



राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेला
National Institute of Technology, Rourkela

**Minutes for the 24th Building & Works Committee, National Institute of Technology, Rourkela
to be held at 09.30 A.M. on 02.03.2015 (Monday) in the Board Room of the Institute.**

Members Present:

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

Members Absent:

1. Mr. Amarjit Sinha, ... Member
Addl. Secretary, Dept. of Higher Education,
MHRD, New Delhi- 110 015

Invitees Present:

1. Sri. D. Tripathy, ... Invitee
Executive Engineer, PWD, Uditnagar, Rourkela.
2. Prof. Sarat Kr. Das, ... Invitee
Professor, Civil Engg., NIT Rourkela.
3. Prof. Sanjeeb Mohanty, ... Invitee
Professor, Elect. Engg., NIT Rourkela.
4. Prof. K. C. Biswal, ... Invitee
Professor, Civil Engg., NIT., Rourkela.
5. Dr. A.K. Panda, ... Invitee
Visiting Professor, Civil Engg., NIT Rourkela.
6. Prof. A.K. Sahoo, ... Invitee
Visiting Professor, Civil Engg., NIT, Rourkela.
7. Mr. Y.K. Sahu, ... Invitee
Visiting Professor, Elect. Engg., NIT, Rourkela.
8. Mr. S. P. Mohapatra, ... Invitee
Executive Engineer (CM), Estate, NIT Rourkela.

Leave of absence was approved for all members absent.

A) GENERAL AND PROCEDURAL MATTERS.

BWC:24 (2015)-01: Welcome to the members by the Chairman.

BWC:24 (2015)-02: Confirmation of the minutes of the 23rd Meeting of the BWC held on 19.11.2014.

The minutes of the 23rd Meeting were sent to the members vide letter No. NITR/2014/BWC-23/670, Dt.25/11/2014. No comments were received from the members.

The BWC confirmed the minutes.

BWC:24 (2015)-03: To report on the action taken on the decisions made in the 23rd Meeting of BWC held on 19.11.2014 and to discuss matters arising out of the minutes.

The report on the action taken on the decisions made in the 23rd Meeting of the BWC held on 19.11.2014 is presented for BWC's consideration.

BWC noted the above.

[Annexure-A1, Page No.13-14]

B) REVIEW OF ONGOING PROJECTS:

BWC:24 (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 and directed the followings:

1. *The roof slab of Filter/Chemical House of 5MLD Water Treatment Plant needs to be dismantled as it is not meeting the quality standards of M20.*
2. *For the Major Projects (phase-1), though the buildings have been completed and handed over long back, M/s UPRNN are still delayed in attending the defects. On the request of M/s UPRNN, NIT has agreed to release Rs.1 Crore from their security deposit amount in order to expedite liquidating of defects.*

[Annexure-A2, Page No.15-19]

BWC:24 (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.20-23]

C) ADMINISTRATIVE PROPOSAL FOR NEW PROJECTS – PART-'A':

BWC:24 (2015)-06: PROPOSAL FOR NEW PROJECTS:

1. **Laying of a dedicated Water Line from the Water Treatment Plant of the Institute to the Central Air Conditioning Plant.**

It is necessary to lay a dedicated water line from the Water Treatment Plant of the Institute to the Central Air Conditioning Plant for make-up water purpose

The detailed specifications, BOQ and estimate have been prepared and these are given in the Annexure. The estimate amounts to Rs. 08.21 Lakhs.

The BWC approved the proposal.

[Annexure-A4, Page No.24-25]

2. Construction of Boundary Wall with chain link fabric behind SAC Building & Partition Boundary wall for Hostels: SS Bhatnagar Hall, Visvesvaraya Hall & Dhirubhai Ambani Hall.

It is necessary to construct Boundary Wall with chain link fabric behind SAC Building and other partition boundary walls for Halls, such as SS Bhatnagar Hall, Visvesvaraya Hall & Dhirubhai Ambani Hall for security reasons.

The detailed specifications, BOQ and estimate have been prepared and these are given in the Annexure. The estimate amounts to Rs. 12.94 Lakhs.

The BWC approved the proposal with modification covering the SAC area. Dean(PD) was advised to submit the revise estimate.

[Annexure-A5, Page No.26-27]

3. Construction of Boundary Wall for the NITR Extension Center at Bhubaneswar.

The Government of Odisha has allotted a land, measuring of one Acres at Mz Chandrasekherpur, Bhubaneswar for construction of NITR Extension Center. It is urgently necessary to construct a boundary wall encompassing the area to prevent any tress passing.

M/s Inform Architects, Bangalore have been entrusted with the Architectural Consultancy Work for the construction of the above building. They have now taken up preparation of specifications, drawings, BOQ and estimate for the boundary and will submit the same shortly.

It is estimated to cost about Rs.24.25 Lakhs.

The BWC approved the proposal.

[Annexure-A6, Page No.28-29]

4. Utilization of Back Wash Water in the new 5 MLD Water Treatment Plant for Horticulture Purposes.

The new 5MLD Water Treatment Plant is in the advance stage of completion and is likely to be commissioned within few months.

The generation of back wash water from the water treatment plant is expected to be of the order of 120.0 m³ / day.

It is proposed to utilize the back wash water after due settlement in the Sludge Bed of the Water Treatment Plant for horticulture purposes in the areas adjacent to the Water Treatment Plant, such as newly constructed Faculty Residences and Faculty Residence under construction. A sketch showing the location of Water Treatment Plant and Faculty Residences is enclosed. It is necessary to install necessary pumps and lay required distribution pipe lines for the same.

It will cost about Rs.33.39 Lakhs.

The BWC approved the proposal.

[Annexure-A7, Page No.30-37]

5. Construction of Additional Reservoir Tanks on the Hill Top of the Institute.

Presently, there are two RCC Reservoir tanks of each capacity 50,000 gallons from where supply of water is made to the campus. In the meantime, construction of a new 5MLD Water Treatment Plant has been taken up which is in an advance stage of completion. The present RCC Reservoir Tanks on the hill top do not have a standby arrangement .As such, though these tanks are pretty old and show signs of distress in the form of leakage / seepage of water and other issues, it has not been possible to take up rectification and strengthening measures.

In the meantime, construction of a new 5MLD Water Treatment Plant has been taken up which is in an advance stage of completion. Further the water demand of the campus has increased to a great extent due to construction of additional Hostels, Faculty Residence and academic buildings.

Considering the above, it is felt necessary to construct two additional RCC Reservoir Tanks on the Hill Top, each of capacity 50,000 gallons on priority basis.

This will cost about Rs. 40.0 Lakhs including Pumps and other accessories.

The BWC approved the proposal.

6. Construction of a Back Wash Water Collection Pond and other auxiliary structures in the new 5 MLD Water Treatment Plant.

It is proposed to construct a small back wash water collection pond to collect back wash decant water from the Sludge Pond of the 5MLD Water Treatment Plant. The size will be about 35m X 17m X 2.5m depth with provision for stone pitching. From this pond, decant back wash water will be pumped to adjacent areas such as Faculty Residences etc. for horticulture proposes.

It will cost about Rs.20.00 Lakhs.

The BWC approved the proposal.

7. Provision of False Ceiling below Chilled Water Pipelines in Corridors & Faculty Rooms in various Academic Buildings for Central AC System

For installation of central air conditioning system, chilled water pipelines have been suspended below the ceilings in corridors of various academic buildings. It is proposed to provide false ceilings below the chilled water pipelines and bulk heads to cover ceiling suspended equipment in faculty rooms in various academic buildings. The cost estimate works to Rs.11.0 Lakhs.

The BWC approved the proposal.

[Annexure-A8, Page No.38-40]

D) APPROVAL OF BOQ AND ESTIMATE FOR TENDERING NEW PROJECT- [PART-'B']:

BWC:24 (2015)-07: 1. Development works in front of Electrical Science Building.

Earlier, the BWC in its 23rd Meeting held on 19.11.2014, approved the administrative proposal of development works such as landscaping, parking, drain etc. in front of Electrical Science Building.

Accordingly, specifications, BOQ and estimate have been prepared. These are given in the Annexure. The estimate amounts to Rs.20.58 Lakhs.

The BWC approved the proposal.

[Annexure-A9, Page No.41-45]

2. Renovation/ Repair to Existing RCC Reservoir Tanks & Construction of Boundary Wall, Approach Road etc. on Hill Top.

Earlier, the BWC, in its 12th meeting (BWC: 12(2010)-07) administrative approval was given for renovation/ repair to existing RCC Reservoir Tanks & construction of boundary wall etc. on Hill Top.

Detailed specifications, BOQ and estimate have been prepared which are given in the Annexure. The estimate amounts to Rs. 20.0 Lakhs.

The BWC approved the proposal.

[Annexure-A10, Page No.46-51]

E. APPROVAL OF TENDER FOR AWARD OF WORK [PART-'C']:

BWC:24 (2015)-08: 1. Finalization of NIT Rate Contract (Civil) 2014-15.

The present NIT Rate Contract (Civil) is valid up to 31.03.2015. In the meantime, action has been initiated to update the Rate Contract. A duly constituted committee has already scrutinized the basic rates of materials collected from the local market and analysis of the rates for various items has been done based on the approved materials rates, prevailing labour rates etc, followings CPWD norms.

A copy of the new Rate Contract, finalized by the committee is enclosed herewith for perusal of the BWC.

The BWC approved the proposal.

2. Installation of Water Softening Plant for the Central AC System.

Earlier, the BWC in its 23rd Meeting held on 19.11.2014, (BWC: 23(2014/10) has given administrative approval for Installation of Water Softening Plant for the Central AC System.

The present status of the case as follows:

Tenders have been invited and the same are under scrutiny. Order will be finalized by 15 March, 2015.

BWC noted the above.

3. Central Air Conditioning System for TIIR Building.

Earlier, the BWC in its 22nd Meeting held on 06.08.2014 (BWC: 22(2014/06) has given administrative approval for Central Air Conditioning System for TIIR Building.

The present status of the case as follows:

Tenders have been invited and the same are under scrutiny. Order will be finalized in March 2015.

BWC noted the above.

4. Fresh Air Ventilation System for Dinning Hall.

Earlier, the BWC in its 20th Meeting held on 13.12.2013 (BWC: 20(2013/06) has given administrative approval for provision of Fresh Air Ventilation System for Dinning Hall of the following hostels:

- i. V.S. Hall
- ii. GD Birla & V.S Hall of Residence
- iii. D Ambani & Swaminathan Hall of Residence

The present status of the case as follows:

The Work order has been placed on M/s Aircon India, Kolkata. The execution of work is in progress and is expected to be completed by end of March 2015.

BWC noted the above.

5. Supply and Installation of Kitchen Equipment to various Hostels.

Earlier, the BWC in its 20th Meeting held on 13.12.2013 (BWC 20/2013-07) has given administrative approval for supply and installation of Kitchen Equipment to various Hostels. The consultant, Mr. Ignatious John, Bangalore has submitted specifications, layout plans, BOQ and estimate for the same. However, for better competition, it has been decided to split the work into following four categories and float tender separately:

1. Custom Fabricated Items
2. Bought-out Items
3. Exhaust Hood and ducting etc.
4. Gas Bank and related Items

Open tenders have been invited separately for each of the above mentioned works in three parts (i.e. EMD, Techno commercial bid and price Bid). The Envelopes containing EMD, Techno commercial bids have been opened on 22.12.2014 and 16.02.2015 for SL Item No-1 and SL Item No- 2, 3, 4 respectively. It is observed that in response to the tenders, the following firms have submitted their offers:

1. Custom Fabricated Items.

- i. M/s Bharti Refrigeration Works
- ii. M/s Charurvedi Steel Industries
- iii. M/s Eastern Gas Equipment Pvt. Ltd

- iv. M/s Rans Technocrats (India) Pvt. Ltd
- v. M/s Kitchenwala Equipment Manufacturing Co
- vi. M/s Oberai Equipments
- vii. M/s Kumar Equipment (INDIA)
- viii. M/s Raunak Kitchen Equipments
- ix. M/s Sri Satya Sai Marketing's

2. Bought-out Items.

- i. M/s Krishna Enterprises
- ii. M/s Bestek Loza India
- iii. M/s Zumex Equipment Pvt. Ltd
- iv. M/s IFB Industries
- v. M/s Eastern Gas Equipment Pvt. Ltd
- vi. M/s Bharti Refrigeration Works
- vii. M/s Raunak Kitchen Equipments
- viii. M/s Kumar Equipment (INDIA)

3. Exhaust Hood and ducting etc.

- i. M/s Bestek Loza India
- ii. M/s Zumex Equipment Pvt. Ltd
- iii. M/s Eastern Gas Equipment Pvt. Ltd
- iv. M/s Kumar Equipment (INDIA)
- v. M/s Raunak Kitchen Equipments
- vi. M/s Bharti Refrigeration Works

4. Gas Bank and related Items.

- i. M/s Bestek Loza India
- ii. M/S Shri Engineers
- iii. M/S Zumex Equipment Pvt. Ltd
- iv. M/S Eastern Gas Equipment Pvt. Ltd
- v. M/S Kumar Equipment (INDIA)
- vi. M/S Raunak Kitchen Equipments
- vii. M/S Bharti Refrigeration Works

The technical comparative statement indicating the firm's experience, organization, financial turn- over etc. are under preparation for prequalification of the firms. Thereafter, price bid will be opened for those firms who are found technically qualified.

BWC noted the above.

6. Proposal for New Electrical Projects.

A. Lifts

The following Lifts will be required for the buildings under construction in 2015-16.

Sl. No.	Description	Quantity	Cost in Rs.
1.	6 passengers G+6 for FR II	4 nos.	
2.	6 passengers G+3 for CH,	2 nos.	
3.	13 passengers G+6 for GJB	4 nos.	
4.	13 passengers G+13 for GJB	2 nos.	
	Total	12 nos.	Rs. 4,00,00,000.00

The BWC approved the following.

Sl. No.	Description	Quantity	Cost in Rs.
1	6 passengers G+6 for FR II	4 nos.	
2	6 passengers G+3 for CH, LH-II	2 nos.	
3	13 passengers G+6 for GJB	3 nos.	
	Total	9 nos.	Rs. 3,00,00,000.00

B. SOLAR Power Plant of 1 MW capacity complete and with a provision of space for Electrical facilities to expand 2 MW capacity Rs. 7,00,00,000.00

Already Solar power Plant was approved vide resolution No. BWC: 20 (2013)-06) dt. 13.12.2013 and BWC:22 (2013)-08 (10) dt. 06.08.2014. Dean(PD) was advised to process accordingly.

[Annexure A11, Page No.52]

F. DEVIATION AND EXTRA ITEMS FOR VARIOUS WORKS [PART-'D']:

BWC:24 (2015)-09: 1. Proposal for construction of Faculty Residence (Small) through M/s Shapoorji & Pallonji Co. Pvt. Ltd.

BOG vide resolution no.BOG-45(2015)-05, dt. 13/03/2015 deferred the item for review BWC vide resolution no.BWC-25(2015)-09 (10) dt. 06/04/2015 recommended the proposal to BOG .

[Annexure-A12, Page No.53-65]

2. Additional Works Related to Extension and Renovation of KMS Hall of Residence at NIT Rourkela.

The above work has been awarded to M/s Dakeswari Enterprises vide Work Order No-NITR/PW/WO/23/12-13/23, dated -26.06.2012 at a value of Rs.3, 83, 32,750.00.

Presently, the agency is carrying out replacement of steel windows by aluminum windows in 'C' Block.

In the meantime, during the visit of our Director to KMS Hall on 13.01.2015, it has been decided to carry out some extension and modification of the existing dining hall and kitchen and some development works in the premises, in order to cater to the demand of additional capacity of students in the coming academic session. Accordingly, a drawing has been prepared which is enclosed. An estimate amounting to Rs.39.52 Lakhs has been prepared for this additional work which is enclosed.

Already, the tendering action for procurement of kitchen Equipment to Hostels is in process. Hence the extension and modification of the existing dining hall and kitchen needs to be taken up on top priority.

It is observed that there will be some saving in the present contract with M/s Dakeswari Enterprises and this additional work can be got done through them within the contract amount. Further, they are having ready mobilization to take up the above work on urgent basis and have given their consent to execute the above work at the same rate, terms and conditions as those of the present contract (Copy enclosed).

Considering the above, we may get the above mentioned additional work of extension and modification of the existing dining hall and kitchen done through M/s Dakeswari Enterprises at the same rates, terms and conditions of the present contract.

The BWC approved the proposal.

[Annexure-A13, Page No.66-78]

**3. Commencement Date for Construction of Major Project (Phase II)
(Agency: M/s Shapoorji & Pallonji)**

1. As per the Amendment Work Order No: NITR/PW/CT-66/12-13/L/2406 dated 02.04.2013, issued to M/s Shapoorji & Pallonji, the date of commencement shall be reckoned from the 14th day from the date of issue of work order or the date of handing over of site whichever is later.

The scope of work includes construction of the following buildings:-

- 1000 Bedded Hostel.
- Lecture Hall Complex (No II)
- Mechanical Science Building
- Faculty residences
- Golden Jubilee Building

Before starting of each of the above buildings, M/s Shapoorji & Pallonji were asked to carry out detailed survey of the area, keeping in view of the adjoining buildings, so that the layout of the buildings can be finalized. This took some time and finally, the layout drawings were finalized and issued to them for starting of works. The following are the details of the actual date of starting of works, building wise, after removal of impediments as indicated below:

Sl. No.	Name of Building	Date of Starting Work
1.	1000 Bedded Hostel	11-05-2013
2.	Lecture Hall Complex (No II)	13-05-2013
3.	Mechanical Science Building	17-05-2013
4.	Golden Jubilee Building	01-08-2013
5.	Faculty Residences	23-12-2013

Considering the above, during the progress Review Meeting held on 26.02.2014, it was suggested to follow the starting date as 01.07.2013. However, this was disputed by M/s Shapoorji & Pallonji through their letter No-SPCL/NITR/13-14/0130, dated 26.02.2014 (copy enclosed).

Earlier, we have already communicated to M/s Shapoorji & Pallonji vide our letter no-NITR/CT/AKP/13/L/801 dated 12.04.2013 that the site for the above work has been handed over on 12.04.2013 (copy enclosed). Now, M/s Shapoorji & Pallonji, vide letter No-SPCL/NITR/14-15/0332 dated 13.02.2015 have confirmed **the commencement date of contract as 12.04.2013** and consequently, they had mobilized their resources to perform the aforesaid project.

Considering the above, the date of commencement of the total project may be considered as 12.04.2013.

BWC approved the proposal.

[Annexure-A14, Page No. 77-78]

2. Completion of Central Air Conditioning work in Academic Building

The BWC expressed its satisfaction about the HVAC work in the current phase which is nearing completion. Testing of the present portion of the work of the 2nd phase is expected in about two weeks. 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 22nd 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.

Presently, the Tender specifications, BOQ and estimate are getting ready. The BWC proposed to complete the work in sub phases over 2 year's period.

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 two years.

The BWC will be kept informed of the status from time to time.

(S. K. Upadhyay)
Registrar & Secretary
Building & Works Committee

(S. K. Sarangi)
Director & Chairman
Building & Works Committee