

Visit Report at Thakur Infra-Structure Pvt. Ltd.



# **G. M. VEDAK INSTITUTE OF TECHNOLOGY, TALA, RAIGAD**

**Educational-Site Visit At**

**THAKUR INFRA. PRIVATE LIMITED, TALA**

**Visit Date : 2<sup>nd</sup> April 2019**

All the students of Second Year Civil Engineering of G. M. Vedak Institute of Technology Tala, Raigad, were very much thankful to our Principle Dr. D.N. Jaiswal & H.O.D. Of Civil Engineering Department Prof. Ajeet Kumar, & Subject Teacher Prof. K. B. Meshram; respectively for Support an Educational-Site Visit for Quarrying of Stones & Ready-Mix-Concrete Plant, At Thakur Private Limited, Tala Raigad.

Visit At Thakur Private Limited On 2<sup>nd</sup> April 2018 At 3:30 P.M. Along With Faculty members Prof. K.B. Meshram, Prof. V.D. Biradar, & Students Of Second Year Civil Engineering of G.M.V.I.T. Tala Raigad.

## **OBJECTIVE OF VISIT :**

Technical Exposure of Building Materials & Concrete Tehnology, Manufacturing Process An Other Engineering Aspects Of Concrete Technology Subject.



G.M.V.I.T. Tala – University of Mumbai

First A Technical Explanation by Plant Supervisor. First, He Explained Us Regarding The Quarrying Of Stone & After Crushing Of Stone, Separation Of Aggregates & Ready-Mix-Plant Etc. He Also Shared Some Knowledge About Their Experience Regarding To Concrete Mix.

## QUARRYING OF STONES :

Site Supervisor gives Some Technical Knowledge About Gelignite, ED's & Drills. Gelignite, ED's & Drills are used for blasting purpose. Quarrying Is Principally Produced Sand, Gravel & Crushed Rocks for Construction & These Material Are Usually Described As 'Aggregate'.

- Drill Diameter of Drills Are 24 mm.
- Depth of Drill Diameter Is up to 2.5ft, 5ft. Or 8 ft. Depending Upon Physical Condition of Rock & Worker.
- EDs & Gelignite Should Recorded After the Blasting.
- More Vibrations Should Have Adverse Effect On Nearby Road, Soil Condition & Nearby Village Also.
- Mahindra Trucks Carry 6 Brass of 27 Tonnes Of Stones After Blasting To Crusher For Crushing Purpose. (by Calculations 1 Brass is 5 Tonnes Of Stones but due to gap between them while placing it is minimize in weight so 6 Brass of stones is approximately equal to the 26 or 27 tonnes of stones)
- Crusher Capacity : 150 TPH (Tonne Per Hour)
- EDs Quantity Used : 8ft – 4 to 5 EDs  
5ft – 2 to EDs



QUARRYING OF STONE SITE



GELIGNITE

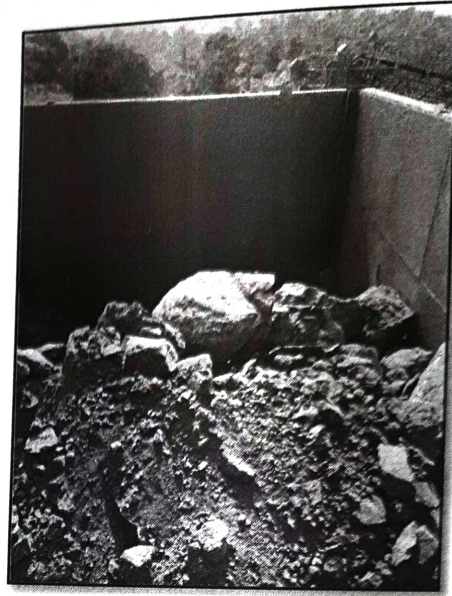
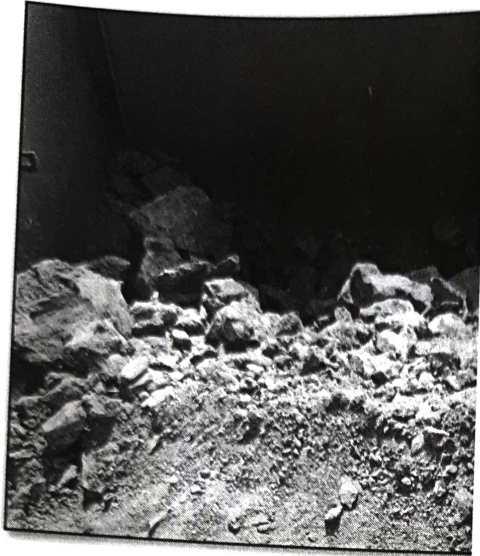
## CRUSHING OF STONES :

For Crushing of Stones i.e., Conversion of Boulders To The Aggregates Of Different Size Crusher is on the site of size 4M × 5M, where the stones are carried out to the mouth of crusher by Mahindra Trucks Of 6 Brass Of Capacity. If Boulder size is larger than stone should made in smaller size before insert in the mouth of crusher.

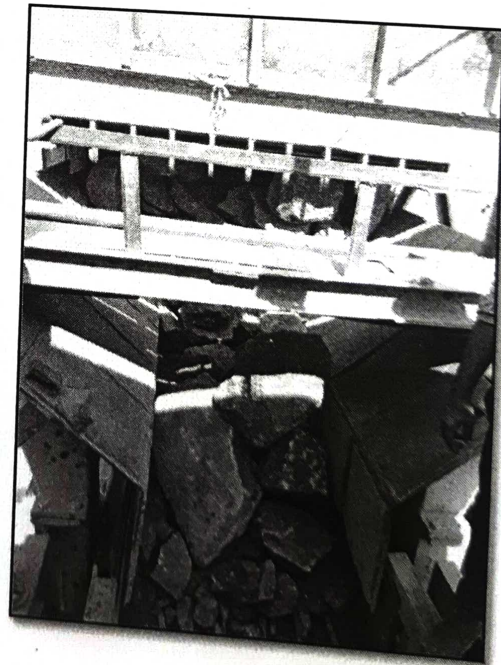
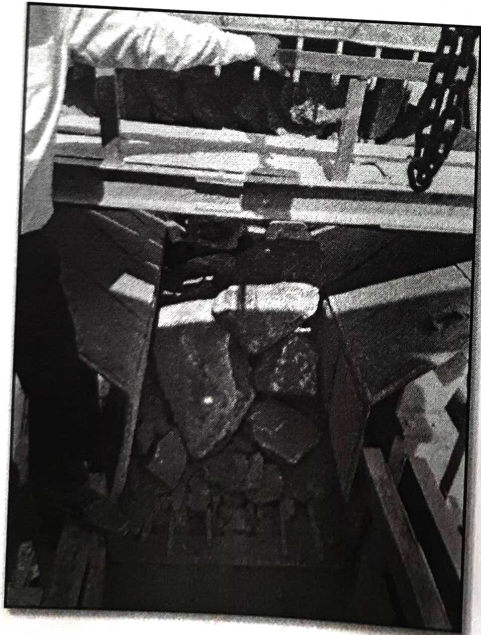
- Jaw Crusher : Capacity 150 TPS
- Crusher made Stones In Smaller Size :
  - i. Soil
  - ii. 40mm-60mm
  - iii. 30mm-40mm
  - iv. 20mm
  - v. 10mm
  - vi. Crush Sand



**MOUTH OF BLADE**



**WAY TO BLADE**



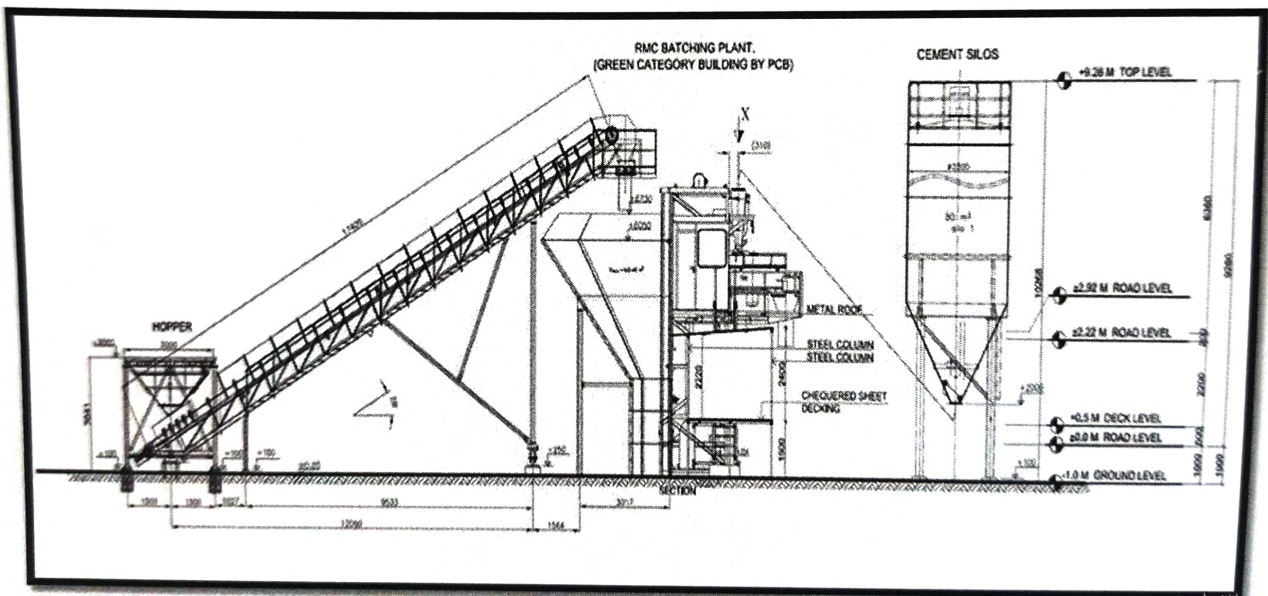
**READY-MIX-**

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# CONCRETE PLANT

Concrete which is mixed at a central batching plant & transported at the site by a suitable means like belt conveyor, transit mixture is called Ready Mix Concrete. Ready Mix Concrete is the concrete that manufactured in a batching plant, according to set Engineered Mix Design. Up-to 80% Capacity of Plant is use at a time to avoid mixing problems

- Plant is calibrated throughout monitor.
- Mixing time set as per Mix Design of Concrete.
- As per required conditions admixtures are used.
- $1\text{M}^3$  Concrete Cost for M10 Grade of Concrete is 3300 Rupees.



## R.M.C. PLANT



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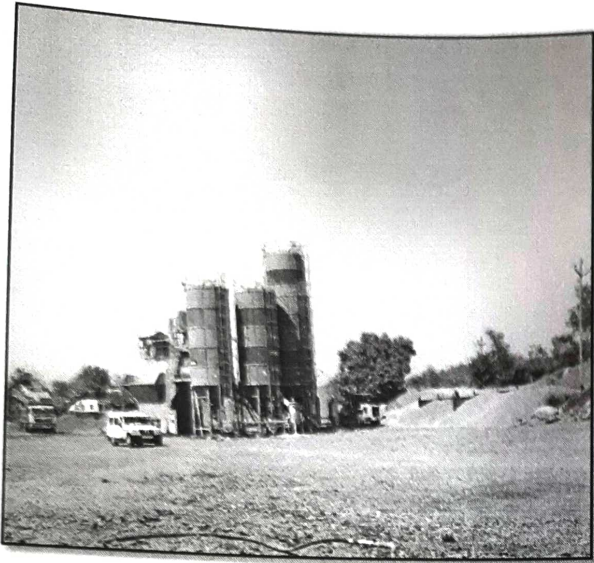


PHOTO : RMC PLANT

ADMIXTURES & PLASTISIZERS



GROUP PHOTO

## CONCLUSION :

Students have learnt process of making Aggregates Of Different Size, The process of making Concrete, Materials Used In Making of Concrete. With this kind of Educational Visit. We Gain more Knowledge On Concrete Technology Application aside from theoretical aspect learned from classroom & laboratory.

