



**GOVERNMENT OF KARNATAKA
PUBLIC WORKS PORTS & INLAND WATER TRANSPORT
DEPARTMENT**

Name of Work :- 1.Construction of Compound wall,Retaining wall,Toilets Repairs and Work Station . 2.Construction of Boys Hostel 3.Construction of Girls Hostel 4.Construction of Sports Complex Building 5.Construction of Workshop Building 6.Construction of Guest house building 7.Construction of Library Building 8.Providing of Solar Power Generating Panel And Street Light 9.Construction of Sewerage Treatment Plant (200 KLD) to Govt.Engineering college in Ramanagara(Indent no.93363)

Project Reports

Executive Engineer,
PWP&IWTD Ramanagara
Division, Ramanagara.

PROJECT REPORTS

CONSTRUCTION OF GUEST HOUSE, LIBRARY BUILDING, SPORTS COMPLEX, BOYS & GIRLS HOSTEL, WORKSHOP BUILDING AND INFRASTRUCTURAL WORKS FOR GOVT ENGINEERING COLLEGE AT RAMANAGARA, RAMANAGARA DISTRICT

I. GENERAL NOTE

Rural India is undergoing rapid transformation. Many Industries are moving towards, rural pockets of the country whereas industries in urban areas are growing manifolds. This calls for an urgent need of highly specialized and both Research & Skilled manpower viz. Institutes to produce much manpower. The Project envisages setting up of an integrated Skill in Ramanagara, Ramanagara District which would not only boost the local economy of the district but also cater to growing demand of highly skilled human resource in the latest technology across sectors in the country.

The Government of Karnataka under the Directorate of Technical Education has established 10 Engineering Colleges during the year 2007-08 with an Objective to nurture the young talent of economically weaker sections from rural Karnataka, Govt. Engineering College at Ramanagara is one such College established. This Institution situated on Bangalore -Mysore Highway, Doddamannugudde village, away from the inland bustle of city, very conducive for academic activities and also very well connected by Rail and Road with all the major cities in India.

This Institution is affiliated to Visvesvaraya Technological University, Belagavi and approved by AICTE, New Delhi. GEC Ramanagara imparts Quality Technical Education; focuses on providing balanced Education and overall development of the Students Embedded with Human values, State-of-the-art facilities are coming up in the College. At present Govt Engineering College, Ramanagara is spread over 19 Acres 30 Guntas and Institution has only one building structure with ground plus two upper floors.

During the Visit of Honorable Chief Minister of Karnataka and PWD Minister in the GEC Ramanagara Premises on 23.07.2018, The Honorable Chief Minister and PWD Minister have instructed to PWD Officials to provide infrastructural works to existing Building (Academic Block) and develop the GEC Ramanagara campus. As per Instructions from the Hon'ble Chief Minister and PWD Minister, the PWD officials, Ramanagara Division and Architects had visited the site and made detail discussion with GEC-Ramanagara officials.

In this preview, the PWD, Ramanagara have Proposal to provide Infrastructure to existing Building (Academic Block) and construct Guesthouse, Library Building, Sports Complex, Boys&Girls Hostel, Workshop and Infrastructural works in the premises of Government Engineering College campus at Ramanagara under the guidance of Directorate of Technical Education, Government of Karnataka. The Land already available in this campus for constructing the Proposed works by Government of Karnataka. Hence, the PWD has proposed project cost Rs.75.10 Crores. Accordingly the Detailed Project Report has been prepared. The amount of each proposed buildings as follows, vide IFA, Board of Technical Education, and Bengaluru Letter Dated No: ED/124/HPU/BENGALURU/Dated: 05-09-2018.

1. Guest House (Ground+1 Upper floor)

- 1) Estimate Cost.....300.00 Lakhs.
- 2) Design.....G+1 Floors.
- 3) Total Floor Area.....780.00Sqm.
(GF-390.00 First Floors 390.00Sqm)
- 4) Ground Floor..... Centre courtyard, Lounge, Kitchen,
Dining Hall, Store Room, 2 no's VVIP Rooms With attached Toilets.
- 5) First Floors..... Centre courtyard, Lounge, Kitchen,
Dining Hall, Store Room, 2 no's VVIP Rooms With attached Toilets.

2. Library Block (Ground+1 Upper Floor)

- 1) Estimate Cost.....900.00Lakhs.
- 2) Design.....G+1 Floors.
- 3) Total Floor Area.....3480.00Sqm.
(GF-1740.00 First Floor 1740.00Sqm)
- 4) Ground Floor.....Librarian Room, Assistant Librarian Room,
Reading Room, Store Room, Conference Hall, Godown, Electrical
Room, Ladies & Gents toilets.
- 5) First Floors:--Digital Library, Reference Section, Periodicals, Reading
Room, News paper Room, E-journals Room, Assistant Librarian Room,
and Ladies & Gents Toilets Store Room.

3. Sports Complex (Ground+1 Upper floor)

- 1) Estimate Cost.....900.00Lakhs.
- 2) Design.....G+2Floors.
- 3) Total Floor Area.....3610.00Sqm.
(GF-1350.00 Remaining Floors 2260.00Sqm)
- 4) Ground floor:--Entrance Lobby, Basket Ball Court, Store Room, Luggage Room, Ladies & Gents toilets, Dress Changing Room.
- 5) 1st&2nd Floors:--Badminton, Table Tennis, Gym, Carrom, Chess, Billiards, Luggage & Dress Changing Room.

4. Boys Hostel (Ground+5 Upper Floors)

- 1) Estimate Cost.....1560.00Lakhs.
- 2) Design.....G+5 Floors.
- 3) Total Floor Area.....6177.00Sqm.
(GF-1335.00 Remaining Floors 4842.00Sqm)
- 4) Total Accommodations:--208 Students.
- 5) Ground floor:--16 Rooms, Warden Room, Kitchen, Dining Hall,
- 6) 1st to 5th Floors:--18Rooms, TV Hall, & Indoor Stadium.

5. Girls Hostel (Ground+5 Upper floors)

- 1) Estimate Cost.....1560.00Lakhs.
- 2) Design.....G+5 Floors.
- 3) Total Floor Area.....6177.00Sqm.
(GF-1335.00 Remaining Floors 4842.00Sqm)
- 4) Total Accommodations:--208 Students.
- 5) Ground floor:--16 Rooms, Warden Room, Kitchen, Dining Hall,
- 6) 1st to 5th Floors:--18Rooms, TV Hall, & Indoor Stadium.

6. Workshop Building (Basement (part)+Ground+1Upper floor)

1) Estimate Cost.....1000.00 Lakhs.

2) Design.....Basement &G+1Floors.

3) Total Floor Area.....6542.00Sqm.

(BF-990.00 Remaining Floors 5552.00Sqm)

4) Basement Floor..... Work shop Hall.

5) Ground Floor.....Work Shop Hall and 1 No Class Rooms.

6) First Floors.....Work Shop Hall and 1 No Class Rooms.

**7.Infrastructure to Existing Government Engineering college Building
(Compoundwall,Repairworks&Workstations)**

1) Estimate Cost.....495.00Lakhs.

2) Design.....G+2Floors.

3) Total Floor Area.....6501.00Sqm

(GF-2167.00+Remainig Floors 4334.00Sqm)

4) Total Length of Compound Wall.....1200.00m

5) 70 no's Of Work Stations for College Staff.

6) Auditorium Renovation, and Seating Arrangements with all facilities
I.e. Sound System, Fire, Etc.

7) Wall Paneling and False Ceiling to Principal Chamber.

8) College Building Centre portion Covered With Truss and
Trapezoidal Sheet and Cobble Stones (Paver Block)

8. Sewage Water Treatment Plant (200KLD)-100.00Lakhs

9. Laboratory Equipments

1) Estimate Cost.....495.00 Lakhs.

2) Providing and Fixing, Installation of Workshop Machinery's, and
Lab Equipment's (Civil, Mechanical, Computer, and E&C Departments)

10. Solar Power Generating Panels and Distribution (Electrical & Pump room..etc) -200.00Lakhs

The Proposed Guest house, Library Building, Sports Complex, Boys & Girls Hostel, Work shop and Infrastructural works will be constructed as per AICTE norms in the allotted land required for the purpose. Total Station Survey and Soil Investigation has been carried out .The SBC of the soil is 18 T/Sqm at 2.00Mtr depth .Accordingly the foundation is designed for the Guest house, Library Building ,Sports Complex, Boys & Girls Hostel, Workshop and Infrastructural works.

ARCHITECTURAL CONCEPT

The entire full pledged proposed works in the premises of GEC at Ramanagara consists of the following buildings and Infrastructure works as under:

Government Engineering College-Ramanagara:

In addition to the existing Academic Block, the following buildings and Infrastructure added:

- Guest House(Ground+1Upperfloor)
- Library Block(Ground+1UpperFloor)
- Sports Complex(Ground+1Upperfloor)
- Boys Hostel(Ground+5UpperFloors)
- Girls Hostel(Ground+5Upperfloors)
- Workshop Building(Basement(part)+Ground+1Upperfloor)
- Infrastructure to Existing GEC Building
(Compound wall, Repair works & Workstations)
- Sewerage Water Treatment Plant (200KLD)
- Laboratory Equipment's
- Solar Power Generating Panels and Distribution
(Electrical & Pump room..etc)
- Other Infrastructural works
- External Electrification
- HT Works
- Panels and Cables
- Under Ground Sump (1.0Lakhs Liters)
- Rain Water Harvesting
- Bore wells

SEWERAGE TREATMENT PLANT (200 KLD)

The STP Consists of Bar Screen Chamber, Equalization Tank, Sequencing Batch Reactor, Pre-Filtration Tank, Treated Water tank, Sludge Digester tank and Plant Room and it is having 200000 Liters Capacity.

GENERAL SPECIFICATIONS

Foundation system

M25 and M30 RCC Framed Structures

400x200x200 Solid Block For Walls

Vitrified/Granite/Tandoor Blue/Industrial flooring For Floorings

Red Sal Wood frames and Flush Shutters

Upvc Windows

Railings:

MS handrails for Staircase & Ramp.

Electrical points:

Lighting points

Fan points

Plug points

Common are as to be well illuminated.

Sanitary fittings:

Indian/Western type water closets, Flushing cisterns, Stainless steel Sinks and Wash basins.


Water supply fittings:


Bib taps, Stopcocks, Health faucets & valves.

Wash basin Pillar taps.

SUMMARY

Detailed estimates has been prepared to all Buildings based on PWD,P&IWTD SR 2016-17,South Zone, Bangalore and Data Rates /Market Rates. The estimates includes cost of civil works, Electro Mechanical works and Architectural & Engineering Consultancy service charges & Project monitoring service charges are also considered in the Estimated cost .Total Estimated cost of all the Project is Rs7510.00 Lakhs.


Assistant Engineer


Assistant Executive Engineer
PWD, P&IWTD No-1
Sub-Division Ramanagara