FOR PRIVATE CIRCULATION ONLY

Issue 5 > April 2007

Relationships

Civil Engineering Construction Contractors

Three months into 2007

At the start of the new year, we resolved ending the financial year with an all-time high order book. Three months into the year, by the grace of God, and through the earnest endeavour of our team we are looking at a bright picture. This is going to be an extremely challenging year with promising new work orders which will support the growth we are looking at achieving for BEBL.

Additionally, the signing of new partnerships is being looked at, the development of which may not only help us financially but also help us grow as a cohesive organization. Also on the drawing board are the establishment of our presence at locations across the country, and plans to diversify into multi-faceted but not disconnected disciplines of our core competence in the building industry. All of this and the reputation we have built over many years will help catapult BEBL into a different league in the near future.

The industry is on an up-swing with plenty of work opportunity in the market but competition is also increasing and is still fierce. Under the circumstances, through ramping up our capacities substantially, adopting cost and time effective management systems and maintaining quality consciousness, we will be fully geared to meet rapidly increasing volumes of work and scale the heights we wish to.

Most importantly, it is the employees of BEBL who will actualize the Management's vision. Implementing cost control measures, cutting down on unnecessary expenses, streamlining reconciliation reports etc. will not only catalyze the growth of the company but also translate into individualistic growth of our employees.

To improve our market position, some of the crucial aspects of our business that need diligent and constant care are strict adherence to high standards of safety, getting the right logistical support, ensuring full and timely recovery of our dues and good planning to eliminate the risk of any work delays.

We need to stay focused on the business as a whole and should always keep in mind that hard-work and good thinking have no substitute. Let us all therefore continue to work together as a team to achieve even more challenging targets in forthcoming years.

Mr. Digant Kapadia
Director

A solution

To overcome a construction difficulty for an RCC component

Mr. D. V. Kulkarni *- Director Engineering*

[This write-up is dedicated to Mr. B.K.Panthaky an eminent structural engineer, whose constant encouragement and design skills helped construction at our sites for 50 long years during which period I was associated with him.]

The construction of the National Hospital was awarded to us in 1978 and our scope of work started after piling for the foundations. The RCC piles were driven as per design. However, while checking, the piles proved to be unreliable due to discontinuity noticed in some piles.

A decision was taken by the Consultants that a new set of piles should be driven, ignoring the entire lot of earlier piles. This decision resulted in doubling the number of piles in any cluster and also in increasing the size of pile cap.

The entire footprint of the building has a basement. The huge pile caps below the basement floor level demanded excavation to a much lower level in order to accommodate the pile cap height 1.5 M to 2.0 M.

Problem

However, this was just not possible due to the following reasons:

- the site being on sea shore and very close to water
- the excavation was in alluvial clay which had a large percentage of fine sand. Whatever excavation was carried out was getting filled with the collapse of sandy strata as well as saline water on account of the close-to-surface water table.

Solutions

To overcome this difficulty, a practical solution was discovered by our BEBL team without any backup from the other Project agencies. We decided to level up the portion of ground at excavated level and decided to construct Caissons-boxlike structure in RCC with a thin wall of 150mm to a shape that was necessary to accommodate the individual cluster of piles. This RCC caisson box would rest on the levelled strata.

After curing of the RCC of the wall for minimum three days the excavation inside the box was taken up. The box thus could be sunk progressively as the excavation inside it progressed. When the top of the box was sunk to near ground level, the height of box was further increased by adding RCC taking into account the required height of the pile cap. The excavation inside the box was stopped as soon as the top of RCC box could be brought to the level of the pile cap as per design.

Ingress of water was negligible and could be controlled to achieve near dry conditions necessary to place RCC. The reinforcement steel for the pile cap could then be placed to get ready for concreting the pile cap. The bar bending schedule had to be worked out as per the physical shape of each pile cap. Thus, the entire huge block of Pile cap concrete at the required level could be done in a satisfactory manner as far as the shape and level of pile cap is concerned.

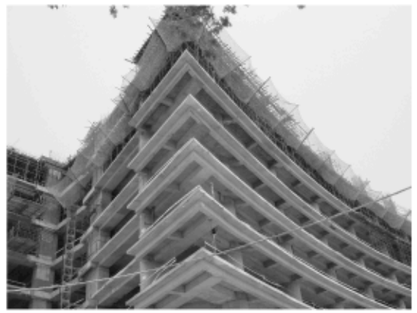
The caisson box concrete wall which provided the facility for casting the pile cap below ground water level gave additional concrete cover surrounding the pile cap, thus protecting the reinforcement steel of the pile cap in a saline surrounding.

Without this methodology which we devised, concreting of the pile caps would have been extremely difficult and the alternative solution would perhaps have been the construction of a diaphragm wall at a very, very high cost.

Project Update

Mumbai Pune Bangalore H.P.

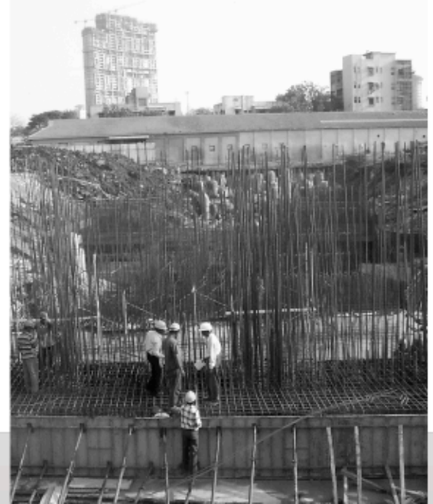
Mr. S. N. Bhat, *General Manager- Operations*



BRIGADE GATEWAY - Tallest building in Bangalore having 30 floors

Construction of S. H. Kelkar's - Administrative Building at Patalganga

View of PLANET GODREJ from 'LODHA BELLISSIMO' at Lower Parel



RESIDENTIAL

'Ashok Towers' at Parel, Mumbai - 3 towers with ground + 30 floors and 1 tower with ground + 51 floors and 3 levels of podium

'Planet Godrej' at Byculla, Mumbai - 5 towers with part podium, 4 towers with 48 + 3 floors and 1 tower with 48 + 3 floors

'Ashford' at Lower Parel, Mumbai -2 towers with 23 floors each, 2 level parking and an in-house amphitheatre

'One Altamount Road' at Altamount Road, Mumbai - 22 floors with duplex flats and 12 parking levels

'Lodha Grandeur' at Parel, Mumbai - basement and ground + 26 floors

'Govind Niwas' at Altamount Road, Mumbai - double basement + 40' podium with 18 floors and 3 level parking

'Piramal House' at Worli, Mumbai - basement and ground + 13 floors

'Chateau Paradise' for Lodha at Worli, Mumbai - double basement with ground + 6 floors

'Regency Park Tower' for Godrej at Thane - Stilt + 23 floors

'Lodha Bellissimo' at Lower Parel, Mumbai - 3 level podium + stilt + 50 floors

'Mantri Green' at Sampige Road, Bangalore - 4 towers with ground + 16 floors, 2 level penthouses, 2 towers with 1 basement each and 2 towers having 2 basements each

'Concorde Manhattan' at Doddathoguru village, Bangalore - 5 towers with Ground + 14 floors with 2 basements

CORPORATE

'Godrej Eternia' at Shivajinagar, Pune - Stilt + 10 floors

'Brigade Gateway' at Malleshwaram, Bangalore - double basement with ground + 28 floors

UTILITY

'Orchid Ozone ' Mall at Dahisar, Mumbai - with 2 basements and Ground + 2 floors

'Brigade Gateway' at Malleshwaram, Bangalore - multilevel car parking

'Breach Candy' Hospital at Breach Candy, Mumbai - addition to existing hospital building

INDUSTRIAL

'Procter & Gamble' factory at Baddi, Himachal Pradesh - civil, structural and infra structural work for fabric, home care and beauty care manufacturing unit

'S. H. Kelkar' at Patalganga, Raigad - civil, structural & miscellaneous works of Fragrance manufacturing unit

'Raptakos Brett & Co. Ltd.' at Thane - Civil, structural and plumbing work for R&D facility manufacturing plant

ENHANCING Equipment Performance

Mr. B. C. Desai, Mechanical Engineer

BEB accomplishes most of its construction through mechanised processes, using sophisticated equipment. To make the most of our equipment and ensure scheduled progress of work at our sites regular maintenance work is being carried out on our equipment.

Simple tasks that need to be observed at sites to help with equipment performance are given below:

MAINTENENCE PROCEDURES

- A daily clean-up and check by the operator will reveal any damage to the equipment and also enhance the appearance of the equipment. Sites need to monitor this carefully as shabby equipment does not provide a sense of comfort.
- Designated days should be properly allocated by all sites, for weekly maintenance of equipment. A proper schedule ensures excellent performance by our equipment.
- **Equipment maintenance checks** - Random **equipment maintenance checks** must be carried out to keep operators alert regarding equipment upkeep

BRAKES

- Weekly testing for all **brakes** is a must to keep them well adjusted

WIRE ROPES

- **For Batching Plants** - It is very IMPORTANT to carry out a weekly check of the condition of the **wire ropes**. For example, wire ropes for our batching plants must be carefully monitored and replaced on notice of the slightest damage as any failure would damage the mixer and endanger the persons working
- **For Cranes** Crane wire-rope damage is due to improper use. It is good practice to provide material platforms for unloading bricks etc. This eliminates pulling of the skip-box inside the building and damage to the crane wire-rope on account of friction with window corners etc.

CONCRETE PUMPS

- For our **concrete pumps**, it is a MUST to clean the **pipes** they must be **washed and greased** after the concrete pour. Greasing is very important as it pushes out the cement slurry which would otherwise set and damage the moving parts of the pump.
- It would be most helpful if the **Project Managers** could carry out frequent **checks** for the **concrete pumps** to ensure that operators are alert regarding the importance of the cleaning process.
- At all times when **concrete pumping** is carried out, it is compulsory that the **concreting-in-charge staff** is made responsible for ensuring proper clean up operations to avoid any break down to pumps.

CONCRETE MIXERS

- With regard to **concrete mixers**, they should be cleaned properly at the end of each day. Once a week, any concrete mass sticking to the drum should be chipped off.

CONCRETE PIPELINE

- **Concrete pipeline plans** should be made well in advance to have minimum bends. This will help to save time and speed up the work.
- **Blowing out concrete** from the pipeline by a compressor is an operation that should only be undertaken under strict supervision

CRANES

- While climbing cranes frames should be level and the cranes should be in plumb

INTERNAL ROADS at the site should be well maintained as this improves faster movement of dumpers / transit mixers. Good road maintenance also reduces breakdowns and improves availability of dumpers and other equipment. Cost increed on maintaining good roads is well offset by reduction in break-down costs

DIESEL SUPPLY AND STORAGE should be properly maintained, preferably isolate, to avoid any contamination and for a safety point of view. Properly maintained and appropriate fire extinguishers should always be installed near the oil storage.

OPERATORS are the best guides for any work that might need to be done and attention must be paid to their input. Guidance must also be provided to operators when critical work is being carried out.

TRAINING - constant training to workers to update repair and maintenance skills and spot and train a second line of competent persons to take on repair work.

PLANET GODREJ

Project PLANET GODREJ, Mumbai

SUCCESSFUL COMPLETION OF TOWER 1

Mr. Shailesh Lalchandani, Sr. Engineer

The construction industry boom in the island city of Mumbai can be witnessed in the huge activity in construction of high rise buildings, mainly on lands formerly occupied by textile mills. To make use of the full FSI, vertical expansion through the construction of towers, is the only way to cater to the city's housing and commercial needs.

I would like to share our experience in the construction of one such 48 storeyed tower being built by our company on the lands of Simplex Mills at Byculla for Godrej Properties Pvt. Ltd.

The salient features of this project are –

- 5 towers – each of 46 floors + 2 level Podium
- Large 2 level extended common podium – encompassing the frontage of all 5 towers
- Area/Floor – 2500 sq ft
- Number of flats – 2 flats/floor
- Refuge floor – on every 7th Floor

As one of the country's leading construction contractors we were awarded this challenging work for this 5 tower project. A team of dedicated engineers was formed to commence the work on Tower 1 and complete it within the agreed time frame. The experience gained from the work on Tower 1 has given us an opportunity to use this to our best advantage during the construction of the other 4 towers which are being constructed simultaneously.

The extensive use of the modern formwork system of Mivan at the site proved to be of immense help. This advanced system assists the speed of construction and has great advantage over the conventional mode of shuttering. Mivan shuttering is made of aluminium sections such as wall plates, wall ties, pin wedges, props, beam soffits, beam sides etc. The aluminium sections are light in weight and easy to handle and and there are benefits not only from speedy construction but also with manpower utilisation.

View of BEB landmarks: Samudra Mahal, Nehru Centre and Nehru Planetarium as seen from PLANET GODREJ

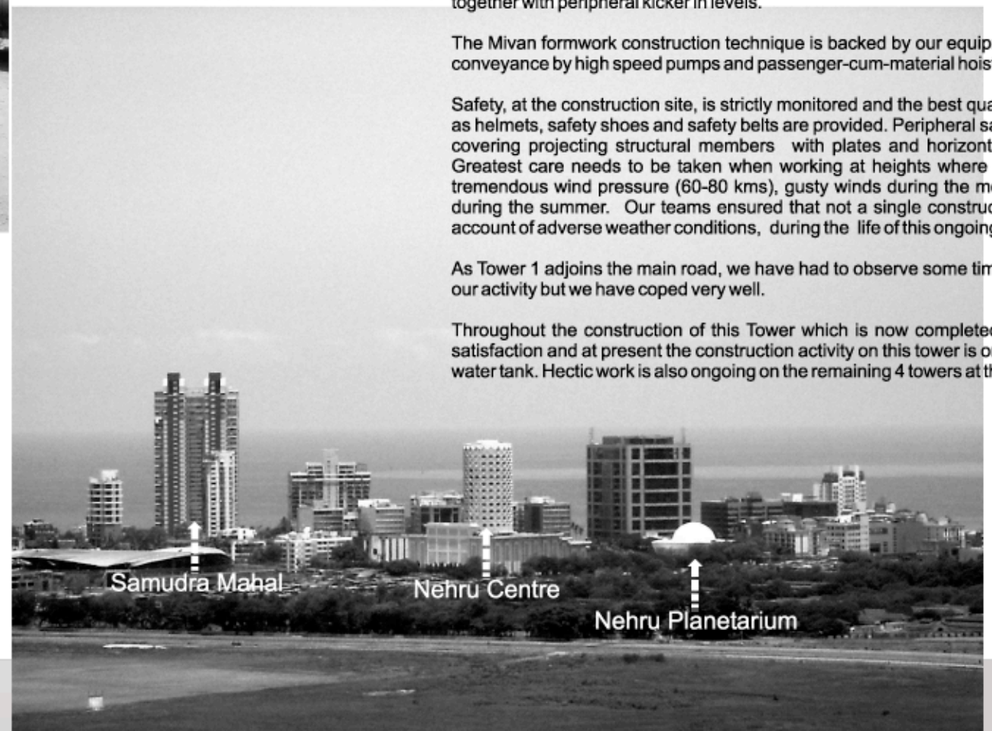
The Mivan system calls for very strict supervision. To ensure the verticality and plumb which are a very important aspects of a high-rise tower, great care is to be taken in the casting of slabs together with peripheral kicker in levels.

The Mivan formwork construction technique is backed by our equipment of tower cranes, RMC conveyance by high speed pumps and passenger-cum-material hoist.

Safety, at the construction site, is strictly monitored and the best quality of PPE equipment such as helmets, safety shoes and safety belts are provided. Peripheral safety is also taken care of by covering projecting structural members with plates and horizontal and vertical safety nets. Greatest care needs to be taken when working at heights where we also have to cope with tremendous wind pressure (60-80 kms), gusty winds during the monsoon and scorching heat during the summer. Our teams ensured that not a single construction day has been lost on account of adverse weather conditions, during the life of this ongoing project.

As Tower 1 adjoins the main road, we have had to observe some time restrictions with regard to our activity but we have coped very well.

Throughout the construction of this Tower which is now completed, our team achieved great satisfaction and at present the construction activity on this tower is on the machine room and the water tank. Hectic work is also ongoing on the remaining 4 towers at this project.



Initiatives

COST CONTROL AT SITES

Mr. S. N. Bhat
General Manager - Operations

How to REDUCE costs at our sites:

- **Generation of debris**
- **Consumption of electricity**
- **Consumption of water**

Systematic work with proper planning and managed within a specified timeframe helps contain costs at sites.

I would like to give some suggestions with regard to debris -

Causes	Remedy
Batching plant produces extra concrete	♦Proper communication is required To produce actual volume of concrete ♦We could consider keeping ready some Areas for P.C.C./lintel/pre-cast for concrete
Concrete splashing while discharging it from batching plant into pump/transit mixer/tuff rider	Cone chute to be properly aligned on top of the vehicle/pump/tuff rider to avoid splashing and wastage
Concrete thrown with ghamelas falling outside the demarcated area	Proper barriers (i.e.chute/supda) to be placed along demarcated area of the pour, so that wastage is minimised
Concrete coming out from window openings, chajjas, lofts, sill etc., While the pour is being carried out in slabs and walls	Special attention and care should be taken while pouring concrete in these particular areas and vibrate in a manner that it should not come out of the demarcated pour area
After completion of pumping concrete, ball to be pushed with compressed air to recover concrete from pipeline	Always plan and calculate the concrete in the pipeline. Plan and make provision for some area to utilise this pipeline concrete
Pipeline choked while pumping	♦Always keep the pump, pipeline under regular maintenance ♦To maintain pumpable workability, always check the grading of ingredients used for concrete
Spill-over of concrete, generated while transporting mechanically / manually	Maintain a proper road for smooth transportation of concrete
Debris generated while completing brick / block work	♦Check and maintain quality of bricks / blocks ♦ Use broken pieces to the best extent possible for masonry and/or waterproofing
Large quantities of debris generated while making and using mortar for masonry, plaster, etc.	♦ Always make mortar as per requirement and only in trays ♦ Always clean the area before starting brick / block work ♦ Put a plastic sheet at floor level so that mortar that falls can be reused
Over-stacking of materials leading to breakage / wastage	Materials storage area should be properly planned to avoid any wastage
Excess bedding material in the flooring	Before laying flooring, proper calculation to be done and mortar to be shifted accordingly
Tiles, granite and cuddappa over-indenting and breakage	♦ Before ordering and fixing of these materials, proper measurements to be taken and to be verified to avoid over indenting and wastage ♦ These materials to be properly stored and transported at site to avoid breakage

From the HR Desk
HOW TO GET STARTED WITH GETTING THINGS DONE...

Mr. Varughese George, *Dy. General Manager - HR*

Getting Things Done is known as Time-Management.

The tools and technologies you use are almost entirely of your choosing - Post-It notes, a smart phone, your own version of Outlook - any or all of these will work, as long as they're deployed systematically and regularly.

Time Management is a total system, and the first step requires at least a two-day collection process, in which you're supposed to gather up every single thing that requires action on your part: unopened mail, emails, voicemails, countertop clutter, reading materials, scary catch-all cabinets you can barely open.

Physical Supplies you will need:

Office Supplies: file folders, paper-holding trays, a pen, a calendar, and some paper are all you need to get started

Other Supplies -

Flexibility: Success at Time management requires small actions throughout the day-at your desk, in meetings, at home, while commuting - Set up a separate sheet of paper to each idea or project.

Record all your commitments to free up mental energy and start accomplishing things. This may require a serious change in mindset. Clear the Clutter, physical and mental.

When all your physical rubble is more or less sorted and discarded, it's time for a "mind-sweep": the process of recording everything in every aspect of your life that you want to get done-now, next year, or in the future.

1996 - 2006

Mr. R. P. Rawool,
Site Engineer - Planet Godrej

In the year 1989, when I was in the 10th standard at school in the small town of Sawantwadi, I visited Mumbai for the first time. On our way to Dindoshi in Goregaon (East), I was amazed to see three tall structures, as I had been exposed to seeing only ground floor structures at Sawantwadi. Much later, on qualifying as an Engineer, in 1994 I joined BEBL and much to my surprise I learnt that the tall buildings I had seen in Goregaon had been constructed by BEBL.

During my early years at BEBL, I can say that I have been privileged to work with some very fine engineers and the guidance I received from my seniors has helped me to become a better professional. I have also learnt quite a lot of the functioning of electrical and mechanical machinery at our sites, which I have been able to put to good use, especially with the high acceleration of mechanisation at sites.

As a fresher, my first job was to help in the erection of batching plant. I had no experience of the job but fortunately I was helped by a very senior mechanical foreman whose knowledge and experience helped me complete this assignment and also to learn a great deal about the machinery involved.

I also learnt a great deal about all aspects of concrete, such as mix design, performance enhancing chemicals, effect of adding flyash and microsilica, various tests for evaluating concrete as a final product and also about constituents which contribute to the ultimate superior product. This knowledge, I have shared with colleagues at other sites.

During my ten years of service at BEBL, I can sincerely say that we are all fortunate to have excellent cooperation of our seniors in sharing their knowledge and guiding us, and, to the company for providing encouragement through letting us attend seminars, training courses and in obtaining technical books. I feel that all my colleagues, senior and junior, work excellently as a team and this contributes to the rapid progress and reputation of our company.

Best wishes to all.

Welcome Aboard

H R Desk 2007

DY. GENERAL MANAGER - HYDERABAD
RUDRARJU PRABHAKAR VARMA

PROJECT CO-ORDINATOR
DILIP S. AWAR

MANAGER FINANCE & ADMINISTRATION
KRISHNA POOVARAGAVAN IYER

MANAGEMENT TRAINEE
APOORVA RASHMIKANT DHOLAKIA
VIRENDRA SINGH SOOD

ENGINEER
AVINASH ANKUSH KORGAONKAR
RAMESH BABU BOGGAVARAPU
SATISH DIWAKAR KULKARNI
BALASUBRAMANYA BANAVAR MURTHY
SHAILESH BHASKAR ANCHAN
G. GOPALKRISHNAN
IMRAN AHMEDSAIFULLAH KHAN
KISHOR SURENDRA JOSHI
MAHABOOB SHARIEF SHAIK
NIKHIL HARISHCHANDRA KOLI
PIYUSH VASUDEO MALI
RUPESH SHARAD MAHADIK
SHIVANANDA SHETTY
TUSHAR TUKARAM SAWANT
VAISHALI JAGANNATH PATIL
VIJAY PURSHOTTAMBHAI RATHOD
VIJAY VITHALRAO NAVGIRE
AFTABHUSSAIN S. MIRZA
MOHD. MASOOD ALI
SHAILESH VISHNU NAIK

GRADUATE ENGINEER TRAINEE
ADITYA DILIP LOTHE

SAFETY
EX.SUBEDAR MAJ. R. POTHERA
MAHFOOZ ALAM RAHMANI
NITIN MACHHINDRA BHOR
UVAIS P. M.

ASSISTANT FOREMAN
T. CHANDRASHEKHAR

OFFICE ASSISTANT
SARITA SHRIKRISHNA KATRE

ASSISTANT STOREKEEPER
DONALD DIAGO ALMEIDA
RAJENDRA VITHAL KOKATE
RAKESH D. VISHWAKARMA

PEON
SANTOSH PUNDALIK JADHAV

For all employees

For any grievance/problem that you might want counselling with, please feel free to approach the Project Manager at your site, after making a prior appointment.

For Head Office employees, please approach Mr Varughese George or Mr S N Bhat, with a prior appointment.

Offices

DELHI
A-34, Okhla Industrial Area, Phase - 1
NEW DELHI 110 020
Tel: 011 22681 6661/62, 6460 3465
Fax: 011 2681 2726

BANGALORE
'Shiv Kripa', 1st Floor, Plot No. 56
1st Cross, 4th Main, Domlur IInd Stage
Indira Nagar
BANGALORE 560 071
Tel: 080 2535 9559
Tele Fax: 080 2535 9566

HYDERABAD
Imperial Apartment, Flat No.102, 1st Flr.
Hse No.6-3-866/2, Greenlands, Begumpet
Ameer Pet Road
HYDERABAD 500 016
Tel: 040 6613 9908
Tele Fax: 040 6613 9908

PUNE
101-102, Mantri Terrace
Thube Park, Shivaji Nagar
PUNE 411 005
Tel: 9520 6620 4867
Tele Fax: 9520 2551 0683

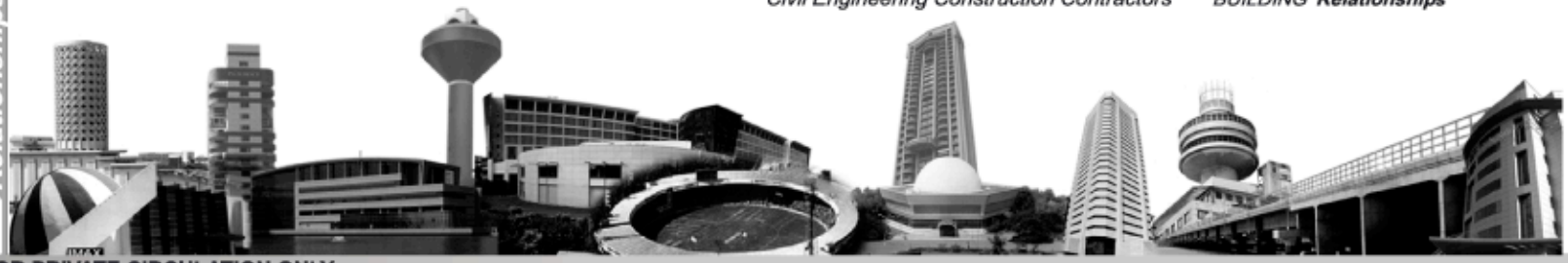
CHENNAI AND KOLKATA
BRANCHES OPENING SHORTLY

All communication by email paga@bebanco.com

B.E.Billimoria & Co.Limited
Civil Engineering Construction Contractors

Shiv Sagar Estate 'A' Block, 2nd Floor
Dr. A.B. Road, Worli, Mumbai 400 018
Tel: 6654 5000 Fax: 6654 5050
Email: beb@bebanco.com
Website: www.bebanco.com

BUILDING ***Relationships***



Relationships