and field permeability upto 30m depth.

#### Principal :

Contractor: Major Bridge Engineering Bureau, P.R. China. Contractor: Foundation Consultants-Ltd.



Exploratory Bore Holes by Rotary Drill Rig on River at Paksey Bridge Construction Project.

## **ENVIRONMENTAL SITE ASSESSMENT**



Environmental Assessment, Drilling with 150mm diameter Auger, collection of soil & water and installation of Monitoring Wells.

Project	18	LPG Terminal, Mongla.
Employer	1	EXXON International.



Collection of Water Sample with Taflon Bailer



Soll Investigation Work by Tone Boring Rotary Rig for the proposed Water Garden Hotel, Dhaka, Bangladesh

Project : Sena Hotel Development, Dhaka

Employer : Sena Hotel Development Ltd., Dhaka



Lowering of Monitoring Well for Water Sampling

# **CONSTRUCTION OF CEMENT PLANT**



Onshore and Offshore Bored Cast-In-Situ R.C.C. Piles for Jetty, Length 52 m, Diameter 600 mm. Using Rotary Drilling Method.

Project		300,000 Ton Capacity Hyundai Cement Factory at Meghna Ghat, Sonar- gaon, Narayangonj.
Employer	100	Hyundai Cement (BD) Co. Ltd., Seoul, South Korea.
Period of Construcation		Feb. 1995-Dec. 1995.
Project Cost	100	Tk. 120 million / US \$ 3 million.



Off-shore Rotary Drilling for Bored Cast in Situ R.C.C. Pile for Jetty, Meghna River.



**On-Shore** Piling



**Construction of Clinker Silos** 

# **CONSTRUCTION OF CEMENT PLANT (Contd.)**



Erection of Mill Building



Converyor & clinker unloading Crane

300,000 Ton Capacity Hyundai Cement Factory at Meghna Ghat, Sonargaon,

Narayangonj.

Project



Employer : Hyundai Cement (BD) Co. Ltd., Seoul, South Korea. Period of Construcation : Feb. 1995 - Dec. 1995.



Panoramic View : Jetty, Mill Building, Cement Silos, Clinker Silos and Loading Converyor



Packing Building and Cement Silos

# JAMUNA MULTIPURPOSE BRIDGE (JMB)

Principal Contractor : SAMWHAN Corporation, Korea. Employer : Jamuna Multipurpose Bridge Project Authority.

Consultant : RPT-BCL NEDECO Consortium.

Construction of Double Cell, Single Cell Box Culverts and Slab Bridges.



Ch : 1+155, Contract No. 4, Serajgonj

Manufacturing, Pitching and Driving of 28.4 m Long (without splice) 400mm x 400mm Pre-Cast R.C.C. Piles



Ch: 3+555, Contract No. 3, JMB Project, Tangail



Pile Manufacturing Yard



Ch : 6+919, Contract No. 4, JMB Project, Serajgonj

## APPROACH ROAD



Slab Bridge (31m) on 28.4 metres Pre-cast Driven Plies at Ch : 3+335, Contract No. 3, JMB Project, Tangail



Slab Bridge (66 m) on 28.4 m Pre-cast. Driven Pile at Ch : 6+818, Contract No. 4, JMB Project, Serajgonj



Double Cell Box Culvert at Ch : 4+400, Contract No. 4, JMB Project, Serajgonj



Slab Bridge (31 m) on 28.4 m Pre-cast Driven Pile at Ch : 1+475, Contract No. 3, JMB Project, Tangall



Slab Bridge (31 m) on 28.4 m Pre-cast Driven Pile at Ch : 2+645, Contract No. 3, JMB Project, Tangail



Slab Bridge (66 m) on 28.4 m Pre-cast Driven Pile at Ch : 1+725, Contract No. 4, JMB Project, Serajgonj

## CONSTRUCTION OF PRE-STRESED GIRDER BRIDGES ON 1.2 METERS Dia. CAST-IN-SITU R.C.C. PILES

Principale Contractor	1	China National Complete Plant Export Corporation.
Consultant		CES (India) Ltd., Roughton & Partners (UK), DDC Ltd., Dhaka.
Employer	-	Roads & Highways Department, Government of Bangladesh.



Scaffolding & Shuttering for concreting of Pre-stressed Girder in place at Str. No. 20, Contract No. 9, RIP, Faridpur



Construction of 1.2 metres Dia and 36 metres Long Cast-in-Situ R.C.C. Piles by Rotary Drilling Method at Str. No.-20, Contract No-9, RIP Project, Faridpur.



Profile of Cable Duct for PSC Girder manufacturies Str. No.-20, Contract No-9, RIP Project, Faridpur



Prestressing 12/8 mm cable with Monopulling Jack, at Str. No. 46, contract No. II, RIP Project, Jhenaidah



Arrangement for Pre-Stressing the Cables (Final Stage) at Str: 46, Contract No. 11, RIP Project, Jhenaidah



Lifting of PSC Girder from Casting Bed at Str: 20, Contract No. 9, RIP Project, Faridpur



Preparation for Deck Slab Construction at Str. 46, Contract No. 11, RIP: Jhenaidah



Re-bar Placing for Approach Slab at Str. 46, Contract No. 11, RIP: Jhenaidah



Bridge Completed, Str: 16, Contract No. 9, RIP Project, Faridpur
# PROJECT : TRUNK PIPELINE MOHARA-BATALI HILL, WASA, PATENGA





Pipe Storage

Pipe Laying



Pipe Laying



Employer	1	Chittagong Water Supply and Sewerage Authority (WASA).
Consultants		Sir M. Macdonal and Partners Ltd., Camp Dresser and McKee Inc. and SARM Associates Ltd.
Contractor	100	Development Constructions Ltd.
Project size		22.5 Km, 600 mm to 1200 mm Diam. Ductile Iron Pipe Line inclusive 56 numbers of Culverts and Railway under-crossings.
Project		the part of the second second
value	-	Tk. 4,42,46,031 in local curren- cy. USS 1,50,000 in foreign
11		exchange. (Excluding cost of pipes and fittings).
Period of		
Construction	12	May, 1984 to September, 1987.

Sack filling on Pipe

# CONSTRUCTION OF OVER HEAD WATER RESERVOIRS



Construction of 600 mm Dia and 45 m long Cast-in-Situ R.C.C. Piles

Project		0,000 Gallons Capacity Reservoir, Mymensingh
Structure	Height = 34 m Diameter of Shaft = 9 Diameter of Main Tan	
Employer	Department of Publi Bangladesh,	lic Health Engineering,
Consultants	Engineering Science sultant and Associate	Inc., USA. AQUA Con- s Ltd., Bangladesh.
Financer Contract	ADB Loan, No. 571-E	BAN (SF).
value	Tk. 2,18,04,072 (US\$) 6,41,296)	
Period of Construction	September, 1968 to A	April, 1991.



Construction of Pile Cap



Construction of Vertical Shaft



Construction of Top Dome

# **PROJECT : IRON REMOVAL PLANT**

Period of Construction	: November, 1983 January, 1984.	to
	24 meters leng Bored Cast-in-Si R.C.C. Pile.	th
Type of foundation	: 400 mm diameter a	nd
1.00	scour.	
Type of plant	: Rapid Gravity Filt Backwash by simult neous air and wat	a-
	US\$ 2,62,000 foreign exchange.	in
Contract value	: Tk. 62,00,000 in loc currency.	al
Financer	: IDA Credit.	
Location	: Kalurghat, Chittago	ng
Consultant	: Sir M. Macdonal a Partners Ltd., Car Dresser and McK Inc. and SAR Associates Ltd.	np ee
Employer	: Chittagong Wat Supply and Sewe age Authority.	
Capacity	: 5 Million Gallons Water per Day.	01



# DYNAMIC STATIC, LOAD TESTS AND INTENTEGRITY TEST ON PILES



### We measure, calculate and check :

- Hammer performance
- Pile integrity or damage in the Pile Shafts
- Driving stresses and
- Bearing capacity of Piles





Our Managing Director with Prof. Dr. George G. Goble and Mr. Frank Rausche of Pile Dynamic, Inc., U.S.A. in 2nd Asian Pile Driving Analyzer Users Conference, 1990, Hongkong.

# STATIC LOAD TEST ON PILE



- Applied load 475 tons, maximum settlement 4.72 mm, net settlement - 1.51 mm.
- Pile size : Diameter 750 mm and length 22 m.
  - : Proposed Fly-over at Mohakhali, Dhaka.
  - : Roads & Highways Directorate, Bangladesh.
- Principal

Employer

Project

Contrractor : Concord Engineers & Constructions Ltd.



Static Load Test at Jamuna Multipurpose Bridge Project (Cut-Off Level of Piles at 6m above ground).

DEVELOPMENT CONSTRUCTIONS LIMITED

# PROJECT : RE-BUILDING OF FLOOD DAMAGED RAILWAY BRIDGES









DEVELOPMENT CONSTRUCTIONS LIMITED

# Extension of Chittagong Cement Clinker Grinding Factory



Completed Packing Building and under Construction 5000T Cement SILO using Slip Form

#### **Project** :

5 Stoned Packing Building for Factory Unit II on 38m long 600mm dia Bored Cast-in-Situ RCC Piles

Employer : Chittagong Cement Clinker & Grinding Co. Ltd.

Project Cost : Tk. 26.00 Million

Construction Period : 04.04.1998 to 19.10.1998.

#### Project :

 ii) Design & Construction in progress of 2 Nos. 5000 Ton (Ht 42m, Diam 14m) Cement SILO of prestressed concrete construction using SLIP FORM on 600mm diam, 38m long Bored Cast-in-Situ Rake (1:6) Piles



SLIP FORM in SILO Construction

# Extension of Chittagong Cement Clinker Grinding Factory



Cement SILO by SLIP FORM under construction



Completed Cement SILO by SLIP FORM

# Extension of Chittagong Cement Clinker Grinding Factory



Project : 25,000 ton capacity 30m diam, 38.5m high Clinker Silo using SLIP FORM

Project Cost : Tk. 63.00 Million

#### Project :

Two Nos. 5000 Ton Capacity Cement SILO of pre-stressed concrete construction using SLIP FORM

Project Cost : Tk. 42.00 Million



# Dhaka Grinding Plant A Project of Scan Cement International Ltd.



Off-shore Pile hole drilling by Rotary Rig for Bored Cast-in-Situ RCC pile for Jetty at Dhaka Grinding Plant Project of SCAN CEMENT

#### Project :

Design & Construction of Jetty for Dhaka Grinding Plant Project at Tatki, Rupgonj, Narayangonj

Length of jetty Head : 73.50m Wide of jetty Head : 14.75m Length of Gangway : 72.10m

Principal Contractor : Korea Heavy Industries Co. Korea

Design Build Contractor : Development Constructions Ltd.

Contract Period : 20th September, 1999 to 30th November, 2000



Completed Jetty 73m x 14m with 8m x 72m catwalk with 120 Ton capacity Gantry Crane for Dhaka Grinding Plant Project of SCANCEM Major Component of Work : a) Bored Cast-in-Situ RCC pile, Length 30m, Diameter 1000 mm, Rake-1:6. Capacity

Vertical 471 Ton

Horizontal 71 Ton.

b) 15m long Pre-stressed

c) RCC Decking.

Project Cost : Tk. 50.00 million

# **Dhaka Grinding Plant Project** A Project for Scan Cement International Ltd.



36m diameter and height 32m, Capacity 40,000 Ton Clinker Silo using SLIP FORM Technique

Project : 5000T Cement SILO and 40,000T Clinker SILO

Principal Contractor : Korea Heavy Industries Co. Korea.

Contractor : Development Constructions Ltd.

Project Cost : Tk. 93. 94 million



16m diameter and height 33m, Capacity 5,000 Ton Cement Silo with Pre-stressed Concrete shell using Slip Form Technique

# Cement Clinker Grinding Plant A Project of Ashugonj Cement Industries Ltd., at Mongla Port.



Completed 3 x 2000T Cement SILO using Slip Form Technique.



**Packing Building** 

# Cement Clinker Grinding Plant A Project of Aashugonj Cement Industries Ltd., at Mongla Port



Completed Jetty for 10,000T DWT Vessel Berthing for Clinker unloading and Cement loading at Mongla Port

### Scope of work :

Jetty for 10,000 DWT Sea going vessel. Jetty Head (130m x 8m), Gangway 2 Nos 58m x 4m and Mooring Dolphin 2 Nos 4m x 4m, Cement Mill Building, Packing Building, Cement Silo, Clinker Storage, Gypsum Storage & 3 Nos Cement Silo using slip form at Plot No. 18, Mongla Port Industrial Area, Mongla, Bagerhat.

#### Pile :

a) 120 Nos 600 mm dia 40m long vertical & Rake (1:5) pile for Jetty in 12m depth tidal environment. b) 500 mm dia, 28 meter

long 182 Nos. Bored Castin-Situ RCC piles. c) 450 mm dia, 28m Long

48 Nos. Bored Cast-in-Situ RCC Pile on land,



Clinker Storage at Mongla Port using Slip Form Technique

# LPG Storage Depot at Mongla Port

A Project of Elpiji Malaysia-(Bangladesh) Limited an enterprise of Kleenheat Gas, Australia.



Scope of work : a) Embankment, Bank Protection, Dolphin Jetty for 3600 Ton Vessel Berthing. b) Depot Facilities, Reclamation. c) 1500 T LPG (20 m Dia) Spherical Tank Foundation.

Employer : Elpiji Malayasia-Bangladesh Ltd.

Project Cost : Tk. 79.614 million



Completed Dolphin Jetty for 3800 DWT, LPG Vessel Berthing

### Saidabad Water Treatment Plant Owner : Dhaka WASA



#### Project :

Bored Cast-in-Situ RCC piles for Saidabad Water Treatment Plant Project, Contract 4B using Rotary Technique of Drilling.

Principal Contractor : M/S. Hanil Construction Co. Ltd., South Korea.

Project Cost : Tk. 51,693,190/-

Contract Period : 19.05.1999 to 31.03.2001







Bored Cast-in-Situ R.C.C. Pile Construction by Dry Hole Method with Hydraulic Vibro Hammer ICF 416, CMV TRM 21/35 Rig/Hydreq Minor Rotary Drill Rig assisted by 70 TP & H Crawler Crane, Transit Mixer and Concrete Pump Car.

# Factory Building A Project of Lakshma Fashion Ltd.



### Project :

Pre-cast RCC Hollow Drilled Shaft and pre-stressed concrete FLAT SLAB in 6-storey Factory Building for Lakshma Fashion Ltd., at Barobari, Gazipur.

Employer : M/s. Lakshma Fashion Ltd.

Principal Contractor : Development Constructions Ltd.

Project Cost : Tk. 20.00 million US \$ 392157



Project : Pre-cast RCC Hollow Drilled Shaft Foundation for R.M. COLD ROLLED STEEL MILLS LTD. at Kumira, Chittagong.

Employer : R.M. COLD ROLLED STEEL MILLS LTD.

Principal Contractor : Development Constructions Ltd.

Project Cost : Tk. 64.50 million

# **Arial Khan Bridge under Construction**



No. 1

General View of 1000 ton Pile Loading Test Site.

### No. 2

Settlement Measurement with 4 Dial Gauge.





No. 3

Electric Motor Oil Pump Pressure Gauge shows 260kg/sq. em which indicates 700 ton loaded on pile

### **KEY TECHNICAL PERSONNEL**

Managing Director	MD. NURUL AMIN B.Sc. Engineer. (Civil) FIE (B), M SEAGS, Member ASCE, USA. Member, Deep Foundation Institute	38 Years.
Director Mechanical	Cliffs U.S.A. ASAADUZZAMAN A.B.M. B.Sc. Engineer. (Mech)	47 Years.
Director	SABINA SHAHNAZ (REMY AMIN) M.Sc. Engineer (Civil). USA.	10 Years.
Director	SONIA SHAHNAJ (SONY AMIN) M.Sc. Engineer (Civil). USA.	10 Years.
Director (Planning&Cost)	CHAITANNA KUMAR MANDAL B.Sc. Engineer. (Civil), FIE(B)	16 Years.
Director (Field Operation)	NURUL AMIN TALUKDAR	30 Years.
Director Technical	MEHEDY AMIN M. Sc. Engineer (Civil) Magna cum Laude with Distinction The Ohio State University, U.S.A. Awards: O.S.U Graduate Fellowship, C.N. Brown Scholarship, Karl. V. Taylor Memorial Scholarship, O.S.U College of Engineering Research Award	2 Years.
Director Operations	<ul> <li>SAADY AMIN</li> <li>M. Sc. Engineer (Civil)</li> <li>Magna cum Laude with Distinction</li> <li>The Ohio State University, U.S.A.</li> <li>Awards: O.S.U College of Engineering Research A</li> <li>O.S.U Civil Engineering Alumni Scholars</li> <li>Member: ACI, USA</li> </ul>	
Senior Advisor	M. K. CHATTERJEE M.Sc. Engineer. (Civil) Member: Indian Road Congress, Member: Various IRC Codes/ Bridge Standard Committees.	42 Years.

Senior Advisor	ABDUR RAHMAN KHAN B.Sc. Engineer. (Civil) FIE (B), Member ASCE, USA. Member, American Concrete Institute	39 Years.
Senior Advisor	A.K.M. AKHTARUZZAMAN M.Sc. Engineer. (Civil)	20 Years.
Design Engineer	LAILA NOOR B.Sc. Engineer (Civil)	9 Years.
Design Engineer	MOHAMMAD MOSLEM UDDIN B.Sc. Engineer (Civil), MIE(B)	7 Years.
Design Engineer	SHEIKH SAIFUL ISLAM B.Sc. Engineer (Civil)	6 Years.
Project Engineer	A.R. FARUOQUE M.Sc. Engineer. (Civil) MEL. MOSCOW, USSR	19 Years.
Project Engineer	MD. TAYABUR RAHMAN B.Sc. Engineer. (Civil)	9 Years.
Project Engineer	MD. EBADUR RAHMAN CHOWDHURY B.Sc. Engineer. (Civil)	6 Years.

# **MANAGEMENT STAFF (OFFICE)**

Designation	Name
Senior Accountant	Md. Shamsuzzaman
Senior Accountant	Prodip Kumar Das
Account	Md. Ashaduzzaman
Account	Md. Shahabuddin
Assistant Accountant	Md. Harun-Or-Rashid
Assistant Account	Md. Rashedule Bari
Auto CAD Engineer	Shamima Afroz
	Dip-in-Architecture
Senior Drafts man	Md. Siddiqur Rahman
System Analyst	Mr. Mazharul Haque (B.Sc.)
Computer Operator	Md. Enayet Hossain (M.Sc.)
Real State Officer	Md. Mamun Hyder (B.A.)
Purchase officer	Md. Shahjahan (B.A)
Reception-Cum-P.A.	Anamika
Reception-Cum-P.A.	Shah-Alam Talukder
Commercial Assistant	Md. Nurul Islam Khan
Office Peon	Eakub Ali Talukder

### WORK MANAGEMENT AND SUPERVISORY STAFF

Manager Construction	N. A TALUKDER	27 Years.
Project Manager	A.R.FARUOQUE M.Sc. Engg. (Civil) MEL. MOSCOW, USSR	19 Years
Project Engineer	MD. EBADUR RAHMAN CHOWDHURY B.Sc. Engg. (Civil)	8 Years
Project Engineer	MD. JAKIR HOSSAIN SRAKER B.Sc. Engg. (Civil)	4 Years
Project Engineer	AHMED SHAFI B.Sc. Engg. (Civil)	2 Years
Project Engineer	MOSHAROF HOSSAIN B.Sc. Engg. (Civil)	2 Years
Construction Engineer	MD. GIAS UDDIN (Dip.in Civil Engg)	18 Years.
Construction Engineer	MAJIBUR RAHMAN (Dip.in. Civil Engg.)	15 Years.
Construction Engineer	ABDUL WADUD (Dip.in. Civil Engg.)	14 Years.
Construction Engineer	MAZAMMEL HAQUE (Dip.in. Civil Engg.)	23 Years.
Construction Engineer	MD. ABDUL JALIL (Dip.in Civil Engg)	10 Years.
Construction Engineer	MD. MAMUNUR RASHID (Dip.in. Civil Engg.)	5 Years.
Construction Engineer	MD. AMINUL ISLAM (Dip.in. Civil Engg.)	5 Years.
Construction Engineer	MD. MOSTAFIZUR RAHMAN (Dip.in. Civil Engg.)	8 Years.
Construction Engineer	MD. NAZMUL AHSAN BHUYAN (Dip.in. Civil Engg.)	3 Years.
Construction Engineer	MD. SHAMSUR RAHMAN(JEWEL) (Dip.in. Civil Engg.)	5 Years.

Asstt. Engineer	MD. IBRAHIM KAZI (Dip.in. Civil Engg.)	6Years
Asstt. Engineer	MD. SHAJAHAN (Dip.in. Civil Engg.)	4Years
Inspector of Works	MD. R.A. KAMAL	18 Years
Inspector of Works	MD. AMANULLAH	10 Years
Inspector of Works	MD. MESBAHUDDIN	14 Years
Inspector of Works	MD. ELIAS MOLLAH	12 Years
Inspector of Works	MD. ABDUL BATEN AKHAND	10 Years
Inspector of Works	MD. A. BARI KHAN	12 Years.

### QUANTITY SURVEY AND QUALITY ASSURANCE STAFF

Name	Designation	Experience
SALINA AKTER JAHAN B.Sc. Engg. (Civil)	Quantity Surveyor	3 Years
Md. Aminul Haque Chowdhury Dip-in-Civil Engg.	Asstt. Engineer	6 Years.

### **KEY FIELD STAFF**

Designation	Name
Drilling Foreman	Md. Amirul Huq
Piling Foreman	Md. Abul Hashem
Piling Foreman	Md. Shahjahan
Driller	Md. Nurul Islam
Driller	Shahjahan
Driller	Md. Sobhan Miah
Driller	Shabuj Miah
Driller	Badal Chow
Driller	Faizuddin
Driller (Soil)	Md. Anusur Rahman
Driller (Rotary)	Md. Saidur Rahman
Driller (Rotary)	Rafique (i)
Driller (Rotary)	Md. Humayun Mir
Asstt. Driller	Md. Nurul Islam (ii)
Asstt. Driller	Md. Nur Mohammad
Asstt. Driller	Md. Khirmohon
Asstt. Driller	Md. Kafiluddin
Asstt. Driller	Md. Milon
Asstt. Driller	Md. Ashadul
Asstt. Driller	Md. Habibur Rahman ( Hoby)

Mechanic	Md. Eshak
Mechanic	Mr. Ajoy Sarker
Mechanic	Md. Sanowar
Mechanic Helper	Md. Shamim
Mechanic Slip Form	Md. A. Motin Talukder
Welder	Md. S. Islam (Uzzal)
Welder	Md. Rafique (ii)
Welder	Md. Bachu Miah
Welder	Md. Achimuddin
Welder	Mr. Rashmohon
Welder	Md. Osmani (i)
Welder	Md. Abul Basher
Welder	Md. Ibrahim (2)
Welder	Md. Osman(3)
Welder	Md. Jahangir
Electrician	Md. Mokleur Rahman

### **KEY HEAVY EQUIPMENT OPERATORS**

Designation	Name
Hydriq Minor Operator	Md. Abul Hossain
Hydriq Minor Operator	Md. Aminul Islam
Hydriq Operator	Md. A Majid
Hydriq Minor Driver	Md. Muslem
Crane Operator (70T)	Md. Karim
Crane Operator (40T)	Md. Jashim
Crane Operator (25T)	Md. Dulal
Crane Driver (70T)	Md. Anisul Haque
Crane Driver (25T)	Md. Shamsul Haque
Crane Truck Driver	Sree Nikhil Acharjee
Low Bed Trailler Driver	Md. Kizir Ahmed
Low Bed Trailler Helper	Md. Saidul ( Liton)
Batching Plant Technician	Md. Nazrul
Batching Plant Operator	Md. Abdul Baset
Pay Loader Driver	Md. Shahbuddin
Drum Truck Driver	Md. Gulzer
Ramico Driver	Md. Farook (i)
Ramico Driver	Md. Afsar Uddin

### WORKSHOP STAFF

Designation	Name
Asstt. Engineer Workshop and Store	MD. SHAFIQUE AHMED (Dip. in Civil Engg.)
Sr. Store In-Charge	Beni Madhab Sharkar
Store Asstt.	Mr. Dipangkar Das
Store Asstt.	Mr. Narayan
Senior Foreman	Mr. Kanchab Miah
Master Mechanic	Md. Ibrahim
Senior Mechanic	Md. Nur Mohammed
Mechanic	Md. Kabir Hossain
Mechanic	Abu Sufian
Mechanic	Md. Fazlul Haque
Electrician	Md. Mynuddin ( Liton)
Welder	Md. Nurul Islam ( Nuru)
Welder	Md. Alamgir
Welder	Md. Farid
Welder	Md. Hafizur
Welder	Md. Fardous
Welder	Md. Minto (1)
Welder	Md. Minto (2)
Lathe Man	Md. Faroque (2)
Lathe Man	Md. Laikat Ali
Lathe Man	Md. Ansur Ali
Lathe Helper	Md. Masum

### CURRICULUM VITAE OF MD. NURUL AMIN MANAGING DIRECTOR

- **QUALIFICATION** : B. Sc. Engg. (Civil), Bangladesh University of Engineering and Technology, Dhaka, 1964, Post Graduate studies (Soil Mech. & Foundation Engineering).
- **ADVANCE TRAINING :** Dynamic Testing of Pile (non-destructive test) for integrity and ultimate load carrying capacity, conducted by pile Dynamics Inc., Ohio, U.S.A., 1989.

### **MEMBERSHIP**: i) Fellow, Institution of Engineers, Bangladesh.

- ii) Member, Deep Foundation Institute, Cliffs, U.S.A.
- iii) Member, South East Asian Geotechnical Society.
- iv) Member, International Society for Soil Mechanics and Foundation Engineering.
- v) Member, American Society of Civil Engineers.
- vi) Vice President, Bangladesh Society for Geotechnical Engineering.
- vii) Resource person (Foundation Engineering) Institution of Engineers Bangladesh.
- viii) Member of the Organizing Committee for the Fifth International Conference on the Application of Stress Wave Theory to Piles held in Orlando, Florida, USA in 1996.
- ix) Convener Editorial Sub-Committee Structural Design (Foundation) Bangladesh National Building Code.
- x) Specialist Resource person (Foundation Engineering) BPWD, RHD.

### NONPROFESSIONAL MEMBERSHIP :

- i) Member, Rotary Club of Dhaka North West, Paul Harris Fellow.
- ii) Life Member, Gulshan Central Mosque and Islamic Research Society, Dhaka.

### PUBLICATIONS /:1. Foundations for Tall Buildings in and around Dhaka City. Presented in the Annual Convention of Institute of Engineers, Dhaka, Bangladesh.

- 2. Compaction Sand Pile in non-cohesive loose ground. –A case study presented in Annual Convention of institute of engineers, Dhaka, Bangladesh.
- 3. Foundation in Swelling Clay in Bangladesh –A case study. Presented in Annual Convention of Institute of Engineers, Bangladesh.
- 4. Geotechnical Behaviour of Soils from Coastal Region of Bangladesh –Presented in the Ninth South East Asian Geo-technical Conference, Bangkok, Thailand /1987.

- 5. Pre-Loading of soft fine grained soil materials using Inflatable Tubes and vacuum. Presented in International Symposium on Shallow Sea and Low Land, Saga Japan / 1988.
- Some Experiences on Integrity Test of Pile in Bangladesh by Nondestructive low strain test method. Presented in the 2<sup>nd</sup> Asian Pile Driving Analyzer Users Conference, Hongkong, 1990.
- Some Experiences on Bored Cast –in-Situ Reinforced Concrete Piles in Bangladesh – A Case Study" presented in U.S. FHWA International Conference on Design & Construction of Deep Foundations, December 1994 in Orlando, Florida, USA.
- 8. Integrity testing of foundation Piles in Bangladesh-Case Study Presented in Fifth International Conference on the Application of Stress-Wave Theory to piles. Sept 1996 in Orlando, Florida, USA.
- 9. Bored Cast –in-Situ R.C.C. piles, Model Procedure and specifications Presented in Annual Conference of the Institute of Engineers Bangladesh 1995.
- Performance of Bored Cast –in-Situ R.C.C Piles in Bangladesh Presented in the Forth International Conference on Case Histories of Geotechnical Engineering, St. Louis Missouri, USA on March 8-15, 1998.

#### **INNOVATIONS / :**

- a) Compaction Sand Pile for structure foundation in non-cohesive loose ground.
- b) Confined Sand Column with grouted tips as structure foundation in soft ground.
- C) Introduced small diameter Masonry Well as Building Foundations in Bangladesh.
- d) Innovated and developed design & construction methodology for for Pre-cast Hollow R.C.C. Drilled shaft with in-situ concrete pedestal.

### **EXPERIENCES / :**

1964-68 : Project Engineer, Swiss Boring Overseas Corpn. (Switzerland), Dhaka.

- 1. Developed and executed driven cast –in-situ enlarged base pile Foundation work :
  - a. National Assembly Building, 184 Ft high R.C.C structure at Shere –e- Bangla Nagar, Dhaka. (2500 numbers of 40t to 60 T capacity piles).
  - b. MNA'S Hostel, Sharwardhy Hospital, Shere –e-Bangla Nagar, Dhaka. (1800 numbers of 40 T to 60 T capacity piles).
  - C. 80 MW Siddhirgonj Power Station (800 numbers of 60 T capacity rake piles).

		e.	ESSO Jetty at Godnail, Narayangonj, Dhaka.
		f.	IWTA-Jetty at Dhaka / Narayangonj, Ground Water
			lowering work for Pumping house and water intake structures for
			120 MW Ashugonj Power Station .
1968-70			Engineer,
			Boring Overseas Crop. (Zurich, Switzerland) Dhaka.
	1.		ed foundation of the following project :
		-	Dhaka International Airport, Terminal Building.
			13-storied Science Faculty Building for Dhaka University.
			14-storied LACO Building at Motijheel, Dhaka.
			11 – storied C.G.O Building at Chittagong and Khulna.
	2.		ed or ground water lowering for following projects)
	2.	-	Chittagong Dry-Dock.
			Shantahar Food silo.
			Karachi Dry-Dock., Pakistan.
1970-71			n Engineer,
1770 71		-	Fech International Ltd.
		Dhak	
	1.		ed foundation for the following Projects :-
	1.	0	Child Welfare Center, Dhaka.
			Dhaka Water Works intake structure.
1971-72			10-storied Telephone House, Mogbazar, Dhaka.
19/1-72			Administrator,
			Soil Tech International Ltd.
			Dhaka.
			Appointed by the Government of the Peoples Republic of
			Bangladesh to run the affairs of the company.
1072 72			
1972-73			Executive Director,
			DRILLCO LTD.
	1	Destau	
	1.	-	ed foundations for the following project :-
			18-Storied P.M.G. Building Khulna.
1070			400 ft high Radio Mast at Kalurghat, Chittagong.
1973-till date			Managing Director
			Foundations Consultants Ltd and Development
			Constructions Ltd.
	1.		action of the following projects :
			Two numbers R.C.C bridge (Span-16.5 m) on cast –in- Situ R.C.C.
			rake –pile diameter 500 mm and length 8m on Dhaka –Chittagong
			Highway.
			2.25 lac gallon capacity R.C.C overhedad water Tank at
			Mymensingh on 46 m long bored castnsitu R.C.C. pile
			foundation.
			Railway (Span 200 ft.) Bridge No. 207, Feni-Laksham Section,
			founded on 42" diameter drilled caissons (bored cast-in-situ piles),
			length75'-0" and masonry piers/abutment.

- d. Railway Bridge No. 119, Sreepur –Kawraid, section (Span160 ft.) founded on 42" diam drilled caissons (bored Cast-in-Situ R.C.C. Piles), Length 70'-0" drilled caissons (bored cast-in-situ R.C.C piles).
- e. Railway Bridge over Turag River (Span 300 ft.) at Tongi, Dhaka founded on 42" diam. 75'-0" drilled caissons (bored cast –in-situ R.C.C. Piles).
- f. Railway Bridge No. 20 (Span 70ft.) Geo-tech. investigation Design and Construction) on 500 mm diam. Bored cast –in-situ rake pile and 42" diam. drilled caissons (bored vertical pile foundation).
- g. Railway Bridge No. 2A, Shambhugonj, Mymensingh. (Span 130 ft.) (Geo-tech. Investigation Design & Construction).
  Founded on 42" diam. 65'-0" long drilled caissons (bored cast –insitu R.C.C.piles)
- h. Railway Bridge No. 8 A (Geo-tech. Investigation & Design).(Span 160'-0")
- i. 5 M.G.D. Iron removal plant for Chittagong WASA.
- j. 22.5 Km, 600 mm to 200 mm dia water pipe line (Ductile Iron Pipe) for Chittagong, WASA.
- 2. Construction of R.C.C. Cast-in-Situ, Pre-cast R.C.C. and Sand piles foundation of following projects:
  - a. Godown, Factory and Administration Building of National Cotton Mills, Chittagong (500 Piles).
  - b. National Library Building at Agargaon, Dhaka. (Investigation, design, construction of 800 Nos. Piles capacity 60 Ton each).
  - d. 132 KV Anchor, River Crossing Towers on Karnafully & Halda River, Chittagong (Span 1000 m each).
  - e. Bangladesh Agriculture Research Institution at Chittagong.
  - f. 132 KV Greater Dhaka Power Distribution Towers from Postogola to Siddhirgonj.
  - g. Chemical Water Treatment Plant of 110 MW Goalpara Power Station, Khulna.
  - h. 2 Nos. Permeable Steel Pile Spares for Protection of Hatiya Town from Erosion.
  - i. 500 Beded Hospital at Chittagong Cantonment
  - j. Housing Complex, CUFL, CHITTAGONG. (1600 Nos. 14"X14" and 16"X16" Pre-cast R.C.C Pile).
  - k. 130 Nos 132 KV Power Distribution Towers (Barisal-Bherapara) along 207 Km cross-country route.
  - L. Design & Construction of 69.4m and 58 m Span Road Bridge with pre-stressed concrete girder bored Cast-in-Situ piles in Kustia-Magura and Faridpur –Daulatdia Road under RIP.
  - M. Design & Construction of 65.23 m long Road Bridge with prestressed concrete girder on Ichamati River in Pabna by pass.

- 3. Major Geotechnical Investigation works executed are:
  - a. 20 Nos. Cyclone shelters at Dublar Char. Bagerhat.
  - b. Land Reclamation Project at Ashugonj for BOGMC.
  - c. Navigation Channel Dredging Project at Mongla Port. Bagerhat.
  - d. 200 Nos. Cyclone Shelters in Greater Barisal and Patuakhali (IDA financed) in Coastal region of Bangladesh.
  - e. 200 Nos. food grain storage in Greater Dinajpur, Rangpur, Bogra, Rajshahi, Districts. (IDA financed).
  - f. Numbers of Hospital Centres, Natural Health Centres at different places in Bangladesh (IDA financed).
  - g. Explosive Cargo Jetty and Multi-storied Transit Sheds at CPA Project area at Chittagong.
  - h. 132 KV Power Transmission Towers for PDB 300
     Numbers for Greater Dhaka Power Distribution 200
     Numbers for Khulna- Bagerhat –Mongla 94 Numbers for
     Bagerhat Perozpur 47 Numbers for Modanhat –Dohozari
     8 Numbers for Mahamudabad Ashugonj.
  - i. Meghna Dhonagoda irrigation Project.
  - j. Karnafully Irrigation project along Halda River.
  - k. 5 Nos light tower installation at Hiron Point at Sundarban Area for Mongla Port Authority.
  - 1. 900 m long Buriganga Bride, Dhaka.
  - m. 300 m long Sitalaykhya Bridge, Dhaka.
  - n. 700 m long Bramaputra Bridge, Mymensingh.
  - o. 700 m long Mohanada Bridge, Rajshahi.
  - p. 1200 m long Mohananda Bridge, Rajshahi.
  - q. Span proposed PAKSEY Road Bride on the River Padma.
  - r. Meghna Bridge at Bhairab Bazar.

# LIST OF CONSTRUCTION EQUIPMENT, VEHICLES AND FACILITIES OWNED BY DEVELOPMENT CONSTRUCTIONS LTD.

Type	SI. No.	Name of plant, Machinery of equipment	Country of Manufacture	Year of Manufacture	Capacity	Number	Present Location	Present condition (Running or out of order)
	1	"P & H" KOBELCO 670-S Crawler Crane	Japan	1982	70 Metric Ton	1	Company Central Depot, Tongi	Running
	2	NCK 605 Crawler Crane 12.5 Tons single line pull, equipped with long and wide u/c 36" pads, 60 ft boom hook block, Dorman engine, part air controls	England	1987	38 Metric Ton	1	Company Central Depot, Tongi	Running
Crane	3	"P & H" KOBELCO 35Ton Crawler Crane	Japan	1988	35 Metric Ton	1	Company Central Depot, Tongi	Running
ľ	4	HITACHI 25Ton Crawler Crane	Japan	1985	25 Metric Ton	1	Company Central Depot, Tongi	Running
	5	25 Ton Capacity (10 Wheeler) Heavy Crane Model : Allen Oxford	England	1988	25 Metric Ton	1	Company Central Depot, Tongi	Running
		5 Ton Capacity (6 Wheeler) Heavy Crane Model : 1976	Japan	1995	5 Metric Ton		Company Central Depot, Tongi	Running
	7	ICE 416 Hydraulic Vibro Hammer with Single with Single clamps, Double Clamps, Cummins Engine, 500 KV Hydraulic Power Pack complete with hoses.	USA	1988	10.5 Tons	1	Company Central Depot, Tongi	Running
	8	CMV TRM 35/21, 21 Tons-meter torque piling Rig equipped with GM 4/71 engine and ZF transmission, 5 X 12 m Kelly bar max. drilling depth 85 m, and dia 2.5 m.	England	1987	Torque 21 Tons- meter. drilling depth 85 m, and dia 2.5 m.	1	Company Central Depot, Tongi	Running
Ŧ	9	Hydreq Minor Rotary Direct/Reverse Circulation Rig	England	1985	1200 mm dia and 40 m long Bored pile	4	Company Central Depot, Tongi	Running
quipmen	10	Koken Heavy Duty Rotary Drilling Rig for Construction of Cast – in – Situ R.C.C Piles (Vertical and Rake piles).	Japan	1990	1200 mm dia and 40 m long Bored pile	4	Company Central Depot, Tongi	Running
ast-in-Situ Piling Equipment	11	Hydraulic Operated Turntable Reverse Circulation Rotary Drilling Rig	Major Component: Norway, England	2006	2500 mm dia and 100m long Bored pile.	2	Company Central Depot, Tongi	Running
-in-Sit		Diesel Hammer K35 complete with tripping device	Japan	1992	10.5 Ton-Meter	3	Company Central Depot, Tongi	Running
U U	13	Diesel Hammer IDH35 complete with tripping device	Japan	1992	10.5 Ton-Meter	1	Company Central Depot, Tongi	Running
Precast and (	14	Pile Frame	(Own Design and Fabrication)		7 Ton Power Winch & 38m Leader to Drive 31 m long Pre-cast / Steel Tube Piles in Single Length up to 1:5 Rake	3	Company Central Depot, Tongi	Running
	15	Piling Rig (Percussion Type) for construction of cast –in-situ R.C.C. Piles		1988	Diameter 450 mm to 1200 mm & Length up to 50m	10	Company Central Depot, Tongi	Running
	16	Heavy Duty Mud Pump	India	1988	'SP' Type, Head 28 m, 30,000 L/hr	12	Company Central Depot, Tongi	Running
	17	Centrifugal Pump	China	1989	2 cu.ft/sec	12	Company Central Depot, Tongi	Running

#### LIST OF CONSTRUCTION EQUIPMENT, VEHICLES AND FACILITIES OWNED BY DEVELOPMENT CONSTRUCTIONS LTD. Present condition SI. Country of Year of Name of plant, Machinery of equipment (Running Capacity Number Present Location Manufacture Manufacture or out of order) Hydraulic jack and kentledge for pile load Up to 1500 Ton 2 Company Central Running 18 test Depot, Tongi Computerized Pile Integrity Tester by Low USA 2002 19 1 Company Central Running Strain Dynamic Response method Origin : Depot, Tongi Pile Testing Equipmen Pile Dynamic Inc. USA Company Central 20 Pile Driving Analyzer inclusive of USA 2003 1 Running CAPWAP Softwarelt measures, calculates Depot. Tongi and checks i) Hammer performance (energy transfer) ii) Pile Integrity or damage (extent and location of damage) iii) Driving stress (compressive and tension) iv) Bearing capacity (at time of testing) Caterpillar CAT121 Excavator USA 1996 0.5m3 Company Central Running 21 1 Depot, Tongi 22 Kobelco PC 200 Excavator 1990 0.75m3 Japan 23 TCM Front End Shovel Loader Model: Japan 1 Company Central Running Depot, Tongi 75111 Earthwork Equipmen 1996 24 Hino Dumper Truck Model: EK100 2 Japan 10 Tons Company Central Running Depot, Tongi 25 Grabs (clam-shell buckets), Winch & Hoist 2000 0.5 m3 5 Company Central Running Depot, Tongi 26 Earth Compactor 1985 10 Tons 6 Running Japan Company Central Depot, Tongi 27 Earth Compactor India 2004 1 Ton 4 **Company Central** Running Depot, Tongi 28 Shallow Tube Well with Electrically 15 Company Central Running Operated Pump Depot, Tongi 29 Vacuum Pump for ground water table England, Japan 1985-88 6 Company Central Running lowering Depot, Tongi Pre-stressing Jack MG1000, S-8 1998 100 Ton 4 Company Central 30 India Running Depot, Tongi Pre-Stressing Jack Monowire 31 India 1998 20 Ton 6 Company Central Running Pre-stressing Equipment Depot, Tongi 32 P-6 Prestressing Pump India 1998 4 Company Central Running Depot, Tongi 33 Grout Pump 1998 1 India Company Central Running Depot, Tongi 34 Agitator India 1998 1 Company Central Running Depot, Tongi Company Central 35 SR 200 Sheathing Machine, Drossbach India 1988 Suitable for Running 1 manufacturing of Depot, Tongi type sheathing of 100 mm I.D

### LIST OF CONSTRUCTION EQUIPMENT, VEHICLES AND FACILITIES OWNED BY DEVELOPMENT CONSTRUCTIONS LTD.

Type	SI. No.	Name of plant, Machinery of equipment	Country of Manufacture	Year of Manufacture	Capacity	Number	Present Location	Present condition (Running or out of order)
	36	Steel Shutter, Props, 1 – Beams, Adjustable Jacks etc			10,000 sq. meter	1 set	Company Central Depot, Tongi	Running
	37	Shutter for Pre-stressed Concrete Girders				3,200 sq. meter	Company Central Depot, Tongi	Running
	38	Lifting, Shifting Jacks and arrangements for Pre-stressed Concrete Girders				4	Company Central Depot, Tongi	Running
ring	39	Welding Machine	Bangladesh	1988	10kW	7	Company Central Depot, Tongi	Running
Shutte	40	Diesel Generating Set	China, UK	1988	20KW,50 KW,75KW150KW	10	Company Central Depot, Tongi	Running
Form	41	Diesel Engines	England, Japan, China	1989		20	Company Central Depot, Tongi	Running
Jump		Hoist with Winch	Bangladesh	1995	60m	3	Company Central Depot, Tongi	Running
Slip Form and Jump Form Shuttering		Slip Form Comprisingi) 3 Ton capacity continuous lifting Hydraulic jack.ii) 3 Ton capacity cap jaw40 Sets.iii) 3 Ton capacity cap jaw40 Sets.iii) Jack Rod.40 Sets.iv) Jack holder.40 Sets.v) Hose pipe.40 Sets.vi) Jack Holder.40 Sets.vii) Power pack40 Sets.viii) Oil seal40 Sets.x) Wailers, Yoke etc40 Sets.xi) 300 Ton capacityHydraulic power pack1 Sets.Niacan Concrete Trapet Miver Truck	India	1006	6 m2	1 set	Company Central Depot, Tongi	Running
ring		Nissan Concrete Transit Mixer Truck	India	1996	6 m3	3	Company Central Depot, Tongi	Running
and Pouring		Concrete Transit Mixer Truck TATA LPK 1313/49	Japan	1996	6 m3	3	Company Central Depot, Tongi	Running
	46	Concrete Mixing Plant	Denmark	1996	15 m3/Hr	1	Company Central Depot, Tongi	Running
sport	47	Concrete Pump	China	2000	65m3/Hr	1	Depot, Tongi	Running
, Tran	_	Concrete Drum Mixtures	England	1989	7.5cft to 10.5 cft	17	Company Central Depot, Tongi	Running
lixing		Stone crusher machine			2000 cu.ft/day	3	Company Central Depot, Tongi	Running
ete N	50	Petrol and Electric Vibrators (Concrete)	China, India	1988	40 mm, 70 mm dia Nozzle	15	Company Central Depot, Tongi	Running
Concrete Mixing, Transport	51	Load Frame for Concrete Cylinder / Cube Compressive strength test model 405	Norway, India		8000 PSI	2	Company Central Depot, Tongi	Running

### LIST OF CONSTRUCTION EQUIPMENT, VEHICLES AND FACILITIES OWNED BY DEVELOPMENT CONSTRUCTIONS LTD.

Type	SI. No.	Name of plant, Machinery of equipment	Country of Manufacture	Year of Manufacture	Capacity	Number	Present Location	Present condition (Running or out of order)
		Nissan Diesel Prime mover (10 wheels) Model: W-CW620GNT.	Japan	1995		1	Company Central Depot, Tongi	Running
tion	53	Low Bed Trailer (16 wheels)	Japan	1994	65 M.Ton capacity 30' x 10'-6"	1	Company Central Depot, Tongi	Running
sport	54	High Bed Trailer (8 Wheels)	Singapore	2005	40' x 10'-6"	1	Company Central Depot, Tongi	Running
Off-Shore and On-Shore Transportation		Hino Truck with Cargo Crane	Japan	1985	Truck-7 Ton Crane-3 Ton	1	Company Central Depot, Tongi	Running
Shore		Tractor with Trailer	India	2006		1	Company Central Depot, Tongi	Running
-uO p		Tug Boat	Japan	1985	700 HP	1	Pagla, Narayanganj	
re an		Flat Barge with Pile Rig Installed	Korea	1992	600 Ton capacity 130 ft x 46 ft	1	Pagla, Narayanganj	Running
f-Sho		Flat Barge with Pile Rig Installed	Korea	1990	200 Ton capacity 95 ft x 30 ft	1	Pagla, Narayanganj	Running
ę		Toyota Pickup truck	Japan	1992		3	Company Central Depot, Tongi	Running
		Sports Utility Vehicles	Japan			1	Head office	Running
		Cars	Japan			5		
ent		Sokkia Set2010 Total Station & PFAI with original accessories	Japan	2001		1	Company Central Depot, Tongi	Running
Equipment		Sokkia KPS11PT Single Pole Prism Complete Set	Japan	2001		1	Company Central Depot, Tongi	Running
Survery Eq		Sokkia B21-Automatic Level with PFA1 Original with tripod and standard accessories	Japan	2001		1	Company Central Depot, Tongi	Running
Sui		Theodolite and Leveling Instrument	Japan	1980-88		10	Company Central Depot, Tongi	Running
Workshop		Engineering Workshop at Shilmon, Tongi Industrial Area, Dhaka for repair and maintenance of equipments, equipped with Lathe Machine, Drill Machine, Welding Machine and Bending Machine to manufacture steel pipes from 400 mm to 3000 mm diameter using plate up to 12mm thickness etc.				1 Set	Company Central Depot, Tongi	Running

#### LIST OF EQUIPMENT FOR GEOTECHNICAL EXPLORATION AND TESTING EQUIPMENTS

#### A. FIELD EQUIPMENTS :

SI. No.	Name of plant, Machinery of equipment	Country of Manufacture / Model	Year of Manufacture	Capacity	Quantity	Present Location	Present condition
1	KOKEN Heavy Duty Drilling Machine RK-2:	RK-2, 540	1985	High pressureup to 70 Kg/Square-cm (Capable of drilling and rock coring by diamond bit upto 450 m depth) with 10T Static Cone Penetration Test attachment.	3 Sets.	Cental Strore	Running
	Drilling Rig Tone Model "THS-C" Japan made with mud pump etc. complete	THS-IC	1979	Capable of drilling and rock coring. with diamond bit upto 1000 ft.) with packer Tests Assembly etc.	1 Set.	Cental Strore	Running
3	Electronic Cone Penetration Test (ECPT)	GME-500 (IP65) 1 Unit Made in The Netherlands.		Apparatus with DATA -ACQUISITION SYSTEM Software, a Pentium (H) Processor, 32 MB 6 GB hard disk and Hydraulic Thrust Machine of 30Ton capacity. It measures, calculates and checks: i) Cone resistance ii) Local Sleeve friction iii) Inclination iv) Pore Pressure v) Conductivity vi) Acidity (pH) vii) Penetration Depth viii) Temperature ix) Permittivity x) Penetration speed xi) Redox xii) Redox xii) Time xiiii) Fuel Fluorescence response		Cental Strore	Running
4	Soil Boring & Testing Rig complete.	Local	1980-89		12 Sets.	Cental Strore	Running
5	Piston Pump	Local			2 Nos.	Cental Strore	Running
	Vane Shear Set	India			1 Nos.	Cental Strore	Running
7	Plate Bearing & Evaluation of Sub-grade Reaction.	Local			6 Nos.	Cental Strore	Running
8	Mud Pump.	Italy			7 Nos.	Cental Strore	Running
9	Water Pump (Centrifugal).	Italy			7. Nos.	Cental Strore	Running
	3 Ton Pickup for Transportation.	Japan			3 Nos.	Cental Strore	Running
11	Four Wheel Drive Jeep.	·			2 Nos.	Cental Strore	Running
12	Tools for Running the Drilling Rigs	Substantial Quantity.				Cental Strore	Running
13	Well equipped workshop for repair and maintenance of equipment.	·			1	Cental Strore	Running

SI. No.	Name of plant, Machinery of equipment	Country of Manufacture / Model	Year of Manufacture	Capacity	Quantity	Present Location	Present condition
В:	LABORATORY EQUIPMENTS						
1	Unconfined Compression for rocks and soils				3	Geotech Lab	Running
2	Atterberg Limits				1	Geotech Lab	Running
3	Natural Moisture Content for rocks and soils.					Geotech Lab	Running
4	Specific Gravity for rocks and soils.				2	Geotech Lab	Running
5	Grainsize Analysis (both sieve and hydrometer).				1	Geotech Lab	Running
6	Unit Weight (Dry & Wet) for rocks and soils					Geotech Lab	Running
7	Consolidation				6	Geotech Lab	Running
8	Direct Shear				2	Geotech Lab	Running
9	Tri-axial –Model EL25-284/01 with accessories Viz. Digital readout unit for un-drained tri-axial tests, submersible load transducer, Pressure Transducer module and XY/I recorder complete, Suitable for point load testing of rocks.				1	Geotech Lab	Running
	Permeability				2	Geotech Lab	Running
11	Compaction				4	Geotech Lab	Running
12	C.B.R. Tests				1	Geotech Lab	Running
13	Drying Ovens				2	Geotech Lab	Running
14	Field Density of Back fill.				1	Geotech Lab	Running
15	Petrography, Visual and Microscopic equipment					Geotech Lab	Running
SI. No.	Name of plant, Machinery of equipment	Country of Manufacture / Model	Year of Manufacture	Capacity	Quantity	Present Location	Present condition
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C. C	COMPUTER EACILITIES :		•			•	•
1	Pentium-4, Computers.				14	H/O	Running
2	3 Pentium-3 Laptop Computers				3	H/O	Running
3	One Unit HP DesignJet 800 (Size 42")			Product type - Plotter, Product Family - HP DesignJet, Product Name - 800 Print, Quality - Ultimate line and photo quality Resolution - 2400 x 1200 dpi, Speed - Line drawings in fast mode 60 seconds (D-size bond paper) Image in fast mode 3 minutes 54 second (D-size), Memory - 96MB RAM and 6 GB Hard Disk. Minimum 160MB RAMP and 6GB Hard Disk.	1	H/O	Running
4	One Number EPSON LQ 300 Printer.				1	H/O	Running
	Three Numbers HP Laser Jet 6P, 1100 HP Laser Jet and 1200 HP Laser Jet.				1	H/O	Running
6	One BJC-2100SP CANON Bubble Jet Printer.				1	H/O	Running
7	One HP ColorPro Graphics Plotter.				1	H/O	Running
8	Computers Operated by AutoCAD 2004				14	H/O	Running
	ADAPT-PT Software for analysis and design of pre- stressed (post tensioned) flat slab &				1	H/O	Running
10	pre-stressed beams/girders.					H/O	Running
	ADAPT-FELT Software for analysis of loss in pre- stressed (post tensioned) member				1	H/O	Running
12	STAAD Pro 2001 Software for Analysis (2D/3D) and design of Structures.				1	H/O	Running

SI. No.	Name of plant, Machinery of equipment	Country of Manufacture / Model	Year of Manufacture	Capacity	Quantity	Present Location	Present condition
No.	Name of plant, Machinery of equipment		Manufacture	Capacity NISA/CIVIL Software for analysis and design of pre- stressed as well as RCC Structures. Offering CAD based solution encountered in the Analysis, Design of reinforced concrete, steel and pre-stressed structures. The output will be both in design document format and drawings will be in AutoCAD format. Following are the Salient features related to moving loads as applied to bridges and fly-overs available in i) Vehicle Configuration and Vehicle Group. ii) Path Specification. iii) Wheel Load Direction and distribution. iv) Automatic Generation of Loads due to Vehicle Movement on Railway and Highway Bridges. v) Pre-stressed Loads. vi) Static Analysis. vii) Wheel Load Direction and distribution.	Quantity	H/O	
				<ul><li>viii) Graphic Display of the above features.</li><li>ix) Transient Dynamic Analysis under Moving Loads.</li><li>x) Comprehensive Vehicle Database.</li></ul>			

# **CURRENT PROJECTS**

1.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 161.64m long Pre-stressed Concrete Girder Bridge at Sheikpur at 18th Km of Panchar- Shibchar-Madaripur Road, under Madaripur Road Division.
	Contract value	:	Tk. 6,70,24,040.00
2.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 155.43m long (4X 38.21m) Pre- stressed Concrete. Girder Bridge over Old Brahmaputra River at 17 <sup>th</sup> K.M. of Ekdoria- Agarpur Regional Highway under Narshingdi Road Division.
	Contract value	:	Tk. 6,72,91,403.20
3.	Employer	:	LARSEN & TOUBRO LIMITED (INDIA).
3.	Employer Principal Contractor	:	LARSEN & TOUBRO LIMITED (INDIA). Development Constructions Ltd.
3.		:	
3.	Principal Contractor	•	Development Constructions Ltd. Pilling work for plat area and construction pilling and superstructure for jetty at Chatak for Lafarge
3.	Principal Contractor Project	•	Development Constructions Ltd. Pilling work for plat area and construction pilling and superstructure for jetty at Chatak for Lafarge Surma Cement plant.
	Principal Contractor Project Contract value	•	Development Constructions Ltd. Pilling work for plat area and construction pilling and superstructure for jetty at Chatak for Lafarge Surma Cement plant. 23,45,39,071.00
	Principal Contractor Project Contract value Employer	:	<ul> <li>Development Constructions Ltd.</li> <li>Pilling work for plat area and construction pilling and superstructure for jetty at Chatak for Lafarge Surma Cement plant.</li> <li>23,45,39,071.00</li> <li>MEDLAR FASHIONS LTD.</li> </ul>

# **CURRENT PROJECTS**

1.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 161.64m long Pre-stressed Concrete Girder Bridge at Sheikpur at 18th Km of Panchar- Shibchar-Madaripur Road, under Madaripur Road Division.
	Contract value	:	Tk. 6,70,24,040.00
2.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 155.43m long (4X 38.21m) Pre- stressed Concrete. Girder Bridge over Old Brahmaputra River at 17 <sup>th</sup> K.M. of Ekdoria- Agarpur Regional Highway under Narshingdi Road Division.
	Contract value	:	Tk. 6,72,91,403.20
3.	Employer	:	LARSEN & TOUBRO LIMITED (INDIA).
3.	Employer Principal Contractor	:	LARSEN & TOUBRO LIMITED (INDIA). Development Constructions Ltd.
3.		:	
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3.	Principal Contractor Project	•	Development Constructions Ltd. Pilling work for plat area and construction pilling and superstructure for jetty at Chatak for Lafarge Surma Cement plant.
	Principal Contractor Project Contract value	•	Development Constructions Ltd. Pilling work for plat area and construction pilling and superstructure for jetty at Chatak for Lafarge Surma Cement plant. 23,45,39,071.00
	Principal Contractor Project Contract value Employer	:	<ul> <li>Development Constructions Ltd.</li> <li>Pilling work for plat area and construction pilling and superstructure for jetty at Chatak for Lafarge Surma Cement plant.</li> <li>23,45,39,071.00</li> <li>MEDLAR FASHIONS LTD.</li> </ul>

# **LIST OF MAJOR PROJECTS COMPLETED**

#### A. FLYOVER:

A1.	Employer	:	LOCAL GOVERNMENT ENGINEERING DEPARTMENT.
	Principal Contractor	:	Development Constructions Ltd.
	Project :	:	Design Build Contract of Flyover at Khilgaon Rail & Road Intersection, Length 1880m with 4 lane carriage way, in Dhaka City.
	Contract value	:	Tk. 627.00 Million
	Contract period	:	23/06/2001 to 31/12/2004.

#### **B. HIGHWAY BRIDGE:**

B1.	Employer Principal Contractor	: :	ROADS AND HIGHWAYS DEPARTMENT. HANIL CONSTRUCTION CO LTD.
	Project	:	Construction of 450m long pre-stressed concrete girder bridge (10 span of 45m) on 1m diameter, 57m long bored cast-in-situ R.C.C piles over River Arial khan at SRNDP, Contract No2, Mawa (Char Janajat) - Bhanga including manufacture and driving of 47 m long 12 mm thick permanent steel casing.
	Contract value	:	27,49,42,486.00 Tk. (Including cost of materials)
	Contract period	:	January 2001 to January 2005.

B2.	Employer Principal Contractor Project	:	<ul> <li>ROAD AND HIGHWAYS DEPARTMENT</li> <li>TOWER ENTERPRISE LTD.</li> <li>Construction of 303.25 m long Pre-Stressed concrete girder Bridge –at Mollahat over</li> <li>Modhumoti River on Bhanga-Bhatiapara</li> <li>Gopalgonj-Mollahat Fakirhat-Tower Noapara- Khulna Road , Under Gopalgonj Road Division, Roads &amp; Highways Department works comprising</li> <li>(1) 1000 mm dia 34 m long, 44 Nos. Bored Cast in Situ R.C.C pile.</li> <li>(2) 1200 mm dia 48m long, 72 Nos. Bored Cast –in-Situ R.C.C pile, off –shore at 16 m water</li> <li>(3) 43.32 m long 2.286 m. height 35 Nos. Pre-</li> </ul>
	Contract Value	:	Stressed Post Tensioning Girder. 2,20,00,000/- (Excluding cost of materials) (30% completed)
	Contract Period	:	21-11-98 to 20/06/2000
	Completion Date	:	15.06.2000
B3.	Employer	:	CHINA HARBOUR ENGINEERING CONSTRUCTION CO.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Constructions of Contract No. – 3, Atrail & Ayermari Bridge at Nalkha-Hatikamrul Bonpara New Road Project RRMP-III, Natore.
	Contract Value	:	Tk. 117,833,486/-
	Contract Period	:	15/03/99 to 31/03/2000.
	Completion Date	:	30.03.2000.
B4.	Employer	:	ROAD AND HIGHWAYS DEPARTMENT .
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 92.96 m long Pre-Stressed concrete girder Bridge on River Ghagor at 20 the K.M. of Gopalgonj – Kotalipara-Paisarhat Road, Gopalgonj.
	Contract value	:	Tk 2,76,24,165/55-
	Contract period Completion Date	:	14-07-97 to 28-02-99. 20-02-99.

B5.	Employer	:	ROADS & HIGHWAYS DEPARTMENTS.
	Principal Contractor	:	SUNGJEE CONSTRUCTION CO. LTD.
	Project :	:	Construction of 188 Nos. 600 mm & 750 dia, Bored Cast-in-Situ pile for Str. No 68,69,70 & 72 at Jamuna Bridge Project, Contract No-3
	Contract value	:	Tk. 60,00,000/00 (Excluding cost of materials)
	Contract period	:	20/02/99 to 20/06/99
	Completion Date	:	20.06.99
B6.	Employer Principal Contractor Project	: : :	<b>ROADS &amp; HIGHWAYS DEPARTMENT.</b> IRCON INTERNATIONAL Construction of 40 m long Kansat Canal Bridge at
			Ch. 21+735 Sonamasjid- Shibganj-Nawabganj Road (RRMP-II /WA)
	Contract value	:	Tk 3,250,370.00
	Contract period	:	05/12/97 to 05/06/98
B7.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
B7.	Employer Principal Contractor	: :	ROADS AND HIGHWAYS DEPARTMENT. ANSAL PUBALI JOINT –VENTURE.
Β7.	1	:	
B7.	Principal Contractor	:	ANSAL PUBALI JOINT –VENTURE. Construction of 65.67 m long Road Bridge super Structure with Pre-stressed concrete girders, R.C.C deck-slab, R.C.C. cross-beam, railing, approach
B7.	Principal Contractor Project	:	ANSAL PUBALI JOINT –VENTURE. Construction of 65.67 m long Road Bridge super Structure with Pre-stressed concrete girders, R.C.C deck-slab, R.C.C. cross-beam, railing, approach slab, guide wall, piers and abutment,
Β7.	Principal Contractor Project Owner	:	ANSAL PUBALI JOINT –VENTURE. Construction of 65.67 m long Road Bridge super Structure with Pre-stressed concrete girders, R.C.C deck-slab, R.C.C. cross-beam, railing, approach slab, guide wall, piers and abutment, Roads & Highway Department.
B7. B8.	Principal Contractor Project Owner Contract value	:	ANSAL PUBALI JOINT –VENTURE. Construction of 65.67 m long Road Bridge super Structure with Pre-stressed concrete girders, R.C.C deck-slab, R.C.C. cross-beam, railing, approach slab, guide wall, piers and abutment, Roads & Highway Department. Tk.12,045,648-
	Principal Contractor Project Owner Contract value Contract period	:	ANSAL PUBALI JOINT –VENTURE. Construction of 65.67 m long Road Bridge super Structure with Pre-stressed concrete girders, R.C.C deck-slab, R.C.C. cross-beam, railing, approach slab, guide wall, piers and abutment, Roads & Highway Department. Tk.12,045,648- Dec. 93 to Dec. 1994.
	Principal Contractor Project Owner Contract value Contract period Employer	:	<ul> <li>ANSAL PUBALI JOINT –VENTURE.</li> <li>Construction of 65.67 m long Road Bridge super Structure with Pre-stressed concrete girders, R.C.C deck-slab, R.C.C. cross-beam, railing, approach slab, guide wall, piers and abutment,</li> <li>Roads &amp; Highway Department.</li> <li>Tk.12,045,648-</li> <li>Dec. 93 to Dec. 1994.</li> <li>ROADS AND HIGHWAYS DEPARTMENT.</li> <li>CHINA NATIONAL COMPLETE PLANT EXPORT CORPORATION.IN DAWLATDIA-</li> </ul>
	Principal Contractor Project Owner Contract value Contract period Employer Principal Contractor	: : : :	<ul> <li>ANSAL PUBALI JOINT –VENTURE.</li> <li>Construction of 65.67 m long Road Bridge super Structure with Pre-stressed concrete girders, R.C.C deck-slab, R.C.C. cross-beam, railing, approach slab, guide wall, piers and abutment,</li> <li>Roads &amp; Highway Department.</li> <li>Tk.12,045,648-</li> <li>Dec. 93 to Dec. 1994.</li> <li>ROADS AND HIGHWAYS DEPARTMENT.</li> <li>CHINA NATIONAL COMPLETE PLANT EXPORT CORPORATION.IN DAWLATDIA- FARIDPUR-JHENAIDAH-KUSTIA ROAD.</li> <li>Construction of 69.4 m Long Bridge with pre-stressed concrete girders on 1.2 m diam 36m long bored Cast-in-Situ pile foundation in RIP,</li> </ul>

	Contract Period	:	April 1992 to 15 <sup>th</sup> Sept, 1994.
	Date of completion	:	28.08.1994.
B9.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
	Principal Contractor	:	CHINA NATIONAL COMPLETE PLANT EXPORT CORPORATION. IN DAWLATDIA- FARIDPUR-JHENAIDAH-KUSTIA ROAD.
	Project	:	Construction of 58 m Long Bridge with pre-stressed concrete girders on 500 mm diam 22 m long bored Cast-in-Situ pile foundation in RIP, Contract-9, Faridpur (Structure No.20).
	Owner	:	Roads and Highways Department.
	Value of Completed work.	:	Tk. 18,281,832/00
	Contract Period	:	April 1992 to 15 <sup>th</sup> June 1994.
	Date of completion	:	28.08.1994.
B10.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
	Principal Contractor	:	ACF- SWEEHONG JOINT VENTURE.
	Project	:	Construction of Bored Cast –in-Situ R.C.C. Piles (Rake & Vertical) Road Bridge under RIP, Contract -4 (Dohazari-Lohagara Section).
	Type of Foundation	:	Bored Cast –in-Situ R.C.C. piles, R.C.C. Abutment, piers, girders, deck slab, railing.
	Contract value	:	Tk. 25 million.
	Year of completion	:	October 1993 to- June 1993.
B11.	Employer	:	ROADS AND HIGHWAYS DEPARTMENT.
	Principal Contractor	:	CHINA NATIONAL COMPLETE PLANT EXPORT CORPORATION. IN DAWLATDIA- FARIDPUR-JHENAIDAH-KUSTIA ROAD.
	Project	:	Construction of 58 m Long Bridge with pre-stressed concrete girders on 500 mm diam 22 m long bored Cast-in-Situ pile foundation in RIP, Contract-9, Faridpur (Structure No.16).
	Owner	:	Roads and Highways Department.
	Value of Completed work.	:	Tk. 15,858,432/00
	Contract Period Date of completion	:	April 1992 to 15 <sup>th</sup> June 1993. 15.06.1993.

B12.	Employer	:	DIRECTORATE OF RELIEF AND REHABILITATION. DHAKA, BANGLADESH.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 280'-0" Long Bridge over the River Mathabanga on Chudanga- Alamdanga Road.
	Type of Foundation	:	Bored Cast –in-Situ R.C.C. piles, R.C.C. Abutment, piers, girders, deck slab, railing.
	Contract value	:	Tk. 7.142 million.
	Year of completion	:	January 92 to July 1993.
	Execution period	:	September 1990 to March 1992.
B13.	Employer	:	ROADS & HIGHWAY DIRECTORATE.
	Principal Contractor	:	RDC-TPL, SINGAPORE.
	Project	:	5 Nos. Bridge sub-structure on Shambugonj- Haluaghat Highway under FRIP, 9 ADB financed. Span 20 m to 77 m.
	Type of Foundation	:	Pre-stressed concrete girders R.C.C. Slab, Pre-Cast and cast-in-situ R.C.C piles.
	Contract value	:	Tk. 46.09 million.
	Year of completion	:	1992
	Execution period	:	September 1990 to March 1992.
B14.	Employer	:	ROADS & HIGHWAY DIRECTORATE.
	Principal Contractor	:	INDIAN RAILWAY CONSTRUCTIONS LTD.
	Project	:	16.5 m long bridge at 4.15 and 9.15 Km Dhaka- Chittagong Highway (Dawoud Kandi-Comilla Section).
	Type of Foundation	:	500 mm diameter 18 m long bored cast –in-situ R.C.C. (Rake) piles R.C.C girders, deck slab. crush barrier, railings,
	Contract value	:	Tk. 16.5 million. (ADB Financed).
	Year of completion	:	May, 1991.
	Execution period	:	December, 1989 to May 1990.

### C. RAILWAY BRIDGE:

C1.	Employer	:	BANGLADESH RAILWAY.
	Principal Contractor	:	SAMWHAN –TSO-JOINT VENTURE.
	Project	:	Construction of 30m long (without splice) Pre-cast RCC Driven Piles for 33 Nos. of Bridge in Division- 1 & V on Bangabandhu Bridge Railway Link Project. Contract –1 at Tangail
	Contract Value	:	Tk. 52,385,060.00 (Excluding cost of materials)
	Contract Period	:	16/12/97 to 26/06/2000
	Completion Date	:	20.06.2000
C2.	Employer	:	JAMUNA MULTIPURPOSE BRIDGE PROJECT AUTHORITY.
	Principal Contractor	:	SAMWHAN CORPORATION, KOREA.
	Project	:	Construction of Bridges & Culverts on JMB Approach Road, Contract –3 & Contract –4, comprising.
		a)	Construction of 12 Nos. Double Cell Box Culverts of 5m x 5.9 m x 2.
		b) c)	<ul> <li>7 Nos. Single Cell Box culverts, 5m x 5.9m.</li> <li>12 Nos. Slab Bridges, Span 31 m founded on</li> <li>4mx4mx28.4m Pre-cast R.C.C single length driven pile.</li> </ul>
		d)	9 Nos. Slab Bridges, Span 66m founded on.4mx4 x 28.4m Pre-cast R.C.C. single length driven pile.
	Contract value	:	Tk.57 million (Excluding cost of cement, aggregates & Re-bar, Batch Plant, Transit mixers).
	Contract period	:	January 95 – June, 1997.
C3.	Employer	:	BANGLADESH RAILWAY (WEST)
	Project	:	Rebuilding of Railway Bridge No.20A at Shambhuganj, Mymensingh.
	Type of Foundation	:	106 cm diameter cast –in-situ R.C.C piles and 50.8 cm diameter cast –in-situ R.C.C piles in wingwalls
	Contract value	:	Tk. 9.65 million.
	Year of completion	:	March, 1990.
	Execution period	:	March 1989 to March 1990

C4.	Employer	:	BANGLADESH RAILWAY
	Principal Contractor	:	DAEWOO CORPORATION.
	Project	:	Railway Workshop at Parbatipur.
	Type of Foundation	:	450 mm diameter 18-24 m long bored cast –in-situ R.C.C piles (925 numbers)
	Contract value	:	Tk. 23.2 million.
	Contract Period	:	Sept 1989 to March 1990
	Year of completion	:	February, 1990. (All piles were tested for integrity by pile integrity tester)
C5.	Employer	:	BANGLADESH RAILWAY (West)
	Project	:	Rebuilding of Railway Bridge No.20, in Ishurdi-Sirajganj Section.
	Type of Foundation	:	42" dia Cast –in-situ R.C.C Piles & 24" diam. Rake Piles.
	Contract value	:	Tk. 9.50 million.
	Year of completion	:	1989
	Execution period	:	March 1989 to October 1989
C6.	Employer	:	BANGLADESH RAILWAY
	Project	:	Rebuilding of Bridge No. 42 (Turag DN) in between DACT. TGI Station.
	Type of Foundation	:	42" dia 70' –0" long Cast –in-situ R.C.C Piles Construction of 2 piers & 1 Abutment with wing walls.
	Contract value	:	Tk. 9.75 million.
	Year of completion	:	1989
	Execution period	:	January 1989 to May 1989.

C7.	Employer	:	BANGLADESH RAILWAY
	Project	:	Rebuilding of Bridge No. 119 in between Shat Khamair & Kawraid Stations.
	Type of Foundation	:	36" dia 70' –0" long Cast –in- situ R.C.C Piles.
	Contract value	:	Tk. 3.6 million.
	Year of completion	:	1987
	Execution period	:	January 1986 to September 1987.
C8.	Employer	:	BANGLADESH RAILWAY (EAST)
C8.	Employer Project	:	<b>BANGLADESH RAILWAY (EAST)</b> Bridge No. 207 on Feni –Laksham Section.
C8.			
C8.	Project		Bridge No. 207 on Feni –Laksham Section. 42" diam 75 ft. long 70 Nos. Cast –in-situ R.C.C.
C8.	Project Type of Foundation		Bridge No. 207 on Feni –Laksham Section. 42" diam 75 ft. long 70 Nos. Cast –in-situ R.C.C. Piles.
C8.	Project Type of Foundation Contract value	: : :	Bridge No. 207 on Feni –Laksham Section. 42" diam 75 ft. long 70 Nos. Cast –in-situ R.C.C. Piles. Tk. 10.4 million.

## D. SILO:

D1.	Employer	:	CHITTAGONG CEMENT CLINKER GRINDING CO. LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of one 25,000 ton capacity 30m diam 38.5 m high Clinker Silo of pre-stressed concrete construction using SLIP FORM at Chittagong.
	Contract value	:	Tk. 62.8 Million.
	Contract period	:	15/02/2001 to 15/02/2002

D2.	Employer	:	ASHUGONJ CEMENT INDUSTRIES LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of Cement Mill Building, Packing Building, Cement Silo, Clinker Silo, Gypsum Storage, Jetty and Conveyor for Ashugonj Cement Industries Ltd. at Mongla Port Area, Mongla, Bagerhat.
	Contract Value	:	Tk. 11,27,73,356.00
	Contract Period	:	20/05/2000 to 20/07/2002
D3.	Employer	:	CHITTAGONG CEMENT CLINKER GRINDING CO. LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of Gas Power Plant at Chittagong Cement Clinker Grinding Plant Project.
	Contract value	:	Tk. 3.00 Million.
	Contract period	:	15/04/2002 to 15/06/2002
D4.	Employer	:	SHAH CEMENT INDUSTRIES LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	3 Nos. Clinker Silos, capacity 25,000T/SILO, diameter 25m, height 57m using <b>SLIPFORM</b> for Shah Cement Industries Ltd., at Muktarpur, Munshigonj.
	Contract Period	:	January 2002 to August 2002.
D5.	Employer	:	SHAH CEMENT INDUSTRIES LTD.,
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 3 Nos Cement Silo wall & roof including Civil work using slip form for Shah Cement Industries Ltd., at Muktarpur, Munshigonj.
	Contract Period	:	July 2001 to November 2001.

D6.	Employer	:	SCANCEM CEMENT INDUSTRIES LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	<ul> <li>a) Construction of One No. 40,000 Ton capacity Clinker Silo.</li> <li>b) Construction of Two Nos. 5,000 Ton Capacity Cement Silo.</li> <li>c) Construction of One Nos. 1,200 Ton Capacity Barge Berthing Jetty at Dhaka Grinding Plant Project, Tatki, Rupgonj, Narayangonj.</li> </ul>
	Contract value	:	Tk.152.132 million
	Contract period	:	15/11/99 to 30.11.2000
	Completion Period	:	30.11.2000.
D7.	Employer	:	CHITTAGONG CEMENT CLINKER GRINDING CO. LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of Cement Packing Building for Factory Unit –II of CCCGCL at Chittagong.
	Contract value	:	TK 26,000,00/00.
	Contract period	:	04/04/98 to 19/10/98.
	Completion Date	:	15/10/98

### E. PILING WORKS:

E1.	Employer	:	WARTSILLA BANGLADESH LIMITED.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project:		Construction 244 piles of 600mm diameter and 32 m length, and civil installation work for site preparation, site works, substructure, and sewage for Surma Energy Ltd. Chatak
	Contract value	:	6,63,00,000.00
	Contract Period	:	April 2004 to December 2004.

E2.	Employer	:	UNIVERSITY OF SCIENCE & TECHNOLOGY CHITTAGONG.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
[	Project	:	Execution of Piling work for construction of 500- Bed Bangabandhu Memorial Hospital at Foy's Lake at Chittagong.
	Contract Value	:	Tk. 2,39,78,747.00
	Contract Period	:	July 2001 to January 2002.
E3.	Employer	:	HANIL CONSTRUCTION CO., LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD
	Project	:	Constructions of Bored Cast-in-Situ R.C.C. piles for Saidabad Water Treatment Plant Project, Contract – 4B, Saidabad.
	Contract Value	:	Tk. 51,698,190/- (Excluding cost of materials).
	Contract Period	:	24/04/99 to 24/04/2000.
	Completion Date	:	20.04.2000.
E4.	Employer	:	BROWN & ROOTS BANGLADESH LTD.
	Project	:	Driving of Tubler Pile at Sangu Onshore Terminal at Chittagong.
	Principal Contractor	:	CIVIC ENGINEERING CO.
	Contract value	:	Tk 30,00,000/- (Excluding cost of steel tube pile) aggregates & Re-bar, Batch Plant, Transit mixers).
	Contract period	:	17/08/97 to 15/11/97
E5.	Employer	:	BANGLADESH POWER DEVELOPMENT BOARD.
	Project	:	River Crossing Tower Foundation of 132 KV Power Transmission Line at Labukhali, Barishal Patuakhali.
	Type of Foundation	:	30" dia ( 750mm) 29m long Cast-in-Situ R.C.C. Piles.
	Principal Contractor	:	THE ENGINEERS & ENGINEERS.
	Contract value Contract period	:	Tk.10 million May –July 1995.

E6.	Employer	:	DEPARTMENT OF PUBLIC HEALTH ENGINEERING BANGLADESH.
	Project	:	Two numbers 2,20,000 gal. over head water reservoirs. (Two number ) at Mymensingh.
	Type of Foundation	:	600 mm diameter 45 m long bored cast –in-situ R.C.C. poles 13.6 m diam 10.7m high R.C.C. reservoirs or 9m diam, 29.54 m high R.C.C. shaft.
	Contract value	:	Tk. 21.8 million. (ADB Financed).
	Year of completion	:	April, 1990.
	Execution period	:	Sept, 1988-April 1991.
E7.	Employer	:	POWER DEVELOPMENT BOARD .
	Principal Contractor	:	TOYOMENKA KAISHA LTD. JAPAN.
	Project	:	Kaptai-Bara Aulia 132KV Trans. tower(86Towers).
	Type of Foundation	:	16" dia (400 m) dia. 15 m long cast-in-situ R.C.C Piles.
	Contract value	:	Tk. 15.50 million
	Year of completion	:	September 1985 to June 30, 1986.
	Execution period	:	
E8.	Employer	:	CHITTAGONG UREA FERTILIZER LTD.
	Project	:	Manufacturing & Driving of Pre-cast R.C.C. Piles at Housing complex at CUFL, Rangadia, Chittagong.
	Type of Foundation	:	1600 Piles.
	Contract value	:	Tk. 30.2 million
	Year of completion	:	1986
E9.	Execution period Employer	:	August 1985 to February 1986. M/S. BHUIYAN & SONS
<b>L</b> ).	Linployer	•	
	Project :	:	22" dia 60-0" long Cast –in- situ R.C.C. piles. for 16-storied Commercial Bldg. at Plot No.28, Dilkusha C/A., Dhaka.
	Contract value	:	Tk. 1.9 million
	Year of completion	:	1985
	Execution period	:	July to September 1985 (2 months.)

E10.	Employer	:	POWER DEVELOPMENT BOARD.
	Project	:	Proposed River Crossing Towers at Atri Baki River at Khulna.
	Type of Foundation	:	16 " dia 60-0" long Cast -in- situ R.C.C. piles.
	Contract value	:	Tk. 6.0 million
	Year of completion	:	1985
	Execution period	:	April 1985 to July 1985.
E11.	Employer	:	BANGLADESH POWER DEVELOPMENT BOARD
	Principal Contractor	:	SHOVAN BROTHERS, DHAKA
	Project	:	Construction of Foundation of River Crossing Towers on the River Meghna and Gumati at Daudkandi.
	Type of Foundation	:	16" dia 50 ft. long Cast -in- situ R.C.C. piles.
	Contract value	:	Tk. 3.0 million
	Year of completion	:	1983-84
	Execution period	:	September 1983. to April 1984.
E12.	Employer	:	POWER DEVELOPMENT BOARD
	Principal Contractor	:	ALSTHOM ATLANTIQUE, FRANCH/UNION MERCANILE AGENCIES BANGLADESH.
	Project	:	25 MW Barisal Gas Turbine Power Station Project.
	Type of Foundation	:	Pile Foundation & other Civil works.
	Contract value	:	Tk. 10.0 million
	Year of completion	:	1983-84
E13.	Execution period Employer	:	July 1983 to January 1984 BANGLADESH POWER DEVELOPMENT BOARD.
	Principal Contractor	:	TOYOMENKA KAISHA LTD., Japan.
	Project	:	Bheramara-Faridpur-Madaripur-Barisal 132 KV Trans. Line/Towers (115Towers)
	Type of Foundation	:	18" dia 50-0" long Cast –in- situ R.C.C. piles. 51,211 rft.
	Contract value	:	Tk. 15.40 million
	Year of completion Execution period	:	1983-84 March 1983 to May 1984.

E14.	Employer	:	POWER DEVELOPMENT/ AFCL.
	Project	:	River Crossing Towers at Lata River and at Muladi, Barisal.
	Type of Foundation	:	16" dia 40'-0" long Cast -in- situ R.C.C. piles.
	Contract value	:	Tk. 10.0 million
	Year of completion	:	1984
	Execution period	:	June 1984 to November 1984.
E15.	Employer	:	CHITTAGONG WATER SUPPLY & SEWERAGE AUTHORITY.
	Project	:	Extension of Kalurghat Iron Removal Plant C-14. Rapid Gravity Filler with Simultaneous air and water scour.
	Type of Foundation	:	Bored cast -in-situ R.C.C. piles.
	Contract value	:	Tk. 62,00,00- US \$ 2,62,000
	Execution period	:	November 1983. to January 1984.
E16.	Employer	:	DEPARTMENT OF PUBLIC HEALTH ENGINEERING
	Principal Contractor	:	ALSTHOM ATLANTIQUE, FRANCH/UNION MERCANILE AGENCIES BANGLADESH.
	Project	:	Eusufzai Brothers. at Dhaka Overhead Water Tank at Chapai Nowabgonj, Rajshahi
	Type of Foundation	:	12"x12"x45"-0 Pre-Cast R.C.C. Piles.
	Contract value	:	Tk. 2.5 million
	Year of completion	:	1983-84
	Execution period	:	November 1983. to January 1984.

E17.	Employer	:	LALBAGH SHAHI MOSQUE COMMITTEE, DHAKA.
	Project	:	Minar of Lalbagh Shahi Mosque, Dhaka.
	Type of Foundation	:	16" dia 50 ft. long Cast in- situ R.C.C. piles.
	Contract value	:	Tk. 6.5 million
	Year of completion	:	1983
E18.	Execution period Employer	:	October 1982. ROYAL NAPAL EMBASSY.
	Principal Contractor	:	NIRMAN INTERNATIONAL LTD., DHAKA.
	Project	:	Napal Embassy Project Complex at Baridhara Gulshan, Dhaka.
	Type of Foundation	:	14"x14"x55 ft.12"x12"x45 ft. Pre-cast R.C.C. Piles
	Contract value	:	Tk. 6.5 million
	Year of completion	:	1983
	Execution period	:	March 1983 to May 1983.
E19.	Employer	:	BANGLADESH T & T BOARD, DHAKA
	Project	:	20-Storied Admn. Building at 36/1, Mymensingh Road, Dhaka.
	Type of Foundation	:	20" dia 6000 rft. 16" dia 3000 rft. Cast-in –situ R.C.C Piles.
	Contract value	:	Tk. 3.0 million
	Year of completion	:	1982
	Execution period	:	March 1980 May 1982.
E20.	Employer	:	UTTARA MOTORS LTD., Chittagong.
	Project	:	Multi-storied Commercial Bldg. at Agrabad. C.A., Chittagong.
	Type of Foundation	:	16" dia 53 ft. long Cast-in-situ R.C.C. piles 4320rft.
	Contract value	:	Tk. 1.5 million
	Year of completion	:	1982
	Execution period	:	August 1982 to September 1982.

E21.	Employer	:	BANGLADESH POWER DEVELOPMENT BOARD
	Project	:	Anchor & River Crossing Towers of 132 KV
	Type of Foundation	:	Tr. line on Karnafully & Halda Rover. 16" dia 40'/45' long 200 Nos. Cast –in-Situ R.C.C Piles.
	Contract value Year of completion	:	Tk. 5.0 million 1981.
	Execution period	:	March 1980 to May 1981.
E22.	Employer	:	BANGLADESH POWER DEVELOPMENT BOARD
	Project	:	132 KV Tr. Tower of GDPD between Posthogola & Siddhirgonj.
	Type of Foundation Contract value	:	Pre-Cast R.C.C. Pile 12"x12", 40 ft. long Tk. 3.5 million
	Year of completion	:	1981
	Execution period	:	April 1981 to May 1981.
E23.	Employer	:	BANGLADESH PUBLIC WORKS DEPARTMENT.
	Project	:	National Library at S.B. Nagar, Dhaka.
	Type of Foundation	:	16"/18" dia 45"/55" long 400 Nos. Cast –in-Situ R.C.C Piles.
	Contract value	:	Tk. 6.0 million
	Year of completion	:	1980-81
	Execution period	:	August 1980 to March 1981.
E24.	Employer	:	BANGLADESH PUBLIC WORKS DEPARTMENT.
	Project	:	TIVT for Women at Eskaton Garden, Dhaka.
	Type of Foundation	:	18" dia 53 ft. long 266 Nos.Cast-in-Situ R.C.C. Piles (1 <sup>st</sup> Phase) 105 Nos. (2 <sup>nd</sup> phase).
	Contract value	:	Tk. 2.7 million
	Year of completion	:	1980-81
	Execution period	:	December 1980 to April 1981.

E25.	Employer	:	BANGLADESH PUBLIC WORKS DEPARTMENT.
	Project	:	Chemical Water Treatment Plant 110 MW Power Station, Khulna.
	Type of Foundation	:	20" dia 70 ft. long 197 Nos. Cast-in-Situ R.C.C Piles.
	Contract value	:	Tk. 4.3 million
	Year of completion	:	1981
E26.	Execution period Employer	:	May 1981 to September 1981. BANGLADESH AGRICULTURE RESEARCH INSTITUTE
	Project	:	Academic, Admn. and Residential Building at BARI, Hathazari, Chittagong.
	Type of Foundation	:	16" dia 40 ft. long 1100 Compaction sand pile.
	Contract value	:	Tk. 1.4 million
	Year of completion	:	1980.
	Execution period	:	February 1980 to July 1980.
E27.	Employer	:	BANGLADESH PUBLIC WORKS DEPARTMENT
	Project	:	FWVTS, Boyra, Khulna.
	Type of Foundation	:	8" dia 25 ft. long 2000 Nos. compaction sand pile.
	Contract value	:	Tk. 1.4 million
	Year of completion	:	1979
	Execution period	:	March 1979 to June 1979.
E28.	Employer	:	MILITARY ENGINEERING SERVICES, BANGLADESH ARMY.
	Project	:	100 Beded Hospital Building (Nursing Unit) Chittagong Cantt.
	Type of Foundation	:	8" dia 35 ft. long compaction sand pile.
	Contract value	:	Tk. 1.4 million
	Year of completion	:	1978
	Execution period	:	September 1978 to December 1978.

F. JETTY:

F1.	Employer	:	ELPIJI MALAYSIA –BANGLADESH LIMITED.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project :	:	Civil construction works of LPG Depot Facilities, Reclamation & Embankment Profession work & Jetty for ELPIJI-Malaysia- Bangladesh at Mongla Port. Mongla, Bagerhat.
	Contract value	:	Tk. 7,91,82,000/00
	Contract period	:	02/01/99 to 30/03/2001
	Completion Date	:	20/03/2001
F2.	Employer	:	PUBLIC WORKS DEPARTMENT. (FOREIGN OWNED COMPANY IN BANGLADESH)
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Re- pair and Reconstruction of Cyclone Damaged Jetty at Marine Academy, Juldia and extension Jetty at Patenga, Chittagong.
	Contract value	:	Tk.20 million
	Contract period	:	August 1995,-December 1996.
F3.	Employer	:	MONGLA PORT AUTHORITY
	Project	:	Construction of Vessel Birth Jetty.
	Principal Contractor	:	M/S. Metropolitan Engineers.
	Contract value	:	Tk.10 million
	Contract period	:	January, 1995 to May, 1995.
F4.	Employer	:	SENA KALYAN SHANGSTHA.
	Principal Contractor	:	M/S. EASTERN ENGINEERS (CTG.)LTD.
	Project	:	Construction of 600 mm dia/50 m Long Bored Cast- in-Situ R.C.C. Piles vertical & Rake for Jetty of Mongla Cement Factory.
	Contract value	:	Tk. 12 million.
	Contract period	:	July 1993 to February 1994.

G.	INDUSTRY:		
G1.	Employer	:	SINHA YARN DYEING & FABRICS LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD
	Project :	:	Design Build Contract of 10 Storied Factory Building with pre-stressed concrete flat slab for M/S. Sinha Yarn Dyeing & Fabrics Ltd. at Kanchpur, Narayangonj.
	Contract value	:	Tk.11,48,82,469.00
	Contract period	:	10/01/2001 to 21.09.2002
G2.	Employer	:	HYUNDAI ENGINEERIN & CONSTRUCTION CO. LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of Hyundai Cement 3rd Cement expansion project at Meghna Ghat Narayangonj, Bangladesh.
	Contract value	:	Tk.3,38,39,517.00
	Contract period	:	04/11/2000 to 10.01.2001
	Completion Date	:	07/01/2001.
G3.	Employer	:	S.K.S. GARMEMTS.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD
	Project	:	Constructions of 5 Storey Factory Building with Bored pile and pre-stressed concrete FLAT SLAB (7omx30m) for SKS Garments at Hemayetpur, Savar.
	Contract Value	:	Tk. 11,04,00,000/00
	Contract Period	:	30/10/97 to 30/04/99
	Completion Date	:	15.04.99.
G4.	Employer	:	BOMBAY SWEETS & CO.LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of Tricepack Main Factory Building for Bombay Sweets & Co. Ltd., at Kanchpur. Narayanganj.
	Contract value	:	Tk. 25,243,980/00

G5.	Employer	:	R.M. COLD ROLLED STEEL MILLS LTD.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Design, Fabrication and installation of HOLLOW SHAFT FOUNDATION (materials supplied free of cost by employer)at Kumira,Chittagong.(Innovated Foundation system by us).
	Contract value	:	Tk 6,450,000.00 (Excluding cost of materials0
	Contract period	:	17/12/97 to 15/7/98
G6.	Employer	:	MARK GROUP OF INDUSTRIES & COMPANIES.
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of 20" duan, 55'-0" long Bored Cast – in –Situ R.C.C. Piles for Proposed Multi-Story Factory Complex at Plot No. 54,55,56, DEPZ, Savar.
	Contract value	:	Tk.15 million
	Contract period	:	April 1997, to August 1997.
G7.	Employer	:	HYUNDAI CEMENT (BD) CO. LTD. (100% FOREIGN OWNED COMPANY IN BANGLADESH)
	Principal Contractor	:	DEVELOPMENT CONSTRUCTIONS LTD.
	Project	:	Construction of Cement Factory at Meghna Ghat Narayangonj, Bangladesh. Work consists of Piling work of Jetty, Building Foundation & Roads Boundary Walls, Water Tank & Water Basin, Clinker & Gypsum Silo, Cement Silo, Cement Mill Building (Steel Structures), Packing House Building (Steel Structures), and Jetty.
	Contract value	:	Tk.200 million
	Contract period	:	February,-December 1995.
G8.	Employer	:	BANGLADESH CHEMICAL INDUSTRIES CORPORATION.
	Principal Contractor	:	HCG. HOLLAND.
	Project	:	12000 Phosphoric Acid Tank at TSP Complex, Chittagong.

	Type of Foundation	:	500 mm diam. 17 m long Cast –in- situ R.C.C piles.
	Contract value	:	Tk. 3.6 million
	Year of completion	:	1986
	Execution period	:	July to September, 1986.
G9.	Employer	:	BANGLADESH TEXTILE MILLS CORPORATION, DHAKA.
	Project	:	National Cotton Mills Ltd. Fauzderhat, Chittagong,
	Type of Foundation	:	14"/15" dia 40 ft. long 320 Nos. Cast –in-situ R.C.C Piles
	Contract value	:	Tk. 3.0 million.
	Year of completion	:	1978.
	Execution period	:	December 1977 to March 1978.

### H. WATER SUPPLY:

H1.	Employer	:	CHITTAGONG WATER SUPPLY SEWERAGE AUTHORITY.
	Project	:	Construction of Trunk Pipe Line Mohara-Battali- Hill-WASA Patenga under Second Chittagong Water Supply Project-IDA Credit No. 1001 –BD.
	Type of Foundation	:	600 m to 1200 mm Ductile Iron Pipes and fittings; Installation, testing and commissioning Depth range 8' –0" to 20'-0", 25.5 Km inclusive 16" dia steel Pile in 25 ft water on Bangshai Khal, Kalurghat, Chittagong for pipe bridge.
	Contract value	:	Tk. 44.246 million, US \$. 15 million.
	Year of completion	:	1987
	Execution period	:	May 1984 to September 1987.

### I. OTHERS:

1.	Employer	:	MES (NAVY)
	Project	:	4-storied E – Type Quarter at Chittagong.
	Contract value	:	Tk. 4.0 million
	Year of completion	:	1984
	Execution period	:	January1984 to May 1984.
2.	Employer	:	MES (Navy)
	Project	:	4-storied E – Type Quarter at Chittagong.
	Contract value	:	Tk. 4.0 million
	Year of completion	:	1984.
	Execution period	:	February 1984 to June 1984.
3.	Employer	:	MR. K. RAHMAN KHULNA.
	Project	:	7-storied Bldg.with Basement Floor Provision for underground Reservoir & Car Park at KDA C.A.Khulna.
	Contract value	:	Tk. 20.0 million
	Year of completion	:	1981-82
	Execution period	:	June 1981 to August 1982.
4.	Employer	:	MES (Navy)
	Project	:	Construction of Parade Ground Complex at CDB, Patenga, Chittagong.
	Contract value	:	Tk. 10.5 million
	Year of completion	:	
	Execution period	:	March to December 1987.

Md. Nurul Amin, Managing Director with Mr. T.W. Lambe at Ninth Southeast Asian Geotechnical Conference held in Bangkok

