

# **National Institute of Technology Rourkela**

## ***MINUTES***

### **27<sup>th</sup> Meeting of the Building & Works Committee**



**DATE : 11<sup>th</sup> December, 2015 (Friday)**

**TIME : 9.30 A.M.**

**VENUE: Board Room, NIT, Rourkela**



राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेला  
National Institute of Technology, Rourkela

Minutes for the 27<sup>th</sup> Building & Works Committee, National Institute of Technology, Rourkela  
to be held at 09.30 A.M. on 11/12/2015 in the Board Room of the Institute.

**Members Present:**

- |    |  |     |          |
|----|--|-----|----------|
| 1. | Prof. Sunil Kr. Sarangi,<br>Director, NIT, Rourkela.   | ... | Chairman |
| 2. | Shri Vinod Kr Shrivastava,<br>DGM, Refrigeration & Air Conditioning,<br>RSP, SAIL, Rourkela.         | ... | Member   |
| 3. | Shri Ajaya Kr. Nayak,<br>DGM, Civil Engineering,<br>Town Engineering Department, RSP, SAIL, Rourkela | ... | Member   |
| 4. | Prof. S.K. Patra,<br>Professor, Dept. of Elect. & Comm. Engg.,<br>NIT, Rourkela.                     | ... | Member   |
| 5. | Prof. C.R. Patra,<br>Professor, Dept. of Civil Engg.,<br>NIT, Rourkela.                              | ... | Member   |

**Invitees Present:**

- |    |  |     |         |
|----|--|-----|---------|
| 1. | Prof. Sarat Kr. Das,<br>Professor, Civil Engg., NIT Rourkela.          | ... | Invitee |
| 2. | Prof. P.K. Ray,<br>Professor, Elect. Engg., NIT Rourkela.              | ... | Invitee |
| 3. | Prof. P. Sarkar,<br>Professor, Civil Engg., NIT., Rourkela.            | ... | Invitee |
| 4. | Dr. A.K. Panda,<br>Visiting Professor, Civil Engg., NIT Rourkela.      | ... | Invitee |
| 5. | Prof. A.K. Sahoo,<br>Visiting Professor, Civil Engg., NIT, Rourkela.   | ... | Invitee |
| 6. | Mr. S. P. Mohapatra,<br>Executive Engineer (CM), Estate, NIT Rourkela. | ... | Invitee |
| 7. | Mr. M.S.P. Rao,<br>Sr. Engineer, NIT, Rourkela                         | ... | Invitee |

**Member Absent:**

- |    |   |     |        |
|----|---|-----|--------|
| 1. | Shri S.P. Goyal,<br>Joint Secretary (TL), MHRD, New Delhi | ... | Member |
|----|---|-----|--------|

**Invitee Absent:**

- |    |  |     |         |
|----|--|-----|---------|
| 1. | Shri D. Tripathy,<br>Executive Engineer, PWD, Rourkela | ... | Invitee |
| 2. | Prof. Y.K. Sahoo,<br>VP(Electrical), NIT, Rourkela     | ... | Invitee |

*Leave of absence was approved for all members absent.*



## राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेला

National Institute of Technology, Rourkela

Minutes of the 27<sup>th</sup> Building & Works Committee, National Institute of Technology, Rourkela to be held at 9.30 AM on 11.12.2015 (Friday) in the Board Room of the Institute.

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### A) GENERAL AND PROCEDURAL MATTERS.

**BWC:27 (2015)-01:** Welcome to the members by the Chairman.

**BWC:27 (2015)-02:** Confirmation of the minutes of the 26<sup>th</sup> Meeting of the BWC held on 26.08.2015.

The minutes of the 26<sup>th</sup> Meeting were sent to the members vide letter No.NITR/2015/BWC-26/707, Dt.09.09.2015. No comments were received from the members.

*BWC confirmed the minutes.*

**BWC:27 (2015)-03:** To report on the action taken on the decisions made in the 26<sup>th</sup> Meeting of BWC held on 26.08.2015 and to discuss matters arising out of the minutes.

The report on the action taken on the decisions made in the 26<sup>th</sup> Meeting of the BWC held on 26.08.2015 is presented for BWC's consideration.

*BWC noted the above.*

**[Annexure-A1, Pg. No. 10-11]**

### B) REVIEW OF ONGOING PROJECTS:

**BWC:27 (2015)-04:** Review of ongoing Civil Projects.

A report on the progress of ongoing Civil Projects is enclosed for perusal of the Committee.

*BWC noted the above.*

**[Annexure-A2, Page No.12-15]**

**BWC:27 (2015)-05:** Review of ongoing Electrical Projects.

A report on the progress of ongoing Electrical Projects is enclosed for perusal of the Committee.

*BWC noted the above.*

**[Annexure-A3, Page No. 16-17]**

### C) APPROVAL FOR PROJECTS:

SLNO	NAME OF WORK	ESTIMATED COST (Rs.Lakhs)	Fund Allocation year (In Lakhs)	
			2015-16	2016-17
1	Construction of Boundary wall for Outreach Center at Bhubaneswar	24.25	5.00	19.25
2	Provision for MS pipe 300 mm dia for main distribution line near FR-I and other ancillary work at NIT Rourkela	5.3	2.00	3.30
3	Renovation of Toilet Blocks in the Main Building.	24.49	5.00	19.49
4	Repair of Ceiling and Provision of APP membrane over Roofs of Metallurgy & Materials Engineering Dept. and Chemistry Dept. in the Main Building.	10.00	03.00	07.00
5	Renovation of old PWD Stores for use as an essential provision shops for campus residents and as store for construction material.	10.95	3.00	07.95
6	Networking of Lecture Hall Complex, Mining and Ceramic Building Extension, TIIR Building and new Academic Building	27.18	5.00	22.18
7	Finishing work of the 3 <sup>rd</sup> Floor of the Extension of Computer Science Building.	20.00	5.00	15.00
8	Renovation and O&M of Central AC of Guest House.	10.0	2.00	8.00
9	Construction of working bench with marble/ granite top, water connection and drainage etc. in Laboratories of Ceramic Engineering Department.	17.65	5.00	12.65
10	Connecting corridor between SAC Road and PG Building Road and dismantling of cycle stand (partly).	11.40	3.00	8.40
11	Road markings along periphery and major roads at NIT Rourkela	16.53	5.00	11.53
12	Provision of Paver Blocks & Kerb stone on both side of Road from	15.67	5.00	10.67

	<b>Mangalamandir to I.E Building</b>			
<b>13</b>	<b>Construction of a Moorum Road for Entry to WESCO Office cum substation</b>	<b>5.0</b>	<b>2.00</b>	<b>3.00</b>
<b>14</b>	<b>Provision of storm water drainage around New Park and development of the area</b>	<b>24.70</b>	<b>5.00</b>	<b>19.70</b>
	<b>Total =</b>	<b>223.12</b>	<b>55.00</b>	<b>168.12</b>

The above Minor projects are urgently required to be taken up for efficient functioning of academic activities and fulfilling campus requirements, wherever necessary. This year budget allocation is only 55.0 Lakhs.

The details of the cases are given below:

**1. Construction of Boundary Wall for Outreach Center at Bhubaneswar. Rs.24.25 Lakh**

The Government of Odisha has allotted a land, measuring of one Acres at Mz Chandrasekherpur, Bhubaneswar for construction of NITR Outreach Center. It is urgently necessary to construct a boundary wall encompassing the area to prevent any trespassing. BOQ and estimate are enclosed.

**Earlier, the BWC had given administrative approval in its 24<sup>th</sup> Meeting. The work is extremely urgent because if we delay the construction, the allotment of land is liable to be cancelled.**

*[Annexure-A4, Page No.18-19]*

**2. Provision for MS pipe 300 mm dia for main distribution line near FR-I and other ancillary work at NIT Rourkela. RS.5.3 Lakh**

The existing CI water supply main line near FR-I west side need to be replaced as it is damaged at several places and also there is no scope for repairing as it crosses the west side boundary wall of Faculty residence -I. Detailed estimate is enclosed.

*[Annexure-A5, Page No.20-23]*

**3. Renovation of Toilet Blocks in the Main Building. Rs.24.49 Lakh**

Earlier, the BWC in its 26<sup>th</sup> Meeting had approved the proposal of renovation of existing toilet Blocks in the Main Building. Relevant detail drawings for renovation and estimate are enclosed.

*[Annexure-A6, Page No.24-43]*

**4. Repair of Ceiling and Provision of APP membrane over Roofs of Metallurgy & Materials Engineering Dept. and Chemistry Dept. in the Main Building. Rs.10.00 Lakhs**

Due to seepage of water from roofs, at places, the reinforcement is getting corroded, resulting in spalling of concrete. For structural safety, it is urgently necessary to carry out repair to ceiling and provide APP membrane over roofs.

5. **Renovation of old PWD Stores for use as an essential provision shops for campus residents and as store for construction material.** **Rs.10.95 Lakhs**  
Existing Store size, 43.0m X 9.17 m with asbestos roofing, is more than 50 years old, requires urgent repair, renovation and elevational treatment. (Details enclosed).

*[Annexure-A7, Page No. 44-47]*

6. **Networking of Lecture Hall Complex Mining and Ceramic Building Extension, TIIR Building and new Academic Building.** **Rs.27.18 Lakhs**  
It is urgently required for complete utilization of services in the above buildings. Detailed estimate is enclosed.

*[Annexure-A8, Page No.48]*

7. **Finishing work of the 3<sup>rd</sup> Floor of the Extension of Computer Science Building.** **RS.20.00 Lakh**  
The skeleton work in the 3<sup>rd</sup> Floor has been virtually completed, but finishing works such as tile flooring (about 600 sqm), door/ window and electrical works; internal and external painting are pending. It is proposed to handover the floor to Humanities Dept.

8. **Renovation and O&M of Central AC of Guest House** **Rs.10.0 Lakh**  
It is proposed to renovate and include the above in the present scope of M/s Blue Star for O&M and AMC for central system by negotiation, in the interest of the system.

9. **Construction of working bench with marble/ granite top, water connection and drainage etc. in Laboratories of Ceramic Engineering Department.** **Rs.17.65 Lakh**  
As per the work requisition received from HOD, Ceramic Engineering Department, it is necessary to construct working bench with marble/ granite top, water connection with sink and drainage etc. A sketch showing the area of provision of bench and estimate is enclosed.

*[Annexure-A9, Page No.49-59]*

10. **Connecting corridor between SAC Road and PG Building Road and dismantling of cycle stand (partly).** **Rs.11.40 Lakh**  
The front quadrangle area between SAC ROAD and Road in front of PG building needs to be developed for aesthetic reason including connection between Golden Jubilee ring road and old Academic roads with some paved walkway. The scheme and estimate are enclosed.

*[Annexure-A10, Page No.60-64]*

11. **Road markings along periphery and major roads at NIT Rourkela.** **Rs.16.53 Lakh**  
Construction of almost all major roads in campus are completed. It is proposed to provide painting with thermoplastic compound. (Two side line and one central line) for the following roads.

a road No 6 & 6a (Southern avenue) 2200

b orthern Avenue	1100
c ports Avenue	950
d idustry avenue	570
e /estern avenue	850
f oad no -4 (Academic Avenue)	850
g entral Avenue	850
h oad no- 6 <sup>th</sup> lane (post office road) upto FR small	930
i cholar avenue	850
j echnology avenue	950
<b>TOTAL      Length</b>	<b>10100</b>

Detailed estimate are enclosed.

**[Annexure-A11, Page No.65-70]**

- 12. Provision of Paver Blocks & Kerb stone on both side of Road from Mangalamandir to I.E Building. Rs.15.67 Lakhs**

The above road (about 500m long, 3.0m width) becomes very crowded due to pedestrians. It is therefore proposed to provide pedestrian path of 800mm width with kerb stone on the both side of the road. (Details enclosed).

**[Annexure-A12, Page No.71-72]**

- 13. Construction of a Moorum Road for Entry to WESCO Office cum substation. Rs.5.0 Lakh**

For entry to NIT campus by outsiders, it is necessary to construct a moorum road, \ about 200m length, 3.5 m width at present. However the land belongs to RSP but they are unwilling to execute this work.NIT being the beneficiary, and in view of urgency, it is proposed to Spend about Rs.5.0 Lakhs for this project. Further construction will be done by Odisha Government.

- 14. Provision of storm water drainage around New Park and development of the area Rs.24.70 Lakhs**

To develop a park in the southern end of the residential campus as this is a befitting space being located near Faculty residences, G&E Type Quarters etc. It is necessary to provide proper drainage system for this park. Detailed scheme including drainage system and estimate are enclosed

**[Annexure-A13, Page No.73-78]**

**BWC:27 (2015)-07: Proposal For Medium Projects. (i.e. Less than Rs.50.00 Crores)**

- 1. Extension of existing Planning & Architecture Building.**

The Accreditation Team of the Council of Architecture is insisting on certain minimum facilities for which some extension is required to be done in the existing building, (approximate built up area 1000 sqm in three floors), **costing about Rs.3.0 crores** (1000XRs.30.000) sqm). The design/ drawing, BOQ and estimate are under preparation in house. **The expenditure will be incurred in the next financial year.**

*The BWC approved the proposal*

## 2. Provision of Central Air Conditioning System for TIIR Building.

Earlier, the BWC in its 25<sup>th</sup> Meeting held on 06.04.2015, (ref: BWC: 25(2015)-08) advised to open the price bids and process the file. In the meanwhile, the price bids have been opened by the Tender Committee.

The Tender Committee recommended to award the subject work to M/s Sterling & Wilson Pvt. Ltd., Kolkata at an amount of Rs. 4, 31, 21640.72 against the estimate of Rs. 4.0 Crores and post commissioning operation & AMC at an amount of Rs. 34,79,815.69 i.e. total amount **Rs. 4,66,01,456.41 on L1 basis.**

It may be mentioned that presently, the above mentioned building has been virtually completed in all respect and ready for handing over to the user's Department. Since it is an important building especially where various industries will set up their establishments for research/ development activities in collaboration with NIT faculty members, it is absolutely necessary to provide air conditioning facility in this building. Already, a few industries have signed agreements with NIT and have been allotted modules in this building. **The L1 Tenderer has reluctantly agreed to extend the validity of the tender up to 31.12.2015. They have verbally informed that further extension of validity is not possible due to increase of price of material / labor etc. In case we place order now, it will involve an expenditure of about Rs. 50 Lakhs this financial year (i.e.2015-2016) only and remaining expenditure will be incurred in the subsequent financial years.**

*Under the circumstances as stated above, the BWC approved the proposal for placement of order.*

## 3. Completion of Central Air Conditioning work for Balance Academic Buildings.

The HVAC work in the current phase (i.e. phase-II) has been completed satisfactorily and commissioned. This includes the high side work for 720 TR, most of the major chilled water pipe line and low side work for Computer Science Building (old portion), Library, Mechanical, Main Administrative Building (West side ) and Auditoriums.

As approved earlier by the BWC in its 22<sup>nd</sup> Meeting and in the Board, it is important to proceed with the balance portion of works which covers approximately 3600 TR of high side work, chilled water pipeline to Lecture Hall complex-II, Golden Jubilee Building, Mechanical Science Building and low side work of Main Administrative Building (East side), Electrical Science building, Biomedical, Lecture Hall complex-II, Chemical Engineering building, Ceramic, Mining and WS.

M/s Arch-en-Design who are the Architects for Major Project (Phase-I) have been entrusted with the consultancy work for the above mentioned Air Conditioning work.

Earlier, the BWC directed the administration to proceed with the work of tendering expeditiously for both high side and low side work to complete the HVAC works within the next three years.

Presently, the Tender specifications, BOQ and estimate are under preparation by the Consultant and will be ready shortly. **It will be cost approximately Rs. 40.0 crores.** It is proposed to invite open tenders through advertisement in newspaper and NIT web site for the same. It is expected to complete the work in sub phases over 4 year's period as given below:

SI No	Name of Work	Estimated Cost (In Crores)	Fund Allocation (In Crores)			
			15-16	16-17	17-18	18-19
1	Completion of Central Air Conditioning work for Balance Academic Buildings.	Rs.40.0	NIL	10.00	15.00	10.00

*The BWC approved the proposal*



**D) APPROVAL OF TENDER FOR AWARD OF WORK [ PART-'C' ]:**  
**BWC:27 (2015)-08: REPORT ON AWARD OF WORKS TO CONTRACTORS.**

**1. Supply and Installation of Kitchen Equipment to various Hall of Residence.**

Earlier, BWC in its 20<sup>th</sup> meeting had approved the proposal. Accordingly, tenders have been finalized separately. The financial status is as given below:

SLNO	NAME OF WORK	Finalized Amount (In Lakhs)	Fund Allocation year (In Lakhs)	
			2015-16	2016-17
1	Supply and Installation of Kitchen equipment (Custom Fabricated Items) to various Hall of Residence.	162.57	20.00	142.57
2	Supply and Installation of Kitchen equipment (Gas Bank) to various Hall of Residence.	35.78	10.00	25.78
3	Supply and Installation of Kitchen equipment (Exhaust Hood) to various Hall of Residence.	106.19	20.00	86.19
4	Supply and Installation of Kitchen equipment (Bought Out Items) to various Hall of Residence. (Tender Under Finalization)	165.45 (Estimated Cost)	NIL	165.45
	<b>TOTAL=</b>	<b>Rs.469.99</b>	<b>50.00</b>	<b>419.99</b>

Details of the tender committee recommendation for serial no1, 2, 3 are given below:

**1. Supply and Installation of Kitchen equipment (Custom Fabricated Items) to various Hall of Residence.**

- As per the recommendation of the Tender Committee, the following firms are technically qualified for the above work:

- M/s Kumar Equipment (India)
- M/s Raunak Kitchen Equipment
- M/s Rans Technocrats (India) pvt. Ltd.

- The above mentioned firms were informed to extend the validity of the Tender up to 30.10.2015 and they have complied with the same.
- Considering the above, the price bids for the above mentioned firms were opened in the presence of their representatives. It was felt to prepare a comparative statement for the same.
- The members of the committee went through the comparative statement and observed that M/s Kumar Equipment (India) have become L1 at a price of Rs. 162, 57,576.36 (i.e.29.39% lower than the the estimated price of Rs.230, 25, 500.00, submitted by the consultant).The members of the committee discussed with the representative of M/s Kumar Equipment(India) about the justification of the rates to which he stated that their rates are competitive and justified; and can give an undertaking in this regard. It is also observed that M/s Rans Technocrats (India) Pvt. Ltd, have not quoted for one item, (i.e. No 17 of the Tender) out of 60 items and their total price excluding this item, amount to Rs.213, 51,000.00,which is higher than quoted price of L1 tenderer.

- Considering the above, the members of the committee recommended to award the work to M/s Kumar Equipment(India) at a total price of Rs. 162,57,576.36(i.e. 29.39% lower than the estimated price of Rs. 230,25,500.00). The total price includes transportation, installation and other taxes as applicable except service tax

*BWC approved the proposal.*

## **2. Supply and Installation of Kitchen equipment (Gas Bank) to various Hall of Residence.**

- As per the recommendation of the Tender Committee, the following firms are technically qualified for the above work:
  1. M/s Eastern Gas Pvt.Ltd.
  2. M/s Kumar Equipment(India)
  3. M/s Bestekloza India.
- The above mentioned firms were informed to extend the validity of the Tender up to 30.10.2015 and they have complied with the same.
- Considering the above, the price bids for the above mentioned firms were opened in the presence of their representatives. It was felt to prepare a comparative statement for the same.
- The members of the committee went through the comparative statement and observed that M/s Eastern Gas Pvt. Ltd. have become L1 at a price of Rs. 35,78,320.00 (i.e. 30.59% lower than the estimated price of Rs.51,55,000.00, submitted by the Consultant). The members of the committee discussed with the representative of M/s Eastern Gas Pvt. Ltd. about the justification of the rates to which he stated that their rates are competitive and justified; and can give an undertaking in this regard.
- Considering the above, the members of the committee recommended to award the work to M/s Eastern Gas Pvt Ltd. at a total price of Rs. 35,78,320.00(i.e. 30.59% lower than the estimated price of Rs 51,55,000.00)

*BWC approved the proposal.*

## **3. Supply and Installation of Kitchen equipment (Exhaust Hood) to various Hall of Residence.**

- As per the recommendation of the Tender Committee, the following firms are technically qualified for the above work:
  1. M/s Eastern Gas Pvt.Ltd.
  2. M/s Kumar Equipment(India)
  3. M/s Bestekloza India.
- The above mentioned firms were informed to extend the validity of the Tender up to 30.10.2015 and they have complied with the same.
- Considering the above, the price bids for the above mentioned firms were opened in the presence of their representatives. It was felt to prepare a comparative statement for the same.
- The members of the committee went through the comparative statement and observed that M/s Kumar Equipment (India) have become L1 at a price of Rs. 106, 19,005.00 (i.e.28.477% lower than the estimated price of Rs.148, 47,000.00, submitted by the Consultant). The members of the committee discussed with the representative of M/s Kumar Equipment(India) about the justification of the rates to which he stated that their rates are competitive and justified; and can give an undertaking in this regard.
- Considering the above, members of the committee recommended to award the work to M/s Kumar Equipment(India) at a total price of Rs. 106,19,005.00(i.e. 28.477% lower than the estimated price of

Rs 148,47,000.00). The total price includes transportation, installation and other taxes as applicable except service tax.

*BWC approved the proposal.*

**E) DEVIATION AND EXTRA ITEMS FOR VARIOUS WORKS [PART-'D']:**

**BWC:27 (2015)-09: Proposal for approval of Deviation and extra items for various works:**

**Closure of Contract for Major Projects (Phase-I) (Agency: - M/s UPRNN Ltd)**

The above job was awarded to M/s UPRNN Ltd Vide Work Order No- NITR/PW/VO/CT/288/07-08/349/2873 Dated- 19.03.2008 with completion period of two years.

This comprises of the following buildings:

- Biomedical Building
- Lecture Hall Complex (No-I)
- Electrical Science Building
- Faculty Residence
- 1000 Seated Hostel (VS Hall)
- Land Scaping, & Development works.

The Biomedical Building was completed on 31.12.2010 and due to various reasons, the remaining buildings were completed on 31.12.2013. These building were handed over progressively for use by various Departments long ago. But formal handing over- taking over formalities got delayed due to delay in liquidation of defects, a long list of which was drawn up by a duly constituted committee of members. Further, there was delay in preparation of As Built Drawings, incorporating changes made at site. As a result, processing of the Final Bill got also delayed.

On 19.11.2015, a meeting was convened chaired by the Director in order to resolve all the issues, so that the closure of the contract can be effected. The Minutes of the discussion held is given in the Annexure.

For closure of the contract, the following decision has been taken regarding payment of Final Bill and Security Deposit to M/s UPRNN Ltd. in stages as given below:

- i) The Final Bill should be released immediately as the preparation of As Built Drawing is completed.
- ii) Then 50 percent of Security Deposit should be released.
- iii) Rs.2.0 crore should be withheld for rectification of defects etc. This Rs.2.0 crore figure is calculated, keeping on the higher side of rough estimate of rectification work. Balance SD may be released.
- iv) Rs.2.0 crore will be released after rectification of all defects and completion of other pending works as stated above.

*BWC approved the proposal.*

79-80  
[Annexure-A14, Page No.]

  
Director, Chairman  
Building & Works Committee