# PROCEEDINGS OF THE 9<sup>th</sup> MEETING OF THE BUILDING AND WORKS COMMITTEE

HELD ON
TUESDAY, 31<sup>ST</sup> MAY 2011



INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN AND MANUFACTURING (IIITD&M)
KANCHEEPURAM



# INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN AND MANUFACTURING (IIITD&M), KANCHEEPURAM

Proceedings of the 9<sup>th</sup> meeting of the Building and Works Committee held at 10 AM on Tuesday 31<sup>st</sup> May 2011 in the Chamber of Director, IIITD&M Kancheepuram, IIT Madras campus, Chennai-36

#### **Members Present**

Prof. R. Gnanamoorthy

Chairman

Mr. R. Arumugam

Member

Mr. Murali

Member

Mr. A. Manickavasagam

Member & Secretary

Lt. Col. (Retd) Jayakumar

Invitee.

Leave of absence was granted to Smt. Pratima Dikshit, Director (Technical) MHRD and Prof. S. Narayanan.

The CPWD has nominated Shri Murali Executive Engineer (Elect.) in place of Shri Rajiv Sharma Member

The Chairman welcomed the members to the meeting. The minutes of last meeting has been circulated to all members. No comments received. Committee ratified the minutes of the last meeting.

ITEM NO. 1	Administrative approval and expenditure sanction for the construction of Laboratory complex consisting of different laboratories, seminar halls and faculty rooms at new campus.
Resolution	The BWC was informed that the various infrastructural requirement for the
No.7/2011	Institute has been identified for the proposed intake as per DPAR of this Institute
	vis-a-vis the requirements to fulfill the normal intake for the UG, PG and

Research Courses by way of thorough discussion with faculty and academicians with reference to the curriculum for presently functioning departments. Accordingly the inputs have been forwarded to the Architectural Consultants to prepare the drawings for the facilities like 1. Laboratories 2. Design Studio 3. Library 4. Seminar Halls 5. Centralize Computer Centre 6. Faculty & HOD Rooms & Offices.

Accordingly the Architectural Consultants have developed conceptual plans. The same has been reviewed by IAC and also by the faculty and students. The various suggestion received have been analyzed and the Consultants have modified the conceptual drawings for better utilization.

All these facilities have been accommodated in a G+6 storied building. Due to height restriction based on the local planning Authority regulation in this block future vertical expansion is not possible. However, taking into consideration of future growth needs of the Institute the Horizontal expansion provision has been made and the Area has been earmarked in the master plan of the Institute.

In the finalized conceptual plan, the following provisions have been made floor wise.

This building has been interconnected with Lecture Hall complex in all the floors, In order to optimize the construction cost and also not to disturb the original ground pattern and to take care of the difference in the ground level in the western side of the building the open basement floors have been provided. This Area is proposed to be utilized for the series like HVAC electricity etc.

The preliminary estimate and conceptual plan are placed as (Annexure-A)

The various provisions made in the revised conceptual plan were explained as below.

The building has been designed as a L -shaped building with one wing in east - west orientation and the other wing in north- south orientation.

The **Ground floor laboratory wing** will house the workshop, machine tools manufacturing, strength of materials lab, thermal engineering lab, electrical machine lab and two nos. of research laboratories.

The Ground floor Library wing will house lobby, librarian room, issue/receipt desk, photo copier room, stacks, new arrivals luggage room and study rooms provided.

The **First floor laboratory** wing will house product design, robotic and automation, engineering drawing/machine drawing, CADD/CAM/simulation, metrology, materials engineering, graphic arts, physics lab with dark room facility and two seminar halls provided. The First floor Library wing will house stacks and study tables.

The Second floor laboratory wing will house faculty cabin 40 rooms, 24 research

scholars, 2 H.O.D rooms, two seminar rooms, digital logic design lab, electronic workshop and DSP lab.

The Second floor Library wing will house stacks and study tables provided.

The **Third floor** laboratory wing will house for faculty cabin 40 rooms, 24 research scholars, 2 H.O.D rooms, two seminar rooms, analog circuit lab, measurements & instrumentation, VLSI & embedded lab.

The Third floor north side wing will house Design studio.

The Fourth floor laboratory wing will house product design lab, high performance computer lab. Communication and data networks, 3 numbers of computer labs, controls system lab, electrical networks lab, two seminar hall and one lecture hall 80 capacity.

The **Fifth floor** laboratory wing will house 3 numbers of computer labs, 4 numbers of research labs, one PG project lab, one UG project lab and two seminar hall.

The **Sixth floor** laboratory wing will house 7 numbers of research lab, one PG project lab, one UG project lab and two seminar hall.

In the Service core in total 8 numbers of (Excluding one goods lift plus one library lifts) 13 passenger capacity lift have been proposed with all the features of barrier free building with specification to suit Green Building GRIHA Rating.

Adequate number of toilets facilities for gents and ladies with separate toilet for handicapped persons have been provided at a common place.

With all the above provision, the laboratory complex will have 36,439 Sq.M. plinth area.

It is proposed to centrally Air condition the certain Laboratories , the entire library , design studio the faculty rooms, HOD rooms, seminar room, discussion room, other portion in faculty area. All the faculty cabin (out of two cabin one cabin only) in each laboratory shall be air conditioned.

The following laboratories Air condition provision has been made.

Ground floor: Machine tools and manufacturing. First floor: CAD/CAM/Simulation, Physics laboratory 50% area, Metrology laboratory 50% area. Second floor: Nil. Third floor: Nil. Fourth floor: Computer laboratory 1, Computer laboratory 2, Computer laboratory 3, High performance computing laboratory. Fifth floor: Computer laboratory 4, Computer laboratory 5, Computer laboratory Sixth floor: Nil

Other services like fire fighting, internal electrification etc are added to the cost of this building.

All external bulk services like water supply distribution, sewerage net work, roads, sewage treatment plant, substation, cable net work, landscaping, data cable net work, Centralized Air conditioner plant etc will be taken up as separate

independent works.

However the construction order of priority has been worked out keeping in view of the allocation of Grant under "building Construction" Head of account and other considerations. Accordingly it has been decided to defer the construction of Design Studio and library and some laboratories at present and take up the remaining components of this combined concept plan during this financial year.

As per the above mentioned priority CPWD has been requested to provide a preliminary estimate utilizing the combined concept plan and accordingly they have forwarded a preliminary estimate for Rs 69,93,34,000/-(Rupees sixty nine Crores ninety three Lakhs and thirty four thousands only ) including 3% contingencies and other statutory Taxes. (Annexure -A)

As per the body of the Estimate the estimate has been framed based on CPWD Plinth Area Rates 2010 enhanced by the approved Building cost Index.

Administrative sanction will be pre requisite for demand of grant from the budget of the ministry.

The BWC deliberated and Resolved to recommend to FC and BoG for accord of Administrative Approval and Expenditure sanction for Rs 69,93,34,000/-(Rupees sixty nine Crores Ninety three Lakhs and Thirty four thousands only ) including 3% contingencies for taking up this work.

#### ITEM NO 2

## Administrative approval and expenditure sanction for the construction of Girls Hostel at new campus

## Resolution No. 8/2011

The BWC was informed that as per the requirement analysed for housing the residence for girl students, common amenities, guest room, wardens room and hostel office of the Institute the architectural consultants M/s CPG Consultants India pvt. Ltd has developed conceptual plans for the Girl's hostel. The same has been reviewed by the Infrastructure Advisory Committee, Faculty, Students and suggested some changes and modification for better functional utility.

Accordingly the consultants have revised the conceptual drawing and the final conceptual drawings have been received from the consultant. The same has been finally approved by the IAC. The various provisions made in the revised conceptual drawings have been explained as below to the BWC.

Taking into consideration of the less land allotment to the institute and to take care of the future growth of the Institute the structural provision has been proposed in the building for six more floor as vertical expansion. At present the building will be of Ground + 8 storied structure. The following provisions have been made for this building floor wise.

The **Ground floor** will house the office room, guest room, warden room, Indoor games, library, gymnasium, TV/common room, sit-out/lounge, laundry, common facilities, 8 numbers of single rooms.

In the **First floor** of building the provision has been made for the 17 single rooms, 6 number of double room with common facilities for students.

In the **Typical floor** of building the provision has been made for the 20 single rooms, 8 number of double room, with common facilities for students.

Based on the experience gained by the faculty from different Institutes it has been decided to put the mess facility for both boys and girls in all the hostel campus in a single building. So the mess and kitchen has not been added in this building and for dining facilities drawings are under preparation.

Three numbers of 20 passenger capacity lifts have been proposed with all the features of barrier free building with specification to suit Green Building GRIHA Rating of Four Star.

Adequate number of toilets facilities for students with separate toilet for Handicapped persons have been provided at a common place.

Other services like fire fighting, Internal Electrification etc are added to the cost of this building.

All external bulk services like water supply distribution, sewerage net work, roads, sewage treatment plant, substation, cable net work, landscaping, data cable net work etc will be taken up as separate independent works.

As per the plan finalized it will house 62 double occupancy room and 165 single occupancy rooms. Thus making the total beds to 289 nos. The total plinth area of the proposed building with all other common amenities and circulation areas will be 8,441 Sq.m.

For the above provisions CPWD has been requested to provide a preliminary estimate and accordingly they have forwarded a preliminary estimate for Rs.23, 86, 27,000 (Rupees Twenty three crore eighty six lakhs and twenty seven thousand only) including 3% contingencies and other statutory Taxes.

### (Annexure -B)

Administrative sanction will be pre requisite for demand of grant from the budget of the Ministry.

The BWC deliberated and Resolved to recommend to FC and BoG for accord of Administrative Approval and Expenditure sanction for Rs.23, 86, 27,000/-(Rupees Twenty three crore eighty six lakhs and twenty seven thousand only) including 3% contingencies for taking up this work.

Ratification of AA/ES issued to CPWD by the Director IIITD&M.
Provision of standby generator of 125 KVA Capacity for Pre Engineered multipurpose structure.
the information gathered from the CPWD
The BWC was informed that as per the information gathered from the CPWD electrical wing, the new campus comes under the rural feeder and hence there is a possibility of daily power interruption for longer duration from TNEB supply. Due to the above reason and after due deliberations, we have requested the CPWD to provide the full capacity standby power to the Pre Engineered Structure works both for academic and hostel building of suitable capacity. Accordingly the Executive Engineer, CPWD CCED IV has forwarded a preliminary estimate for Rs. 10, 60,500/-(Rupees Ten lakhs sixty thousand and five hundred only) for the provision of standby power as per the scope provided in the body of the estimate.(Annexure-C)
The amount is well within the competence of the Director for accord of administrative approval as per the delegation of financial powers.  Accordingly the Director has accorded Administrative approval and expenditure
sanction for the above work for Rs.10, 60,500/- (Rupees Ten lakhs sixty thousand and five hundred only) for the scope mentioned in the body of the estimate with the condition that the work shall be completed by June 2011.
The BWC deliberated and resolved to ratify the sanction issued by the Director for the above purpose for RS. 10, 60,500/- (Rupees Ten lakhs sixty thousand and five hundred only) for taking up this work as deposit work through CPWD.
Providing MV panel boards, feeder pillars, street lighting and LT cabling.
The BWC was informed that since campus is to be occupied once the pre engineered multipurpose structure work is completed and start functioning in the new campus for the intake of 2011, the campus need lighting in the night time.  It is necessary to take up a part of street lighting to cater the immediate need. Accordingly CPWD has forwarded a preliminary estimate for Rs.39, 37,500/-(Rupees Thirty nine lakhs thirty seven thousand and five hundred only) including 5% contingencies. (Annexure-D)  The amount is well within the competence of the Director for accord of administrative approval as per the delegation of financial powers.

Accordingly the Director has accorded Administrative approval and expenditure sanction for the above work for Rs. 39, 37,500/-(Rupees Thirty nine lakhs thirty seven thousand and five hundred only) for the scope mentioned in the body of the estimate with the condition that the work shall be completed by June 2011. And entrusted the work to CPWD as deposit work.

The BWC deliberated and resolved to ratify the sanction issued by the Director for the above purpose for Rs. 39, 37,500/-(Rupees Thirty nine lakhs thirty seven thousand and five hundred only) for taking up this work as deposit work through CPWD.

3.3

Providing bore wells and pumps to augment water supply in the new campus.

## Resolution No.11/2011

The BWC was informed that for the new campus water supply from local body is not available the ground water source only to be explored.

Accordingly for the immediate requirement the CPWD has proposed for providing 2 nos. bore wells, pump and other accessories. The Director IIITD&M under his delegated financial powers has accorded an Administrative Approval and Expenditure Sanction for Rs.6, 13,000/-(Rupees six lakhs and thirteen thousand only) based on the Preliminary Estimate forwarded by CPWD.

The Preliminary Estimate is placed below as (Annexure-E)

The BWC deliberated and resolved to ratify the sanction issued by the Director for the above purpose for Rs.6, 13,000/-(Rupees six lakhs and thirteen thousand only) for taking up this work as deposit work through CPWD.

3.4

## Resolution No.12/2011

Earth work formation for the Play fields (Cricket ground, Athletic Track, Foot Ball)

The BWC was informed that as per the decision taken by the competent authorities the Institute needs to function in the new campus with residential accommodation inside the new campus for 2011 intake. The play field facilities are must—for the use of residents of the new campus. Development of full-fledged play fields may take some more time, so it is proposed to make leveling and formation work immediately and use it for the play area. Accordingly CPWD has forwarded a Preliminary Estimate based on the Delhi Schedule of Rates of CPWD enhanced by the cost index and contingencies and other statutory taxes.

A copy of Preliminary Estimate is placed below as (Annexure-F)

Director IIITD&M with his delegated financial powers has accorded an Administrative Approval and Expenditure Sanction for Rs. 82, 04,000/-(Rupees Eighty two lakhs and four thousand only ) Including contingencies and statutory taxes.

The BWC deliberated and resolved to ratify the sanction issued by the Director

3.5

for the above purpose for Rs. 82, 04,000/-(Rupees Eighty two lakhs and four thousand only) for taking up this work as deposit work through CPWD.

Resolution No.13/2011

Sub Grade Formation of Road Net Work between the Semi Permanent Structure and Entrance.

The BWC was informed that taking up the full fledge Road work at this stage of the project is not practicable since the same will get damaged during the construction of various bulk services and during construction of permanent buildings. So in order to facilitate the usage of road by the present occupants it is proposed to make the sub grade preparation of road between Semi Permanent Structures and the Entrance gate and surface it with quarry dust.

Accordingly the Director IIITD&M under his delegated financial powers has accorded an Administrative Approval and Expenditure Sanction for Rs.1,09,92,500/-( Rupees One crore nine lakhs ninety two thousand and five hundred only) Including contingencies and statutory taxes based on the preliminary estimates given by CPWD. (Annexure-G.)

The BWC deliberated and resolved to ratify the sanction issued by the Director for the above purpose for Rs.1,09,92,500/-( Rupees One crore nine lakhs ninety two thousand and five hundred only) for taking up this work as deposit work through CPWD.

The meeting ended with Thanks to the chair.

A. Maniecavaragamin Secretary 315

Chairman