



राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेला
National Institute of Technology, Rourkela

**Minutes for the 25th Building & Works Committee, National Institute of Technology, Rourkela
to be held at 03.00 P.M. on 06.04.2015 in the Board Room of the Institute.**

Members Present:

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

Members Absent:

- | | | |
|---|-----|--------|
| 1. Mr. S.P. Goyal,
Addl. Secretary, Dept. of Higher Education,
MHRD, New Delhi- 110 015 | ... | Member |
| 2. Shri Ajaya Kr. Nayak,
DGM, Civil Engineering,
Town Engineering Department, RSP, SAIL, Rourkela | ... | Member |

Invitees Present:

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

Leave of absence was approved for all members absent.

A) GENERAL AND PROCEDURAL MATTERS.

BWC:25 (2015)-01: Welcome to the members by the Chairman.

BWC:25 (2015)-02: Confirmation of the minutes of the 24th Meeting of the BWC held on 02.03.2015.

The minutes of the 24th Meeting were sent to the members vide letter No.NITR/2015/BWC-24/255, Dt.10.03.2015. No comments were received from the members.

The BWC confirmed the minutes. Registrar informed that Board directed that the proposal for construction of faculty residence (small) through M/s Shapoorji & Pallonji Co Pvt. Ltd. vide BWC-24(2015)-09 be reviewed by BWC and put up the minutes for approval in the next meeting.

BWC:25 (2015)-03: To report on the action taken on the decisions made in the 24th Meeting of BWC held on 02.03.2015 and to discuss matters arising out of the minutes.

The report on the action taken on the decisions made in the 24th Meeting of the BWC held on 02.03.2015 is presented for BWC's consideration.

BWC noted the above.

[Annexure-A1, Page No. 14-15]

B) REVIEW OF ONGOING PROJECTS:

BWC:25 (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.16-20]

BWC:25 (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.21-23]

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

BWC:25 (2015)-06: PROPOSAL FOR NEW PROJECTS:

- 1. Operation and AMC for Central AC System (Phase-II) of various Academic Buildings.**

The Central Air Conditioning System (Phase: II) of various academic buildings has been commissioned on 19-03-2015 and defects are being liquidated now.

After defects liability period of 15 days, the AC System will have to be put in regular operation and maintenance. As per tender condition, the Contractor, M/s Blue Star Ltd., will provide regular Operation for six (6) years and AMC for five (5) years beyond guarantee period of one (1) year as per following rates.

Item No.	Description	Unit	Qty	Unit Rate Rs.	Amount Rs.
F	Plant Operation & Maintenance				
1	Plant Operation & Routine Maint. on six days of the week	Per Month	72	63,827	45,95,544
2	AMC beyond Guarantee Period	Per Year	5	18,35,000	91,75,000
	Total				1,37,70,544

A copy of relevant extract (page: 28 of 28) of BOQ of M/s Blue Star Ltd. is enclosed for reference.

It is proposed to place work order on M/s Blue Star Ltd. for regular Operation and AMC of Central AC System (Phase: II) for various Academic Buildings at a value Rs:1,37,70,544 as indicated above.

The BWC decided that after liquidation of all defects and formal handing & taking over, the effective date for plant operation and routine maintenance will commence. After one year from the effective date of commencement, the guarantee period will be over and AMC will start.

[Annexure-A4, Page No.24]

2. Construction of third floor of the Extension to Computer Science Building (Under Construction).

The work of extension to Computer Science Building has been awarded to M/s P.K Rout at a value of Rs. 3,51,73,418.00 vide Work Order No NITR/PW/WO/CT/58/12-13/58, Dated-31/12/2012. The same is under construction and presently, the finishing work is in progress.

The present construction envisages a three storeyed construction (G+2). Considering the present trend, and aesthetic compatibility with neighboring buildings, it is felt necessary to construct the third floor over this building for which foundation has been designed and constructed. This solution is economical because additional floor space will be created without sacrificing land and foundation cost. The Computer Science Department needs space to accommodate the Laxma Rao Peri Center for Advanced Analysis & Decision Sciences which is bringing in a new M. Tech Programme and more research students.

It is estimated that there will be a saving of about Rs. 20.0 Lakhs from the present construction including finishing works. It is therefore, proposed to get the third floor constructed through the existing contractor, M/s P.K Rout at the same rates, terms, and condition of the present contract. M/s P.K Rout has given his consent for execution of the same which is enclosed.

The BWC considered the proposal. However, in view of serious fund constraints, only skeleton work will be done with external wall in the 2nd and 3rd floor of the building ensuing expenditure within the work order value and no significant upward deviation.

[Annexure-A5, Page No.25]

3. Construction of Utilities & Toilet over the Existing Rengcol Canteen.

The present canteen is a two storeyed one where the Ground Floor is generally used for students and the First Floor for faculty members and other visitors. It is observed the 1st Floor canteen is not effective for want of some utility facilities and toilets. It is therefore proposed to construct utilities and toilets in the 1st floor of the canteen Building. A sketch showing the scheme is enclosed.

The approximate cost will be about Rs.6.0 Lakhs (Built up area of about 40sqm @ Rs. 15,000/- per sqm).

In view of the shortage of fund, the item was deferred.

[Annexure-A6, Page No.26]

4. Construction of a part Floor over existing PG Mechanical Department Building.

The South eastern portion of the PG mechanical Building is a Single storeyed one and is presently used as Production Laboratory. In order to have additional space for this Building, it is proposed to construct another floor over this portion of the building with provision of a stair case. A sketch showing the scheme is enclosed.

The approximate cost will be about Rs.18.75 Lakhs (Built up area of about 125sqm @ Rs. 15,000/- per sqm).

In view of the shortage of fund, the item was deferred.

[Annexure-A7, Page No.27]

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

BWC:25 (2015)-07: PROPOSAL FOR APPROVAL OF BOQ AND ESTIMATE FOR TENDERING FOR APPROVED PROJECTS:

1. Provision of False Ceiling below chilled water pipelines in corridors & Rooms in Various Academic Buildings for Central AC System

Earlier, the BWC in its 24th Meeting held on 02.03.2015, approved the administrative proposal for Provision of False Ceiling below chilled water pipelines in corridors & Rooms in Various Academic Buildings for Central AC System.

Accordingly, specifications, BOQ and estimate have been prepared. These are given in the Annexure. It is proposed to invite tenders from experienced and registered contractors of NIT, Rourkela. The estimate amounts to Rs.10.31 Lakhs (Copy enclosed).

BWC approved the proposal.

[Annexure-A8, Page No.28-29]

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

BWC:25 (2015)-08: REPORT ON AWARD OF WORKS TO CONTRACTORS.

1. Finalization of NIT Annual Maintenance Rate Contract (Civil) 2015-16

A duly constituted committee has already scrutinized the basic rates of materials collected from the local market and analysis of the rate for various items has been done based on the approved material rates, prevailing labour rates etc following CPWD norms. A copy of the New Rate Schedule finalized by the committee was put up to the BWC in its 24th meeting held on 02.03.2015 and the BWC has approved the same.

For **Annual Maintenance Contract**, it is now proposed to invite open tenders from registered Civil contractors of NIT, Rourkela having experience in Civil Engineering works of various category at NIT, Rourkela, in three parts, separately in sealed envelopes (i.e. EMD, Techno, Commercial and Price bid). The estimated cost will be about Rs.1.00 Crore in total for this Financial Year. It is proposed to divide the entire work amongst maximum 15 Contractors at the same rates, terms and conditions of the quoted price of L1 tenderer. The allocation will be done in the descending order with L1 tenderer getting the highest share. The distribution pattern will be decided as per the guideline of the NIT Purchase Procedure.

BWC accorded the administrative approval.

2. Provision of Central AC for TIIR Building.

Provision of 2X200 Tr Central AC for TIIR building at an estimated cost of Rs.4.00 Crores has been approved in 22nd BWC Meeting held on 06.08.2014. Accordingly, open tenders have been invited and evaluated. Following four tenderers are found to be techno-commercially acceptable.

1. M/s Sterling & Wilson Pvt Ltd
2. M/s Track Fujico Air System
3. M/s Voltas Ltd.
4. M/s Aircon India Inc.

It is proposed to open the price-bids of above techno-commercially acceptable firms on 08.04.2015 and finalize the work order.

The BWC advised to open the price bids and file processed. Further action will be taken depending upon availability of fund.

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

BWC:25 (2015)-09: Proposal for approval of Deviation and extra items for various works:

1. **Extra Item for “Addition, Alteration and Renovation of 'A' type quarters” (Agency: M/s Nirman Construction).**

The Extra Item statement for Addition, Alteration and Renovation of 'A' type quarters is given in the Annexure. The work order for the above work was awarded to M/s Nirman Construction vide Work Order No NITR/PW/WO/CT/12/12-13/12, Dated-31/05/2012 for a value of Rs.1,52,50,597.00

During the course of execution, it is decided to provide some additional item such as provision of Kota Stone slab flooring of 25mm, thick, glass shelf, vitrified floor tile, water proofing cement paint etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 11,78,659.24.

BWC approved the proposal within the work order value.

[Annexure-A9, Page No.30-33]

2. **Extra Item for “Addition, Alteration and Renovation of 'A' type quarters” (Agency: M/s Eastern Infrastructure).**

The Extra Item statement for Addition, Alteration and Renovation of 'A' type quarters is given in the Annexure. The work order for the above work was awarded to M/s Eastern Infrastructure vide Work Order No

NITR/PW/WO/CT/13/12-13/13, Dated-31/05/2012 for a value of Rs.1,01,67,064.00.

During the course of execution, it is decided to provide some additional item such as provision of Kota Stone slab flooring of 25mm thick glass shelf, vitrified floor tile, water proofing cement paint etc which were not envisaged in the original scope of work. Hence, these have become extra items.

The estimated cost of the same comes to Rs. 8, 42,105.62.

BWC approved the proposal within the work order value.

[Annexure-A10, Page No.34-37]

3. Extra Item for “Construction of Security Watch Tower” (Agency: M/s S.K. Mohanty)

The Extra Item statement for Construction of Security Watch Tower is given in the Annexure. The work order for the above work was awarded to M/s Eastern Infrastructure vide Work Order No NITR/PW/WO/CT/39/13-14/41, Dated-30/08/2013 for a value of Rs.21,76,771.00

During the course of execution, it is decided to provide one additional item: providing and fixing Hand Rail of approved size which was not envisaged in the original scope of work. Hence, this has become extra item. The estimated cost of the same comes to Rs. 1,03,392.00.

BWC approved the proposal within the work order value.

[Annexure-A11, Page No.38]

4. Extra Items for “Construction of RCC Drain cum pathway by the side of Golden Jubilee Building”. (Agency: M/s S.K. Mohanty)

The Extra Item statement for Construction of RCC Drain cum pathway by the side of Golden Jubilee Building is given in the Annexure. The work order for the above work was awarded to M/s S.K Mohanty vides Work Order No NITR/PW/WO/CT/40/13-14/42, Dated-30/08/2013 for a value of Rs.39, 17,745.00.

During the course of execution, it is decided to provide some additional items such as provision of steel frame guard, bar railing, brackets, gates; 50mm thick precast slab etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 6,09,374.88.

BWC approved the proposal within the work order value.

[Annexure-A12, Page No.39-40]

**5. Extra Items for “Addition & Alteration of Computer Science Building”,
(Agency: M/s P.K Rout)**

The Extra Item statement for Addition & Alteration of Computer Science Building is given in the Annexure. The work order for the above work was awarded to M/s P.K Rout vide Work Order No NITR/PW/WO/CT/58/12-13/58, Dated-31/12/2012 for a value of Rs.3,51,73,418.00.

During the course of execution, it is decided to provide some additional item such as provision of GI pipes of different diameter 20, 25 & 40mm nominal bore, 15mm dia PTMT stop cock & push cock, pressed door frame, 35mm thick flush door shutter etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 3,87,819.36.

BWC approved the proposal within the work order value.

[Annexure-A13, Page No.41-43]

6. Proposal for Taking over Construction Site Office Building for Major Project (Phase-I) from M/s UPRNN Ltd

The work: Construction of Major Project (Phase-I) was awarded to M/s UPRNN Ltd vide Work Order No-NITR/PW/WO/CT/288/07-08/349/2873, Dated. 19.03.2008. The building under this scheme have been completed in all respects and handed over for our use long back. Before actual starting of the works, they have constructed a site office building near the Bio Medical Building. This has a total plinth area of 2078 sqft, consisting of six rooms and toilet blocks etc. A sketch showing the details of the site office is enclosed. The roof of the building consists of CGI roofing sheeting with false ceiling. The flooring consists of vitrified tile except verandah which is IPS flooring. The doors fixed are of flush doors.

As per contract, any site office needs to be cleared and the whole area is to be left in good condition on completion of the contract to the satisfaction of the Architects.

It is observed that the condition of the site office buildings is fairly good and can be utilized for our official purposes. Therefore, it is proposed that M/s UPRNN, instead of dismantling the site office structure, can hand over the same to NIT for their appropriate use.

The matter has been discussed with the Project Manager of M/s UPRNN. They have agreed to hand over the site office building including electrical fittings but without fan and AC to NIT at a depreciated rate of Rs.3.74 Lakhs vide their Letter No- 150/PM/ROU-NIT/RNN/15 Dated-31.03.2015 (Copy

enclosed) They have also submitted detailed calculations in support of this amount which is enclosed.

Considering the condition of the site office buildings, the price seems to be reasonable and we may take over this building for NCC, USS Security and other Outsourcing Department of NIT.

BWC approved the proposal within the work order value.

[Annexure-A14, Page No.44-47]

7. Extra Items for “Construction of TIIR Building”, (Agency: M/s S.P Padhi)

The Extra Item statement for Construction of TIIR Building is given in the Annexure. The work order for the above work was awarded to M/s S.P Padhi vide Work Order No NITR/PW/WO/CT/20/12-13/20, Dated-19/06/2012 for a value of Rs.32, 22, 74,942.00

During the course of execution, it is decided to provide some additional items such as Vitrified Tile 600mmX600mm, Ultra Tech Permasand exterior paint, Wash Basin, UPVC Pipes etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 75,25,506.00. The details are given in the Annexure. The extra items are mainly substitute items and as such, these may not increase in the contract value.

BWC approved the proposal within the work order value.

[Annexure-A15, Page No.48-49]

8. Extra Items for “Construction of Major Project (Phase-I)”, (Agency: M/s UPRNN).

The Extra Item statement for Construction of Major Project (Phase-I) is given in the Annexure. The work order for the above work was awarded to M/s UPRNN vide Work Order No NITR/PW/WO/CT/288/07-08/349/2873, Dated-19/03/2008 for a value of Rs.163, 25, 13,935.00

During the course of execution, it is decided to provide some additional items such as Providing Chain & Crank operation for operating rolling shutters, GI Sheet, Brass Sheet, etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 30,92,968.89. The details are given in the Annexure.

BWC approved the proposal.

[Annexure-A16, Page No.50-51]

9. Extra Items for “Construction of Major Project (Phase-II)”, (Agency: M/s Shapoorji Pallonji).

The Extra Item statement for Construction of Major Project (Phase-II) is given in the Annexure. The work order for the above work was awarded to M/s Shapoorji Pallonji vides Work Order No NITR/PW/WO/CT/66/13-13/68, Dated-22.02.2013 for a value of Rs.303, 82,39,866.00

During the course of execution, it is decided to provide some additional items such as TMT Bar, Screed Concrete, 1 HP Submersible pump, Water Proofing Treatment, ISI marked GI pipes, Durafill filler material in the expansion joints etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 4,47,47,979.00. The details are given in the Annexure.

BWC approved the proposal.

[Annexure-A17, Page No.52-55]

10. Proposal for Construction of Residential quarters (Small) through M/s Shapoorji & Pallonji Co. Pvt. Ltd.

At present, there is large scale increase in the number of Junior Faculty members. As such, there is urgent need for provision of accommodation for these faculty members. The problem is so acute that some of the faculty members are putting up in the Guest House and Hostels. Faculty are also occupying accommodation meant for non-teaching staff. Therefore, it is proposed to construct one block of (G+5) of about 150 Flats of small size (plinth area about 55.0 sqm per unit) with provision of parking in the basement in the adjacent location of the present Construction of Faculty Residences under Major Projects (Phase-II). The specification for these housing will be similar to the present construction of Faculty Residences being done by M/s Shapoorji & Pallonji Co. Pvt. Ltd.

*Now, we have received **detailed drawings, BOQ and estimate** for the proposed building from the **Architect, M/s Inform Architects, Bangalore** which are enclosed. **The estimate amounts to Rs. 26.89 Crores** based on the similar rates as those of the present contract awarded to M/s Shapoorji & Pallonji Co. Pvt. Ltd for the work: Construction of Major Project (Phase-II). With this arrangement, **the plinth area cost of construction will amount to Rs.16, 191.0 per sqm (i.e. Total Project Cost Rs.26.89 Crores divided by Total Project area 16,613 sqm)** (Details enclosed).*

M/s Shapoorji & Pallonji Co. Pvt. Ltd. have been awarded with the following buildings including civil, electrical, HVAC, plumbing, fire etc. at a total value of Rs. 302.82 Crores vide Work Order No. NITR/PW/WO/CT/66/12-13/68 Dated 22.02.2013.

- *1000 Seated Hostel.*
- *Lecture Hall Complex (No-II).*
- *Mechanical Science Building.*
- *Faculty Residences.*
- *Golden Jubilee Building.*

All of the above mentioned buildings except Golden Jubilee Building are in advance stage of completion.

*During the progress Review Meeting held on 11-12-2014 and Vide letter No-SPCL/NITR/14-15/0328, dated 12-02-2015, (Copy enclosed), M/s Shapoorji & Pallonji, have **expressed serious concern on the anticipated reduction in the contract value due to possible reduction in the execution of some major items**, such as omission of stone cladding items, solar system, PA system, DG set, change in specification etc. M/s Shapoorji & Pallonji have submitted a calculation indicating tentative reduction amounting to Rs. 31.6 Crores (Copy enclosed). To this, NIT had suggested to M/s Shapoorji & Pallonji that in view of the growing need of construction in the Institute, it will be possible to cover the estimated volume of work by expanding the scope of construction with the approved items and approved budget.*

*In the light of the above, on our suggestion, M/s Shapoorji & Pallonji have expressed their intent to perform such civil works which includes **“Construction of Residential buildings (Small)” vide their above mentioned letter at the existing rate and provisions of the contract.***

It is proposed to get the above work executed through M/s Shapoorji & Pallonji at the same rates, term and conditions as those of the present contract (i.e. NITR/PW/WO/CT/66/12-13/68, Dated. 22.02.2013) within the contractual amount.

The BWC approved the proposal

[Annexure-A18, Page No.56-102]

G. ANY OTHER ITEM WITH THE PERMISSION OF THE CHAIR.

BWC:25(2015)-10: 1. Proposal for building a clean room facility for microelectronics, materials, biology and biomedical research.

To support research in advanced materials, semiconductors, electronic devices, solar cells, cellular and molecular biology, stem cells and tissue engineering, the institute needs a clean room facility. In fact the space has been identified and Dr. V. M. Katoch, DG-ICMR has laid the foundation stone of the small building. It is expected to be a 3 storey building of foot print 15m x 25m, the ground floor being used for utilities. The expenses are expected to be:

Basic Civil work: 25m x 15m x 3 = 1125m²

Approx cost @ Rs/25,000/-m² = **Rs.2.81 crore**

Special Finishing work = 20 m x 15m x 2 = 600m²

Approx. Cost 600 x Rs.50,000/- m² =**Rs.3.0 crore**

Misc. Cost = **Rs.0.2 crore**

Total estimate (rough) =**Rs.6.0 crore**

The item was deferred.

2. Extension of Time for Completion for the Work: Construction of Major Project (Phase II) Agency: M/s Shapoorji Pallonji & Co. Pvt. Ltd

Earlier, the matter of commencement date of the total project comprising of 1000 Seated Hostel, Lecture Hall Complex (II), Mechanical Science Building, Golden Jubilee Building & Faculty Residence was discussed in the 24th Meeting of the BWC, held on 02.03.2015. It was decided that the **commencement date of the total project will be considered as 12.04.2013.**

Now, M/s Shapoorji Pallonji have informed NIT vide their letter No-SPCL/NITR/15-16/0362 Dated 06.04.2015 (copy enclosed) that due to the following reasons, beyond their direct control, they were prevented to perform their obligation:

- Delay in prolonged front clearance of individual building
- Protracted decision
- Delay in issue of drawings
- Change in the scope of work

They have requested to grant them extension of time up to **31.12.2016** without the imposition of Liquidated Damages to perform the balance job as per contract.

*The matter was discussed in the BWC meeting held on 06.04.2015. This being a major project, the **BWC approved extension of time up to 11.04.2016 (i.e. 1 year).***

[Annexure-A19, Page No.103-104]

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

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