

REPORT ON INDUSTRIAL VISIT TO NEWLY CONSTRUCTED SECRETARIAT NEAR VELAGAPUDI

Name of the place: VELAGAPUDI

Name of the work: CONSTRUCTION OF SECRETARIAT

Date of visit: 26-09-2016

List of the faculty accompanied: 1) Mr. RAHUL

:2) Mr. MANI DEEP

:3) Mr. S.SHAHABAS

:4) Miss. AFSHAIN SHEIKH

:5) Miz. SRUJANA.

No of students visited: 120

All the M. Tech. First and second year students of Department of Civil Engineering have visited the newly constructed C.R.D.A buildings in Velagapudi. With the help of one of the C.R.D.A civil engineers named Mr. H. M. Reddy garu all the students observed and learned many aspects like foundation details, fire safety and security systems, interiors and process of roofing, electrical fittings, centralized air condition systems and various parts of ministers cabins construction.

Total number of blocks: 6

Name of the contractors: 1) L&T CONSTRUCTIONS(4 BLOCKS)

2) SPCL(2 BLOCKS)

Size of each block: 72Mx72m

Floor area of each block: 50,000Sft.

Total number of floors constructed: G+1(2)

Designed number of floors: G+9(10).

Span of each beam: 11m

Type of soil: BLACK COTTON SOIL

After the separation of Telangana and Andhra Pradesh state, the A.P govt. started construction of its own buildings. On that process in March 2016 they started construction of their secretariat near Velagapudi with very fast track construction. Construction of a huge G+1 building in a short span of 3 months. Those contract is given to very famous INDIAN construction companies named L&T and SPCL. The total cost of entire construction is 600 crores with 6 blocks. On those 6 blocks, 2 blocks are constructed by SPCL and remaining 4 blocks are constructed by L&T.

Because of soil condition they gone through pile foundation. The depth of each pile is nearly 40 to 30 feet. Size of piles are 90mm, and 100mm. They used a huge pile driving machines for making of bore holes. After the foundation they started the construction of columns. They designed the columns for G+9 building construction. The grade of concrete used is M40.

For the construction of slabs and beams SPCL gone through regular and conventional process simply placing scaffolding and gone for reinforcement placing and pouring of concrete but the L&T adopt new technique named precast construction. In the precast construction all the beams are constructed off the site and placed on the constructed columns. And they placed iron beams in between each precast beams. On those iron beams they placed G.I sheets and they poured the concrete on that. Due to this process the cost of cost of scaffolding is decreased and they can go for interior works without stopping even they are going for slab construction.

Each and every block is highly secured and monitored through C.C cameras at various places. And high quality of cables are used for monitoring systems and a hi-speed digital servers are used. All the buildings are totally having new technology fire safety systems. They have sprinkling system and direct pipe system. They have temperature and heat sensors inside the building. If the temperature inside the building reaches the 70⁰c the fire safety system automatically starts working and send those message to central system. All the buildings have various fire exit doors.

All the air conditions, lights, fans and each and every electrical product is fully energy efficient. SPCL company used Voltas A.C'S and L&T company used Daiken A.C'S. All A.C'S are fully energy efficient and having 5 star energy rating.

All the lights used inside the building is hi efficient L.E.D's with fully reflective power.



A VIEW OF VELAGAPUDI SECRETARIAT CONSTRUCTION



ERECTION OF PRECAST BEAMS USING CRANES



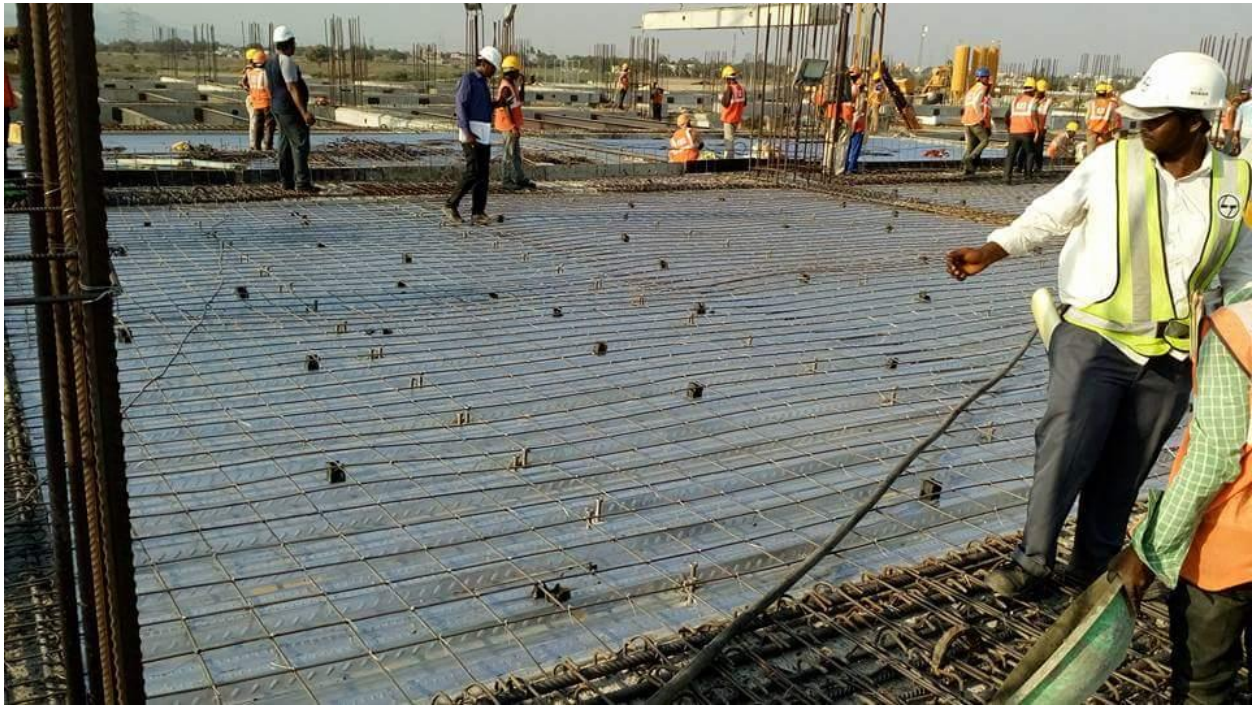
M.H REDDY GARU EXPLAINING ABOUT SECRETARIAT CONSTRUCTION



HUGE NUMBER OF PILING WORK FOR FOUNDATION WORK



FIRE SAFTY SYSTEM AND LED LIGHTS INSIDE THE BUILDING



PLACING OF G.I SHEETS FOR THE CONSTRUCTION OF SLAB