

# National Institute of Technology Rourkela

# MINUTES

33<sup>rd</sup> Meeting of Building & Works Committee

ROURKELA

DATE: 30<sup>th</sup> April, 2019 (Tuesday)

TIME: 09.30 A.M.

VENUE: Board Room, NIT, Rourkela







Minutes of the 33<sup>rd</sup> meeting of Building & Works Committee, National Institute of Technology, Rourkela held at 9.30 AM on 30.04.2019 (Tuesday) in the Board Room of the Institute.

# **Members Present**

- Prof. Animesh Biswas
   Director & Chairman, BWC
   NIT, Rourkela
- 2. Shri Subhransu S. Satpathy DGM, Design (Civil) SAIL, RSP, Rourkela.
- 3. Shri Rakesh Kumar Shah DGM, Power Distribution SAIL, RSP, Rourkela
- Prof. Chitta Ranjan Patra
   Professor, Civil Engg. & Member, BOG
   NIT, Rourkela
- 5. **Prof. Japes Bera**Professor, Ceramic Engg. & Dean (PD)
  NIT, Rourkela
- 6. **Prof. Saroj Kumar Patel**Registrar & Secretary, BWC
  NIT. Rourkela

#### Invitees Present

- 1. Prof. P. Sarkar PIC(Civil Const.), NIT Rourkela
- 2. **Prof. U. Chattaraj** PIC(Civil Maint), NIT, Rourkela
- 3. **Prof. S. Samanta**PIC(Elect. Const.), NIT Rourkela
- 4. **Prof. S. Karmakar** PIC(Elect. Maint.), NIT Rourkela
- 5. **Prof. S. Murugan** PIC(HVAC), NIT Rourkela
- 6. **Mr. Joydip Mondal**Executive Engineer, Estate, NIT Rourkela
- 7. **Mr. Rajesh Kumar Sahoo**Engineer, Estate, NIT Rourkela

# Members Absent

- Shri Madan Mohan
   DDG(HE), MHRD, New Delhi- 1100012.
   (Written comments received from MHRD vide F.No.14-3/2019-TS-III dated 29-04-2019 are enclosed in Annexure- A1)
- 2. **Mr. B. K. Pati** Executive Engineer, PWD, Rourkela

NIT, Rourkela [Minutes of 33<sup>rd</sup> meeting of the BWC]

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## A) GENERAL AND PROCEDURAL MATTERS.

BWC: 33 (2019)-01: Welcome to the members by the Chairman.

The Chairman, BWC welcomed all the members to the meeting.

BWC: 33 (2019)-02: Confirmation of the minutes of the 32<sup>nd</sup> Meeting of the BWC held on 04.12.2018.

The minutes of the 32<sup>nd</sup> Meeting were sent to the members. No comments were received from the members.

BWC confirmed the minutes.

[Annexure-A1 Pg. 7(a)-14]

BWC: 33 (2019)-03: To report on the action taken on the decisions made in the 32<sup>nd</sup> Meeting of BWC held on 04.12.2018 and to discuss matters arising out of the minutes.

The report on the action taken on the decisions made in the 32<sup>nd</sup> Meeting of the BWC held on 04.12.2018 was discussed and the updated status is enclosed in the Annexure. It was decided to add one extra column showing the value of each work in the action taken report in the future.

The BWC approved the report.

[Annexure-A2 Pg.15-16]

#### B) REVIEW OF ONGOING PROJECTS

BWC: 33 (2019)-04: Review of ongoing Civil Projects & Projects in the Pipeline.

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

The BWC noted the above.

[Annexure-A3 Pg.17-18]

BWC: 33 (2019)-05: Review of ongoing Electrical Projects & Projects in the Pipeline.

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

The BWC noted the above.

[Annexure-A4 Pg.19-20]

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Or.

# C) APPROVAL FOR PROJECTS: (PART- 'A')

BWC: 33 (2019)-06: Proposal for New Projects.

# 1. Upgradation of two lawn tennis courts and one basketball court.

There was a proposal from students to build 2 international standard asphalt base synthetic flooring lawn tennis courts and 1 basketball court. In this regard, CPWD submitted an estimate of Rs.1,49,08,000/- (Copy enclosed as Annexure).

The BWC decided to discuss with CPWD and try to reduce the estimate as far as possible by dropping a few items from the list. It also decided to seek clarification from MHRD if this expenses can be made out of IRG.

[Annexure-A5 Pg. 21-27]

# 2. Construction of Green House for nursery and research Purpose

There was a proposal from Life Science department to construct green house for nursery and research purpose. Approximate estimated cost is Rs.35 lacs. Detailed Speciation was attached in the Annexure.

The BWC approved the proposal.

[Annexure-A6 Pg. 28-29]

# 3. Safety of Electrical Science, Biomedical Building and FR Building.

Electrical Science and Biomedical building was constructed by M/s UPRNN and handed over to NIT in 2013-14. The cladding material is falling down at regular intervals. Since the safety of the building is at stake. This matter was already discussed in 29<sup>th</sup> BWC meeting and it was decided to engage CPWD for safety assessment of above mentioned building with remedial measure. But the report from CPWD is still awaited. For preventive measure works for putting the fencing around the electrical science building was started and the same works for biomedical building is yet to be started.

Six blocks of faculty residence (constructed as part of Major Projects Phase - I) is in severe distress. Continuous leakage of sewage from concealed drainage line and the sunken slabs for a long time is affecting the strength and durability RC structural elements of the building in addition to the damage of public health and hygiene. Keeping these building unattended in such exposure condition further will lead to their premature collapse. An immediate action is necessary to protect these assets.

In view of the above, it was proposed to hire a renowned consultant for safety assessment of above mentioned buildings.

The BWC approved the proposal.

[Annexure-A7 Pg. 30-32]

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and

## 4. Installation of Gas detector at kitchen of different Halls of Residence.

Gas bank supply and installation etc. for kitchen of different halls of residence was awarded to M/s Eastern gas equipment Pvt. Ltd. Vide work order no. NITR/PW/WO/CT/51/15-16/54 dated 30.03.2016. The agency was completed the works except installation of gas detector. The agency was informed us that they will install the gas detector system only after getting the balance payment. The payment made to the agency for only supply against the all items (except gas detector). As per contract payments against installation and commissioning is to be made after completion of work in all respect.

In view of the above special approval may please be granted for paying the agency against installation and commissioning for all items except gas detector.

The item was deferred.

[Annexure-A8 Pg. 33-34]

### 5. Issues regarding construction of Golden jubilee building

It has been found that some cracks were developed in the cantilever slabs on the north, south and west side of the building at various levels and the matter was immediately brought into the notice of our consultant M/S Inform Architects and contractor M/S SPCL (ref. Letter of Dr. A.K. Panda NITR/CT/AKP/16/L/142 dated 31/03/2016 and NITR/CT/AKP/16/L/385 dated 31/08/2016). Structural group of M/S Inform Architects visited the site on 29/03/2016 and submitted a technical report on the crack via email dated 13/04/2016. In their report M/S Inform Architects have indicated some construction flaws as the reason for these cracks. From the available documents. it is observed that M/S Inform Architects have submitted some strengthening scheme for west side balcony. This retrofitting scheme was forwarded to M/S SPCL for their comment (ref. NITR/CT/AKP/16/L/239 dated 03/06/2016). However, there is no record available on further action about this strengthening M/S Inform Architects have further confirmed via email dated 28/08/2016 that design is safe and sound for north and south balconies. NIT Rourkela has requested M/S SPCL (through a letter No. NITR/CT/AKP/16/L/394 dated 26/09/2016 issued by Dr. A. K. Panda) to put hold on the flooring work of cracked cantilever slabs of Golden Jubilee Building.

At present work is completed on all the fronts except for west side balcony. An internal review of the structural drawings has revealed that flexural cracks developed due to inappropriate placement of supports on the cantilever slab at west side balcony. However, the cracks on the soffit or top of the sunken slab near the west side balcony may be due to inadequate shear design as pointed out by M/S SPCL (ref. letter of M/S SPCL No. SPCL/1067/NITR/17-18/0928 dated 22/09/2017). NIT Rourkela unsuccessfully tried to engage third party expert to find out a way forward ensuring the safety of the structure. At this situation, any one of the following actions were proposed:

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ors.

- (1) Allow M/S SPCL to complete their work including the cracked slabs and complete the project within the time limit given to them considering the nonprogressive nature of the crack. The structural evaluation (and retrofitting if required) can be conducted by a third party after the completion of the project keeping the responsibility of this defect to both M/S SPCL and M/S Inform Architects.
- (2) Ask M/S SPCL to complete the project including fixing the problems associated with the developed cracks within the given time and handover the building.

It was appraised that a committee has already been constituted to look into the above matter. The BWC decided to wait till the report of the committee is received.

6. Non-cooperation of M/s Inform Architect.

We have encountered several structural issues during the construction of Golden Jubilee building in last one year. For example, the drawings of canopy structure received from M/S Inform Architects Pvt. Ltd. does not give the complete details of the anchorage. Also, we had doubt on the connection design for the two structural steel frames with associated louvers on the north and south side of the tower block terrace. Numerous emails, phone calls were sent to M/S Inform Architects to clear the issues and expedite the construction. However, M/S Inform Architects have stopped responding to our queries since June 2018. Also, they have withdrawn their staff engaged at our site for certifying the design compliant construction since July 2018. This has resulted a significant delay in the construction process. Also, we had to engage another consultant for fixing the steel to concrete connections in absence of any communication from M/S Inform Architects.

The BWC decided to issue a warning letter to M/s Inform Architect in consultation with Legal Advisor.

[Annexure-A9 Pg. 35-46]

7. Installation of LED Street light in Residential Area.

An estimate of Rs.23,65,393/- was made for installation of LED streetlights in residential area. (Copy enclosed as annexure).

The item was deferred.

[Annexure-A10 Pg. 47-49]

8. Construction of 33/0.433 KV sub-station for Golden Jubilee Building

An estimate of Rs.69,80,425/- was made for sub-station for golden jubilee building. (Copy enclosed as annexure).

The item was deferred.

[Annexure-A11 Pg. 50-56]

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9. Installation High end equipment to cater Air Conditioning System for GJB, LC-II and Mechanical Science Building.

With reference to BOG resolution number BOG-62(2018)-22(11), dated: 08.12.2018 and office order no NITR/RG/BOG-62/2019/0066, dated: 18.01.2019, it was decided for tendering of HVAC High end equipment for civil and electrical work. A meeting of HVAC committee was held on 07.01.2019 and the committee proposed to award the consultation work for HVAC work to Prof. M.P. Maiya, Refrigeration and Air-conditioning Laboratory, Engineering Department, IIT, Madras. Subsequently, an enquiry has been issued to Prof. M.P. Maiya, inviting brief consultancy proposal along with budgetary offer for the above consultancy job.

The item was deferred.

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

NIL

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

NIL

F) DEVIATION, EXTRA ITEMS FOR VARIOUS WORKS & POINTS FOR INFORMATION OF BWC [ PART-'D' ]:

BWC: 33 (2019)-07: Proposal for approval of Deviation and extra items for various works:

1. Extra Items for Construction of Major Project Phase (II).

The work order for the above work was issued to M/s Shapoorji Pallonji Co (P) Ltd. at Value of Rs.302.82 crores. During the course of the execution, it has been found necessary to execute some items which are not contained in the BOQ. As such, these become extra items. Since most of the items are substitute items, no additional fund is necessary. The extra items statements are given in the Annexure.

During the course of execution, it is decided to provide some additional items such as aluminum roller, alumunium sliding windows, Armstrong metal false ceiling, parquet flooring etc. which were not envisaged in the original scope of work. Hence these have become extra items. Since most of the extra items are substitute items, no additional fund is necessary. The estimated cost of the same comes to Rs.29.11 Lakhs.

The item was deferred.

[Annexure-A12 Pg. 57-59]

## 2. Deviation for construction of a RCC Reservoir Sump and Connecting Pipe line

The deviation statement for construction of RCC reservoir and connecting pipe line is given in the annexure. The work was awarded to M/s Sarat sahoo vide work order no. NITR/PWWO/CT/15/18-19/17 dated 30.08.2018 for value Rs. 53.40.954/-.

During the course of execution due to adverse site condition, revision of drawing and design there has been deviation in the quantity indicated in the bill of quantities as per contract. However, the overall deviation amounts to (+) 15.27%.

The item was deferred.

[Annexure-A13 Pa. 60-63]

# 3. Release of security deposit of M/s UPRNN for Major Project Phase-I

M/s UPRNN has given lots reminder for release of security deposit as per the minutes of meeting dated 19.11.2015. This matter was already discussed in 30th BWC meeting and BWC suggested the following:

Since the water logging problem in the basement area and falling of cladding tiles have not been resolved the security deposit will be held up till further decision. Present status is M/s UPRNN have not completed rectification of all defects and completion of other pending works till date.

The BWC decided to constitute a committee consisting of the following members to look into the above matter and advise:

1) Prof. S. K. Rath, CS

- Chairman

2) AR (FA)

- Member

3) Mr. A. K. Panda, Legal Advisor - Member

4) DR (PW)

- Member Secretary

[Annexure-A14 Pg.64-72]

BWC: 33 (2019)-08: Any other item with the permission of the chair.

Nil

The meeting ended with thanks to the Chair.

(Prof. S. K. Patel)

The then Registrar & Secretary **Building & Works Committee** 

Director & Chairman **Building & Works Committee** 



# National Institute of Technology Rourkela

# MINUTES

32<sup>nd</sup> Meeting of Building & Works Committee

DATE: 04<sup>th</sup> December, 2018 (Tuesday)

TIME : 10.00 A.M.

VENUE: Board Room, NIT, Rourkela

Minutes of the 32<sup>nd</sup> Building & Works Committee, National Institute of Technology, Rourkela held at 10.00 AM on 04.12.2018 (Tuesday) in the Board Room of the Institute.

## Members Present:

 Prof. Animesh Biswas, Director & Chairman, BWC, N.I.T., Rourkela

Shri Ajaya Kr. Nayak, DGM
PL No.917095
Civil Engineering, Town Engineering Department,
SAIL, RSP, Rourkela., Qr. No.C-2, Sector-1, Rourkela.

 Shri Vinod Kr Shrivastava, DGM PL. No.041492 Refrigeration & Air Conditioning, RSP, SAIL, RSP, Rourkela Qr. No.B/ 56, Sector-5, Rourkela-769 002

4. **Prof. C. R. Patra**Professor, CE
NIT, Rourkela.

5. Prof. J. Bera, Professor, CR &

Dean (PD), NIT, Rourkela.

Er. S.K. Upadhyay,
 Registrar & Secretary, BWC,
 NIT, Rourkela

# **Invitees Present:**

7. **Mr. B. K. Pati,** Executive Engineer, PWD, Rourkela

8. Prof. P. Sarkar, PIC(Civil Const.), NIT Rourkela

9. **Prof. U. Chattaraj,** PIC(Civil Maint), NIT, Rourkela

 Prof. S. Samanta, PIC(Elect. Const.), NIT Rourkela

11. Prof. S. Karmakar, PIC(Elect. Maint.), NIT Rourkela

12. **Prof. S. Murugan,** PIC(AC), NIT Rourkela

 Mr. Joydip Mondal Executive Engineer, NIT Rourkela

Mr. Rajesh Sahoo
 Engineer, Estate, NIT Rourkela

Mr. S. Pathak, (Special Invitee)
 Executive Engineer(Civil), CPWD

### Member Absent:

 Shri Madan Mohan DDG(HE), MHRD, New Delhi- 1100012.

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#### A) GENERAL AND PROCEDURAL MATTERS:

BWC: 32 (2018)-01: Welcome to the members by the Chairman.

The Director and Chairman BWC welcomed all the members to the meeting.

BWC: 32 (2018)-02: Confirmation of the minutes of the 31<sup>st</sup> Meeting of the BWC held on 08.08.2018.

The minutes of the 31<sup>st</sup> Meeting were sent to the members. No comments were received from the members.

BWC confirmed the minutes.

[Annexure-A1, Page No. 01-10]

BWC:32 (2018)-03: To report on the action taken on the decisions made in the 31<sup>st</sup> Meeting of BWC held on 08.08.2018 and to discuss matters arising out of the minutes.

The report on the action taken on the decisions made in the 31st Meeting of the BWC held on 08.08.2018 is presented for BWC's consideration.

The BWC noted the above with the corrections.

[Annexure-A2, Page No.11-12]

## B) REVIEW OF ONGOING PROJECTS:

BWC: 32 (2018)-04: Review of ongoing Civil Projects & Project in the Pipeline.

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

- i. It was informed Golden Jubilee Building there are some cracks marked in the pillar and also the entrance canopy to be filled properly. Dean(PD) was advised to take up with the consultant immediately and resolved the issue in consultation with M/s Shapoorji Pallonji Co.
- ii. Kitchen equipment for hostel will be commissioned by December, 2018.
- iii. Installation of 1020 kWp Grid connected Solar PV plant on Roof top Installation work is in progress. Commissioned of the plant by January, 2019

The BWC noted the above.

[Annexure-A3, Page No.13-14]

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BWC: 32 (2018)-05: Review of ongoing Electrical Projects & Project in the Pipeline.

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

The BWC noted the above.

[Annexure-A4, Page No. 15-16]

C) APPROVAL FOR PROJECTS: (PART-'A')

BWC: 32 (2018)-06: Proposal for New Projects.

1. Partition work at Various Location of TIIR Building.

Several requisitions come to Estate Maintenance for partition work at various location of TIIR Building for following purpose:-

- Studio room for Planning & Architecture Department.
- To facilitate the incubates with laboratory for various Government Sponsored projects related entrepreneur ship, innovation & skill development founded by DST.
- Installation of different instruments for CIF
   In view of the above, an estimate of Rs.29.77 Lakh was made in this regard (copy given in annexure).

BWC approved the proposal.

[Annexure-A5, Page No.17-20]

# 2. Enforcement of Corridor and Balconies of FRA and FRB.

Presently in FRA and FRB flats balconies and corridor are enforced by steel railing. As many of the occupants are having small kids, so to avoid any mishap there is a demand from FRA & FRB occupants that balconies and corridors are encroached by grill up to roof height. In view of the above, an estimate of Rs.1.07 Crore was made in this regard (copy enclosed in Annexure).

BWC advised Dean (PD) to review the proposal and resubmit it in the next BWC meeting.

[Annexure-A6, Page No.21-22]

# 3. Annual Maintenance work (Civil).

Presently all the day to day basis maintenance work based on the complaints received from the users was carried out through existing rate contract. The above mentioned works were divided among the enlisted contractor under rate contract for early completion. But CAG Audit objects (Copy enclosed Annexure) the same stating that it is violation of GFR 2017 Rule.

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In view of the above, it is proposed to invite open tender for Armal Maintenance work (Civil) as per Institute Purchase Procedure. Earlier the matter has been discussed in the 30<sup>th</sup> BWC Meeting.

Estimate has been prepared for the above mentioned works this amounts to Rs.1.95Cr.

BWC approved the proposal.

[Annexure-A7, Page No.23-24]

4. Cable Shade room for Electrical Department (Estate).

Presently there is no storage yard for electrical goods such as HT Cables, Scraps and other obsolete material. In view of the above it is proposed that to build a new storage yard for above mentioned electrical good. An estimate of Rs.26, 19,164.00 was made in this regard (Copy enclosed Annexure).

BWC approved the proposal.

[Annexure-A8, Page No.25-26]

5. Multi facility Room at Dilip Tirkey Stadium for SAC.

There was a requirement from student for multi facility room and wash rooms at DTS, P.T Usha and STSC to provide better basic facilities to the students for day to day usages and during Inter NIT or Major fest events. An estimate of Rs.31, 83,220.00 was made in this regard (Copy enclosed Annexure).

BWC approved the proposal.

[Annexure-A9, Page No.27-33]

6. Green lush Grass & Water supply work for Dilip Tirkey Stadium & Sachin Tendulkar Stadium (without fencing).

There was a need from students for plants and sustain the green lush grass with constants water supply at the Sachin Tendulkar Stadium, P.T Usha and Dilip Tirkey Stadium sports complex. It is needed to improve the quality and infrastructure of above mentioned fields. An estimate of Rs.36, 40,576.00 was made in this regard (Copy enclosed Annexure).

BWC approved the proposal.

[Annexure-A10, Page No.34-35]

7. Replacement of O/H 33KV lines near proposed area of Sports Complex.

As the O/H conductor near the proposed area of Sports Complex, which connects S/s 2 to S/s 6&9 for safety purposes these lines to be replaced by U/G cable with an estimate cost of Rs.35 Lakhs.

BWC approved the proposal.

[Annexure-A11, Page No.36-37]

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8. Installation High end equipment to cater air-conditioning system for GJB, LC-II and MSc Building.

As M/s SPCL has not submitted the detailed estimation and hesitate to execute the above with a plea of additional Defects liability of Phase-II contract, a part from HVAC high end equipment, both Civil and Electrical works needed to complete the above project. Hence it is decided to execute this balance work through Engineering, Procurement, and Commissioning (EPC) mode by open tendering and suitable budget provision of approx. 20Cr.

BWC approved and recommend the proposal to FC.

[Annexure-A12, Page No.38-62]

9. Street Light & Cabling from Security & Mess Barrack to Naga Pond.

Street lighting from Security Barrack to SPCL Substation (Cover organic farming, Midtrial garden).

An estimate of Rs.27, 58,976.00 was made in this regard (Copy enclosed Annexure).

BWC approved the proposal.

[Annexure-A13, Page No.63-65]

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

# BWC: 32 (2018)-07: PROPOSAL FOR APPROVAL OF BOQ AND ESTIMATE FOR TENDERING NEW PROJECT

1. Procurement of 3nos 70 HP Pumps for campus Pump House.

A committee was constituted for replacement/ repair of break down pump set of campus pump house. Committee visits the campus pump house and submit the report with one recommendation that in order to cater the water supply in campus area 3nos 70 HP may be procured.

Earlier, in principal approval of BWC has been obtained for the above proposals vide its 31<sup>st</sup> meeting. Detailed BOQ, Estimate with specification and approved makes have been prepared for the above work. The estimate amounts to Rs.1, 526,097.00 (Copy enclosed in Annexure). It is proposed to invite open tender as per Institute Purchase Procedure.

BWC approved the proposal.

[Annexure-A14, Page No.66]

2. Annual Operation, Maintenance of Campus and Institute Pum. House.

It is necessary to carry out water supply for Academic Building, Hostel and Residential area an day to day basis. Estimates have been prepared for the above mentioned work and this amount to Rs.28, 66,851.00. (Copy enclosed in Annexure).

It is proposed to invite open tender as per Institute Purchase Procedure.

BWC approved the proposal.

[Annexure-A15, Page No.67-70]

3. Procurement of 3X750 KVA DG Sets for Hostel and Academic area.

As per Minutes of 29<sup>th</sup> BWC and subsequent MOM on 27.03.2018 (Copy enclosed, Annexure). The committee propose procurement of 3X750 KVA DG set with an approx. cost of Rs.300Lakh.

BWC approved the proposal and advised to propose it in the next Financial Year.

[Annexure-A16, Page No.71]

4. HVAC System for Auditorium of TIIR Building.

Detailed BOQ received from Prof. P. Maya IIT, Madras Prime Consultant of this project with an estimated cost Rs. 67,26,596.00 (Copy enclosed in Annexure).

It is proposed to invite open tender as per Institute Purchase Procedure.

BWC approved the proposal.

[Annexure-A17, Page No.72-78]

- E) APPROVAL OF TENDER FOR AWARD OF WORK [ PART-'C' ]: NIL
- F) DEVIATION, EXTRA ITEMS FOR VARIOUS WORKS & POINTS FOR INFORMATION OF BWC[ PART-'D']:

BWC: 32 (2018)-08: PROPOSAL FOR APPROVAL OF DEVIATION AND EXTRA ITEMS FOR VARIOUS WORKS:

1. Extra Items for Construction of Major Projects (Phase-II). The work order for the above work has issued to M/s Shapoorji Pallonji Co. (P) Ltd.at a value of Rs. 302.82 Crores. During the course of the execution, it has been found necessary to execute some items which are not contained in BOQ. As such, these become extra items. Since most of the items are

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substitute items, no additional fund is necessary. The extra item statements are given in the Annexure.

#### CIVIL

During the course of execution, it was required to execute some items such as Aerated Autoclaved Fly ash Bricks and Supply and Installation of Fresh color Restroom Cubicles System make for completion of the project 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.69, 04,058.00 (Copy enclosed, Annexure).

The order is to be placed by Purchase & Works Section. This is for information of the BWC.

[Annexure-A18, Page No. 79-80]

BWC: 32 (2018)-09: Any other item with the permission of the chair:

1) Proposal of Loan for NIT Rourkela from Higher Education Funding Agency (HEFA) to the tune of Rs.99 Crore.

The MHRD vide Letter No.F.No.14-8/2018-TS.III, dated 20.11.2018 has approved the HEFA proposal for NIT Rourkela for Rs.99 Crores.

SI. No.	Projects	Total cost of the Project	HEFA loan for 2019-19	HEFA loan for 2019-20	HEFA loan for 2020-21
1.	600 Seated Girl's Hostel	35.00	10.50	17.50	07.00
2.	Sports and Common Facilities	25.00	07.50	12.50	05.00
3.	Academic Building at BBSR	20.00	06.00	10.00	04.00
4.	UG/PG Teaching Laboratories	9.00	05.00	04.00	0.00
5,	Research Laboratories	10.00	05.00	05.00	0.00
	Total =	99.00	34.00	34.00	16.00

BWC noted the above. Mr. S. Pathak, EE, CPWD attended the meeting and it was decided to award the project of 600 seated Girl's Hostel to CPWD and sign the MoU in Dec, 2018. All the above three projects (sl.no.1 to 3) will be awarded on turnkey basis to CPWD.

[Annexure-A19, Page No.81-86]

(S. K. Upadhyay) Registrar & Secretary

**Building & Works Committee** 

(A. Biswas)
Director & Chairman

Building & Works Committee

# Report on the action taken on the decisions made in the 32<sup>nd</sup> Meeting of BWC held on 04.12.2018

BWC item No.	Item Descriptions	Action taken
BWC: 32 (2018)-01:	Welcome to the members by the Chairman.	NA
BWC: 32 (2018)-02:	Confirmation of the minutes of the 32 <sup>nd</sup> Meeting of the BWC held on 08.12.2018.	NA
BWC: 32 (2018)-03:	To report on the action taken on the decisions made in the 32 <sup>nd</sup> Meeting of BWC held on 08.12.2018 and to discuss matters arising out of the minutes.	NA
BWC: 32 (2018)-04:	Review of ongoing Civil Projects & Project in the Pipeline.	NA
BWC: 32 (2018)-05:	Review of ongoing Electrical Projects & Project in the Pipeline.	NA
BWC: 32 (2018)-06:	<ol> <li>Proposal for New Projects.</li> <li>Partition work at various location of TIIR Building</li> <li>Enforcement of corridor and Balconies of FRA and FRB</li> <li>Annual Maintenance work (Civil)</li> <li>Cable shed for Electrical department (Estate)</li> <li>Multi facility room at DTS</li> <li>Green lush grass and water supply work for DTS and STSC</li> <li>Replacement of O/H 33 KV lines near proposed area of sports complex</li> <li>Installation High end equipment to cater air conditioning system for GJB LC-II</li> </ol>	Tendering process initiated  Dropped  Tendering process yet to be started.  In Process

		4
	9. Street light cabling from security barrack to naga pond	Work Started
BWC: 32 (2018)-07:	<ul> <li>Proposal for approval of BOQ and Estimate for Tendering New Project:</li> <li>1. Procurement of 3 nos of 70 HP Pumps for campus Pumps house.</li> <li>2. Procurement of 3*750 KVA DG sets for Hostel and academic.</li> </ul>	Tendering process initiated In process
BWC: 32 (2018)-08:	Proposal for approval of Deviation and extra items for various works:  1. Extra Items for Construction of Major Projects (Phase-II).	NA
BWC: 32 (2018)-09:	BWC: 31 (2018)-09: Any other item with the permission of the chair:  1. Proposal of loan for NIT Rourkela from Higher Education Funding Agency(HEFA) to the tune Rs. 99 Crore	In Process

	STATUS	STATUS OF ONGOING WORKS(AS ON 05.04.2019) OF CIVIL CONSTRUCTION	VORKS(AS	ON 05.04.201	9)OF CIVIL	CONSTRUCTI	NC	
SL.NO	Name Of Work & W.O.No	Name of Agency	Order Value in Rs.Lakhs	Payment Done in Rs.Lakhs (Approx)	Schedule date of Starting	Schedule date of Completion (As per	Extension Granted Expected date of	Remarks
Ħ	Major Project (PH-II) W.O. NITR/PW/WO/CT/66/12-13/68,	/CT/66/12-13/6		Dt. 22.02.2013		(0.W	Completion	
1.1	Lecture Hall Complex No-2,		4077.00		12.04.2013	11.04.2015	30.06.2019	Taken over by NIT
1.2	Mechanical Science Building,		5315.00		12.04.2013	11.04.2015	30.06,2019	Taken over by NIT
1.3	Satish Dhawan Hall of Residence.	M/s Shapoorji	7248.00		12.04.2013	11.04.2015	30.06.2019	Taken over by NIT
1.4	Golden Jubilee Building.	Pallonji & Co Ltd	10012.00		12.04.2013	11.04.2015	30.06.2019	Painting, front canopy works and inertal glass partion work etc. is in progress.
1.5	(i)Faculty Residence (Phase-II) & Parking in Basement (ii)Faculty Residence (Small) (Rs.26.89 Crores)		(3262.00		12.04.2013	11.04.2015	30.06.2019	3 BHK- Taken over by NIT 2BHK- Taken over by NIT FR Small- Taken over by NIT
		Total Work Value:- 30282.40	falue:-	2639.82*				
	* Processed for payment Rs.2639.82 (Lakhs)							

	STATU	STATUS OF ONGOING WORKS(AS ON 05.04.2019)OF CIVIL CONSTRUCTION	ORKS(AS	ON 05.04.20	19)OF CIVIL	CONSTRUCTI	NO	
SL.NO	Name Of Work & W.O.No	Name of Agency	Order Value in Rs.Lakhs	Payment Done in Rs.Lakhs (Approx)	Schedule date of Starting	Schedule date of Completion (As per		Remarks
7	ACADEMIC AREA					(o.w	Completion	
m	HOSTELS							
3.1	Supply, installation & commisioning of Kitchen equipments(Bought Out Items) for Hostels NITR/PW/WO/CT/03/16-17/03,Dt. 09:05.2016	M/s Bestekloza	39.54	27.68	09.05.2016	08.09.2016	31.03.2019	Completed
3.2	Gas Bank supply & Installation etc. for kitchen of Hostels. NITR/PW/WO/CT/51/15-16/54, Dt. 30.03.2016	M/s Eastern Gas Equipments Pvt. Ltd.	35.78	3.48	30.03.2016	29.07.2016	30.06.2018	Completed except installation of Gas detector.
3.3	Supply, installation & commissioning of Kitchen equipments(Custom Fabricated items) for Hostel. NITR/PW/WO/CT/49/15-16/52, Dt. 30.03.2016	M/s Kumar Equipments (India)	162.58	87.75	30.03.2016	29.09.2016	31.03.2019	Completed
4.6	Supply, installation & commisioning of Kitchen equipments(Bought Out items) for hall of Residence.  NITR/PW/WO/CT/03/16-17/04, Dt. 09.05.2016	M/s Kumar Equipments (India)	31.87	22.31	22.31 09.05.2016	08.09.2016	31.03.2019	Completed
3.5	Design, Engineering, supply and installation of Exhaust Hood, Blowers, Ducting for Kitchen Equipment for Hostel.  NITR/PW/WO/CT/50/15-16/53 Dt. 30.03.2016	M/s Kumar Equipments (India)	106.19	48.46	48.46 30.03.2016	29.07.2016	31.03.2019	Completed

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WORKS (AS ON 05.04.2019) OF ELECTRICAL CONSTRUCTION	Work status		Electrical work completed. FDA work completed. Testing of FDA system pending. Power supply to the building completed and working smoothly. Defect list attended	Electrical work completed. FDA work completed. Testing of FDA system pending. Power supply to the building completed and working smoothly. Defect list attended	Electrical work completec. FDA work completed. Testing of FDA system pending. Power supply to the building completed and working smoothly. Defect list attended.	Point & circuit wiring Completed in all floors except LGF. Electrical Panel fixing complete.  Main panel termination in progress.  switch & socket fixing completed except GF, LGF and seminar block  rising main work complete.  lightening arrestor work complete.  Lift circuit work completed.  Lift circuit work completed.  Light fixture fixing in progress in LGF, GF and seminar block.	
OF ELECTR	Expected date of Completion		30.06.2019	30.06.2019	30.06.2019	30.06.2019	
05.04.2019)	Schedule date of Completion (As per W.O/PO)	nase - II	30.06.2015	30.06.2015	30.06.2015	30.06.2015	
KS (AS ON	Schedule date of Starting	jor Project pł	01.07.2013	5,315.00 01.07.2013	7,248.00 01.07.2013	01.07.2013	
	Order Value in Lakhs ₹	AC works) Ma	4,077.00	5,315.00	7,248.00	10,012.00	
STATUS OF PROGRESS OF ONGOING	Name of Agency & Consultants, WO No. & date	f (Civil, Electrical & HV.				M/s Shapoorji pallonji & Co. Ltd. WO No: NITR/PW/WO/CT/66/ 12-13/68, Dt22.02.2013	
STATUS OF	Name Of Work	MAJOR PROJECT: Construction of (Civil, Electrical & HVAC works) Major Project phase - II	Lecture Hall Complex No-2.	Mechanical Science Building.	Satish Dhaban Hall of Residence.	Golden Jublee Building	
	SL.NO	н	1.1	1.2	1.3	1.4	

	STATUS OF	PROGRESS OF ON	GOING WORI	KS (AS ON	05.04.2019)	OF ELECTR	STATUS OF PROGRESS OF ONGOING WORKS (AS ON 05.04.2019) OF ELECTRICAL CONSTRUCTION
SL.NO	Name Of Work	Name of Agency & Consultants, WO No. & date	Order Value in Lakhs ₹	Schedule date of Starting	Schedule date of Completion (As per W.O/PO)	Expected date of Completion	Work status
1.5	Faculty residence (Phase-II)		3262.00 +	01.07.2013	30.06.2015	30.06.2019	3BHK Block: Electrical wiring complete. Snag list issues resolved. 2BHK Block: Electrical wiring complete. Snag list issues resolved. FR (Small): Electrical wiring completed. Snag list submitted.
1.6	HT SUB-STATION						Transformer and HT cable erection complete and permission received from CEA for energisation. Substation charged Drainage system of substation area work completed.
7	Other Projects						
2.1	Installation of 1020 kWp Grid Connected Solar PV Plant on Roof top.	M/S Solar Energy Corporation of India Ltd., New Delhi					PPA done with M/S Azur Power. Installation work completed. CEA inspection completed. Permission for net metering is awaired from WESCO Utility.

### **GENERAL ABSTRACT**

Name of Work: Construction of Sports Complex comprising of 2 Nos. Lawn Tennis Courts, 01 Nos. Basketball Courts including Seating Galleries and lighting arrangements at NIT Rourkela, Rourkela, Odisha.

Sl. No	SUB HAED	Unit	Quantity	Unit Rate	Amount
1	Basket Ball Court	each	1	2950000.00	2950000.00
2	Lawn Tennis Court	each	2	3053000.00	6106000.00
3	Development Works				0100000.00
3.1	Drainage line				2058000.00
3.2	Scating Gallery				2411000.00
3.3	Paver block For Flooring				1383000.00
4	Electrical Works				, , , , , , , , , , , , , , , , , , , ,
		Total			14908000.00

Say ₹ 14,908,000.00

Assistant Engineer (P) BCC, CPWD, BBSR

Executive Engineer (P) BCC, CPWD, BBSR

Superintending Engineer BCC, CPWD, BBSR

Name of Work: Construction of synthetic Acrylic outdoor lawn tennis and basketball courts after dismantling the old courts including construction of drains, Seating Gallery and Lighting Arrangement at NIT Rourkela,Rourkela,Odisha
Sub Head: 1 Nos Basket Ball Court

	. No Sub -Head and Item of Work TAILS OF COST FOR 1 NOS BASKET BALL COURT	Unit	Quantity	Rate	Amount	DSR-1
1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Fngineer - in - charge,					15.
1.1						
2	Nominal concrete 1:3:6 or richer mix i/c equivalent design mix  Earth work in rough excavation, banking excavated earth in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with ½ tonne roller or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide banks or filling up ground depressions, lead upto 50 m and lift upto 1.5 m;		162.00	997.05	161522,00	15.2.
2,1	All kinds of soil					
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:	cum	162.00	427.90	69320.00	2.2.1
3.1	1:11/2:3 (1 Cement: 11/2 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	cum	27.00	6215.35	167814.00	5.1,2
4	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	kg	4020,00	67.60	271752,00	10,2
5	Providing and applying tack coat using bitumen emulsion conforming to IS: 8887, using emulsion pressure distributer including preparing the surface & cleaning with mechanical broom.					16.31
1	With medium setting bitumen emulsion,					16.31.2
.1.1	On W.B.M / W.M.M. @ 0.4 kg/ sqm.	sqm	608.00	13,20	8026.00	16.31.2.1
	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.					16,54
1	50 to 100 mm average compacted thickness with bitumen of grade VG-30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity.	cum	30.40	7140.45	217070.00	16.54.2
	Providing and laying semi- dense Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equiped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-inCharge.					16,56
I	25 mm compacted thickness with bitumen of grade VG30 @ 5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90 TPH capacity	sqm	608.00	178.45	108498.00	16.56.2
	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge					16.70
	Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not less than 5 mm in required colour and shade	sqm	402.00	594.65	239049.00	16,70.2

SI.	No Sub -Head and Item of Work  Construction of granular sub-base by providing close graded Material	Unit	Quantity	y Rate	Amount	DSR-1
	conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.					16.7
0.1	With material conforming to Grade-III (size range 26.5 mm to 0.075 mm ) having CDR Value-20	cum	60.80	1931.45	117432.00	10.78.
0	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub- base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achievethe desired density, complete as per specifications and directions of Engineer-in-Charge.	cum	121.60	2132,25	259282.00	16.79
1	Providing and laying outdoor flexible, synthetic acrylic sports flooring 8 Layers system ideal for outdoor courts and FIBA Approved of basket ball sports courts of bituminous base having combination of wet-pour acrylic coatings in total average thickness of 3-3.5mm consisting of One Layer-Resurface/Four Layer-Cusion/3 Layer Color (Application-Basket Ball), in different colour and shade, marking the court lines as per manufactures specifications and direction of engineer-in-charge. (Top visible Plan area shall be measured for the payment)	sqm	608.00	951.00	578208.00	MR
	Providing and fixing of box type basket ball poles (fixed on ground) made of double rolled steel channel of size ISLC200 of standard height with 3.20 metres extension including projection of square pipe 50x50x3 mm upto all four corners of the board including all necessary fittings welding & PU painting etc., including providing & fixing of the basket ball back board of size 1800x1050x30 mm made of 30 mm thick transparent acrylic board, all edges supported with angle iron size 50x50x3 mm frame including all necessary fittings & PU painting complete, including providing & fixing of the basket ball ring 380 mm diameter, made of 20 mm solid rod with provision for 12 number net lock hooks including all necessary fittings & PU painting all complete as per International Standard.	1 set	1.00	190000.00	190000.00	MR
	Total				2297072.00	
	Add approved cost index over DSR 2016 Items as on 10/2017 for Ro	urkela ( 13	32-102 ) /102	2 =29.41%	2387973.00 476373.00	
	Total				2964246.00	
	Add 3% Contingencies				2864346.00 85930.00	
	Total				2950276.00	
	Say				2950000.00	
	Cost of One Basket ball Court				2950000.00	

Assistant Engineer SPSD,CPWD,Sambalpur

Executive Engineer SPD,CPWD,Sambalpur

# Name of Work: Construction of Sport Complex at NIT Rourkela,Rourkela,Odisha Sub Head: 1 Nos Lawn Tennis Court

SI. No	Sub -Head and Item of Work	Unit	Quantity	Rate	Amount	DSR-16
DETAI	LS OF COST FOR 1 NOS LAWN TENNIS COURT					
1	Demolishing cement concrete manually/ by mechanical means			T T		15.2
	including disposal of material within 50 metres lead as per direction of					
	Engineer - in - charge.					
1.1	Nominal concrete 1:3:6 or richer mix i/c equivalent design mix	cum	330.60	997.05	329625.00	15.2.
2	Earth work in rough excavation, banking excavated earth in layers not					
	exceeding 20 cm in depth, breaking clods, watering, rolling each layer					
	with ½ tonne roller or wooden or steel rammers, and rolling every 3rd					
	and top-most layer with power roller of minimum 8 tonnes and dressing up in embankments for roads, flood banks, marginal banks and guide				1	
	banks or filling up ground depressions, lead upto 50 m and lift upto 1.5				1	
	m :					
2.4	All kinds of soil	01100	220.60	407.00	141464.00	2.2.4
	Providing and laying in position cement concrete of specified grade	cum	330.60	427,90	141464.00	2,2,1
J	excluding the cost of centering and shuttering - All work up to plinth					5.1
	level:					
3.1	1:11/2:3 (1 Cement: 11/2 coarse sand (zone-III) : 3 graded stone	cum	20.00	6215.35	124307.00	5.1.2
	aggregate 20 mm nominal size).					
4	Structural steel work riveted, bolted or welded in built up sections,	kg	2880.00	67.60	194688.00	10.2
	trusses and framed work, including cutting, hoisting, fixing in position					
	and applying a priming coat of approved steel primer all complete.					
5	Providing and applying tack coat using bitumen emulsion conforming to					16.31
5	IS: 8887, using emulsion pressure distributer including preparing the					10.31
	surface & cleaning with mechanical broom.					
E 4		_				16.31.2
	With medium setting bitumen emulsion. On W.B.M / W.M.M. @ 0.4 kg/ sgm.	aam	669.78	13.20	8841.00	16.31.2.1
6	Providing and laying Dense Graded Bituminous Macadam using	sqm	009.70	13.20	0041.00	16.54
٥	crushed stone aggregates of specified grading, premixed with				1	10.54
	bituminous binder and filler, transporting the hot mix to work site by					
	tippers, laying with paver finisher equiped with electronic sensor to the		-			
	required grade, level and alignment and rolling with smooth wheeled,					
	vibratory and tandem rollers as per specifications to achieve the desired					
	compaction and density, complete as per specifications and directions of					
	Engineer-in-Charge.					
6.1	50 to 100 mm average compacted thickness with bitumen of grade VG-	cum	33.49	7140.45	239134.00	16.54.2
0	30 @ 5% (percentage by weight of total mix) and lime filler @ 2%					
	(percentage by weight of Aggregate) prepared in Drum Type Hot Mix					
	Plant of 60-90 TPH capacity.					
7	Providing and laying semi- dense Bituminous concrete using crushed					16.56
	stone aggregates of specified grading, premixed with bituminous binder					
	and filler, transporting the hot mix to work site by tippers, laying with					
	paver finisher equiped with electronic sensor to the required grade, level					
	and alignment and rolling with smooth wheeled, vibratory and tandem					
	rollers to achieve the desired compaction and density as per					
	specification, complete and as per directions of Engineer-inCharge.					
7.1	25 mm compacted thickness with bitumen of grade VG30 @ 5%	sqm	669.78	178.45	119522.00	16.56.2
	(percentage by weight of total mix) and lime filler @ 2% (percentage by					
	weight of Aggregate) prepared in Drum Type Hot Mix Plant of 60-90					
	TPH capacity					40 =0
8	Providing and fixing G.I. chain link fabric fencing of required width in					16.70
	mesh size 50x50 mm including strengthening with 2 mm dia wire or					
	nuts, bolts and washers as required complete as per the direction of					
	Engineer-in-charge					
8.1	Made of G.I. wire of dia. 4 mm, PVC coated to achieve outer dia not	sqm	288.00	594.65	171259.00	16,70.2
	less than 5 mm in required colour and shade	ı I				

				· · · · · · · · · · · · · · · · · · ·		
SI. No		Unit	Quantity	Rate	Amount	DSR-16
	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer-in-Charge.					16.78
9.1	With material conforming to Grade-III (size range 26.5 mm to 0.075 mm ) having CBR Value-20	cum	66.98	1931.45	129369.00	16.78.3
10	Providing, laying, spreading and compacting graded stone aggregate (size range 53 mm to 0.075 mm) to wet mix macadam (WMM) specification including premixing the material with water at OMC in for all leads & lifts, laying in uniform layers with mechanical paverfinisher in sub-base / base course on well prepared surface and compacting with vibratory roller of 8 to 10 tonne capacity to achievethe desired density, complete as per specifications and directions of Engineer-in-Charge.	cum	133.96	2132.25	285636.00	16.79
11	Providing and laying outdoor flexible, synthetic acrylic sports flooring 8 Layers system ideal for outdoor courts and ITF Approved of tennis sports courts of bituminous base having combination of wet-pour acrylic coatings in total average thickness of 3-3.5mm consisting of One Layer-Resurface/Four Layer-Cusion/3 Layer Color (Application-Tennis) as per manufactures specifications and direction of engineer-in-charge. (Top visible Plan area shall be measured for the payment)	sqm	669.78	951.00	636961.00	MR
	Tennis Pole and net- Movable Made of 80mmx80mm Ms pipe with special internal ratchet system for tightening the rope/net. Weight per pole is approx x 150 kg. Combined weight of both poles is approx. 300 kg. Easy moving on 2 double PU wheels which are non making branded wheels to help protect floors. Use of Branded Epoxy paint	1 set	1.00	70000.00	70000.00	MR
	Total				2450806.00	
	Add approved cost index over DSR 2016 Items as on 10/2017 for =29.41%	r Rour	kela ( 132-1	02 ) /102	512865.00	
	Total				2963671.00	
	Add 3% Contingencies				88910.00	
	Total				3052581.00	
	Say				3053000.00	
	Cost of One Lawn Tennis Court				3053000.00	

Assistant Executive Engineer RPSD,CPWD,Sambalpur

Executive Engineer SPD,CPWD,Sambalpur

Name of Work: Construction of Sport Complex at NIT Rourkela,Rourkela Odisha Sub Head: Seating Gallery

SI. No	Sub -Head and Item of Work	Quantity	Rate	Unit	Amount	DPAR-12
1	Stilt Portion of Multistorey RCC structure (up to ht of 3.35m) Applicable area onl	180	9850	sqm	1773000	1.8.1
	Total				1773000.00	
	Add approved cost index over DPAR 2012 as on 10/2018 for Rourkela 132%				567360.00	
	Total Add 3% Contingencies				2340360.00	
				70211.00		
	Total				2410571.00	
	Say			2411000.00		

# Name of Work: Construction of Sport Complex at NIT Rourkela,Rourkela,Odisha Sub Head: cost of drainage line

SI. No	Sub -Head and Item of Work	Unit	Quantity	Rate	Amount	DSR-16
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.					2.
1.1	All kinds of soil.	cum	120	166.4	19968	2.8.
	Providing and laying in position cement concrete of specifiedgrade excluding the cost of centering and shuttering -all workupro plinth level.					4.:
2.1	1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	cum	24	4209.05	101017.2	4.1.1
3	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:					6.:
	Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	55.2	4751.65	262291.08	6.1.
	12 mm cement plaster of mix :					13.
	1:6 (1 cement: 6 coarse sand)	sqm	390	168.25	65617.5	13.4.
	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :					5.
5.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	cum	21	5772.65	121225.65	5.1.
6	Neat cement punning.	sqm	300	42.6	12780	13.1
7	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.					10.2
7.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works(100 kg /sqm)	kgs	10500	85.95	902475	10.25.
8	Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.					13.84
8.1	Two coats	sqm	1150	75	86250	13.84.2
	Total				1571624.43	
	Add approved cost index over DSR 2016 Items as on 10/2018 for Rourkela (132-102) /102 =29.41%					
	Total					
	Add 3% Contingencies					
	Total				2058132.43	
	Say				2058000.00	
	cost of drain					

No. NITR/LS/2018/11/1267

Annexure- A6

FTS/2570K

To Director NIT Rourkela

℃Date: 21/11/2018

2 2 May 2018

2.0.000

Subject: Approval of Green house for nursery and research purpose

Respected Sir,

Please find below requirements and specifications of greenhouse for the purpose of Nursery and research which have been finalized after interacting with two firms, **Saveer 18/09/2018**.

# Our Requirements

SL no		No.	Working
1	Poly house or hardening room		area
2	Poly house (Fan & Pad System) or Nursery Greenhouse	1	800 sq ft
3	Green house	1	800 sq ft
		3	300 sq ft

# **Specifications**

All structures must be erected on strong foundation to withstand any adverse wind (load of 100 km/hr or more) and climatic condition at NIT Rourkela and must match DBT guidelines. Electric devices of high quality and ISI approved fittings must be provided. Doors should be made with anodises aluminium. More details as follows:

Poly house/Hardening Chamber

with pipes (anticorrosive, humidity resistant, ISI standard), 6mm multiwalled polycarbonate sheet with more warranty period, Shade (green) net, 4 ft. wide door (2 no's), floor: natural soil, proper ventilation

Nursery Poly house (Fan & Pad System)

with steel frame, anticorrosive pipes, 6mm multiwalled polycarbonate sheet with more warranty period, temperature: 25(ambient)-50°C, shade (green) net, fan pad system for cooling (fan with auto opening system), auto control unit for temperature, LED lights with white and warm white fluorescence, photoperiodic timer, humidity upto 95%, floor: cemented, plant work station/benches for growing plant trays or saplings

#### Green house

with steel frame, anticorrosive pipes, separate door to access each room, 6mm multi-walled polycarbonate sheet with more warranty period, side windows: 4 ft., temperature: 22-50°C, 60-95% humidity by fogging or misting, air curtain with auto on or off, overhead shade (black) net, fan pad system, auto control unit for temperature, photoperiodic timer, humidity controller, floor: cemented, LED lights with white and warm white fluorescence (100-400 µEinstein.m<sup>-2</sup>·s<sup>-2</sup>), plant work station/benches for growing plant trays

## Plants to be grown:

Poly house or hardening room	Hardening of saplings
Poly house (Fan & Pad System) or	Seasonal flowers, saplings of medicinal
sapling production house/Nursery	plants, saplings of tropical plants including
greenhouse	regional plants
Green house for Research purpose	1. Arabidopsis thaliana (22 degree C),
	2. Oryza sativa (37-degree C)
	Etc.

Approximate estimated cost: 35,00000/-.

This is for your kind approval.

Sincerely,

Prof. B.B. Sahu, LS Prof. Balasubramanian P, BM Prof. P.N. Vishwakarma, PH

HOD. LS



# राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेला

# National Institute of Technology ROURKELA - 769 008

Er. Santosh Kumar Upadhyay Registrar

इं. सन्तोष कुमार उपाध्याय कुलसचिव

To

No.NITR/RG/2018/L/O208 Dt.02.05,2018

The Executive Engineer Central Public Works Department (CPWD) Sambalpur Division Sambalpur (Odisha)

Dub: Ractification of defects in the basement area of Electrical and Electronics Science Building, other buildings of NIT, Rourkela.

Sir,

The following buildings of NIT Rourkela were constructed by M/s UPRN Ltd during 2010 - 2015:

- 1) Electrical and Electronics Science Building..
- 2) Lecture Hall Complex-1.

The following defects were abserved in the last two years:

- 1) Falling of cladding tiles from the Building which causes serious safety and secuty concern for the Students, Faculty and Staff members.
- 2) Water leakage in the basement area of the Electrical and Electronics Science and other buildings.

We shall be highly thankful to you if you can suggest some remedial measures, so that the same can be rectified at the earliest. Expecting a quick reply from you.

With regards,

Yours sincerely,

[S. K. Upadhyay] REGISTRAR

Copy to:

1) Secretaru to Director, NIT Rourkla

2) Dean (PD).

(EM) Eccutive Engineer (EM)

- 30 -

दूरभाष/Phone: 0661-2462021(O)2476773(O), 2463021(R), मोबाइल/Mobile: 9437153285 फैक्स/Fax: 0661 - 2462022, 2472926, ईमेल/E-mail: registrar@nitrkl.ac.in

Website www.nitrkl.ac.in

### **Zimbra**

mondalj@nitrkl.ac.in

# Fwd: Rectifications of defects of electrical science building and lecture hall-I

From: Joydip Mondal < mondalj@nitrkl.ac.in>

Wed, Apr 03, 2019 11:15 AM

**Subject:** Fwd: Rectifications of defects of electrical

science building and lecture hall-I

**To:** lpsdcpwd@gmail.com, spdcpwd@gmail.com

**Cc :** JAPESH BERA <jbera@nitrkl.ac.in>, pradip sarkar <sarkarp@nitrkl.ac.in>, CHITTARANJAN

PATRA <crpatra@nitrkl.ac.in>

Dear Sir,

This has reference to the trailing mail, please submit the report at the earliest.

Regards

Joydip Mondal EE(CIVIL)

**From:** "Joydip Mondal" <mondalj@nitrkl.ac.in> **To:** lpsdcpwd@gmail.com, spdcpwd@gmail.com

Cc: "JAPESH BERA" <jbera@nitrkl.ac.in>, "pradip sarkar" <sarkarp@nitrkl.ac.in>,

"CHITTARANJAN PATRA" <crpatra@nitrkl.ac.in> **Sent:** Monday, January 21, 2019 4:31:08 PM

Subject: Rectifications of defects of electrical science building and lecture hall-I

Dear Sir,

This has reference to the letter no. NITR/RG/2018/L/0208 dated 02.05.2018 regarding rectification of defects in the basement area of Electrical and electronics science building ,other buildings and your subsequent site visit. Please submit the report at the earliest.

Regards

Joydip Mondal EE(CIVIL) From: Joydip Mondal < mondalj@nitrkl.ac.in>

Mon, Jan 21, 2019 04:31 PM

**Subject:** Rectifications of defects of electrical science

building and lecture hall-I

To: lpsdcpwd@gmail.com, spdcpwd@gmail.com

Cc: JAPESH BERA < jbera@nitrkl.ac.in>, pradip sarkar < sarkarp@nitrkl.ac.in>, CHITTARANJAN

PATRA <crpatra@nitrkl.ac.in>

Dear Sir,

This has reference to the letter no. NITR/RG/2018/L/0208 dated 02.05.2018 regarding rectification of defects in the basement area of Electrical and electronics science building ,other buildings and your subsequent site visit. Please submit the report at the earliest.

Regards

Joydip Mondal EE(CIVIL)



Annexure- A8

# NATIONAL INSTITUTE OF TECHNOLOGY

राउरकेला ROURKELA - 769008, ओडिशा ODISHA

Date



NITE / EM/2018/1/1166/2108

D4-31/10/18

To,
M/s EASTERN GAS EQUPMENTS PVT LTD
A-66/1, INDUSTRIAL AREA,
KHARVEL NAGAR, UNIT-III,
Bhubaneswar, Odisha

Sub: - Installation of Gas Detection system and flexible pipe

Respected sir/madam,

Through the column of this letter, I would like to draw your kind attention towards the undermentioned matter.

Your agency was entitled for laying of gas pipeline and installation of Gas Detection System work prior to the installation of kitchen equipment at various mess of NIT, Rourkela. You have successfully completed the laying of gas pipeline and work of Gas Bank. However, the installation work of Gas detection system and flexible pipe are still pending. As all other kitchen equipment are already placed in respective kitchens and at final stage of installation and other agencies can move forward with the final installation only after the completion of Gas pipeline work.

Hence, therefore you are requested to arrange for the installation of above-mentioned work as early as possible, failing which we will opt, other means to complete the work. With a hope of getting a suitable, reply at the earliest

Thanking you,

With best regards,

JOYDIP MONDAL

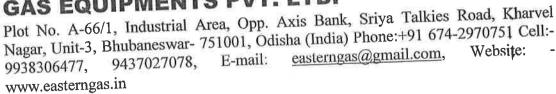
**EXECUTIVE ENGINEER** 

NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA



# **EASTERN**

# GAS EQUIPMENTS PVT. LTD.





Ref No. EGEPL/0125/18-19

DT. 02.11.2018

To. The Executive Engineer National Institute of Technology. Rourkela: - 769008

Sub: - Request Letter for Release of Due Balance Payment against supplied of Materials.

Your Work Order No. NITR/PW/WO/CT/51/15-16/54, Dated-30/03/2016

Dear Sir,

With Reference to your above order, we had supplied and Installation the material at NIT Rourkela site against our challan No. 2842, 2843, 2844, 2845 on Dt. 04.05.2017, at your R. R. Patel Cafeteria DBA Mess Hostel ,G.D birla vishwesya raiah hall, Vikram Sarabha hall, D.Ambani M.S. Swami Nathan Residence, C.V Raman Residency, Satish Dhawan hall, Homl Jehangir Bhaba,KMS hall at your project site. But we have received Rs.3,41,144.00 dated 26th July,18. From last 8 months our bill is pending at your site,

So we are requesting you to kindly Release the Balance amount Rs.5,67,633.00 as soon as possible. Then we will start rest of the work,

For Eastern Gas Equipments Pvt. Ltd.

For Eastern Gas Equipments Pvc Ltd Manyare Ka N'8LR9 Managing Director

(Authorise Signature)

Mr. shoravour oliscuss.

Please oliscuss.

### Annexure- A9

mondalj@nitrkl.ac.in

#### **Zimbra**

# Connection of L 18 mumty level frames at GJB

From: Pradip Sarkar <sarkarp@nitrkl.ac.in>

Wed, Feb 27, 2019 12:23 PM

Subject: Connection of L 18 mumty level frames at GJB

To: Abhilash <abhilash@informarchitects.com>, GJB

<gjb@informarchitects.com>, nit\_se
<nit\_se@informarchitects.com>

**Cc:** JAPESH BERA <jbera@nitrkl.ac.in>, Joydip Mondal <mondalj@nitrkl.ac.in>

Dear Sir:

The two structural steel frames with associated louvers on the north and south side of the tower block terrace are given in the drawing number NIT/RKL/GJB/WD/AR-12. However, both of these two frames with louvers at the height of 70 m (approximately) from the ground will be subjected to a significant amount of lateral wind force. The details of the connections between the frames and the supporting beams with seven numbers of M16 bolts of 4.6 grade as given in the drawings are appear to be not sufficient to resist the wind force (checked by an independent calculation). We are particularly concerned about the safety of the structure as these frames are already placed at the terrace of the tower block, Golden Jubilee Building.

Could you please recheck the design of the connections (especially for the base moment generated by the wind force) and confirm its adequacy? Also, we need your support for a suitable retrofitting scheme to strengthening the connection, if required.

Additionally, I would like to inform you that the wind force will transfer approximately 250 kN factored shear and 750 kN-m factored moment (twisting) to the supporting beam at the event of extreme wind as per our independent calculation. I am sure your designer has considered these forces while designing the supporting RC beam at the roof level.

Thank you, Sincerely,

Pradip Sarkar PIC, Civil Construction Dr. Pradip Sarkar, Associate Professor
Department of Civil Engineering
National Institute of Technology Rourkela
Odisha - 769 008, INDIA
Tel. +91-661-246-2326, Cell. +91-94394-29739

#### **Zimbra**

# mondalj@nitrkl.ac.in

#### **Fwd: REQUIRE DB DETAILS FOR GJB**

From: Joydip Mondal <mondalj@nitrkl.ac.in>

Fri, May 11, 2018 11:18 AM

1 attachment

Subject: Fwd: REQUIRE DB DETAILS FOR GJB

To: nit se <nit\_se@informarchitects.com>, Abhilash

<abhilash@informarchitects.com>

Cc: Susovon Sananta <samantas@nitrkl.ac.in>, JAPESH BERA <jbera@nitrkl.ac.in>, Rajesh Ku. Sahoo <sahoork@nitrkl.ac.in>, satyendra das,,,,

<satyendra@nitrkl.ac.in>

Dear Sir,

With reference to the trailing mail, please provide the require DB details at the earliest.

Regards Joydip Mondal EE(Civil)

From: "rajesh kumar sahoo" <sahoork@nitrkl.ac.in>

To: "nit se" < nit\_se@informarchitects.com>

Cc: "Joydip Mondal" <mondalj@nitrkl.ac.in>, "DEAN-PD DEAN(PD)" <dean-

pd@nitrkl.ac.in>, "JAPES BERA" <jbera@nitrkl.ac.in>

Sent: Friday, May 11, 2018 10:37:22 AM

Subject: Fwd: REQUIRE DB DETAILS FOR GJB

For necessary action asap.

From: "Kartik Chandra Nandi" <kartik.nandi@shapoorji.com>

To: "rajesh kumar sahoo" <sahoork@nitrkl.ac.in>

Cc: "SATYENDRA DAS" <satyendra@nitrkl.ac.in>, "nit se"

<nit\_se@informarchitects.com>, "asutosh.patra" <asutosh.patra@shapoorji.com>,

"avijit choudhuri" <avijit.choudhuri@shapoorji.com>, "SUJOY.SHIKARI"

<SUJOY.SHIKARI@shapoorji.com>

**Sent:** Friday, May 11, 2018 10:12:52 AM

Subject: RE: REQUIRE DB DETAILS FOR GJB

Dear Sir,

As per discussion had with you, please provide us the DB details for Golden Jubilee Building as mentioned as bellow.

Sl. No.	Type of DB	Location- GJB	Present status	Require Details
01	DB at Server Room	Lower Ground Floor: Core-2	No Details in Drg.	DB Size & Ckt. Details
02	ACDB	Lower Ground Floor: Core-1, 2 & 3	No Details in Drg.	DB Size & Ckt. Details
03	PDB-2	Lower Ground Floor: Core-3	No Details in Drg.	DB Size & Ckt. Details
04	ACDB	Seminar Block (LGF)	No Details in Drg.	DB Size & Ckt. Details
05	EXT DB	Seminar Block (LGF)	No Details in Drg.	DB Size & Ckt. Details
06	ELDB	Fifth Floor: Core-1, 2 & 3	No Details in Drg.	DB Size & Ckt. Details
07	ELDB	Sixth Floor: Core-1, 2 & 3	No Details in Drg.	DB Size & Ckt. Details

So, you are requested to send the DB details as soon as possible to execute the electrical work in scheduled time.

Thanks & Regards,

Kartik Chandra Nandi

Project – NIT Rourkela, Odisha | M – 8599006070

#### mondalj@nitrkl.ac.in

#### Re: Regarding Canopy structure of Golden Jubilee Building.

From: Pradlp Sarkar <sarkarp@nitrkl.ac.in>

Wed, Jan 30, 2019 07:46 PM

Subject: Re: Regarding Canopy structure of Golden Jubilee

Building.

To: Abhilash <abhilash@informarchitects.com>

Cc: Joydip Mondal <mondalj@nitrkl.ac.in>, JAPESH BERA

<jbera@nitrkl.ac.in>, nit se
<nit\_se@informarchitects.com>

Dear Sir:

The drawings of canopy structure received from M/S Inform Architects Pvt. Ltd. does not give the complete details of the anchorage. For example, the embedded lengths of the anchor bolts are not given in the drawing. Steel columns are to be anchored with the RC Beams at top and bottom of the columns. Details of these connections given in the drawings are based on the insert plate which is not available. We did not get any response from you regarding the alternative design scheme since August. Redesign of the fasteners requires the forces at each of the connections. Could you please send us the connection forces at all the base place locations?

I am trying to contact you through your cell phone and land phone of M/S Inform Architects Pvt. Ltd. Bangalore office but could not get through.

Please help

Pradip Sarkar PIC, Civil Construction

Dr. Pradip Sarkar, Associate Professor Department of Civil Engineering National Institute of Technology Rourkela Odisha - 769 008, INDIA Tel. +91-661-246-2326, Cell. +91-94394-29739

---- Original Message -----

From: "Abhilash" <abhilash@informarchitects.com>

To: "Joydip Mondal" <mondalj@nitrkl.ac.in>, "nit se"

<nit\_se@informarchitects.com>

Cc: "JAPESH BERA" <jbera@nitrkl.ac.in>, "pradip sarkar"

<sarkarp@nitrkl.ac.in>, "Shakeeb" <shakeeb@tpcl.in>, "khizar"

<khizar@tpcl.in>

Sent: Wednesday, 12 September, 2018 09:50:06

Subject: Re: Fwd: Regarding Canopy structure of Golden Jubilee Building.

```
Dear Mr. Mondal,
```

Please find the attached model of steel structure received from Structural designer as request.

My apologies due to the delay in this.

Thanks

Abhilash

```
----- Forwarded Message -----
```

Subject: Re: NIT GJB Rourkel - Regarding Canopy structure of Golden

Jubilee Building.

Date: Tue, 11 Sep 2018 20:41:44 +0545

From: sarita . <sarita@tpcl.in>

To: GJB <gjb@informarchitects.com>

CC: Shakeeb <shakeeb@tpcl.in>, khizar <khizar@tpcl.in>

Dear Sir Find enclosed the model of steel structure. The loads on columns are negligible compared to their capacity. Hence the same is ok.

Thanks Sarita

```
On 10-09-2018 11:16 AM, Joydip Mondal wrote:
> Gentle Reminder
>
> Dear Mr. Abhilash,
>
> With reference to the trailing mails, site is badly wanting the
> below mentioned details as erection of canopy area at entrance area is
> totally stop. Please be noted that unless the erection of the entrance
> canopy is completed, the structural glazing works in the entrance area
> also cannot be executed.
>
> Regards
>
> Joydip Mondal
>
> EE(Civil)
>
```

<sup>&</sup>gt; \*From: \*"Abhilash" <abhilash@informarchitects.com>

```
> *To: *"Joydip Mondal" <mondalj@nitrkl.ac.in>
> *Cc: *"pradip sarkar" <sarkarp@nitrkl.ac.in>, "JAPESH BERA"
> <jbera@nitrkl.ac.in>, "nit se" <nit_se@informarchitects.com>
> *Sent: *Thursday, August 30, 2018 11:06:15 AM
> *Subject: *Re: Fwd: Regarding Canopy structure of Golden Jubilee
Building.
> Dear Mr. Mondal,
> Amit is coordinating and we have already asked the same from
> structural engs. as soon as we get it will share with you. Generally
> eng. donot share the stat model so we are trying to get the same but
> there is some delay.
> Thanks
> Abhilash
> On 30-08-2018 10:45 AM, Joydip Mondal wrote:
      Dear Abhilash,
>
>
      With reference to the trailing mail, Details required from your
      end is pending till date. Please give the below details. *Matter
      most urgent*.
>
>
      Regards
      Joydip Mondal
      EE(Civil)
>
      *From: *"Pradip Sarkar" <sarkarp@nitrkl.ac.in>
       *To: *"Abhilash" <abhilash@informarchitects.com>
>
      *Cc: *"nit se" <nit se@informarchitects.com>,
      amit@informarchitects.com, mondalj@nitrkl.ac.in, "JAPESH BERA"
      <jbera@nitrkl.ac.in>
       *Sent: *Thursday, August 23, 2018 4:35:02 PM
       *Subject: *Fwd: Regarding Canopy structure of Golden Jubilee
Building.
>
       Dear Abhilash:
>
>
       Greetings from NIT Rourkela!
>
       A couple of issues are holding our contractor M/S Shapoorji
       Pallonji back to start the erection of Steel Truss Canopy over the
       main entrance of Golden Jubilee Building. We need the following
       details from you to start this work. Please note that we have
       received your approval of lowering the canopy for about a meter
       which allows the required space for lifting gantry.
>
       (i) Kindly provide us with an alternate connection detail for
```

```
'structural steel member-to-reinforced concrete column' joints as
      drilling a through bolt hole may cut the longitudinal
      reinforcements of the critical columns and weaken the entire
>
      structure. Please refer the appended mail from our contractor M/S
>
      Shapoorji Pallonji for further details.
>
>
      (ii) We are particularly concerned about the load transfer
>
      mechanism for this canopy and subsequently safety of the building
>
      as we found that the canopy is transferring a considerable amount
>
      of load (in vertical as well as transverse directions) to the
>
      mid-span of two critical columns. Although we trust your design,
>
      we are inquisitive about the relevant design details. Can I
>
      request you to share us the final computer model (in STAAD-Pro or
      ETABS or whatever other software that you have used) of Golden
>
      Jubilee Building incorporating the Steel Truss Canopy?
>
>
>
      Kindly treat this mail as URGENT!
>
      With warm regards,
>
      Pradip (PIC, Civil Construction)
>
>
      Dr. Pradip Sarkar, Associate Professor
      Department of Civil Engineering
>
>
      National Institute of Technology Rourkela
>
      Odisha - 769 008, INDIA
>
      Tel. +91-661-246-2326, Cell. +91-94394-29739
>
      *From: *"Sujoy Shikari" <sujoy.shikari@shapoorji.com>
      *To: *"Joydip Mondal" <mondalj@nitrkl.ac.in>, sarkarp@nitrkl.ac.in
>
      *Cc: *"avijit choudhuri" <avijit.choudhuri@shapoorji.com>, "nit
>
      se" <nit_se@informarchitects.com>, amit@informarchitects.com
      *Sent: *Wednesday, 22 August, 2018 09:32:54
      *Subject: *FW: Regarding Canopy structure of Golden Jubilee
Building.
>
>
      Dear Sir,
>
>
      We would like to draw your kind attention on the below points in
      reference to the construction of steel canopy at the entrance of
>
>
      Golden Jubilee Building, for which the work is getting delayed:
>
      ·We had received the RCC column detail drawing on 19.02.2014
      (drawing No: NIT-S-40A, NIT-S-40B and NIT-S-40C) & 10.09.14
>
      (drawing No: NIT-S-40D), Second floor mezzanine framing plan slab
>
>
      RCC detail drawing on 30.10.2014 of drawing no S-NIT-105, and
>
      Third floor framing plan slab RCC detail drawing on 13.10.2014 of
>
      drawing no S-NIT-106. But there was no details for Canopy
```

structure joint with RCC column through bolt in those drawings.

We had received the first Canopy structure drawing on 26.04.2016 but there was no structural details and we had informed the issue to Inform Architect by mail. Then the canopy length was 11M (at

4 of 9

>

```
grid B, projected towards north).
       ·After that we have received the final canopy structure drawing of
 >
       revised canopy length of 8 M at the same location on 31.01.2018
       and the drawing is showing the Canopy structure joint with RCC
 >
 >
       column through bolt. But as per the trailing mail at this stage it
 >
       is not possible for us to install the bolts as the RCC columns
       were constructed long back. Your suggestion for alternative
 >
 >
       methodology for fixing the bolts is requested.
 >
 >
       Other than the above many other inputs as per below trailing mail
>
       is still pending from M/s Inform Architect.
>
>
      Also kindly note that, as informed to you vide our letter
      SPCL/1067/NITR/18-19/1129 dated 09.08.2018 we have requested NITR
>
      for increasing the space between the third floor slab and top of
>
      Canopy structure as the space as per available drawing is very
>
>
      less for movement of the crane's boom required for erection of the
>
      Canopy structure. The same was discussed with Inform Architect
>
      site representative & NITR also and it was agreed to do the
>
      construction as per the above.
>
>
      *Regards, *
>
      * *
>
      *Sujoy Shikari*
>
>
      *NIT Rourkela, Odisha*
>
>
      *Mob.No.: +91 8328955808*
      cid:image003.jpg@01D2C598.2185BF80
>
      *From: *Joydip Mondal [mailto:mondalj@nitrkl.ac.in]
      *Sent:* 30 July 2018 15:54
      *To:* Abhilash; nit_se@informarchitects.com
      *Cc:* Avijit Choudhuri; Sujoy Shikari; Shraban Behera; Manoranjan
>
>
      Mahapatra; pradip sarkar
      *Subject:* Fwd: Regarding Canopy structure of Golden Jubilee
>
Building.
>
>
      Dear Sir,
>
>
      Please give the below details immediately.
>
>
      Regards
>
>
      Joydip Mondal
>
>
      EE (Civil)
>
```

```
*From: *"Sujoy Shikari" <sujoy.shikari@shapoorji.com
      <mailto:sujoy.shikari@shapoorji.com>>
>
      *To: *"Abhilash" <abhilash@informarchitects.com
>
      <mailto:abhilash@informarchitects.com>>, "nit se"
>
      <nit se@informarchitects.com <mailto:nit se@informarchitects.com>>
>
      *Cc: *"Joydip Mondal" <mondalj@nitrkl.ac.in
>
      <mailto:mondalj@nitrkl.ac.in>>, "avijit choudhuri"
>
      <avijit.choudhuri@shapoorji.com
      <mailto:avijit.choudhuri@shapoorji.com>>, "ashish singh"
      <ashish.singh@shapoorji.com <mailto:ashish.singh@shapoorji.com>>
      *Sent: *Monday, July 30, 2018 10:49:27 AM
      *Subject: *RE: Regarding Canopy structure of Golden Jubilee
Building.
      Dear Sir,
>
      Till date we have not received any inputs/clarification for the
      below trailing points from your end. Please clarify the below
      issues ASAP.
>
      *Regards, *
>
>
      * *
>
      *Sujoy Shikari*
      *NIT Rourkela, Odisha*
>
>
      *Mob.No.: +91 8328955808*
      cid:image003.jpg@01D2C598.2185BF80
      *From: *Sujoy Shikari [mailto:sujoy.shikari@shapoorji.com]
      *Sent:* 02 June 2018 16:58
      *To: * 'Abhilash'; nit se@informarchitects.com
      <mailto:nit se@informarchitects.com>
      *Cc:* avijit.choudhuri@shapoorji.com
      <mailto:avijit.choudhuri@shapoorji.com>;
'ashish.singh@shapoorji.com'
      *Subject:* Regarding Canopy structure of Golden Jubilee Building.
>
      Dear Sir,
>
      The following inputs/clarification is required to execute the
      Canopy structure of Golden Jubilee Building.
      1. Materials details for Gutter.
      2. Gutter down take pipe detail G.A drawing and specification.
      3. Right angle hollow section and square hollow section splice
detail.
```

4.As per G.A drawing in section 3-3 at second floor Mezz. level, 8 nos(4x2 nos) 25 dia. through bolts are showing but the structure has already been constructed and at this stage to drill the  $900\text{mm} \times 900\text{mm}$  column is not possible.

\*Regards, \*

\* \*

>

>

> >

>

>

>

>

>

>

>

>

>

\*Sujoy Shikari\*

\*NIT Rourkela, Odisha\*

\*Mob.No.: +91 8328955808\*

cid:image003.jpg@01D2C598.2185BF80

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> --
> warm regards,
> Abhilash
> *For InFORM Architects*
> No. 422, 2^nd Floor*, *9^th Main Road, Banashankari 2^nd Stage,
> *Bangalore* 560 070 India
> Phone: +91 80 2671 3360 | 3361 | 3362 | www.informarchitects.com
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# Estimate for Installation of LED StreetLights in Residential Area in, NIT, Rourkela

SI. No.	NITR Ref.	Description	Unit	Rate in Rs	Quantity	Amount in Rs
1		Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required				
	12	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre	183.00	100	18,300.00
2		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
	43	25 mm	Metre	95.00	100	9,500.00
3	174	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Metre	145.00	50	7,250.00
4	175	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	Metre	38.00	400	15,200.00
5		Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.	4			-
	180	Upto 35 sq. mm	Metre	182.00	300	54,600.00
6		Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				_
	226	4 X 10 sq. mm (25mm)	Each	116.00		23,200.00
7	229	4 X 35 sq. mm (32mm)  Supply of following size of XLPE insulated, PVC sheathed, round armoured aluminium conductor power cable of 1100 volt grade		199.00	10	1,990.00
		4 X 10 sq. mm	Metres	151.00	1000	151,000.00
		4 X 35 sq. mm	Metres	281.00	500	140,500.00

8	Supply of materials and installation of pipe earth electrode made out of 50 mm dia class B(05.03kg/metre) G.I. pipe of 3.0 metre long with arrangements for fitting/ termination of G.I. flat / wire with G. I. nut bolts & washers including cost of charcoal, salt, foreign soil, water pouring arrangements, brick masonary enclosure on top with removable RCC cover complete with labour for excavation of pit in all kinds of soil & rock as required and as per direction of Engineer-incharge.		4000.00	4	16000.00
9	Supply of materials and installation of earth rod electrode made out of 19 mm dia 1200mm long with arrangements for fitting/ termination (with street light pole by providing suitable extra one nut for pole) of G.I. flat / wire with G. I. nut bolts with clamp & washers for all kinds of soil & rock as required and as per direction of Engineer-in-charge.		750.00	100	75000.00
10	Supply, delivery, installation, testing & commissioning of L.T. outdoor plinth mounted type distribution boards made out of 2 mm thick CR sheet metal cubicle fixed on m.s. channel base, duly acid treated for derusting and painted with power coated paint of approved shade; dust, damp & vermin proof; having hinged door and compartmental arrangement for each equipment & busbar chamber; having provision for cable/ conduit entry from bottom, earthing studs as per specification mentioned below duly factory wired conforming to the relevant ISS and as per special conditions of contract making good the damages caused complete as per the direction of Engineer-in-charge.	Set	85760.00	3	257280.00
	Incomer				
	80A 4P MCCB 55KA adjustable overload & short circuit protection.	Set	-	1	
	Al. Bus-bar size(25×6)mm² 4P	Set		1	
	Multifunction Meter	Set		1	
	Indicator (R-Y-B) with control fuse	Set		1	
	Outgoing:	Set		2	
	(SP MCB x 3), 20A, 10K, C-curve	Set		3	
	Contactor with bimetalic relay, 3TF, 4P, 70A, coil volt 230V AC with 2 nos. NO/NC with a DP MCB	Set		1	

	Timer Astronomical, Schinder/ SIEMENS make	Set		1	
	Selector switch	Set		1	
	Push buttons on/off	Set		1	
	Outgoing busbar type terminal block in 03 sets.				
11	Supply and fixnig of 4 pole, 32A, terminal block with (2~6)A SP MBC	Set	397.00	100	39700.00
12	Supply, Installation, Testing and commissioning of L.T. outdoor Aluminium busbar panel having (25 x 6) mm 4 busbars along with its grouting with PCC footing	Set	5300.00	6	31800.00
13	Supply LED streetlight fixture with IP66 protection 150W, cool day light as per approved make.	Nos.	5850.00	100	585000.00
14	Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep)and refilling etc as required				-
	100 mm dia	Mtrs.	765.00	50	38250.00
15	Installation of 7.0m Long Octagonal pole & fixing of streetlight fixture for operation on 240V, single phase AC complete with a foundation 500mm X 500mmX 600mm base plate of 300x300 mm with anchor bolt duly embedded in 1:1.5:4 RCC including excavation pit, concreting, providing GI pipes for cable entry junction box with prewired 2 Amp SP MCB, loop-in -loop-out terminal block, wiring with copper 2.5mm 3 core flexiable cable upto the fitting etc., complete as required . Cost of foundation bolt not included.	Set	5000.00	30	150000.00
16	Supply of Hot Dip Galvanized 07 mtrs Octagonal Poles (Bajaj) with foundation bolt and 1.5 m single arm bracket, camouflaged junction box and electrical control gears with weather proof flush door and locking facility.	Set	13000.00	30	390000.00
	TOTAL				2,004,570.00
	GST @ 18 % extra				360,822.60
	GRAND TOTAL				2,365,393.00



	Estimate for construction of 33/0.433 k	XV 750 KV	A sub-stat	ion for GJB	
SI. No	Description	Unit	Rate	Quantity	Amoun
1	Laying of one number XLPE power cable of 33 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.				
	Above 120 sq. mm. and upto 400 sq. mm.	Metre	231.00	50	11,550.00
2	Supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 33 KV grade as required.			30	11,550.00
	240 sq. mm.	Set	14,225.00		28,450.00
3	Supplying and making outdoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 33 KV grade as required.				29, 150100
	240 sq. mm.	Set	19,128.00	2	20.356.00
	Providing and fixing G.I. pipe complete with G.I fittings including trenching and refilling etc.	361	13,128.00		38,256.00
	65 mm dia nominal bore	RM	453.55	10	4,535.50
	80 mm dia nominal bore	RM	573.40	10	5,734.00
	Supplying and Earthing with <b>Cu earth plate</b> 600mm x 600 mm x 3 mm thick including accessories and providing masonary enclosure with cover plate having locking arrangement and watering pipe etc, with coke	Set	9,500.00	4	38,000.00
	Providing & fixing <b>50mm x 6mm G.I. strip</b> on surface or in recess for connections etc. as required.				20,000,00
		Rm	111.00	50	5,550.00
	Providing & fixing <b>50mm x 6mm Cu. strip</b> on surface or in recess for connections etc. as required.	Rm	1001.00	20	20,020.00
	Supply, laying, jointing, testing and commissioning of ISI marked (IS: 14930, part 2) H.D.P.E. (DWC) Double wall Corrugated pipe for cable laying having corrugation on outer wall and plain smooth surface at inner side			20	20,020,00
i ŝ	300 mm. ID	RM	803.00	10	8,030.00
ii [	150 mm. ID	RM	546.00	10	5,460.00

9	Supply, Installation, testing, Commissioning of J K Maintenance Free Chemical Gel Earthing - Dual Pipe (GI) Technology of "JK CHENSODE" 3mtr long 80mm dia permenantly sealed at both the ends with the lead terminal at the top along with 50 kgs of duly filled with metallic conducting compound permenantly sealed at both the ends with the lead teRminal at the top along with 50 kgs of "RESLOW" grounding minerals duly tested & certified by CPRI. The earth pit chamber shall be				
	of heavy duty Polyplastic earth pit cover.				
		Each	20000.00	4	80,000.00
10	H.V. PANEL (33 KV - VCB PANEL)				nii
	Supply, installation, testing & commissioning of indoor type floor mounted metal clad, IP 52, 33 KV VCB panel with 3 nos VCB (1 incomer and 2 out goings), totally enclosed & fully interlocked, horizontal drawout, horizontal isolation type breaker as per IS: 13118, as ammended upto date and additional specifictions, having capacities as mentioned below, single break, trip free mechanism, motorised charged and auto closing breaker suitable for use on 33 KV, 3 Phase, 50 Hz A. C. supply with short circuit fault level of 1000 MVA, complete with self contained, fully interlocked, rack in and rack out mechanism, air insulated but encapsulated Aluminium alloy bus bars of suitable fault level, G.I. earth bar, earth bar, breaker featured with mechanical ON / OFF indicator with hand trip device, spring release coil, shunt trip coil, control voltage of 24 Volt DC, TNC, LED type indicating lamps for phases and trip conditions and auxiliary switch of 6 NO + 6 NC and equipped with following switchgears and accessories.				
	The panel should be suitable for connections for up to 3 x 300 sq.mm XLPE 33 KV cable (cable entry from bottom), end termination with heat shrinkable jointing material etc. as required. (The Cost of end termination not included in this item)				-

ite) Iri	p circuit supervision relay	Set	1,600,000.00	1	1,600,000.0
	aster trip relay				
(d) N4-	actor tele vel				
protec	tantaneous element for O/L, E/F and S/C ction.	= = ,	_ = =		
(C) IVI	icroprocessor based numerical relay with IDMT				
	hes for ammeters.				
(b) (0-	-200A) Ammeters, dual scale analog type & selector				
class 5	5P10 for protection.				
of 15	VA burden and accuracy class-1 for metering and				
(a) 3 r	nos. dual core dual ratio CTs of ratio 200/100/5/5A				
break	ker -				
	oing - 1 Nos 630 A VCB with followings in each				
	mer and TNC switch				
	ver and Under voltage relay.				
(g) Re	estricted earth fault relay				
settin	ng for O/L, E/F and S/C protection.				
	icroprocessor based numerical relay with IDMT				
	rip circuit supervision relay				
	Master trip relay				
(c) 1 swite	No (0-200A) Ammeter, analog type with selector				
for m	netering and class 5P10 for protection.				
	100/5/5A of 15 VA burden and accuracy class-0.5				
(b) 3	3 nos. dual core dual ratio CTs of ratio				
mete	ering.				
for v	voltmeter and protection fuses/MCB for HT	ľ			
No.	Voltmeter (0-36 KV), analog type, selector switch				
PT C	Class 0.5 accuracy and 100 VA burden with 1				
(a) 1	L set (3 nos) 33 KV / v3 / 110 / v3 Volts drawout type				
Inco	oming - 1 No. 630 Amp. VCB with followings -				
- 1					
pane	els as required.				
8 nc	os 32 Amp DP MCB's for DC supply distribution to				
cop	per conductor cable etc. including DC DB consisting o	f			1
Volt	tmeter i/c connections with 2.5 sq.mm FRLS insulate	d	I	I	
syst	tem complete with suitable capacity of Ammeter &		1		1
unit	t, capacitor bank for emergency delivering for trip		1	1	
mai	intenance free batteries of suitable AH each, chargin	g			
Nos	s. HT panel boards with 2 Nos. 12 Volts each				
indi	icating lights & closing / tripping / indication of 3				
inp	wer pack (1 working & 1 standby) with 220 Volt AC ut & 24 Volt DC continuous output suitable for		1		

y Paradaga

11	SUPPLY OF 3C X 150 SQ MM 33 KV (UE) XLPE CABLE WITH STRANDED COMPACT CIRCULAR ALUMINIUM CONDUCTOR, CONDUCTOR SCREEN WITH EXTRUDED SEMI CONDUCTING COMPOUND, , XLPE INSULATED , INSULATION SCREENING WITH EXTRUDED SEMI CONDUCTING COMPOUND IN COMBINATION WITH COPPER TAPE, CORES LAID UP, EXTRUDED INNERSHEATH OF PVC, GALVANISED STEEL FLAT STRIP ARMOURED , AND OVERALL PVC SHEATHED CABLE CONFORMING TO IS 7098 (PART-2) 2011 WITH UPTO DATE AMENDMENTS.				174.500.00
12	150 sq. mm 3 core	RM	3,490.00	50	174,500.00
	Design, manufacture, testing at works supply, installation, testing and commissioning at site 33 KV/440V, 3 phase, 50 Hz, delta/star connected, outdoor type following sizes of transformers, oil immersed ONAN cooled, complete with all fittings such as oil conservator, silica gel breather, thermometer, explosion vent, Local ON LOAD tap changer with RTCC for +5% & -15% tappings in step of 1.25 bidirec-tional roller, diagram & rating plate, oil temperature indicator, winding temperature indicator and buccholtz relay with wiring upto marshalling box, lifting lugs, first filling of oil, weather proof HT cable box, LT bus duct disconnecting chamber minimum 8 mm thick non magnetic gland plate etc. complete as per specification including 10% extra oil in non returnable drum for topping up as required. (The transformer shall be subject to all tests specified in the specifications and test certificates shall be produced along with facilitation of Inspection at work site).	- 1			
	750 KVA	No.	2,150,000.00	1	2,150,000.00
13	Supplying & making indoor end terminations with brass compression gland and aluminum lugs for following sizes of PVC insulated and PVC sheathed/ XLPE aluminium conductor cable of 1.1  KV grade as required.			E	
	3.5 X 300 sq. mm (38mm)	each	724.00	12	8,688.00
14	Supply and Inslallation of Straight Through Jointing Kit (Heat Shrink Type) for 33 HV (UE) 3C x 150 XLPE Round Arm. Cable	No.	45,000.00	1	45,000.00
15	Supply and Installation of 200 NB G.I Pipe (6.4 mm) for Protection of 33KV underground cable at Road crossing & Joist pole.	Mtr.	3,270.00	10	32,700.00
16	Supply and Installation of HT Cable Route Marker of concrete rectanglar shape of dimension 240mm (W) X 160 mm (D) X 1500 mm(H) RCC (1:2:4)		2,100.00	10	21,000.00

17	Laying of one number PVC insulated and PVC				T
ì	sheathed/ XLPE power cable of 1.1 KV grade of		1		
1	following size direct in ground including excavation,				
	sand cushioning, protective covering and refilling the				
	trench etc as required.				
а	Upto 35 sq.mm	mt	r 167.00	10	1,670.00
b	Above 35sq.mm and upto 95sq.mm	mt			
С	Above 95sq.mm and upto 185sq.mm	mt			
d	Above 185sq.mm and upto 400sq.mm	mt		100	
18	Laying of one number pve insulated and pve		130.00	100	13,000.00
	sheathed/ XLPE power cable of 1.1 KV grade of				
	following size direct in ground in the same trench in				
	one tier horizantal formation including excavation,				
	sand cushioning, protective covering and refilling the			1	
	trench etc as required			-	_
а	Upto 35 sq.mm	mti	115.00	10	1,150.00
b	Above 35sq.mm and upto 95sq.mm	mti		10	
С	Above 95sq.mm and upto 185sq.mm	mti		10	
d	Above 185sq.mm and upto 400sq.mm	mtı		100	
19	Laying of one number PVC insulated and PVC				
	sheathed/ XLPE power cable of 1.1 KV grade of followng		Δ.		
	sizein the existing masonry open duct required.				
	2-				
a	Upto 35 sq.mm	mtı	9.10	10	91.00
b	Above 35sq.mm and upto 95sq.mm	mtr	15.00	10	150.00
С	Above 95sq.mm and upto 185sq.mm	mtr	20.50	10	205.00
d	Above 185sq.mm and upto 400sq.mm	mtr	37.50	50	1,875.00
20	Design, fabrication, assembling, wiring, supply				
	installation, testing and commissioning of Following				7
	Panels, fabricated out of 14/16 Gauge CRCA sheet steel in				*
	cubicle compartmentised modular construction complete				
	with supporting rigid structure, interconnections,				
	aluminium bus bar strip with heat strinkable colour coded				
	current density of bus bar 0.8 A per sqmm Identification				
	on all breakers & MCCB to indicate the area they serve.				
	Degree of protection IP				
	42, earthing hinged doors with 2.5 sqmm tinned braded			1	
	copper wire, free standing floor mounted with removable				
	Gland Plates on top & bottom of the panel, all mounting				
	plates shall be GI				
	sheets. Panels shall be treated with all anticorrosive				
	process before powder coating as per specifications and				
	final approved shade. Galvanised hardwares with zinc				-
	passivation shall be used in fabrication of panels 2 Nos.				
	earthing terminals shall be provided for all distribution				
	panels. Panels shall be suitable for 415 V, 3 Phase, 4 Wire,				_
	50Hz supply system.				
i	Main LT Panel				

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	Incoming: (Transformer)	T		1	
	One (1) Nos. 1250A FP ACB EDO Type	+			
	Metering:		_	-	
	One (1) Nos. (0-500V) 96 x 96 Sq.mm voltmeter with	+			
	control MCB & selector switch.				
	One (1) Nos. (0-1250A) 96 x 96 Sq.mm CT operated				
	Ammeter with selector switch.				
	One (1) Set of Phase Indication Lamp with 2A SP MCB.				
l	one (1) set of thisse materials Lamp with 2A 3F Web.				
	Incoming: (DG 1)				
	One (1) Nos.800A TPN MCCB (35KA)				
	Metering:				
	One (1) Nos. (0-500V) 96 x 96 Sq.mm voltmeter with				
	control MCB & selector switch.				
	One (1) Nos. (0-800A) 96 x 96 Sq.mm CT operated	5			
	Ammeter with selector switch.				
	One (1) Set of Phase Indication Lamp with 2A SP MCB.				
	Bus Coupler:				
	One Nos. 1600A, FP ACB EDO Type				
	Bus Bar:				
	4000A, TPN aluminium bus bar of suitable length with				
	colour coded sleeves.				
	Outgoing:				
	Two (2) Each. 800A FP ACB EDO Type				
1	Three (3) Each. 160A TPN MCCB				
	Four (4) Each. 100A TPN MCCB				
	Three (3) Each. 63A TPN MCCB	Set	1500000	1	1,500,000.00
ii	Floor Panel				
	Incoming:				
	One (1) Nos.100A TPN MCCB				
	Metering:				
	One (1) Nos. (0-500V) 96 x 96 Sq.mm voltmeter with				
	control MCB & selector switch.			1 1	
	One (1) Nos. (0-100A) 96 x 96 Sq.mm CT operated				
	Ammeter with selector switch.				
	One (1) Set of Phase Indication Lamp with 2A SP MCB.				
	Bus Bar:				
	160A, TPN aluminium bus bar of suitable length with				
	colour coded sleeves.				
	Outgoing:				
	Three (3) Nos. 40A TPN MCB				
	Six (6) Nos. 32A TPN MPCB				
	Four (4) Nos. 25A TPN MCB				
	Three (3) Nos. 25A DP MCB	Set	50000	1	50,000.00

21	Is				
21	Supply and fixing CO2 type fire extinguisher conforming				·
	to IS 2876 with cylinder duly charged of capacity 4.5 kgs				
	including fixing clamps brackets, bolts and nuts etc. as				
	required.	Nos.	3500.00	2	7,000.00
22	Supplying of fire buckets of 9 litres capacity quality				
	painted white from inside and red from outside and			1	
	having inscription "FIRE" in white conforming to IS 2546-	1		- 1	
	1974 duly amended upto date as required.				
	Sand Buckets-Set of Four	Nos.	2,500.00	1	2,500.00
23	Supplying of first aid box with cover made out of 16 SWG				
	MS sheet of size 450 mm x 600 mm x				
	200 mm and painted with two coats of enamel paint over				
	one coat of steel primer and having				
	inscription "FIRST AID BOX" in white and a red cross of				
	suitable size with following items:				
	- 1 No. band-aid bandage 150mm				
	- 1 No. Savlon soap 100 ml				
	- 1 No. Bottle betadine 30 ml				
	- 1 No. Roll cotton				
	- 1 No. Packet dressing material	Set	1,500.00	1	1,500.00
24	Supply, installation of 1.1 KV grade ISI marked rubber				
	mats of 1 meter width.	RM	1,200.00	10	12,000.00
25	Preparing and obtaining the approval from CEIG to				
	carryout electrical installation and duly submitting the			- 1	
	drawing for approval including necessary inspection fees				
	for inspection and obtaining Safety certificate for entire				
	new installation	LS	20,000.00	1	20,000.00
	Sub-Total				5,915,614.50
	GST @ 18 % EXTRA				1,064,810.61
	GRAND TOTAL				6,980,425.00







**Annexure- A12** 

24-1-19

No: NITR/EM 2019 MO100

PROPOSAL FOR EXTRA ITEMS & DEVIATIONS OF WORKS CONTRACT (To be processed before starting the additional work; in emergency cases within one month of starting the additional work)

1. Work order No: NITR/PW/WO/CT/66/12-13/68

2. Account Head : PE 0500/2013

3. Nature of Works: Civil Delectrical D T&E Comprehensive D Others

4. Name of The work: Construction of Major Projects- Phase-II at NIT Rourkela

Total Contract Value: Rs.302,82,39,866.00 5. Name of the Contractor : M/s. Shapoorji Pallonji & Co. Ltd

6. Extra items [Use additional sheets if necessary]

SI No	Extra Item	Unit	Unit rate (Rs)	Estimated Quantity	Estimated Cost (Rs.)	Justification
:1-052	Providing and fixing G.I. Sheets at the vertical face of false ceiling at corridor below parapet wall supported on frame work made of GI perimeter channel & vertical stiffener as per instruction of Engineer in Charge	Sq.m.	928.72	350	325052.00	As per technical and site requirement
E1-053	Providing, fabricating and fixing metallic false ceiling comprising of aluminium rectangular box section (heavy) of 50mm x 25mm (2"x1") size running on both side walls of corridor, aluminium angle (meium) of 25mm x 25mm size on one side wall screwed with cadmium plated machined screws at regular interval of 300 mm and SS pipe (22 SWG) of 32 dia. x 2400 mm long at 150 mm c/c interval across the corridor supported on the box sections complete as per drawing and direction of Engineer in Charge.	Meter	2367.26	35	82853.94	As per technical and site requirement
EI-054	Providing lock for Aluminium windows /	Nos.	661.01	200	132202.00	requirement As per site
EI-055	Providing Aluminium Handle for Aluminium windows / sliding doors as per drawing and	Nos.	544.86	200	108972.00	requireme
EI-056	/ or instruction of Engineer in-Charge  Providing roller for Aluminium windows /	Nos	1134.9	200	226980.00	As per site requireme
EI-05	Armstrong Metal false ceiling: Providing & Fixing including all materials, labours, consumables & tools & tackles - Armstrong GI Lay-in Plain metal ceiling consisting of 600x600mm Lay-in tiles of pre-coated	Sq.n	n. 1401.	51 671	940415.66	As per technical a site requireme

1	1,					$\overline{}$
5.1						(35
1-058	Parquet flooring: Providing and fixing approved shade of 8mm thick Floor Master Egger AC 3 Laminated wooden flooring, Classification of Use 23/32 (Heavy Domestic/General Commercial) with a Surface Abrasion Resistance of class AC4 (average 4000 cycles), Impact Resistance of IC2 (EN13329), of plank size 1291 mm X 193 mm X 8mm with an underlayment made of natural colour foam, with accessories like End profile, Transition profile, reducer, etc. complete. Make -Floor Master (original- Germany).	Sq.m.	1125.45	400	450180.40	As per site requirement
EI-059	Flexible drop: Providing & fixing in the false ceilings, high pressure metallic hose with fittings (25 NB at one end for connection to pipe and 15 NB at the other end for the Sprinkler) for connecting the Sprinklers to Sprinkler piping system, Hose & Fittings to be UL listed or FM approved as per drawing and instruction of Engineer in-Charge. length = 1000 mm	Each	1030.55	250	257637.50	As per site requirement
E1-060	Flexible drop: Providing & fixing in the false ceilings, high pressure metallic hose with fittings (25 NB at one end for connection to pipe and 15 NB at the other end for the Sprinkler) for connecting the Sprinklers to Sprinkler piping system, Hose & Fittings to be UL listed or FM approved as per drawing and instruction of Engineer in-Charge.	Each	1106.80	350	387380.00	As per site requirement
EI-061	Flexible drop: Providing & fixing in the false ceilings, high pressure metallic hose with fittings (25 NB at one end for connection to pipe and 15 NB at the other end for the Sprinkler) for connecting the Sprinklers to Sprinkler piping system, Hose & Fittings to be UL listed or FM approved as per drawing and instruction of Engineer in-Charge.  length = 1500 mm	Each	1130.26	350	395591.00	As per site requiremen
	75.			TOTAL	2911673.50	

Note: For extra items, details of computation of unit rate should be shown a separate page and signed by concerned institute personnel and the contractor.

• The extra items value of Rs. 29, 11,673.50 will be adjusted within the contract W.O. value.

Al 24/04/19

Fords A.

# 7. Deviation quantity SI Item Unit Rate Quantity Quantity Quantity (..........%)

2,

3.				
The	extra items and deviation	ons are necessary for rea	sons stated above. Director ma	y kindly approve.
	Sineer (Civil)	HOD (EM)	Prof- In- Charge	Dean (P&D) 25/1/19
	of in institu	sued by the P& W Office.		Ser, Infrastruetum  IRECTOR 26 1/19
То <u>А</u>	R (P&W)		Som N.	
TARIAN 200	Bar the ob		eineuron with were in the chitect; hower during tender	EE (ceve) of coordonce original drawing ref tot in the rend process, the of been put up

Justification

Additional

Cost

Based on the account the original drawing we above items were in the original drawing the above items tendering process, the given by bell during tendering process, the project of these contrality of these can be covering the cost of eatoa items can be interest, the cost of eatoa items can be items, the cost of eatoa items can be items, the cost of the project approved since the budset is within the overall cost of the project

The order wir.t. extra items against the P.O. issued upon M/s. Sapoprii Rallonji is put-up for signature.



#### NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

						Dated:
(To be processed befo	ore starting the additio	nal worl	k; in emerge	ncy cases withir	n one month of starting the	additional work)
Work order No. NI	TR/PW/WO/CT/15/1	L8-19/1	7			
Account Head :						
Work order No. NITR/PW/WO/CT/15/18-19/17  Account Head:  Nature of work: Civil Electrical Comprehensive Others  Name Of Work: Construction of RCC Reservoir Sump and connecting Pipelines to Pump house at NIT, Rourkela  Name of Contractor: M/s. S.K. Sahoo Contract Value: Rs. 53,40,954.00  Extra items [Use additional sheets if necessary]						
Name Of Work: Cor	struction of RCC Res	servoir :	Sump and o			t NIT. Rourkela
Name of Contractor	r : M/s. S.K. Sahoo		•			
Extra items [Use a	dditional sheets if ne	cessary	1			
SI				Estimated		
No E	xtra Item	Unit	Unit rate	Quantity	Estimated cost	Justification

Note: For extra items, details of computation of unit rate should be shown a separate page and signed by concerned institute personnel and the contractor.

#### **Deviation quantity**

SI No	Item	Unit	Unit rate	Estimated Quantity	Revised Quantity	Deviation quantity	Additional cost	Justification
1	Earthwork in excavation by mechanical means (Hydraulic excavator)/manual means overareas (Exceeding 30Cm in depth 1.5m in width as well as 10 Sq.M on Plan) including disposal of excavted earth lead upto 50m and lift upto 1.5m disposed earth to be levelled and neatly dressed (All							As per site condition and changes in design and
	kinds of Soil)	Cum	120	200	1080	880	105600	drawing.
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundation etc. in layers not exceeding 20Cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50M and lift upto 1.5M	Cum	76	150	0	-150	-11400	DO
3	Supplying and filling in plinth with river sand under floors including watering ramming consolidating and dressing complete.	Cum	619	35	300	265	164035	DO

4	Clearing jungle including uprooting of rank		1					
	vegetation , Grass brush wood ,trees and	100						
	ling of girth upto 30Cm measured at a			1				
	height of 1 Mtr above the ground leveland			I				
	removal of rubbish upto a distance of 50N							
	outside te periphery of the area cleared	00 Sq.I	438	1200	840	-360	-1576.8	DO
5	Diluting and injecting chemical emulsion							
	for Pre-Constructional anti termite							
	treatment Treatment of soil under floor							
	over masonry/RCC portion as per							
	specification and IS code including before filling sand and over all periphery wall and							
	before plinth protection and before floor							
1	concreting etc complete using chemical			5				
	emulsion @one litr per hole, 300 mm apart							
ŀ	/7.5ltr per SQ.M including along the							
	external wall/ internal wall all surface to be							
	covered below PCC and alaround below							
	concrete or masonry apron/ plinth							
	protection etc complete, measurement to							
	be taken per Sq.M of Plinth area of building only (All materials and labour							
	inleuding)							
	Chloropyriphos /Lindane emulsifiable							
	concentrate of 20% with 1% concentration							
	OR Imidaclopid 30.5 EC	Sq.M	153	200	300	100	15300	DO
6	Providing and laying in position cement							
	concrete of specified grade excluding the							
	cost of centering and shuttering. Cement							
	concrete in 1:3:6 (1 Cement : 3 sand:6							
	Coarse Aggregate 40mm Down)	Cum	4360	35	63	28	122080	DO
7	Thermo Mechanically Treated Bars	Kg	77	30505	38500	7995	615615	DO
8	Centering and shuttering including struting							
	propping etc and removal of forms for:				-			
8.1	Foundations footing bases of column etc							
	for mass concrete	Sq.M	164	45	50	5	820	DO
8.2	walls (Any thickness) including attached							
8.3	pillaster buttresses plinth and string Suspended floors roofs landings balconies	Sq.M	275	320	30	-290	-79750	DO
	and access platform	Sq.M	308	150	250	100	30800	DO
	and doods platform	-	- 500	130	250	100	30800	<del></del>
9	PLY SHUTTERING							
	centering and shuttering including strutting							
	proping etc and removal of form work for:							
	suspended floors, roofs, landing balconies and access platform with water proof ply							
	of 12mm thick	Sq.M	521	250	570	250	130250	DO
				230	3,0	250	130230	50
	Lintels beams plinth beams girders							
	bressumers and cantilevers.with water							
	proof ply of 12mm thick	Sq.M	496	70	30	-40	-19840	DO

10	Brick work with F.P.S bricks of class designation 75 in foundation and plinth in rent mortar 1:6 (1cement: 6 Sand complete in all respect as per direction of Engineer in charge	)	3664	5	0	-5	-18320	DO
11	Providing and fixing 1mm thick M.S sheet door with frame of 40x40x6mm angle iron and 3mm M.S gusset paltes at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.							
	Using M.S flats 30x6 mm for diagonal braces	Sq.M	2781	15	0	-15	-41715	DO
12	Providing and laying in position Reinforced cement concrete of specified grade excluding the cost of centering and shuttering. Cement concrete in 1:1:2 (1 Cement : 1 sand:2 Coarse Aggregate 20mm Down) mix design M25 (By volume) complete as per direction of Enginee r incharge complete Upto plinth		6193	39	40	1	6102	2
			0193	39	40	1	6193	DO
	Providing and laying in position machine batched and machine mixed design Mix - M30 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixture in recomended proportion as per IS: 9103 to accelerate, retard setting of concrete, improve workability without imoairing strength and durability as per direction of Engineer -in-charge." (Note:- Cement content considered in this item is @340 kg/Cum. "Excess/ less cement used as per design		6516	255	320	65	423540	DO
	Add for using Extra cement in the items of design Mix over and above the specified cement content therein.	Quinte	672.75	80	352	272	182988	DO
	12mm cement plaster of mix 1:4 (1 cement: 4 Sand)	Sq.M	122	300	360	60	7320	DO
	Neat cement Punning	Sq.M						
	The second second	Jq.IVI	34	150	300	150	5100	DO

	Ductile Iron pipe (class K-7) pipes formig to IS 8329 complete as per							
	directionof Engineer in charge							
17.1	200mm dia	Rm	2002	150	0	-150	-300300	DO
17.2	300mm dia	Rm	3902	100	0	-100	-390200	
18	Providing and fixing C.I sluice valve (with cap) complete with bolts and nuts rubber insertions etc (the tail piece if required will be paid separately)							
	300 mm dia	Each	25258	1	0	-1	-25258	DO
19	Providing push on joints to centrifugally cast iron pipes or Ductile Iron pipes including testing and including cost of rubber gasket: TYTON joints  200mm dia pipe	Each	124	20	0	-20	-2480	DO
	300mm dia pipe	Each	224	40	0	-40	-8960	DO
20	Providing and fixing C.I sluice valve (with cap) complete with bolts and nuts rubber insertions etc (the tail piece if required will be paid separately)							
	200mm dia	Each	23569	1	0	-1	-23569	DO
				Less (	@ 8% as per c Net amo	-		886272.20 70901.78 815370.42
				Deviatio	n (+) in perc	entage =		15.27

Engineer (civil) Executive Engineer (EM) Visiting Professor Professor In- Charge Dean (PD)

Extra items and/or Deviations and payment for the same, as proposed above is approved

Necessary order may be issued by the P& W Office.

To AR (P&W)

DIRECTOR

NSTITUTE OF TEC

Ph. No. 09437116541, 0651-2243019, TELEFAX NO. 0651-2243019, Email: uprnnrkl@gmail.com

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटे **UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED**

(A STATE GOVERNMENT UNDERTAKING)

OFFICE OF THE PROJECT MANAGER, UNIT- RANCHI,382-B, ROAD NO.4C, ASHOK NAGAR. RANCHI, JHARKHAND- 834 002

Ref. No.: 99 /PM/Ranchi/NIT-Rou/RNN/19

DATE: 22.02.2019

The Director, National Institute of Technology, Rourkela, Odisha.

Construction of Major Project (Phase-I) at N.I.T. Rourkela, Odisha.

1) NITR/PW/W0/CT/288/07-08/349/2873, dt.19.03.2008.

Letter No. Letter No. 606 /PM/Ranchi/NIT-Rou/RNN/16,dt. 06.12.2016

Letter No. 220/PM/Ranchi/NIT-Rou/Payment/RNN/17, dt. 19.04.2017

4) Letter No. 316/PM/Ranchi/NIT-Rou/RNN/17, dt. 06.06.2017

5) Letter No. 384 /PM/Ranchi/NIT-Rou/RNN/17,dt. 03.08.2017

6) Letter No. 408 /PM/Ranchi/NIT-Rou/RNN/17, dt. 30.08.2017

7) Letter No. 459 /PM/Ranchi/NIT-Rou/RNN/17, dt. 24.10.2017

8) Letter No. 778 /PM/Ranchi/NIT-Rou/RNN/17, dt. 04.12.2018

9) Letter No. 20/PM/Ranchi/NIT-Rou/RNN/19, dt. 07.01.2019

Dear Sir,

150:14001-2004 CERTIFIED

> This has reference to our numerous letters as shown above. It is for your kind information that as per minutes of meeting at 19.11.2015 (photocopy enclosed), N.I.T. authorities have agreed that all the works have been completed on 31.12.2013 and balance 50% outstanding security deposit excluding Rs. 2.00 Crores for recfication of the defects shall be released immediately. Non payment of the security deposit is violaton of the decision taken by committee. It is submitted that U.P.R.N.N.Ltd. has rectified all the defects as pointed out by N.I.T. authorities from time to time and the same has been reported to N.I.T. Photocopy of the letters for rectification of the defects submitted to N.I.T. is enclosed for your ready reference. As for as falling of stone cladding is concerned, all the cladding stones which have comeout from their position have been rectified and vide letter No. 20/PM/Ranchi/NIT-Rou/RNN/19, dt. 07.01.2019 undersigned has requested to depute N.I.T. Engineers for inspection. It is also submitted that all the rectification works pertaining to Faculty Residences, High voltage Laboratory etc. has been attended and rectified.

> In view of above, it is hereby once again requested to the needful for release of outstanding security desposit of Rs. 6,03,87,045.00 (Rupees Six Crores Three lacs Eighty Seven Thousand Forty Five only) plus interest of Rs. 3,62,32,227.00 (Rupees Three Crores Sixty Two lacs Thrity Two Thousand Two Hundred Twenty Seven only) i.e. total of Rs. 9,66,19,272.00 (Rupees Nine Crores Sixty Six lacs Nineteen Thousand Two hundred Seventy Two only). As per clause No. 6 of the contract agreement amount of interest is payable to U.P.Rajkiya Nirman Nigam Ltd. on outstanding 50% security deposit. The amount of interest has been calculated since Jan.'2014 i.e. date of completion of the project. An early action in this matter shall be highly solicited.

> > Thanking you,

(Ajay Tripathi) General Manager

ours faithfully, o

Copy to :1) Dr. Santrupt B Misra, Chairperson, BOG, NIT, Rourkela, CEO, Carbon Black Business, Director, Group H.R., Aditya Birla Management, Corporation Pvt. Ltd., Aditya Birla Centre, 'C' Wing, 3rd Floor, S. K. Ahire Marg, Worli, Mumbai-400 030, India for information and necessary action.

The Registrar, N.I.T. Rourkela for information and necessary action. 3) The Dean, N.I.T. Rourkela for information and necessary action.

4) The P.I.C. (Civil), N.I.T. Rourkela for information and necessary action.

(Ajay Tripathi)

Registered Office : Vishweshwarajya Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow- 2260 LO (U.P.) Post Box -56 The matter may be discussed in BWC meetings. Accordingly, the Registrar may be advised to call a BWC meeting.

-64-



Ph. No. 09437116541, 0651-2243019, TELEFAX NO. 0651-2243019, Email: uprnnrkl@gmail.com

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

# UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

(A STATE GOVERNMENT UNDERTAKING)

OFFICE OF THE PROJECT MANAGER, UNIT- RANCHI,382-B, ROAD NO.4C, ASHOK NAGAR. RANCHI, JHARKHAND- 834 002

Ref. No.: 150/PM/Ranchi/NIT-Rou/RNN/19

DATE: 01.04.2019

To.

Shri R. Subrahmanyam, I.A.S, Secretary (Higher Education), Ministry of Human Resource Development, Room No. 128-C-Wing, Shastri Bhawan,

New Delhi-110001.

Sub: Construction of Major Project (Phase-I) at N.I.T. Rourkela, Odisha.

Ref.: 1) NITR/PW/W0/CT/288/07-08/349/2873, dt.19.03.2008.

2) Letter No. Letter No. 606 /PM/Ranchi/NIT-Rou/RNN/16,dt. 06.12.2016

3) Letter No. 221/PM/Ranchi/NIT-Rou/Payment/RNN/17, dt. 19.04.2017

4) Letter No. 316/PM/Ranchi/NIT-Rou/RNN/17, dt. 06.06.2017

5) Letter No. 385 /PM/Ranchi/NIT-Rou/RNN/17,dt. 03.08.2017

6) Letter No. 409 /PM/Ranchi/NIT-Rou/RNN/17, dt. 30.08.2017

7) Letter No. 458 /PM/Ranchi/NIT-Rou/RNN/17, dt. 24.10.2017

8) Letter No. 778 /PM/Ranchi/NIT-Rou/RNN/17, dt. 04.12.2018

9) Letter No. 20/PM/Ranchi/NIT-Rou/RNN/19, dt. 07.01.2019

10) Letter No. 99/PM/Ranchi/NIT-Rou/RNN/19, dt. 22.02.2019

It is hereby submitted that vide above referred numerous letters (photocopy enclosed) undersigned has Dear Sir, submitted request for release of balance 50% security deposit of Rs. 6,03,87,045.00 (Rupees Six Crores Three lacs Eighty Seven Thousand Forty Five only) plus interest of Rs. 3,62,32,227.00 (Rupees Three Crores Sixty Two lacs Thrity Two Thousand Two Hundred Twenty Seven only) i.e. total of Rs. 9,66,19,272.00 (Rupees Nine Crores Sixty Six lacs Nineteen Thousand Two hundred Seventy Two only), but undersigned is unable to receive any reply from N.I.T. Rourkela authorities.

It is for your kind information that as per minutes of meeting dt. 19.11.2015 (photocopy enclosed) N.I.T. Rourkela authorities have agreed that all the works have been completed on 31.12.2013 and outstanding security deposit excluding Rs. 2.00 Crore for recfication of the defects shall be released immediately. It is submitted that U.P.R.N.N. Ltd. has rectified all the defects as pointed out by N.I.T. authorities from time to time and the same has been reported to N.I.T. Rourekla. Photocopy of the letters submitted to N.I.T. after rectification of the defects is enclosed for your ready reference.

Seeing above, undersigned hereby requests your goodself to intervene in the matter for issuance of necessary instructions to N.I.T.Rourkela authorities for release of outstanding security deposit of Rs. 6,03,87,045.00 (Rupees Six Crores Three lacs Eighty Seven Thousand Forty Five only) plus interest of Rs. 3,62,32,227.00 (Rupees Three Crores Sixty Two lacs Thrity Two Thousand Two Hundred Twenty Seven only) i.e. total of Rs. 9,66,19,272.00 (Rupees Nine Crores Sixty Six lacs Nineteen Thousand Two hundred Seventy Two only). As per clause No. 6 of the contract agreement amount of interest is payable to U.P.Rajkiya Nirman Nigam Ltd. on outstanding 50% security deposit. The amount of interest has been calculated since Jan. 2014 i.e. date of completion of the project.

An early action in this matter shall be highly solicited.

Thanking you,

Yours faithfully.

(Ajay Tripathi)

Ivelude BWC meeting

General Manager (Jhr.zone) Copy to :1) Dr. Santrupt B Misra, Chairperson, BOG, NIT, Rourkela, CEO, Carbon Black Business, Director, Group H.R., Aditya Birla Management, Corporation Pvt. Ltd., Aditya Birla Centre, 'C' Wing, 3rd Floor, S. K. Ahire Marg, Worli, Mumbai-400 030, India for information and necessary action.

2) The Director, N.I.T., Rourekla for information and necessary action.

3) The Registrar, N.I.T. Rourkela for information and necessary action.

1) The Dean, N.I.T. Rourkela for information and necessary action.

5) The P.I.C. (Civil), N.I.T. Rourkela for information and necessary action.

(Ajay Tripathi)



Ph. No. 09437116541, 0651-2243019, TELEFAX NO. 0651-2243019, Email: uprnnrkl@gmail.com

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

(A STATE GOVERNMENT UNDERTAKING)

OFFICE OF THE PROJECT MANAGER, UNIT.- RANCHI,382-B, ROAD NO.4C, ASHOK NAGAR. RANCHI, JHARKHAND- 834 002

Ref. No.: 100/PM/Ranchi/NIT-Rou/RNN/19

To,

DATE: 22.02.2019

The Registrar, National Institute of Technology, Rourkela, Odisha.

Sub : Construction of Major Project (Phase-I) at N.I.T. Rourkela, Odisha.

Ref.: 1) NITR/PW/W0/CT/288/07-08/349/2873, dt.19.03.2008.

- 2) Letter No. Letter No. 606 /PM/Ranchi/NIT-Rou/RNN/16,dt. 06.12.2016
- 3) Letter No. 220/PM/Ranchi/NIT-Rou/Payment/RNN/17, dt. 19.04.2017
- 4) Letter No. 316/PM/Ranchi/NIT-Rou/RNN/17, dt. 06.06.2017
- 5) Letter No. 384 /PM/Ranchi/NIT-Rou/RNN/17,dt. 03.08.2017
- 6) Letter No. 408 /PM/Ranchi/NIT-Rou/RNN/17, dt. 30.08.2017
- 7) Letter No. 459 /PM/Ranchi/NIT-Rou/RNN/17, dt. 24.10.2017
- 8) Letter No. 778 /PM/Ranchi/NIT-Rou/RNN/17, dt. 04.12.2018
- 9) Letter No. 21 /PM/Ranchi/NIT-Rou/RNN/19, dt. 07.01.2019

#### Dear Sir,

This has reference to our letters as referred above. It is hereby submitted that a deduction of Rs. 11,93,482.92 (Rupees Eleven lacs Ninety Three Thousand Four Hundred Eighty Two and paise Ninety Two only) in the final bill for the subject as cited above has been done wrongly. It is for your kind information that as per decision taken in the pre bid meeting, which is part of contract agreement, it was decided that rates for common items from M/s. Vastukar and M/s. A.E.D., the rates for A.E.D. shall be taken as final. In the tender B.O.Q. for 1000 seated hostel building, item shown at SI. No. 6 is same as written for Bio Medical Science building shown at Sl. No. 28. As per tender B.O.Q., there is no difference at all in the description of the item. So decision taken in the pre bid meeting, prevails over all the language of tender document regarding tender bill of quantities. So as per decision of pre bid meeting, rate of granite stone flooring work for 1000 seated hostel building should be Rs. 2597.80 per M2 in place of Rs. 2284.05 per M2.

So the deduction of Rs.11,93,482.92 (Rupees Eleven lacs Ninety Three Thousand Four Hundred Eighty Two and paise Ninety Two only) in the final bill for the subject as cited above is simply violation of the contract agreement. In the case of dispute of opinion the same can be resolved in presence of the IIIrd party arbitrator.

So it is hereby once again requested to kindly do the needful for release of Rs. 11,93,482.92 (Rupees Eleven lacs Ninety Three Thousand Four Hundred Eighty Two and paise Ninety Two only) as corrected amount of final bill. Undersigned shall be highly obliged.

Thanking you.

Yours faithfully.

(Ajay Tripathi) General Manager

Copy to : i) Dr. Santrupt B Misra, Chairperson, BOG, NIT, Rourkela, CEO, Carbon Black Business, Director, Group H.R., Aditya Birla Management, Corporation Pvt. Ltd., Aditya Birla Centre, 'C' Wing, 3rd Floor, S. K. Ahire Marg, Worli, Mumbai-400 030, India for information and necessary action.

2) The Director, N.I.T. Rourkela for information and necessary action.

3) Sri C. R. Patra, Dean Planning and Development, N.I.T. Rourkela for information and necessary action. -02-2019

4) The P.I.C. (Civil), N.I.T. Rourkela for information and necessary action.

12 (Ajay Tripathi)

Minutes of the Discussion held on 19.11.2015 in the Board Room Pertaining to closure of Contract for Major Projects (Phase-I) (Agency: - M/s UPRNN Ltd)

M/s UPRNN Ltd

Sri Ajay Tripathy .

#### Members Present:

MIT

Prof. C.R.Patra, Dean (PD)

Prof. S.K. Das. PIC (Civil)

Prof P.K Ray, PIC (Elec)

Prof A.K. Sahoo, VP (Civil)

Prof A.K. Panda, VP (Civil)

Prof Y.K Sahoo, VP (Elec)

Mr. M.S.P Rao (Mech)

Er. S P Mohapatra, (EE)

Mr. H. Satpathy, Engineer (Civil)

Mrs. A Dutta, Engineer (Civil)

Mrs. R Sahoo, Engineer (Elec)

Prof S.K Sarangi, Director, chaired the meeting

1. At the outset, the Director was apprised of the status of the project (Phase-I) (i.e. Biomedical Building, Lecture Hall Complex No-I, Electrical Science Building, Faculty Residence, 1000 Seated Hostel, Land Scaping, & Development), and payment position for the above work to M/s UPRNN.

2. It was informed to Director that the Biomedical Building was completed on 31.12.2010 and remaining Buildings were completed on 31.12.2013. Thereafter, these buildings were handed over for use by various Departments long ago.

3. After completion of the above works, a duly constituted committee of Engineers inspected the works and has drawn up a list of defects as well as some pending works which has been passed on to the contractor, M/s UPRNN. In the meantime, many of the points have been attended by the Agency as verified by the committee members. Barring some minor points, the following major points are yet to be attended:

# i) Stone cladding falling off:

Recently, few cladding stones fell down from the front portion of the Biomedical Building. The matter was discussed and it was decided to inform M/s Arch-en-Design, the Consultant for this work to send an expert to investigate into the matter and suggest remedial measures. Accordingly, M's UPENN will carry out

ii) Faculty residence:

a)' Many complaints have been received from occupants of the flats about water leakage from the sunken slabs of toilets. M/s UPRNN Ltd were requested to look in to the matter and carryout necessary rectifications.

# b) Ducts:

It is observed that the ducts are too small; no plastering done; servicing is almost impossible. Director advised that for future buildings, the size of ducts should be increased and internal plastering should be carried out.

- 66 -

- c) At many places, texture paint has peeled off. After rectification of defects. repainting should be done.
- iii) VS Hall:

Entire painting on the external face should be replaced.

- iv) Electrical Science Building & High voltage laboratory:
  - Proper copper shielding has not been done in the High volatage Laborotory: It is necessary to deploy special welder for the same.
  - Leakage/seepage of water was observed earlier of Electrical Science Building. This should be checked up during coming monsoon and rectification to be done if necessary.
- 4. It was informed that formal handing over-taking over of the above buildings has already been completed. However, preparation of As Built Drawings, incorporating changes made at site has taken some time, for which processing of their final bill of the above work was held up. Now, preparation of As Built Drawings is completed.
- 5. 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 erore will be released after rectification of all defects and completion of other pending works as stated above

M/s UPRNN Ltd. Member:

(Sri Ajav Tripathy)

NIT Members

Er. (Elec)

Er. (Civil)

(H'-Satpathy)

Er. (Civil)

(Er. S.P. Mohapatra)

EE (Civil)

(Sr Er. MSP Rao)

Er. (Mech)

VP (Elec)

(Prof. Y.K Sahoo)

(Prof. A.K Sahoo)

VP (Civil)

(Prof. A. K. Panda)

VP (Civil)

(Prof. P.K Ray) PIC (Elec)

PIC Civil)

(Prof. C.R.P.

Dean (PD)



### Ph. No. 09437116541, 0651-2243019, TELEFAX NO. 0651-2243019, Email: uprnnrkl@gmail.com उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

( A STATE GOVERNMENT UNDERTAKING )
OFFICE OF THE PROJECT MANAGER, UNIT- RANCHI, 168-C, ASHOK NAGAR, RANCHI, JHARKHAND- 834002

Ref No.: 336/PM/Ranchi/N.I.T Work /RNN/17

DATE: 29.06.2017

To.

Dr. A. K. Sahoo,

Consultant (Civil)

National Institute of Technology,

Rourkela (Odisha)

Sub.: Construction of Major Project (Phase – 1) at NIT, Rourkela-Rectification of Defects.

Ref.: letter no. -NITR/CT/AKP/17/L/181 Date 28.06.2017

Sir,

This has reference to your office letter as cited above. It is hereby submitted that after telephonic massage as received for your good self, undersigned visited the site and it was found that one piece of openable window fixed in the glazing at entrance portion of Electrical Science Building has broken. The reason for coming out of the openable portion of structural glazing is only due to mishandling of window, as it is fitted at floor level of the building and some one tried to open it without holding it properly.

It is also to bring your kind notice that the out side drain around Electrical Science Building, which is leading towards main drain has been blocked and broken. Due to this huge rain water mixed with red soil has entered into the building. The same has been shown to Dr. S. K. Das PIC (Civil) on 26.06.2017. During visit, no water seepege from retaining wall inside the building has been found.

So it is hereby submitted that for breaking of glazing window glass is a simply mishandling and U. P. Rajkiya Nirman Nigam Ltd. is not responsible.

Submitted for your kind perusal.

Thanking you,

Yours Faithfully 7007

(Ajay Tripathi)
Project Manager

Copy to:

1. Dean (PD), NIT, Rourkela for kind information

2. PIC (Civil), NIT, Rourkela for kind information

3. HOD (EM), NIT, Rourkela for kind information

Project Manager



# Ph. No. 09437116541, 0651-2243019, TELEFAX NO. 0651-2243019, Email: uprnnrkl@gmail.com

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

( A STATE GOVERNMENT UNDERTAKING )
OFFICE OF THE PROJECT MANAGER, UNIT- RANCHI, 168-C, ASHOK NAGAR. RANCHI, JHARKHAND- 834002

Ref. No.: 432/PM/Ranchi/NIT-Rou/RNN/17

DATE: 25.09.2017

To.

Dr. A.K. Panda, Visiting Professor, Civil Engg. Department, N.I.T.,Rourkela, Odisha.

Sub: Flooding in the basement floor of Electrical Science Building.

Ref.: Your office e-mail letter dt. 22<sup>nd</sup> Sept.2017

Dear Sir,

This has reference to your office e-mail letter dt. 22<sup>nd</sup> Sept. 2017. It is for your kind information that profuse leakage of water into the basement floor of the Electrical Science Building is due to poor workman ship of the contractor, M/s. Sapoor Ji Pallan Ji, who has executed connection of fire pumps fitted in the electrical science building for fire fighting works. U.P. Rajkiya Nirman Nigam Ltd. is not responsible at all for the poor work. The video and photo taken at site on 23.09.2017 showing leakage of water is enclosed for your ready reference.

So it is hereby requested that corrective measures should be taken by N.I.T. for rectification of the poor work done by other contractor.

Submitted for your kind perusal.

Thanking you,

(Ajay Tripathi)
Project Manager

Encl: As above.

Copy to following for information:

- 1. The Dean (P.D.), N.I.T. Rourkela.
- 2. The P.I.C. (Civil), N.I.T. Rourkela.
- 3. The H.O.D. (E.M), N.I.T. Rourkela.

(Ajay Tripathi)

(A)

gistered office : Vishweshwaraiya Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow- 226010 (U.P.) Post Box - 56

-69-



# Ph. No. 09437 | 16541 | 0651-2243019 TELEFAX NO. 0651-2243019 | Email: upranck@gmeii.com उत्तर प्रदेश राजकीय निर्माण निर्मा लिमिटेड

# UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

( A STATE GOVERNMENT UNDERTAKING )

FILE OF THE PROJECT MANAGER LINES, RAY THE 1687, ASHOK NADAR RANCHI THARKHAND, RAMOS

Ref. No.: 478 /PM/Ranchi/NIT-Rou/RNN/17

DATE: 07.11.2017

To.

The Registrar, National Institute of Technology, Rourkela. Odisha.

Sub: Construction of Major Project (Phase-I) at N.I.T. Rourkela, Odisha.

Ref.: Letter No. NITR/CT/AKP/17/L/290, dt. 26.10.2017

Sir.

This has reference to letter as cited above. Parawise clarification is as given below:

- U.P.Rajkiya Nirman Nigam Ltd. hereby assures N.I.T. Rourkela that all the cladding 1. stones which have fallen down shall be rectified. U.P. Rajkiya Nirman Nigam Ltd. is in the process of procurement of cladding stone sizewise from source and all stone cladding shall be rectified latest by 10.12.2017.
- The complaints from 33 Nos. occupants as received upto 12.01.2017 regarding 2. water leakage from the sunken toilets of faculty residences have been rectified.On 30.05.2017, again Mr. Behera, T.A. of N.I.T. has said to do it for further 9 No. residences. It is submitted that out of 9 occupants complaints of 7 No. residents have been rectified. After rectification the signature as received from residents of individual residences is enclosed for your ready reference.

Submitted for your kind perusal.

Thanking you,

(Ajay Tripathi) Project Manager

Yours faithfully 201)

End: As above.

Copy to : i) The Director, N.I.T. Rourkela, Odisha for information.

ii) The Dean, N.I.T. Rourkela, Odisha for information.

The P.I.C. (Civil), N.I.T. Rourkela for information.

v) Dr. A.K. Panda, Visiting Prof. Civil Engg. Dept., N.I.T. Rourkela for information.

(Ajay Tripathi)



Ph. No. 09437116541, 0651-2243019, TELEFAX NO. 0651-2243019, Email: uprnnrkl@gmail.com

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

( A STATE GOVERNMENT UNDERTAKING ) OFFICE OF THE PROJECT MANAGER, UNIT- RANCHI, 168-C, ASHOK NAGAR, RANCHI, JHARKHAND- 834002

Ref. No.: 386 /PM/Ranchi/NTT-Rou/RNN/17

DATE: 03.08.2017

To.

Dr. A.K. Panda, Visiting Professor, Civil Engg. Department N.I.T., Rourkela, Odisha

Sub: Construction of Major Project (Phase-I) at N.I.T. Rourkela, Odisha.

Dear Sir.

This has reference to e-mail letter dated. Dec.'14, 2016 of Sri Y.K. Sahu, P.I.C. (Elect), regarding welding of copper plate in H.V. Lab of Electrical Science Building.

It is your kind information that as per direction of Sri Subrata Karmakar of Electrical Engineerig Deptt.welding of copper plate work in H.V. Lab of Electrical Science Building has been completed. Submitted for your kind perusal

Thanking you,

(Ajay Tripathi)

Project Manager

Yours faithfully,

Copy to : Sri Y.K. Sahu, Visiting Professor, (Electrical), N.I.T, Rourkela for information and necessary action 03 8-2017

(Ajay Tripathi)

71-



# Ph. No. 09437116541, 0651-2243019, TELEFAX NO. 0651-2243019, Email: uprnnrkl@gmail.com उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

# UTTAR PRADESH RAJKIYA NIRMAN NIGAM LIMITED

( A STATE GOVERNMENT UNDERTAKING )
OFFICE OF THE PROJECT MANAGER, UNIT- RANCHI, 168-C, ASHOK NAGAR. RANCHI, JHARKHAND- 834002

Ref. No.: 181 /PM/Ranchi/ N.I.T, -RKL/RNN/18

DATE: 11.4.2018

To,

The Registrar, National Institute of Technology, Rourkela, Odisha.

Sub: Construction of Major Projects (Phase-I) at N.I.T. Rourkela, Odisha.-Release of Security Deposit regarding

Ref.: N.I.T. Letter No. NITR/RG/2018/M/0134, dt. 29.03.2018

Sir.

This has reference to your office letter as cited above. It is for your kind information that defect shown at SI.No. (1) has been rectified and there is no water logging problem at present in the Electronics and Electrical Science Building. As for as falling of stone cladding and defects in faculty residences is concerned, the same is being attended by U.P.R.N.N.Ltd.

Submitted for your kind perusal.

Thanking you,

(Ajay Tripathi)
Project Manager

Copy to : i) The Dean, Planning and Development, N.I.T. Rourkela.

ii) Secy. to Director, N.I.T. Rourkela

(Ajay Tripathi)

12/0 A/18

Mahman 8

Premise South of Street of

Registered Office : Vishweshwaraiya Bhawan, Vibhuti Khand, Gomit Nagar, Lucknow- 226010 (U.P.) Post Box - 56