

I.1: Construction and Services

1. Construction of a tunnel for InfraRed Free Electron Laser Lab (IRFEL) :

A tunnel is constructed for the Infrared Free Electron Laser Lab (IRFEL) at RRCAT. The tunnel is 60 m long and 5 m wide with clear height of 3.50 m. The tunnel is provided with RCC walls and slabs of 1.35 m and 1.00 m thickness respectively for radiation shielding. Self-leveling epoxy floor is provided to ensure dust controlled environment. The inside view of the tunnel at IRFEL is shown in Fig. I.1.1.



Fig. I.1.1: Inside view of the tunnel at IRFEL

2. Construction of H⁻ion laboratory buildings :

A double storied RCC (Reinforced Cement Concrete) structure for associated labs and services of H⁻ion project is constructed. A pre-engineered building with high bay of 20 metres height and electrically operated crane of 10 Metric Ton for material handling is also setup. The high bay area has been provided with metal halide illumination. The built up area of building is 2800 square meters. The roadside view of the H⁻ion lab buildings is shown in Fig. I.1.2.



Fig. I.1.2: Roadside view of the H⁻ion lab buildings

3. Construction of Communication Building :

A double storied RCC (Reinforced Cement Concrete) structure with a floor area of 560 square meters is constructed for communication building. False flooring is provided in the EPABX (Electronic Private Automatic Branch Exchange) room. The front view of the communication building is shown in Fig. I.1.3.



Fig. I.1.3: Front view of the Communication building

4. Construction of LCW Plant building for Magnet Fabrication Lab (MFL) :

A double storied building along with two number of raw water sumps of 20,000 litres capacity each with treatment plant is constructed for LCW Plant building. A view of the LCW Plant building is shown in Fig. I.1.4.



Fig. I.1.4: A view of the LCW Plant building

5. Commissioning of Diesel Generator (DG) sets at Central Complex Sub-Station :

Two number of diesel generator (DG) sets, each of 320 KVA capacity, are commissioned at the Central Complex sub-station along with automatic transfer panel for providing backup power to critical buildings in the campus. DG setup has been tested for parallel operations and has been put in use.



Fig. I.1.5: Front panel view of DG set at Central Complex sub-station

6. Landscape development works around Guest house, Physiotherapy Centre & Open Air Theatre :

The surrounding development works including horticultural works are completed near Guest House, Physiotherapy Centre and Open Air Theatre. The development work is carried out in such a way that the natural surroundings are unaffected and utility services like walk ways and drainages are also constructed. The surrounding development near open air theatre is shown in Fig. I.1.6.



Fig. I.1.6: Surrounding development near open air theatre

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