



ଓଡ଼ିଶା ସେତୁ ଓ ନିର୍ମାଣ ନିଗମ ଲିଃ
(ଓଡ଼ିଶା ସରକାରଙ୍କ ପୂର୍ବ ବିଭାଗ ଅଧ୍ୟନର ଏକ ଉଦ୍ୟୋଗ)

ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED
(A Government of Odisha Undertaking under Works Department).

No: 4525

Date 17.06.2021

File: PCF-903

From

Er. Jaya Krishna Das
EIC-cum-Managing Director
O.B & C.C Ltd., Bhubaneshwar

To

The Commissioner-cum-Secretary to Govt.,
Works Department, Govt. of Odisha, Bhubaneshwar

Sub: Infrastructure Development work for Odia University at Satyabadi, Puri- Submission of Preliminary (Rough cost) Estimate for accordance of Administrative Approval and allocation of funds.

Ref: Letter No.32070 Dt.06.10.2020 of Higher Education Department, Govt. of Odisha on your address.

Sir,

With reference to the subject cited above, it is to submit herewith the preliminary (Rough cost) estimate amounting to ₹61.73 Crores for the subject work proposed to be taken up in two phases i.e., Phase-I amounting to ₹39.81 Crores and Phase-II amounting to ₹21.92 Crores for accordance of necessary Administrative Approval and allocation of funds.

The estimate has been prepared based on the Schedule of Rates-2014 (Post GST) published by Works Department, Govt. of Odisha adopting the Labour rates as per Notification No.2816 Dt.25.05.2021 of Labour Commissioner, Odisha and Analysis of Rates-2006, CPWD PAR 2020 and DSR 2019. For items not covered in State SOR, CPWD PAR 2020 and DSR 2019, Market rates have been considered for arriving at the cost estimate.

There is provision for accommodating following facilities:

Phase-I

Student intake 180

Built-up area of Infrastructure:

- (i) Two nos. of School of learning: 17800 sft
- (ii) Admin Block: 10869 sft
- (iii) Hostel blocks for 64 students and 16 scholars: 32070 sft
- (iv) Library & Computer labs: 3205 sft
- (v) Cafeteria block: 6000 Sft

Phase-II

Additional Student intake 180

Built-up area of Infrastructure:

- (i) Two nos. of School of learning: 17800 sft
- (ii) Hostel blocks for 64 students and 16 scholars: 32070 sft
- (iii) Auditorium: 5500 sft

It is requested that Higher Education Department may kindly be moved for accordance of necessary Administrative Approval and place the funds to the tune of requirement. However, bidding process is being initiated for Phase-I programme in anticipation of receipt of Administrative Approval and funds.

Encl: Estimate: -Two Sets

Yours sincerely,

EIC-cum-Managing Director

Memo No. 4526

Date: 17.06.2021

Copy to Principal Secretary to Govt., Higher Education Department, Odisha for favour of kind information w.r.t. his memo No.32071 dt.06.10.2020 addressed to the Chief Engineer, Buildings, Odisha.

EIC-cum-Managing Director

Memo No. 4527

Date: 17.06.2021

Copy to Engineer-in-Chief, Buildings, Govt. of Odisha, Bhubaneshwar for information and necessary action w.r.t. his letter No.31204 dt.07.10.2020.

EIC-cum-Managing Director

GOVERNMENT OF ODISHA

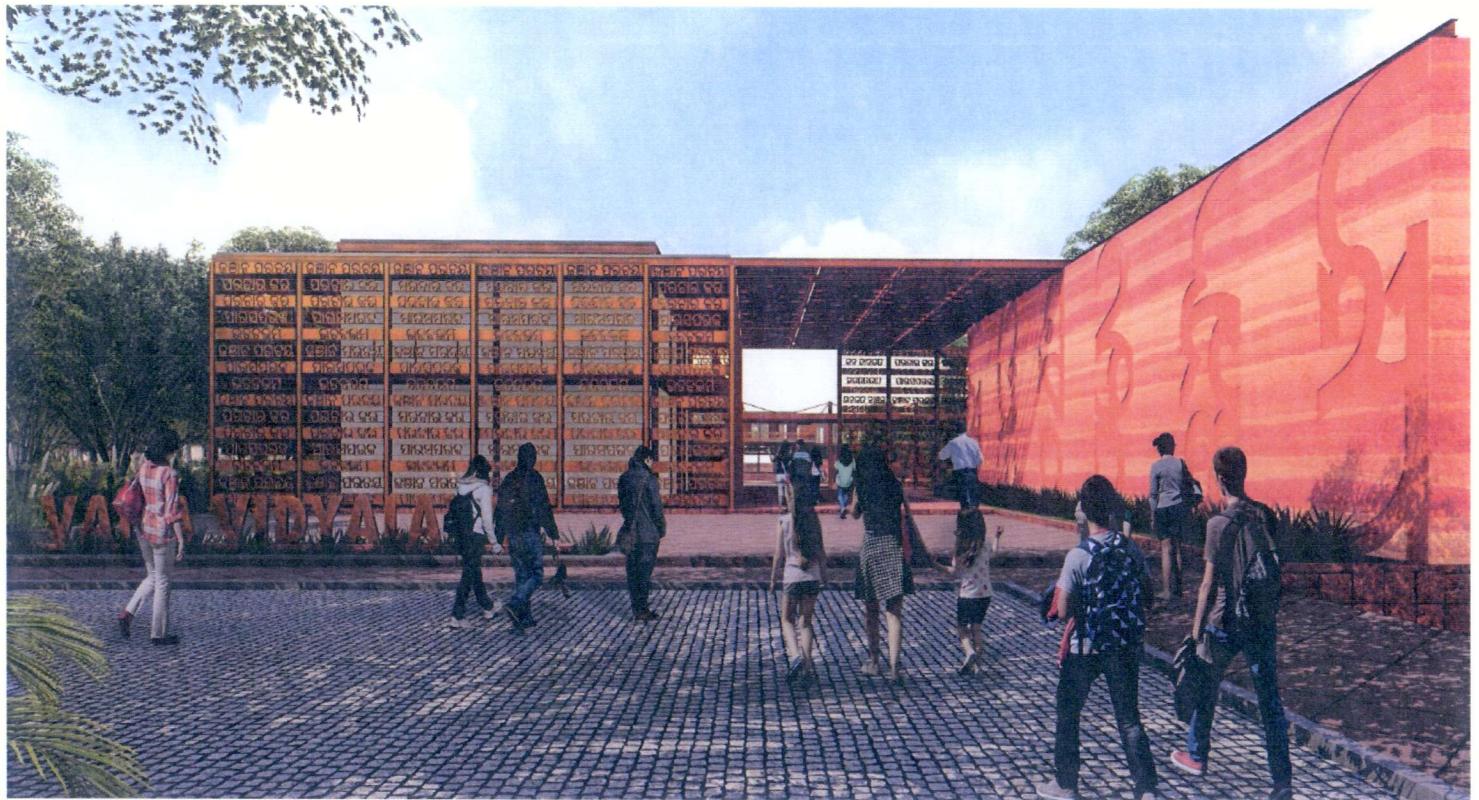


ଓଡ଼ିଶା ସେତ୍ର ଓ ନିର୍ମାଣ ନିଗମ ଲିଃ

ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED
(ଓଡ଼ିଶା ସରକାର ଙ୍କ ଏକଉଦ୍ୟୋଗ)
(A Government of Odisha Undertaking)

NAME OF WORK : Preliminary Estimate-
Infrastructure Development work for the Odia
University at Satyabadi in the District of Puri

ESTIMATED COST : **Rs. 61.73 Crore** (Incl. all Centages)



PRELIMINARY COST ESTIMATE

ODIA UNIVERSITY

"Infrastructure Development work for the Odia University at Satyabadi in the District of Puri"

REPORT

1.0 Introduction

The Government of Odisha has proposed to establish the first of its kind language university at Satyabadi in Puri district of Odisha. This institute would provide the unique opportunity of developing a world-class university that connects its physical identity with its academic mission of offering a post-graduate course in Odia language and literature. It is aimed to serve as a centre that facilitates research on different aspects of the language. The campus is envisioned to be at the forefront of international university design parameters that will help to put Odisha on the educational world map.

The proposed university is decided to set up near Bakula Bana in Sakhigopal under the Satyabadi block of Puri district. Various design elements have been conceptualized to bring the vision to reality which perfectly resonates with the objectives of the establishment of the university.

The preliminary project cost has been worked out, keeping in mind various design elements proposed and the project's design intent based on overall architectural specifications for various works.

2.0 Cost Estimation Methodology

The cost estimate has been prepared with the following approach towards Rates for different works:

Step 1: Analysis of rates have been prepared for various items based on State PWD AOR 2006, and have been converted to present rates by applying Basic Rates as per office memorandum no 13827 dated 16.09.2017. Labour rates are as per the latest notification from Labour Commissioner, Odisha, Bhubaneshwar.

Step 2: For items that are not covered in PWD SOR 2006, such as new technology materials, and specialised items required to be executed as per Design intent, the rates have been arrived at based on DSR 2019.

Step 3: Basic rates of some works have been taken from CPWD PAR 2020.

Step 4: For elements that require detailed design development for quantification, such as internal electrical works, Plumbing works, internal water supply works etc., the cost has been calculated based on a set percentage of the cost of civil works as indicated in CPWD PAR 2020,

Step 5: For items not covered in CPWD PAR 2020 as well as in SOR, market rates were adopted.

3.0 Specifications, Assumptions and Technical Considerations

Preparation of preliminary estimates requires accurate prediction of works, detailed understanding of specifications, and forecast of various services to be undertaken as well as quantifying various structural components. Accordingly, the following assumptions were made to frame these estimates

1) Civil assumptions:

- a) The floor shall be prepared on 90mm thk pre-cast planks of size 1.2m x 2.4m with a screeding layer of 50-60mm. The precast planks shall be of minimum M25 grade. The screeding along with studs will ensure diaphragm action, as well as steel beams, shall be designed as composite beams taking advantage of Concrete planks in compression.
- b) The steel structure shall be designed to take care of Dead, Live and Wind loads under normal serviceable conditions. To maintain serviceability in the event of a fire, separate measure for fire retardation/protection have been taken up such as Fire-retardant coatings.
- c) The building is proposed to be constructed as Type 2 Construction, however under the regulations laid down by NBC 2016, the building can be of Type 1, Type 2, Type 3 or Type 4. Type 4 construction being is the least cost intensive wherein the service quality is a bare minimum.
- d) The construction taken up is a pre-engineered, prefabricated steel structure for which a mark-up equivalent to 3.0 kg/sq.ft. of structural steel has been considered which equals to 92.5₹/kg. (Analysis for the same has been attached with the estimates)
- e) The cost of Fire protection paints has been added in addition to the Plinth Area Rates for Building works and made as a separate item under fire protection works.

2) MEP design and Assumption

a) Water Supply

- o As per the attached annexure, the freshwater requirement is 40KL and the flush water requirement is also 40KL. It is assumed that water would be supplied to the campus via 2 tube wells connected to a raw water reservoir of capacity 60KL (1.5 times the freshwater requirement) which is further connected to a water treatment plant of 40KLD. An STP of 52KLD is provided (80% of total water demand less horticulture requirement).
The detailed water requirements are shown in the water requirement analysis attached with the Estimate. The assumption for per capita requirement is in terms with NBC Part 1, Section 1, Table 1. The freshwater requirement calculated is 40KL and the flushing water requirement (including horticulture requirement) calculated is 40KL. A 40KL recycled water tank is provided which would have a 15KL separation for horticulture purposes as per the calculations attached.

The water from the treated water tank will be supplied to the terrace tanks of individual buildings via hydro-pneumatic systems. Hydro pneumatic pumps are also provided to pump recycled water to recycled water tanks.

- o Two rising mains each 375m length has been considered for supply of fresh water and recycled waters to the buildings. The length is assumed from the road length connecting each building to the services areas.
- o A water treatment facility of 40 KLD is proposed for phase 1 and phase 2 of development which will cater to the freshwater requirement only however, flushing requirements would be catered by recycled water.

b) STP

- o It is assumed that out of 65 KLD (80-15) of usage, 80% of consumed water would come back as sewage.
Thus, a sewage treatment plant of 52 KLD capacity is considered.

c) Electrical Loads:

- o Electrical Load has been estimated as per calculations as indicated in Appendix 2 (Attached).

d) HVAC

- o Additional Cost has been considered for HVAC considering VRF systems and IP based EPABX systems on specific areas already mentioned in the building estimates.
- o HVAC load has been calculated considering 1TR/150 sqft.

e) Lifts:

- o 1 lift of 8 passengers each has been considered in each block for enabling universal access.

3) Landscaping:

Under landscaping and horticulture various design considerations have been taken as under:

a) Shaded walkways: Structure made in Bamboo frame with vernacular thatched roofing in two layers including split bamboo jafri on top.

b) Desilting and dredging works are required for existing pond, to clean up existing pond, peripheral green belt around the pond shall be developed to support the natural ecosystem in terms of phytoplankton and zooplankton.

c) Trees and Plantations proposed shall be suitable as per local habitat.

d) Laterite block walls with voids have been proposed near the kund area and entrance area as per design intent.

- e) CNC cut metal plates have been used as per design at the entrance area near Admin Block and around Kund region.
- 4) Architectural:
- a) Lightweight construction Methodology consisting of Steel Frames and Drywall partitions, External façade shall be based on EPS core with cement fibre boards on both sides having specified U value to limit solar heat gain. The hybrid structure has been adopted in a few buildings.
 - b) Plinth shall be raised to 4'-0, with filling under floors from sand/ earth brought to the site, the Plinth shall be enclosed by Laterite Stonemasonry in CM 1:6, from tie beam to Ground level.
 - c) Flooring is proposed to be done by Granite tiles locally available, and in wet areas, ceramic wall tiles are proposed to be used.
 - d) Gypsum plaster 6 mm thk. is proposed for external walls and 75mm thk. cement fibre boards are considered for internal wall partition.
 - e) Full length Sliding Aluminium profiled Glazed panels (3'-0" X 12'-0") have been proposed along with one of the walls of classrooms.

Cost of Basic materials has been taken up as per Works Department, Government of Odisha, Office Memorandum No 13827 dated 16.09.2017, and Labour rates have been taken as per notification of Labour commissioner vide Notification No. 2816 dated 25.05.2021.

4.0 Site Phasing

The university is spread across a total area of 9.4 acres (with an additional area of 0.95 acres) and its construction will be undertaken in 2 phases. A broad description of works within each phase is as mentioned below;

Phase 1 (A): Site Development for a site area of 3,72,560 sqft (8.5 acres)

- a. Construction of the boundary wall,
- b. Laying of site services,
- c. Creation of plinths to serve as connecting pathways
- d. Landscaping (Softscape & hardscape)
- e. *Kund Re-development*; including the construction of circumambulatory pathway, laterite stone walls and metal trellis.

Phase 1 (B): Total Build up area - 72,944 sqft

- a. **2 Schools of Learning** – 180 students, 22 Faculty members
(Seminar Halls + Classrooms + Faculty rooms + Toilets)
- b. **1 Students Hostel block** - 32 male students + 32 female students
- c. **1 Scholars Hostel block** - 16 Scholars
- d. **Administrative block** – 60 Officials
(Reception, Registrar office, Controller of Finance; Vice Chancellor's office, Controller of

- Examination office, Conference room, Administrative offices)
- e. **Library + Computer Labs**– 60 students
(Computer labs + Digital Library + Archives + Reading rooms)
- f. **Cafeteria block** – 80 persons
(Kitchen + Indoor/Outdoor Dining)
- g. Shaded pathway connecting the various blocks.
- h. Ancillary services and infrastructure

Phase 2: Total Build up area - 55,370 sqft

- a. **2 Schools of Learning** – 180 students, 22 Faculty members
(Seminar Halls + Classrooms + Faculty rooms + Toilets)
- b. **1 Students Hostel block** - 32 male students + 32 female students
- c. **1 Scholars Hostel block** - 16 Scholars
- d. **Auditorium** – 250-seater capacity
- e. Shaded pathway connecting the various blocks.
- f. Ancillary services and infrastructure

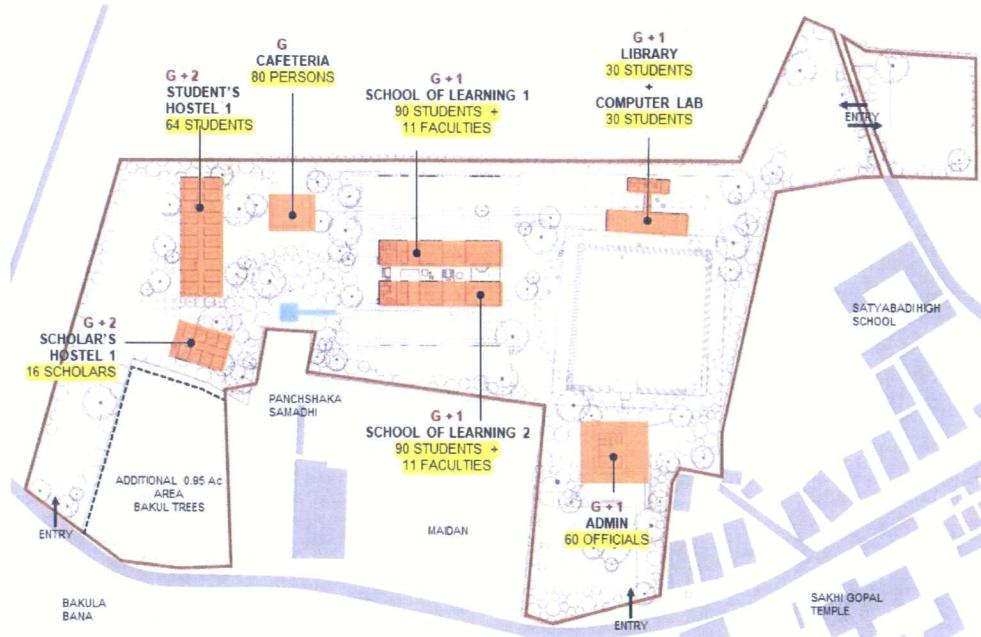
Summary of the Area Statement:

Phase	Functions	Proposed areas (sqft)	Capacity	No of Floors	Comments
PHASE 1A	Site Development	372560			
PHASE 1B	LIBRARY	6205	30 students for Computer Labs / 30 Students for Library	G+1	Includes stilted area
	SCHOOLS OF LEARNING (1 & 2)	17800	180 students 22 teachers	G+1	Includes stilted area
	STUDENTS' HOSTEL (64 students) + SCHOLARS HOSTEL (16 scholars)	32070	64 students in 32 Rooms + 16 scholars in 16 Studio apartments	G+2	Area & Footprint for each block to be detailed further
	CAFETERIA	6000	80 persons	G	Includes stilted area
	ADMIN	10869	60 officials	G+1	Includes double height entry
	TOTAL BUILD UP (PHASE 1)	72944			
PHASE 2	SCHOOLS OF LEARNING (3 & 4)	17800	180 students 22 teachers	G+1	Includes stilted area
	STUDENTS' HOSTEL (64 students) + SCHOLARS HOSTEL (16 scholars)	32070	64 students in 32 Rooms + 16 scholars in 16 Studio apartments	G+2	Area & Footprint for each block to be detailed further
	AUDITORIUM	5500	250 seater		
	TOTAL BUILD UP (PHASE 2)	55370			

**PHASE 1 (A)**

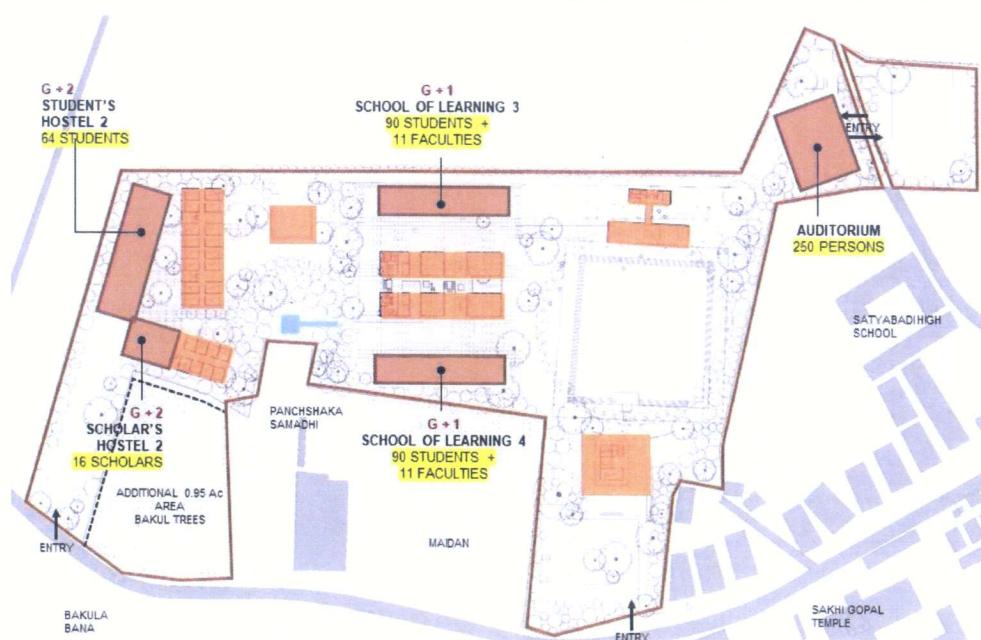
Site Development Area = 3.72,560 sqft

- Existing Kund
- Softscape
- Hardscape Plinth
- Boundary Wall
- Laterite Wall

**● PHASE 1 (B)**

Total Built up Area = 72,944 sqft

- Schools of Learning (1 + 2)
- Library + Computer Lab
- Student's Hostel 1
- Scholar's Hostel 1
- Cafeteria
- Admin

**● PHASE 2**

Total Built up Area = 55,370 sqft

- Schools of Learning (3+4)
- Student's Hostel 2
- Scholar's Hostel 2
- Auditorium



5.0 Cost Summary

Preliminary Estimate of costs of works for the said project amount to **₹ 6173.75 Lakhs** as calculated in detail with supporting documents attached herewith at Annexure 1.

The cost of works is divided into 2 phases. The summary of the cost of works calculated under various heads excluding overhead charges and GST are detailed below:

Phase 1

A.1. External Development and Services: Cost of works **₹ 1068.74Lacs**,

This is further divided into the following Sub-heads:

A.1.1. Site Development: Cost of works **₹ 468.00Lacs**,

Under this head works such as construction of boundary wall (length 1356.6), entrance gate, Site levelling and gradation, Internal Road network, Stormwater drains, Sewerage network, Constructed Wetlands based STP, Rain Water harvesting Pits, Kund de-silting and dredging have been envisaged.

A.1.2. Landscape and Horticulture Works: Cost of works **₹ 507.82 Lacs**,

Under this head works such as paved area, Kund Redevelopment, Horticulture and plantations, Shaded walkways, laterite walls.

A.1.3. Water Supply Works: Cost of works **₹ 92.92 Lacs**,

Under this head, external water supply works have been accommodated including the cost of tube wells, rising mains pumps and motors, distribution network, overhead tanks and underground tank.

B.1. Cost of Building Works in Phase 1: Cost of works **₹ 2130.62 Lacs**,

This is further divided into the following Sub-heads:

B.1.1. Building Works: Cost of works **₹ 2011.29 Lacs**,

Under this head, Building works for School of Learning 1 & 2 (17800 sq.ft), Admin Block (10869 sq.ft.) Cafeteria (6000 sq.ft.), Library and Computer Labs (6205 sq.ft.), Students Hostel (18864 sq.ft.) and Scholar's Hostel (13206 sq.ft.) have been accommodated.

B.1.2. Fire Protection Works: Cost of works **₹ 22.20 Lacs**,

Under this head Fire protection works such as protective coatings on steel structures, protective coating on timber screens has been provisioned.

B.1.3. Misc. E&M Works: Cost of works **₹ 97.13 Lacs**,

Under this head, Miscellaneous works such as specialised items for CCTV, LAN cabling Network etc. have been considered.

C. Additional for Specialized GRIHA Works:

C.1. Specialized Works GRIHA Phase 1: Cost of works ₹ 64.08 Lacs,

Under this head, specialised items for GRIHA Ratings such as Solar photovoltaic power Generation System, Access Control System, IBMS – Integrated Building Management System, Lighting Automation etc. have been taken up.

Total Cost (A.1 + B.1+ C.1): ₹ 3263.44 Lacs.

Adding on above OBCC Charges @8%, additional incentive for timely completion @2% and 12% GST i.e., ₹ 717.96 Lacs

Total Project Cost for Phase 1: ₹ 3981.39 Lacs= ₹ 39.81 cr

Phase 2

A.2. External Development and Services: Cost of works ₹ 110.56Lacs,

A.2.1. Landscape and Horticulture Works: Cost of works ₹ 110.56 Lacs,

Under this head works such as structure made in Bamboo frame of 2.5cm to 4cm of dia with vernacular thatched roofing 22.5cm in two layers (7.5cm bottom + 15 cm top) including split bamboo Jafri on top, plinth development under phase 2 etc.

B.2. Cost of Building Works in Phase 2: Cost of works ₹ 1644.92 Lacs,

This is further divided into the following Sub-heads:

B.2.1. Building Works: Cost of works ₹ 1543.38 Lacs,

Under this head Building works for School of Learning 3 & 4 (17800 sq.ft), Auditorium (5500 sq.ft.), Residential Blocks for Scholar's Hostel (13206 sq.ft.) and Student's hostel (18864 sq.ft.) have been considered.

B.2.2. Fire Protection Works: Cost of works ₹ 18.36 Lacs,

Under this head, Fire protection works such as protective coatings on steel structures, protective coating on timber screens, Yard Hydrants and Fire pumps campus levels has been provisioned.

B.2.3. Misc. E&M Works: Cost of works ₹ 82.69 Lacs,

Under this head, Miscellaneous works such as specialised items for CCTV, LAN cabling Network etc. have been considered.

C. Additional for Specialized GRIHA Works:

C.2. Specialized Works GRIHA Phase 2 : Cost of works ₹ 41.53 Lacs,

Under this head, specialised items for GRIHA Ratings such as Solar photovoltaic power Generation System, Access Control System, IBMS – Integrated Building Management System, Lighting Automation etc. have been taken up.

Total Cost (A.2 + B.2 + C.2): ₹ 1797.01 Lacs.

Adding on above OBCC Charges @8%, additional incentive for timely completion @2% and 12% GST i.e., ₹ 395.34 Lacs

Total Project Cost for Phase 2: ₹ 2192.35 Lacs= ₹ 21.92 cr

The total project cost= Project Cost in Phase 1 + Project Cost in Phase 2

$$=39.81 + 21.92 \text{ cr}$$

$$\underline{=61.73 \text{ cr}}$$


Project Manager
Puri Project Division-II
OBCC Ltd.


Sr. Project Manager
O.B. & C.C. Ltd.
Puri Divn-II

ESTIMATE

Preliminary Estimate-
Infrastructure Development work for the Odia University at Satyabadi in the District of
Puri

S.No.	Description of work	Amount (in lacs)
Phase 1		
A.1	External Development and Services Ph 1	1068.74
A.1.1	Site Development	468.00
A.1.2	LandScape & Horticulture Works	507.82
A.1.3	Water Supply Works	92.92
B.1	Cost of Building works in Phase 1	2130.62
B.1.1	Building Works	2011.29
B.1.2	Fire Protection Works	22.20
B.1.3	Misc E & M Works	97.13
C.1	Additional for Specialized GRIHA Works	64.08
C.1.1	Specilaized works GRIHA Phase 1	64.08
X.0	TOTAL Cost in Phase 1 (A.1 + B.1+C.1)	3263.44
Phase 2		
A.2	External Development and Services in Phase-2	110.56
A.2.1	LandScape & Horticulture Works	110.56
B.2	Cost of Building works in Phase-2	1644.92
B.2.1	Building Works	1543.88
B.2.2	Fire Protection Works	18.36
B.2.3	Misc E & M Works	82.69
C.2	Additional for Specialized GRIHA Works	41.53
C.2.1	Specilaized works GRIHA Phase 2	41.53
Y.0	TOTAL Cost in Phase 2 (A.2 + B.2+C.2)	1797.01
	TOTAL (X.0 + Y.0) =	5060.45
	Add for OBCC Charges @8% & Add for Additional incentive Charges for timely completion @2% as per Finance Deptt. OM No.25217/F Dt.30.07.2018	506.04
	Add for GST @12%	607.25
	Total Project Cost in Lakhs	6173.75
	Total Project Cost in Crores	61.73 Cr

Gop
17/6/21
Project Manager
Puri Project Division-II
OBCC Ltd

Amr
18/6/20
Sr. Project Manager
O.B. & C.C. Ltd.
Puri Divn-II

Technically approved for ₹ 61.73 crore (Rupees Sixty One Crore Seventy three Lakhs) only.

17/6/2021
General Manager Projects-I
O.B. & C.C. Ltd.,
Bhubaneswar.

Amr
17/6/21
E.I.C.-cum-Managing Director
O.B. & C.C. Ltd.
Bhubaneswar

**Preliminary Estimate of Works
ODIA UNIVERSITY, SAKHIGOPAL, PURI**

S.No.	Description of work	Amount (in lacs)
Phase 1		
A.1	External Development and Services Ph 1	1068.74
A.1.1	<i>Site Development</i>	468.00
A.1.2	<i>LandScape & Horticulture Works</i>	507.82
A.1.3	<i>Water Supply Works</i>	92.92
B.1	Cost of Building works in Phase 1	2130.62
B.1.1	<i>Building Works</i>	2011.29
B.1.2	<i>Fire Protection Works</i>	22.20
B.1.3	<i>Misc E & M Works</i>	97.13
C.0	Additional for Specialized GRIHA Works	64.08
C.1	<i>Specilaized works GRIHA Phase 1</i>	64.08
	TOTAL (A.1 + B.1 + C.0) =	3263.44
	<i>Add for OBCC Charges @8% & Add for Additional incentive Charges for timely completion @2% (as per Finance Deptt. OM No.25217/F Dt.30.07.2018)</i>	326.34
	<i>GST @12%</i>	391.61
	Total Project Cost in Lakhs	3981.39


Project Manager
 Puri Project Division-II
 OBCC Ltd.


Sr. Project Manager
 O.B. & C.C. Ltd.
 Puri Divn-II

Preliminary Estimate of Works
ODIA UNIVERSITY, SAKHIGOPAL, PURI

S.No.	Description of work	Amount (in lacs)
<i>Phase 2</i>		
A.2	External Development and Services Ph 2	110.56
A.2.1	<i>Landscape & Horticulture Works</i>	110.56
B.2	Cost of Building works in Phase 2	1644.92
B.2.1	<i>Building Works</i>	1543.88
B.2.2	<i>Fire Protection Works</i>	18.36
B.2.3	<i>Misc E & M Works</i>	82.69
C.0	Additional for Specialized GRIHA Works	41.53
C.2	<i>Specilaized works GRIHA Phase 2</i>	41.53
	TOTAL (A.2 + B.2 + C.0) =	1797.01
	<i>Add for OBCC Charges @8% & Add for Additional incentive Charges for timely completion @2% as per Finance Deptt. OM No.25217/F Dt.30.07.2018</i>	179.70
	<i>GST @12%</i>	215.64
	Total Project Cost in Lakhs	2192.35


 18/6/21
 Project Manager
 Puri Project Division-II
 OBCC Ltd.


 18/6/21
 Sr. Project Manager
 O.B. & C.C. Ltd.
 Puri Divn-II

A.1 External Development and Services			
S.No.	Schedule	Description of works	Amount in Lacs
1	A.1.1	Site development Works	468.00
2	A.1.2	Landscape works	507.82
3	A.1.3	Water Supply Works	92.92
		Total amount of works in lacs	1068.74


 Project Manager
 Puri Project Division-II
 OBCC Ltd.


 Sr. Project Manager
 O.B. & C.C. Ltd.
 Puri Divn-II

A.1.1 Summary OF Cost of Site Development

S.No.	Description of works	Unit	Qty	Rate	Amount	Remarks
1	Boundary wall -Combination (30% MS work + 70% Laterite block work)	m	1356.6	9309.71	1,26,29,651.88	RA-Boundary Wall
2	Site Leveling (considering 10% of Site to be levelled)	Sq.m	3832.51	267.86	10,26,565.18	Refer 5.1 of CPWD PAR2020
3	Internal Road Network (as calculated as per site plan provided)	Sq.m	6738.04	1517.86	1,02,27,388.21	Refer 5.2.3 of CPWD PAR2020
4	Embankment for Road Network (300mm thk soil filling)	cum	2021.41	387.00	7,82,286.91	AOR 2.25
5	Stormwater drains	m	1400	1111.00	15,55,400.00	AOR 2.23
6	Sewer Lines	m	600	2946.43	17,67,857.14	Refer 5.3 of CPWD PAR2020
7	Trenches for services	m	600	5535.71	33,21,428.57	Refer 5.7 of CPWD PAR2021
8	STP	kld	52.0	53571.43	27,85,714.29	Refer 20.1 of CPWD PAR2020
9	Kund desilting/dredging	cum	597	2500	14,92,500.00	RA- Kund desilting
10	Rain Water Harvesting	m	1500	2,946.43	44,19,642.86	Refer 5.6 of CPWD PAR2020
11	Supplying installing testing and comissioning of LED Campus Lighting	sqm	38325.1	134	51,32,824.55	Refer 19.1 of CPWD PAR2020
12	Civil works for substation	sqm	72	23036	16,58,571.43	Refer 1.1.1 of CPWD PAR2020
Total Amount A.1.1					4,67,99,831.02	
Total In lacs					468.00	

A.1.2 LANDSCAPE WORKS		
Summary of costs		
PRELIMINARY ESTIMATE		
S.NO.	DESCRIPTION	AMOUNT (INR)
I	LANDSCAPE CIVIL WORK	4,75,39,497
II	HORTICULTURE WORKS (This includes Trees, Shrubs, climbers, Ground covers, Lawn, Earth work, manure and fertilizers complete as per design/drg.)	32,42,114
	Total Amount	5,07,81,610
	Total Amount A.1.2 in lacs	507.82

Attachment 02: LANDSCAPE WORKS ph 1

PRELIMINARY ESTIMATE						SITE AREA (ACRE)		9.47
S.NO.	DESCRIPTION	UNIT	QTY.	RATE (INR)	AMOUNT (INR)	REMARKS		
I LANDSCAPE CIVIL WORK								
1.0 DROP OFF								
1.1	Finished in GRANITE COBBLES including 200mm thick GSB, 200 mm thk WMM, and 100mm thick PCC subbase.	Sqm	100	3,738.00	3,73,800	AOR 2.16		
2.0 PARKING								
2.1	Cement Concrete pavement with vacuum dewatered concrete (included DLC, PQC and CRM)	Sqm	584	1,964.29	11,47,371	CPWD PAR 2020	Refer 5.2.3	
2.2	Embankment for parking area (300mm thk soil filling)	cum	175	387	67,816	AOR 2.25		
3.0 DRIVEWAY AND PARKING EDGING								
3.1	KERB STONE 300 x 300 x 150 mm : Made of M - 25 Precast Conc. Including 100 mm thk P.C.C Subbase <i>(this is the kerb stone required around the boundary wall and is independent and not part of the Pathways or Roadwork)</i>	Mtr.	1725	1,009.86	17,42,005	AOR 2.13		
4.0 PATHWAY / PAVING -Phase 1								
4.1 Laterite wall for retainig of fill								
4.2.1	Made in laterite including pcc + Toe wall of 0.75m and 0.6m(foundation), IN laterite block masonry.	Mtr.	1658	1,800	29,84,292	AOR 2.9		
4.2 SOIL FILLING								
4.2.1	In raised paved area (Inlcuding Raised area under stilt and ground i.e 6645 sqm, and Shaded walkways i.e. 2546 sqm (900mm thk soil filling)	Cum.	8272	387	32,01,225	AOR 2.25		
4.3	Top finish of raised pathways							

Attachment 02: LANDSCAPE WORKS ph 1

PRELIMINARY ESTIMATE						SITE AREA (ACRE)	9.47
S.NO.	DESCRIPTION	UNIT	QTY.	RATE (INR)	AMOUNT (INR)	REMARKS	
4.3.1	Finished in Shot blasted Kota stone (85%) with granite bands (15%) including 150mm thick hardcore and 100mm thick PCC subbase. (this includes all paved area less kund paving area) Rates as workout = 45 Rs/sqft kota+ 25Rs per sqft shot blasting+15 Rs persqft mortar+25Rs persqft of Pcc+25Rs persqft of cutting and labour = 45+25+15+25+25 = 135Rs persqft = 1452Rs persqm including overheads =1598Rs	Sqm	7461	1,598	1,19,23,186	as calculated	
5.0	WATER BODY : OF AREA	Sqm.	190				
5.1	Made in RCC Finished in GLASS Mosaic tile of approved shade. <i>(ON BASE AND WALLS)</i>	Sqm.	243	3,117	7,56,356	AOR 2.29	
5.2	EXCAVATION FOR THE ABOVE WATER BODY	cum	275	134	36,868	AOR 2.8	
5.3	PCC for the above water body	cum	30	3,942	1,17,950	AOR 2.9	
6.0	MEP WORK (FOR WATERBODY) : This includes necessary plumbing, electrical and mechanical work as per vendors.	Job.	1	10,00,000	10,00,000	L.S	
7.0	KUND STPES						
7.1	Finished in 25mm thick Mint stone including brick masonry and PCC and RCC Waist slab subbase.	Sqm.	425	3,682	15,64,880	AOR 2.19	
8.0	PAVING AROUND KUND						
8.1	Finished in Shot blasted Kota stone with granite bands including 150mm thick hardcore and 100mm thick PCC subbase.	Sqm.	3227	1,598	51,56,746	As mentioned under 4.3.1	
9.0	GATES :2400mm high- Made in mild steel.						
9.1	Vehicular gates	nos.	6	2,96,562	17,79,370	AOR 2.17.1	
9.2	Pedestrian Gates	nos.	5	1,97,708	9,88,539	AOR 2.17.2	

Attachment 02: LANDSCAPE WORKS ph 1

S.NO.	DESCRIPTION	PRELIMINARY ESTIMATE			SITE AREA (ACRE)	9.47
		UNIT	QTY.	RATE (INR)	AMOUNT (INR)	REMARKS
10	Laterite walls					
10.1	AROUND KUND	cum	176	4,707	8,29,018	AOR 2.5
10.2	part of Admin 1 block	cum	389	4,707	18,30,258	AOR 2.5
11	CNC CUT METAL Plates					
	CNC cut steel plates made from 1mm thk MS steel plates, including cost of material labour and erection and cost of cnc cutting					
11.1	at Entrance around admin block 1	sqm	720	3,246	23,37,460	AOR 2.1
11.2	above item near kund (1285 sqm around Kund shaded area)	sqm	1285	3,246	41,71,716.67	AOR 2.1
	MS prefabricated structure to support the CNC plates					
11.3	near kund (considering 4kg/sqft@100Rs/KG =400*10.76 = 4304Rs/sqm)	sqm	1285	4,304	55,30,640.00	as calculated
	TOTAL OF 'I'				4,75,39,496.61	
	HORTICULTURE WORKS (This includes Trees, Shrubs, climbers, Ground covers, Lawn, Earth work, manure and fertilizers complete as per design/drg.)	SQM	14524.67	223	32,42,114	Refer 5.9.1, CPWD PAR 2020
	SUB TOTAL (I - II)				5,07,81,610	


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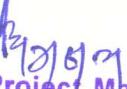
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A.1.3. Summary of Cost of Water Supply Works

S.No.	Description of works	Unit	Qty	Rate	Amount	Remarks
1	Tube wells	No.	2	6,00,000.00	12,00,000.00	RA- Tube wells
2	WTP	litre	40000	35.00	14,00,000.00	RA- 09
3	RCC UGT for Fresh Water/ Fresh Water	litre	60000	17.86	10,71,428.57	Refer 4.5 of CPWD PAR2020
4	RCC UGT for Recycled Water	litre	60000	17.86	10,71,428.57	Refer 4.5 of CPWD PAR2020
5	Pump Rising Mains- Fresh water	metre	375	3,214.29	12,05,357.14	Refer 5.4.2 of CPWD PAR2020
6	Pump Rising Mains- Recycled water	metre	375	3,214.29	12,05,357.14	Refer 5.4.2 of CPWD PAR2020
7	Hydro Pneumatic systems for pumping fresh water to OHT	lpm	1000	1,339.29	13,39,285.71	Refer 13.1, specialized E&M works CPWD PAR2020
8	Standby motor for hydro pneumatic pumps for pumping fresh water <i>(HP calculations as per attached Hydro Pneumatic Pump Requirements)</i>	hp	5.75	15,000.00	86,209.79	MR, deduced from catalogue price
9	Hydro Pneumatic systems for pumping fresh water to OHT	lpm	500	1,339.29	6,69,642.86	Refer 13.1, specialized E&M works CPWD PAR2020
10	Standby motor for hydro pneumatic pumps for pumping recycled water <i>(HP calculations as per attached Hydro Pneumatic Pump Requirements)</i>	hp	2.87	15,000.00	43,104.89	MR, deduced from catalogue price
Total Amount					92,91,814.68	
Total Amount for A.1.3 In lacs					92.92	

B.1 Cost of works in Phase 1			
S.No.	Ref-Schedule	Description of works	Amount in Lacs
1	B.1.1	Building Works	2011.29
2	B.1.2	Fire Protection Works	22.20
3	B.1.3	Misc E&M Works	97.13
		Total amount of works in lacs	2130.62

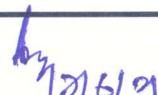

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B.1.1 Summary of cost of works of Building areas under Phase 1

S.No.	Description	Qty	Unit	Rate	Amount	Remarks
1	School of learning 1 and 2	17800	sqft	3469.95	6,17,65,050.91	as per attached calculation B.1.1.1
2	Library and Computer lab	6205	sqft	3228.69	2,00,34,000.61	as per attached calculation B.1.1.2
3	Admin Block	10860	sqft	2876.81	3,12,42,120.17	as per attached calculation B.1.1.3
4	Cafetria	6000	sqft	2863.67	1,71,81,993.78	as per attached calculation B.1.1.4
5	Students hostel	18864	sqft	2228.56	4,20,39,525.36	as per attached calculation B.1.1.5
6	Scholors Hostel	13206	sqft	2185.81	2,88,65,816.91	as per attached calculation B.1.1.6
Sub Total					20,11,28,507.76	
Total IN LACS for B.1.1						2,011.29


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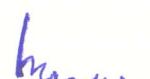
B.1.1.1 Summary OF Cost of School of learning 1 & 2 Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	875.14	9420		3.8	
1	First Floor	778.52	8380		3.8	
1	Terrace Area covered in solar panel	437.57	4710		-	
	Total built up area	1653.66	17800			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
A	CIVIL STRUCTURE COST					
1	Structure (G+1)	1653.66	Sq. mt.	23,035.71	3,80,93,247.33	Refer 1.1.1 of CPWD PAR2020
2	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	1653.66	Sq. mt.	312.50	5,16,768.86	Refer 1.3.2 of CPWD PAR2020
	Total Building Cost				3,86,10,016.19	
B	SERVICES					
3	Internal water supply and sanitary installation			4%	15,44,400.65	Refer 2.1 of CPWD PAR2020
4	External Electrical Service Connections <i>(This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual Buildings)</i>			3.75%	14,47,875.61	Refer 2.2.1 of CPWD PAR2020
5	Internal Electric Installations			12.50%	48,26,252.02	Refer 2.3 of CPWD PAR2020
6	Power wiring and Plugs			4%	15,44,400.65	Refer 2.4.1 of CPWD PAR2020
7	lightning conductors			0.25%	96,525.04	Refer 2.4.2 of CPWD PAR2020
8	External Civil Service Connections			1.25%	4,82,625.20	Refer 2.4.2 of CPWD PAR2020
9	Telephone Conduits			0.25%	96,525.04	Refer 2.4.3 of CPWD PAR2020
10	8 Passenger Lift (G+1)	1	Each	14,28,571.43	14,28,571.43	Refer 3.1.1 of CPWD PAR2020
C	ADDITIONAL SPECIALISED ITEMS					
11	Additional item for PREFABRICATED Components@3kg/sq.ft	53400	kg	92.50	49,39,429.74	as per AOR 2.24
12	Timber Screening with Flooding and Fixtures for seminar halls	64	each	30,201.26	19,32,880.64	Refer RA 01

B.1.1.1 Summary OF Cost of School of learning 1 & 2 Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	875.14	9420		3.8	
1	First Floor	778.52	8380		3.8	
1	Terrace Area covered in solar panel	437.57	4710		-	
	Total built up area	1653.66	17800			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
13	Cement fiber Board with insulation & M.S Framing with EPS core	945.6	Sq. mt.	3,005.89	28,42,372.29	DSR 2018 S.NO. 26.67
14	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	437.57	Sq. mt.	1,404.33	6,14,492.38	DSR 2018 S.NO. 26.26
D	ADDITIONAL E&M ITEMS					
15	IP based EPABX services (faculty rooms+ head rooms+ deans rooms)	146.79	sq.m.	446.43	65,529.28	Refer 17.1 pg 8, of CPWD PAR 2020
16	HVAC (faculty rooms+ head rooms+ deans rooms) (Assuming 1Tr/150 sq.ft. and 1Tr= 1.25hp, So, qty= area in sq.ft * 1.25 / 150	26.33	hp	49,107.14	12,93,154.76	Refer CPWD PAR 2020
	TOTAL (A)				6,17,65,050.91	


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B.1.1.2 Summary OF Cost of Library and Computer Lab Building Works

S.NO.	Description	Area (sqm)	Area (sqFt)	height (m)		
1	Ground Floor	166.295	1790.00	3.8		
2	Stilt Portion On Ground Floor	131.921	1420.00	3.8		
3	First Floor	278.242	2995.00	3.8		
4	Terrace Area covered in solar panel	83.148	895.00	-		
	Total built up area	576.459	6205.00			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
	A CIVIL STRUCTURE COST					
1	Structure (G+1)	444.537	Sq. mt.	23,035.71	1,02,40,235.31	Refer 1.1.1 of CPWD PAR2020
2	Stilt Portion On Ground Floor	131.92122	Sq. mt.	7,142.86	9,42,294.42	Refer 1.8.1 of CPWD PAR2020
3	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	444.54	Sq. mt.	312.50	1,38,917.92	Refer 1.3.2 of CPWD PAR2020
4	Cost for additional Height for stilt portion (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 2	131.92	Sq. mt.	178.57	23,557.36	Refer 1.8.2 of CPWD PAR2021
	A Total Building Cost				1,13,45,005.01	
	B SERVICES					
5	Internal water supply and sanitary installation			4%	4,53,800.20	Refer 2.1 of CPWD PAR2020
6	External Electrical Service Connections <i>(This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual Buildings)</i>			3.75%	4,25,437.69	Refer 2.2.1 of CPWD PAR2020
7	Internal Electric Installations			12.50%	14,18,125.63	Refer 2.3 of CPWD PAR2020
8	Power wiring and Plugs			4%	4,53,800.20	Refer 2.4.1 of CPWD PAR2020
9	lightning conductors			0.25%	28,362.51	Refer 2.4.2 of CPWD PAR2020
10	External Civil Service Connections			1.25%	1,41,812.56	Refer 2.4.2 of CPWD PAR2021

B.1.1.2 Summary OF Cost of Library and Computer Lab Building Works

S.NO.	Description	Area (sqm)	Area (sqFt)		height (m)	
1	Ground Floor	166.295	1790.00		3.8	
2	Stilt Portion On Ground Floor	131.921	1420.00		3.8	
3	First Floor	278.242	2995.00		3.8	
4	Terrace Area covered in solar panel	83.148	895.00		-	
	Total built up area	576.459	6205.00			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
11	Telephone Conduits			0.25%	28,362.51	Refer 2.4.3 of CPWD PAR2020
12	8 Passenger Lift (G+1)	1	Each	14,28,571.43	14,28,571.43	Refer 3.1.1 of CPWD PAR2020
	C ADDITIONAL SPECIALISED ITEMS					
13	Additional item for PREFABRICATED Components@3kg/sq.ft	18615	kg	92.50	17,21,863.01	as per AOR 2.24
14	Cement fiber Board with insulation & M.S Framing with EPS core with wood stain	369.6	Sq. mt.	3,005.89	11,10,978.00	DSR 2018 S.NO. 26.67
15	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	83.15	Sq. mt.	1,404.33	1,16,766.60	DSR 2018 S.NO. 26.26
	D ADDITIONAL E&M ITEMS					
16	IP based EPABX services (computer lab and library)	280.56	sq.m.	446.43	1,25,252.16	Refer 17.1 pg 8, of CPWD PAR 2020
17	HVAC (computer lab and library) (Assuming 1Tr/150 sq.ft. and 1Tr= 1.25hp, So, qty= area in sq.ft * 1.25 / 150	25.17	hp	49,107.14	12,35,863.10	Refer CPWD PAR 2020
	TOTAL (A)				2,00,34,000.61	


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 Puri Project Division-II
 OBCC Ltd.


 Sr. Project Manager
 O.B. & C.C. Ltd.
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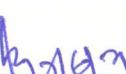
B.1.1.3 Summary OF Cost of Admin Block Building Works

S.NO.	Description	Area (sqm)	Area (sqft.)	height (m)		
1	Ground Floor	415.27	4470.00	3.8		
2	Stilt Portion On Ground Floor	187.20	2015.00	3.8		
3	First Floor	406.45	4375.00	3.8		
4	Terrace Area covered in solar panel	203.22	2187.50	-		
	Total built up area	1008.92	10860.00			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
A	CIVIL STRUCTURE COST					
1	Structure (G+1)	821.72	Sq. mt.	23,035.71	1,89,28,919.81	Refer 1.1.1 of CPWD PAR2020
2	Stilt Portion On Ground Floor	187.20	Sq. mt.	7,142.86	13,37,129.05	Refer 1.8.1 of CPWD PAR2020
3	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	821.72	Sq. mt.	312.50	2,56,787.67	Refer 1.3.2 of CPWD PAR2020
4	Cost for additional Height for stilt portion (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 2	187.20	Sq. mt.	178.57	33,428.23	Refer 1.8.2 of CPWD PAR2021
	Total Building Cost				2,05,56,264.76	
B	SERVICES					
5	Internal water supply and sanitary installation		4%		8,22,250.59	Refer 2.1 of CPWD PAR2020
6	External Electrical Service Connections <i>(This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual buildings)</i>		3.75%		7,70,859.93	Refer 2.2.1 of CPWD PAR2020
7	Internal Electric Installations		12.50%		25,69,533.10	Refer 2.3 of CPWD PAR2020
8	Power wiring and Plugs		4%		8,22,250.59	Refer 2.4.1 of CPWD PAR2020

B.1.1.3 Summary OF Cost of Admin Block Building Works

S.NO.	Description	Area (sqm)	Area (sqft.)	height (m)		
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
1	Ground Floor	415.27	4470.00		3.8	
2	Stilt Portion On Ground Floor	187.20	2015.00		3.8	
3	First Floor	406.45	4375.00		3.8	
4	Terrace Area covered in solar panel	203.22	2187.50	-		
	Total built up area	1008.92	10860.00			
C	ADDITIONAL SPECIALISED ITEMS					
13	Cement fiber Board with insulation & M.S Framing with EPS core with wood Stain	388.8	Sq. mt.	3,005.89	11,68,691.14	DSR 2018 S.NO. 26.67
14	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	203.22	Sq. mt.	1,404.33	2,85,393.22	DSR 2018 S.NO. 26.26
D	ADDITIONAL E&M ITEMS					
15	IP based EPABX services (all spaces except store rooms, toilets and pantry)	506.78	Sq. mt.	446.43	2,26,241.90	Refer 17.1 pg 8, of CPWD PAR 2020
16	HVAC (all spaces except store rooms, toilets and pantry) (Assuming 1Tr/150 sq.ft. and 1Tr= 1.25hp, So, qty= area in sq.ft * 1.25 / 150	45.46	hp	49,107.14	22,32,328.87	Refer CPWD PAR 2020
	TOTAL (A)				3,12,42,120.17	


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Puri Project Division-II
OBCC Ltd.


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O.B. & C.C. Ltd.
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B.1.1.4 Summary OF Cost of Cafeteria

S.NO.	Description	Area (sqm)	Area (sqft.)	height (m)		
1	Ground Floor	418.06	4500.00	3.8		
2	Stilt Portion On Ground Floor	139.35	1500.00	3.8		
3	Terrace Area covered in solar panel	418.06	4500.00	-		
	Total built up area	557.41	6000.00			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
	A CIVIL STRUCTURE COST					
1	Structure (G)	418.060	Sq. mt.	23,035.71	96,30,315.34	Refer 1.1.1 of CPWD PAR2020
2	Stilt Area	139.353	sqm	7,142.86	9,95,381.43	Refer 1.2.1 of CPWD PAR2020
3	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	418.06	Sq. mt.	312.50	1,30,643.81	Refer 1.3.2 of CPWD PAR2020
4	Cost for additional Height for stilt portion (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	139.35	Sq. mt.	178.57	24,884.54	Refer 1.8.2 of CPWD PAR2021
	Total Building Cost				1,07,81,225.12	
	B SERVICES					
5	Internal water supply and sanitary installation		4%		4,31,249.00	Refer 2.1 of CPWD PAR2020
6	External Electrical Service Connections <i>(This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual Buildings)</i>		3.75%		4,04,295.94	Refer 2.2.1 of CPWD PAR2020
7	Internal Electric Installations		12.50%		13,47,653.14	Refer 2.3 of CPWD PAR2020
8	Power wiring and Plugs		4%		4,31,249.00	Refer 2.4.1 of CPWD PAR2020
9	lightning conductors		0.25%		26,953.06	Refer 2.4.2 of CPWD PAR2020
10	External Civil Service Connections		1.25%		1,34,765.31	Refer 2.4.2 of CPWD PAR2021
11	Telephone Conduits		0.25%		26,953.06	Refer 2.4.3 of CPWD PAR2020

B.1.1.4 Summary OF Cost of Cafeteria

S.NO.	Description	Area (sqm)	Area (sqft.)	height (m)		
1	Ground Floor	418.06	4500.00	3.8		
2	Stilt Portion On Ground Floor	139.35	1500.00	3.8		
3	Terrace Area covered in solar panel	418.06	4500.00	-		
	Total built up area	557.41	6000.00			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
12	Manually Operated Fire Alarm System	975.47	Sq. mt.	223.21	2,17,739.69	Refer 1.6.1 of CPWD PAR2020
	C ADDITIONAL SPECIALISED ITEMS					
12	Additional item for PREFABRICATED Components@3kg/sq.ft	13500	kg	92.50	12,48,732.24	as per AOR 2.24
13	Timber Screening with Floding and Fixtures for seminar halls	19	each	30,201.26	5,73,823.94	Refer RA 01
14	Cement fiber Board with insulation & M.S Framing with EPS core with wood stain	240	Sq. mt.	3,005.89	7,21,414.29	DSR 2018 S.NO. 26.67
15	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	418.06	Sq. mt.	1,404.33	5,87,094.63	DSR 2018 S.NO. 26.26
	D ADDITIONAL E&M ITEMS					
16	IP based EPABX services	557.41	Sq. mt.	446.43	2,48,845.36	Refer 17.1 pg 8, of CPWD PAR 2020
	TOTAL (A)				1,71,81,993.78	
	PER SQ. FT. COST				2,863.67	


 Project Manager
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B.1.1.5 Summary OF Cost of Student Hostel Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	240.80	2592.00		3.8	
2	Stilt Portion On Ground Floor	334.45	3600.00		3.8	
3	First Floor	588.63	6336.00		3.8	
4	Second Floor	588.63	6336.00		3.8	
5	Terrace Area covered in solar panel	412.04	4435.20		-	
	Total built up area	1752.51	18864.00			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
A CIVIL STRUCTURE COST						
1	Structure (G+2) (Excluding the Stilt portion on Ground floor)	1418.06	Sq. mt.	17,589.29	2,49,42,666.03	Refer 1.1.1 of CPWD PAR2020
2	Stilt Portion On Ground Floor	334.45	Sq. mt.	7,142.86	23,88,915.43	Refer 1.8.1 of CPWD PAR2020
3	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	1418.06	Sq. mt.	312.50	4,43,143.81	Refer 1.3.2 of CPWD PAR2020
4	Cost for additional Height for stilt portion (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 2	334.45	Sq. mt.	178.57	59,722.89	Refer 1.8.2 of CPWD PAR2021
	Total Building Cost				2,78,34,448.16	
B SERVICES						
5	Internal water supply and sanitary installation		12%		33,40,133.78	Refer 2.1 of CPWD PAR2020
6	External Electrical Service Connections <i>(This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual Buildings)</i>		3.75%		10,43,791.81	Refer 2.2.1 of CPWD PAR2020
7	Internal Electric Installations		12.50%		34,79,306.02	Refer 2.3 of CPWD PAR2020

B.1.1.5 Summary OF Cost of Student Hostel Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	240.80	2592.00		3.8	
2	Stilt Portion On Ground Floor	334.45	3600.00		3.8	
3	First Floor	588.63	6336.00		3.8	
4	Second Floor	588.63	6336.00		3.8	
5	Terrace Area covered in solar panel	412.04	4435.20		-	
	Total built up area	1752.51	18864.00			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
8	Power wiring and Plugs			4%	11,13,377.93	Refer 2.4.1 of CPWD PAR2020
9	lightning conductors			0.25%	69,586.12	Refer 2.4.2 of CPWD PAR2020
10	External Civil Service Connections			1.25%	3,47,930.60	Refer 2.4.2 of CPWD PAR2021
11	Telephone Conduits			0.25%	69,586.12	Refer 2.4.3 of CPWD PAR2020
12	8 Passenger Lift (G+2)	1	Each	14,28,571.43	14,28,571.43	Refer 3.1.1 of CPWD PAR2020
C ADDITIONAL SPECIALISED ITEMS						
13	Timber Screening with Folding and Fixtures	64	each	30,201.26	19,32,880.64	Refer RA 01
14	Cement fiber Board with insulation & M.S Framing with EPS core with wood stain	261.6	Sq. mt.	3,005.89	7,86,341.57	DSR 2018 S.NO. 26.67
15	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	412.04	Sq. mt.	1,404.33	5,78,640.47	DSR 2018 S.NO. 26.26
D ADDITIONAL E&M ITEMS						
16	IP based EPABX services (Warden's office)	33.44	Sq. mt.	446.43	14,930.72	Refer 17.1 pg 8, of CPWD PAR 2020
	TOTAL (A)				4,20,39,525.36	
	PER SQ. FT. COST				2,228.56	


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Puri Project Division-II
OBCC Ltd


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O.B. & C.C. Ltd.
Puri Divn-II

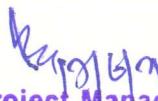
B.1.1.6 Summary OF Cost of Scholars Hostel Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	120.96	1302.0		3.8	
2	Stilt Portion On Ground Floor	288.00	3100.0		3.8	
3	First Floor	408.96	4402.0		3.8	
4	Second Floor	408.96	4402.0			
5	Terrace Area covered in solar panel	286.27	3081.4		-	
	Total built up area	1226.87	13206.0			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
	A CIVIL STRUCTURE COST					
1	Structure (G+2) (Excluding the Stilt portion on Ground floor)	938.87	Sq. mt.	17,589.29	1,65,14,058.10	Refer 1.1.1 of CPWD PAR2020
2	Stilt Portion On Ground Floor	288.00	Sq. mt.	7,142.86	20,57,121.62	Refer 1.8.1 of CPWD PAR2020
3	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	938.87	Sq. mt.	312.50	2,93,396.97	Refer 1.3.2 of CPWD PAR2020
4	Cost for additional Height for stilt portion (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 2	288.00	Sq. mt.	178.57	51,428.04	Refer 1.8.2 of CPWD PAR2021
	Total Building Cost				1,89,16,004.74	
	B SERVICES					
5	Internal water supply and sanitary installation			12%	22,69,920.57	Refer 2.1 of CPWD PAR2020
6	External Electrical Service Connections (This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual Buildings)			3.75%	7,09,350.18	Refer 2.2.1 of CPWD PAR2020
7	Internal Electric Installations			12.50%	23,64,500.59	Refer 2.3 of CPWD PAR2020
8	Power wiring and Plugs (Client has requested not to take this cost as this will be already covered in Point no 5 above)			4%	7,56,640.19	Refer 2.4.1 of CPWD PAR2020

B.1.1.6 Summary OF Cost of Scholars Hostel Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)	
1	Ground Floor	120.96	1302.0		3.8
2	Stilt Portion On Ground Floor	288.00	3100.0		3.8
3	First Floor	408.96	4402.0		3.8
4	Second Floor	408.96	4402.0		
5	Terrace Area covered in solar panel	286.27	3081.4		-
	Total built up area	1226.87	13206.0		
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount
9	lightning conductors			0.25%	47,290.01
10	External Civil Service Connections			1.25%	2,36,450.06
11	Telephone Conduits			0.25%	47,290.01
12	8 Passenger Lift (G+2)	1	Each	14,28,571.43	14,28,571.43
C ADDITIONAL SPECIALISED ITEMS					
13	Timber Screening with Folding and Fixtures	21	each	30,201.26	6,34,226.46
14	Cement fiber Board with insulation & M.S Framing with EPS core with wood stain	360	Sq. mt.	3,005.89	10,82,121.43
15	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	286.27	Sq. mt.	1,231.34	3,52,494.32
D ADDITIONAL E&M ITEMS					
16	IP based EPABX services	46.94		446.43	20,956.93
	TOTAL (A)				2,88,65,816.91


Project Manager
Puri Project Division-II
OBCC Ltd


Sr. Project Manager
O.B. & C.C. Ltd.
Puri Divn-II

B.1.2 Summary OF Cost of Fire Protection Works						
S.No.	Description of works	Unit	Qty	Rate	Amount	Remarks
1	<p>Fire protection coating of 2 hours natural steel members taking up 6.5 kg/sqm</p> <p>Assuming steel perimeter area with respect to kg is 0.03 sqm/kg for a typical fire protection coating of 700 microns, coverage of the paint is 1 sqm per litre.</p> <p>(Average cost of paint including primer is 800/litre, to achieve the desired fire rating a coverage of 0.03 kg /sqm is required, the average cost of fire protective paint comes around Rs. 24/kg for steel structure, plus labour of 5 Rs per kg, plus overheads of 15% equals = Rs 33.4Rs/kg)</p> <p>(Exposed steel area in the structure is assumed @3.25Kg/sqft which is 215579Kg</p>	kg	215579.00	10.30	2220463.7	As calculated
	Total Amount					2220463.7
	<i>Total In lacs</i>					22.2


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B.1.5 Summary OF Cost of Miscellaneous E&M Works

S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
1	LAN System (Scholors Block, Library+lab, admin)	1099.41	Sq. mt.	446.43	4,90,805.99	Refer 16.1 of CPWD PAR2020
2	CCTV System (admin, cafeteria, library, 30% of school of learning, 10% area of Hostels)	2906.53	Sq. mt.	178.57	5,19,023.21	Refer 10.1 of CPWD PAR2020
4	DG Set	200	Kva	9,821.43	19,64,285.71	Refer 2.1 of CPWD PAR2020
5	3 Phase UPS System with 30 minutes backup including batteries, interconnectivity cables etc.	3.955	kw	17,857.14	70,625.00	Refer 4.1 of CPWD PAR2020
6	Substation works and equipment	700	kva	8,035.71	56,25,000.00	Refer 1.1, specialized E&M Works CPWD PAR2020
7	For extra stabdbby transformer (700kVa)	1	nos	10,43,000.00	10,43,000.00	RA-06
MISCELLANEOUS WORK COST					97,12,739.92	
Total In lacs					97.1	


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 Puri Project Division-II
 OBCC Ltd.


 Sr. Project Manager
 21/6/21
 O.B. & C.C. Ltd.
 Puri Divn-II

A.2 External Development and Services ph 2			
S.No.	Schedule	Description of works	Amount in Lacs
A.2.1	A.2	Landscape works	110.56
		Total amount of works in lacs	110.56

A.2.1 LANDSCAPE WORKS

Summary of costs

PRELIMINARY ESTIMATE

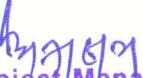
S.NO.	DESCRIPTION	AMOUNT (INR)
I	LANDSCAPE CIVIL WORK	1,10,55,733
	SUB TOTAL (I)	1,10,55,733

Attachment 02: LANDSCAPE WORKS ph 2

S.NO.	DESCRIPTION	UNIT	QTY.	RATE (INR)	AMOUNT (INR)	REMARKS
PRELIMINARY ESTIMATE						
SITE AREA (ACRE) 9.47						
1	LANDSCAPE CIVIL WORK					
1.0	DRIVEWAY					
1.1	Cement Concrete pavement with vacuum dewatered concrete (including PQC,DLS, CRM)	Sqm	942	1,964.29	18,50,416	Refer 5.2.3 CPWD PAR 2020
1.2	Embakement of 300mm below the driveway	Sqm	283	387.00	1,09,370	AOR 2.25
5.0	PATHWAY / PAVING -Phase 1					
5.1	Laterite wall for retaining of fill					
	Made in laterite including pcc + Toe wall of 0.45 and 0.6m(foundation), IN Laterite block masonry.	Mtr.	532	1,800	9,57,348	As per AOR 2.9
5.2	SOIL FILLING					
5.2.1	In raised paved area (Including Raised area under stilt and ground and Shaded walkways 4530sqm x 0.9m	Cum.	4077	387	15,77,805	As per AOR 2.25
5.3	Top finish of raised pathways					
	Finished in Shot blasted Kota stone (85%) with granite bands (15%) including 150mm thick hardcore and 100mm thick PCC subbase. (this includes all paved area less kund paving area)	Sqm	3398	1,598	54,29,224	as calculated
5.3.1	Rates as work out = 45 Rs/sqft kota+ 25Rs per sqft shot blasting+15 Rs persqft mortar+25Rs persqft of Pcc+25Rs persqft of cutting and labour = 45+25+15+25 = 135Rs persqft = 1452Rs persqft including overheads =1598Rs					
5.4	COVERED PAERGOLA FOR PATHWAYS					
	Structure made in Bamboo frame of 2.5cm to 4cm of dia with vernacular thatched roofing 22.5cm in two layers (7.5cm bottom + 15 cm top) including split bamboo jaffri on top.	Sqm.	891	1,270.00	11,31,570	As per AOR 2.4
	SUB TOTAL (I)					1,10,55,733

B.2 Cost of works in Phase 2			
S.No.	Ref-Schedule	Description of works	Amount in Lacs
1	B.2.1	Building Works	1543.88
2	B.2.2	Fire Protection Works	18.36
3	B.2.3	Misc Works	82.69
Total amount of works in lacs			1644.92


 Project Manager
 Purj Project Division-II
 OBCC Ltd.


 Sr. Project Manager
 O.B. & C.C. Ltd.,
 Purj Diwn-II

B.2.1 Summary of cost of works of Building areas			
S.No.	Description	Amount	Remarks
1	School of Learning 3 & 4	6,17,65,050.91	as per attached calculation B.2.1.1
2	Auditorium	2,19,48,111.40	as per attached calculation B.2.1.3
3	Residential Block (Scholar's Housing)	2,88,00,477.10	as per attached calculation B.2.1.4
4	Residential Block (Student's Hostel)	4,18,74,199.52	as per attached calculation B.2.1.5
Sub Total		15,43,87,838.93	

Total in Lacs for B.2.1

1,543.88

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Project Manager
Puri Project Division-II
OBCC Ltd.

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Sr. Project Manager
O.B. & C.C. Ltd.
Puri Divn-II

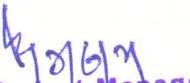
B.2.1.1- Summary OF Cost of School of learning 3 & 4 Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	875.14	9420		3.8	
2	First Floor	778.52	8380		3.8	
3	Terrace Area covered in solar panel	437.57	4710		-	
	Total built up area	1653.66	17800			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
	A CIVIL STRUCTURE COST					
1	Structure (G+1)	1653.66	Sq. mt.	23,035.71	3,80,93,247.33	Refer 1.1.1 of CPWD PAR2020
2	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	1653.66	Sq. mt.	312.50	5,16,768.86	Refer 1.3.2 of CPWD PAR2020
	Total Building Cost				3,86,10,016.19	
	B SERVICES					
3	Internal water supply and sanitary installation			4%	15,44,400.65	Refer 2.1 of CPWD PAR2020
4	External Electrical Service Connections <i>(This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual Buildings)</i>			3.75%	14,47,875.61	Refer 2.2.1 of CPWD PAR2020
5	Internal Electric Installations			12.50%	48,26,252.02	Refer 2.3 of CPWD PAR2020
6	Power wiring and Plugs <i>(Client has requested not to take this cost as this will be already covered in Point no 5 above)</i>			4%	15,44,400.65	Refer 2.4.1 of CPWD PAR2020
7	lightning conductors			0.25%	96,525.04	Refer 2.4.2 of CPWD PAR2020
8	External Civil Service Connections			1.25%	4,82,625.20	Refer 2.4.2 of CPWD PAR2021
9	Telephone Conduits			0.25%	96,525.04	Refer 2.4.3 of CPWD PAR2020
10	8 Passenger Lift (G+1)	1	Each	14,28,571.43	14,28,571.43	Refer 3.1.1 of CPWD PAR2020
	C ADDITIONAL SPECIALISED ITEMS					
11	Additional item for PREFABRICATED Components@3kg/sq.ft	53400	kg	92.50	49,39,429.74	as per AOR 2.24
12	Timber Screening with Flooding and Fixtures for seminar halls	64	each	30,201.26	19,32,880.64	Refer RA -01
13	Cement fiber Board with insulation & M.S Framing with EPS core with wood stain	945.6	Sq. mt.	3,005.89	28,42,372.29	DSR 2018 S.NO. 26.67

B.2.1.1- Summary OF Cost of School of learning 3 & 4 Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	875.14	9420		3.8	
2	First Floor	778.52	8380		3.8	
3	Terrace Area covered in solar panel	437.57	4710		-	
	Total built up area	1653.66	17800			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
14	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	437.57	Sq. mt.	1,404.33	6,14,492.38	DSR 2018 S.NO. 26.26
D ADDITIONAL E&M ITEMS						
15	IP based EPABX services (faculty rooms+ head rooms+ deans rooms)	146.79	sq.m.	446.43	65,529.28	Refer 17.1 pg 8, of CPWD PAR 2020
16	HVAC (faculty rooms+ head rooms+ deans rooms) (Assuming 1Tr/150 sq.ft. and 1Tr=1.25hp, So, qty= area in sq.ft * 1.25 / 150)	26.33	hp	49,107.14	12,93,154.76	Refer CPWD PAR 2020
TOTAL (A)						6,17,65,050.91


Project Manager
Puri Project Division-II
OBC


Sr. Project Manager
O.B. & C.C. Ltd.
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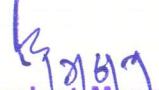
B.2.1.3- Summary OF Cost of Auditorium Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	255.48	2750	3.80		
2	First Floor	255.48	2750	3.80		
3	Terrace Area covered in solar panel	255.48	2750	-		
	Total built up area	510.96	5500			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
A	CIVIL STRUCTURE COST					
1	Structure (G+1)	510.96	Sq. mt.	23,035.71	1,17,70,385.41	Refer 1.1.1 of CPWD PAR2020
2	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 4.5-3.6= 0.9m 0.9/0.3= 3	510.96	Sq. mt.	312.50	1,59,675.77	Refer 1.3.2 of CPWD PAR2020
	Total Building Cost				1,19,30,061.18	
B	SERVICES					
3	Internal water supply and sanitary installation			4%	4,77,202.45	Refer 2.1 of CPWD PAR2020
4	External Electrical Service Connections <i>(This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual buildings)</i>			3.75%	4,47,377.29	Refer 2.2.1 of CPWD PAR2020
5	Internal Electric Installations			12.50%	14,91,257.65	Refer 2.3 of CPWD PAR2020
6	Power wiring and Plugs			4%	4,77,202.45	Refer 2.4.1 of CPWD PAR2020
7	lightning conductors			0.25%	29,825.15	Refer 2.4.2 of CPWD PAR2020
8	External Civil Service Connections			1.25%	1,49,125.76	Refer 2.2.2 of CPWD PAR2021
9	Telephone Conduits			0.25%	29,825.15	Refer 2.4.3 of CPWD PAR2020
10	8 Passenger Lift (G+1)	1	Each	14,28,571.43	14,28,571.43	Refer 3.1.1 of CPWD PAR2020
11	Fire Fighting System (With Wet Riser System and Sprinkler system)	510.96	Sq. mt.	1,071.43	5,47,459.79	Refer 1.5.2 of CPWD PAR2020
12	Automatic Fire Alarm System <i>(assuming rates are inclusive of PA system)</i>	510.96	Sq. mt.	535.71	2,73,729.89	Refer 1.6.2 of CPWD PAR2020
C	ADDITIONAL SPECIALISED ITEMS					

B.2.1.3- Summary OF Cost of Auditorium Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
1	Ground Floor	255.48	2750	3.80		
2	First Floor	255.48	2750	3.80		
3	Terrace Area covered in solar panel	255.48	2750	-		
	Total built up area	510.96	5500			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
13	Additional item for PREFABRICATED Components@3kg/sq.ft	16500	kg	92.50	15,26,228.29	as per AOR 2.24
14	Cement fiber Board with insulation & M.S Framing with EPS core with wood stain	220.032	Sq. mt.	3,005.89	6,61,392.62	DSR 2018 S.NO. 26.67
D	ADDITIONAL E&M ITEMS					
15	IP based EPABX services	510.96	sq.m.	446.43	2,28,108.24	Refer 17.1 pg 8, of CPWD PAR 2020
16	HVAC (Assuming 1Tr/150 sq.ft. and 1Tr= 1.25hp, So, qty= area in sq.ft * 1.25 / 150	45.83	hp	49,107.14	22,50,744.05	Refer CPWD PAR 2020
	TOTAL (A)				2,19,48,111.40	


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 Project Manager
 Puri Project Division-II
 OBCC Ltd.

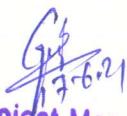

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 Sr. Project Manager
 O.B. & C.C. Ltd.
 Puri Divn

B.2.1.4- Summary OF Cost of Scholors Hostel Building Works

S.NO.	Description	Area (sqm)	Area (sqft)	height (m)		
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
A CIVIL STRUCTURE COST						
1	Structure (G+2) (Excluding the Stilt portion on Ground floor)	938.87	Sq. mt.	17589.29	1,65,14,058.10	Refer 1.1.1 of CPWD PAR2020
2	Stilt Portion On Ground Floor	288.00	Sq. mt.	7142.86	20,57,121.62	Refer 1.8.1 of CPWD PAR2020
3	Cost for additional Height (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 1	938.87	Sq. mt.	312.50	2,93,396.97	Refer 1.3.2 of CPWD PAR2020
4	Cost for additional Height for stilt portion (every 0.3 metre or part thereof, additional/ lesser height of floor above normal floor height of 3.60 metre/ 3.00 metre i.e. Floor height condnsired = 3.8m Additional height= 3.8 - 3.6= 0.2m 0.2/0.3= 0.67 ~ 2	288.00	Sq. mt.	178.57	51,428.04	Refer 1.8.2 of CPWD PAR2021
	Total Building Cost				1,89,16,004.74	
B SERVICES						
5	Internal water supply and sanitary installation			12%	22,69,920.57	Refer 2.1 of CPWD PAR2020
6	External Electrical Service Connections (This take care of Cost of MV cables and Cost of panels etc required for connection from substations to individual Buildings)			3.75%	7,09,350.18	Refer 2.2.1 of CPWD PAR2020
7	Internal Electric Installations			12.50%	23,64,500.59	Refer 2.3 of CPWD PAR2020
8	Power wiring and Plugs			4%	7,56,640.19	Refer 2.4.1 of CPWD PAR2020
9	lightning conductors			0.25%	47,290.01	Refer 2.4.2 of CPWD PAR2020
10	External Civil Service Connections			1.25%	2,36,450.06	Refer 2.2.2 of CPWD PAR2021
11	8 Passenger Lift (G+2)	1	Each	1428571.43	14,28,571.43	Refer 3.1.3 of CPWD PAR2020

B.2.1.4- Summary OF Cost of Scholors Hostel Building Works

S.NO.	Description	Area (sqm)	Area (sqft)		height (m)	
1	Ground Floor	120.96	1302		3.80	
2	Stilt Portion On Ground Floor	288.00	3100		3.80	
3	First Floor	408.96	4402		3.80	
4	Second Floor	408.96	4402		3.80	
5	Terrace Area covered in solar panel	204.48	2201		-	
	Total built up area	1226.87	13206			
S.NO.	Description of items of work	Quantity	Unit	Rate	Total Amount	Remark
12	Telephone Conduits			0.25%	47,290.01	Refer 2.4.3 of CPWD PAR2020
	C ADDITIONAL SPECIALISED ITEMS					
13	Timber Screening with Flooding and Fixtures	21	each	30,201.26	6,34,226.46	Refer RA-01
14	Cement fiber Board with insulation & M.S Framing	360	Sq. mt.	3,005.89	10,82,121.43	DSR 2018 S.NO. 26.67
15	Flase Ceiling at Second Floor of GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm	204.48	Sq. mt.	1,404.33	2,87,154.51	DSR 2018 S.NO. 26.26
	D ADDITIONAL E&M ITEMS					
16	IP based EPABX services	46.94	sq.m.	446.43	20,956.93	Refer 17.1 pg 8, of CPWD PAR 2020
	TOTAL (A)				2,88,00,477.10	


 Project Manager
 Puri Project Division-II
 OBCC Ltd.


 Sr. Project Manager
 O.B. & C.C. Ltd.
 Puri Divn-II

Analysis of Rates 1 - 2006 to 2021

S.No.		Sl. No.s	Description	Quantity Required	Rate ₹ P.	Unit	Amount	
1			Clearing & Grubbing the road land including uprooting rank vegetation grass, bushes, shrubs, saplings and trees girth upto 300m, removal of stumps of trees cut earlier and disposal of unserviceable materials and stacking of serviceable material to be used or auctioned, upto a lead of 1000 meters including removal and disposal of top organic soil not exceeding 150mm in thickness.		XIV - 03 (Ref :- A/R - 2006, P- 196, Item No - 03)			
			Unit- Hectare					
			(I) In area of light Jungle					
			(a) Labour					
			(i) Mate	6.00	day	/day	₹ 2106.00	
			(ii) Mulia unskilled	150.00	day	/day	₹ 46650.00	
							₹ 48756.00	
			(b) Machinery					
			(i) Tractor - Trolley	1	hour	/hour	₹ 200.87	
							₹ 48956.87	
			(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)		₹ 3671.77	
			(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)		₹ 3671.77	
			Rate / Hectre				₹ 56300.40	Per Hectre
							₹ 5.63	Per Sqm
			(f) Add Labour Cess @ 1%	1%	on (a+b+c+d+e)		₹ 0.06	
							₹ 5.69	Per Sqm
2	V, 22, Page 32		Earth work in ordinary soil within 50m, initial lead and 1.5m, initial lift including rough dressing and breaking clods to maximum 5cm to 7cm and laying in layers not exceeding 0.3m in depth and as per direction of the Engineer-in-charge per 100 cum.					
			i) Labour					
			Man Mulia- semi skilled	day	16	351	5568	
			Female Mulia- semi skilled	day	16	401	6368	
			ii) Overhead Charges @10% on (i)				1193.6	
			iii) 2% Sundries and T & P etc. on (i)				23.872	
			IV) Sub Total for 100 cum				13153.47	
			v) Add GST 12% on above	@12%			1578.42	
			Total for 100 CUM including GST				14731.89	
			Total per cum				147.32	
3			Earth work in ordinary soil within 50m, initial lead and 1.5m, initial lift including rough dressing and breaking clods to maximum				I - I(a)	
			Man mulia	16	No. @ ₹	311.00	Per day	4976.00
			Female Mulia	16	No. @ ₹	311.00	Per day	4976.00
			Add Overhead Charges	7.50%				746.40
			Add Contractor Profit	7.50%				746.40
						A	₹ 11444.80	per 100 cum
			Add Cess	1%				114.45
							11559.25	per 100 cum
					Add 20% extra For Foundation ₹		2288.96	A
							13733.76	per 100 cum
4	VII, S.No. 4, pg 42		Add Cess	1%				137.34
							13871.10	per 100 cum
			Cement concrete (1:4:8) with 4 cm size hard granite metal					
			a) Material					
			Hand broken granite stone 4cm size	cum	0.96	626.81	601.74	
			Sand (screened & washed)	cum	0.48	51.71	24.82	
			Cement	quintal	1.38	500	690	
			b) Labour					
			Mason second class	day	0.18	401	71.64	
			Man mulia	day	1.8	351	626.4	
			Women mulia	day	1.4	351	487.2	
			Man mulia for mixing stone, sand and cement and getting water	day	0.7	351	243.6	
			c) Overhead Charges @ 10 % on (a+b)				274.54	
			d) Total (a+b+c)				3019.94	
			e) Add GST 12% on above	@12%			543.59	
			f) Total per cum				3563.53	
			g) For work below 1.5m upto 4.5m add 15% extra on labour rate				214.326	
			h) Total for CC work in foundation deeper than 1.5m upto 4.5m				3777.86	
			Cement concrete (1:4:8) with 40 mm size hard granite metal (per Cum)				III - 4	
			(a) Material					
			(i) Granite metal	0.96	Cum @ ₹	706.67	Per Cum.	₹ 678.40
			(ii) Sand	0.48	Cum @ ₹	46.67	Per Cum.	₹ 22.40

	(iii)Cement (0.12 Cum)	1.72	Qntl @ ₹	491.74	Per Qntl.		₹	845.79	
	(b) Labour								
	(i)Mason 2 nd Class	0.18	No. @ ₹	401.00	Per day		₹	72.18	
	(ii)Man mulia	1.8	No. @ ₹	311.00	Per day		₹	559.80	
	(iii)Female Mulia	1.4	No. @ ₹	311.00	Per day		₹	435.40	
	(iv)Man mulia for mixing	0.7	No. @ ₹	311.00	Per day		₹	217.70	
	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)				₹	212.38	
	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)					212.38	
							₹	3256.43	per cum
	(e) Royalty & Carriage								
	(i)Granite metal	0.96	Cum @ ₹	631.67	Per Cum.		606.40		
	(ii)Sand	0.48	Cum @ ₹	387.07	Per Cum.		185.79		
	(iii)Cement	1.72	Cum @ ₹	16.17	Per Qntl.		27.82		
								4076.44	
	(f) Add Labour Cess @ 1%	1%	on (a+b+c+d+e)					40.76	
								4117.21	
	For work below 1.5m upto 4.5m add 15% extra on labour rate							192.76	
	<i>Add Overhead Charges @ 7.5%</i>	<i>7.50%</i>	<i>on (a+b)</i>				₹	<i>14.46</i>	
	<i>Add Contractor Profit @ 7.5%</i>	<i>7.50%</i>	<i>on (a+b)</i>					<i>14.46</i>	
	<i>Add Labour Cess @ 1%</i>	<i>1%</i>	<i>on (a+b+c+d+e)</i>					<i>43.39</i>	
	Total for CC work in foundation deeper than 1.5m upto 4.5m							4382.27	

	R.C.C. work of M-25 grade with 20mm and down grade black hard granite (crusherbroken) stone chips including hoisting and laying Data for 15 cum.								
	a) Material								
	20 mm size chips	cum	8.1	1116.34	9042.354				
	10mm size chips	cum	5.4	1181.76	6381.504				
	coarse sand (screened and washed)	cum	6.75	380.45	2568.0375				
	Cement	mt	6.05	5000	30250				
	b) Labour								
	Mate	Nos	0.86	351	299.28				
	Mason 2nd class	Nos	1.5	401	597				
	Man Mulia	Nos	20	351	6960				
	c) Machinery								
	Concrete mixer(cap. 0.40/0.28 cum)	hr	6	170.52	1023.12				
	Generator 33 KVA	hr	6	231.22	1387.32				
	d) Overhead Charges @ 10 % on (a+b+c)				5850.86				
	Cost of 15 cum =(a+b+c+d)				64359.4755				
	e) Add GST 12% on above	@12%			7723.14				
	Rate per cum=(a+b+c+d)/15				4805.51				
	Rate for foundation works below 1.5m to 4.5m				5526.34				

	R.C.C. work of M-15 grade with 20mm and down grade black hard granite (crusherbroken) stone chips including hoisting and laying. Data for 1 cum								
	a) Material								
	20mm size chips	cum	0.54	1116.34	602.82				
	10mm size chips	cum	0.36	1181.76	425.43				
	coarse sand (screened and washed)	cum	0.45	380.45	171.20				
	cement	quintal	2.8	500	1400.00				
	Total				2599.46				
	b) Labour								
	Mate	day	0.06	351	20.88				
	Mason (second class)	day	0.1	401	39.80				
	Man Mulia	day	1.33	351	462.84				
	Total				523.52				
	c) Machinery								
	Concrete mixer	hour	1	170.52	170.52				
	Generator 33 KVA	hour	1	231.22	231.22				
	Total				401.74				
	Total (a+b+c)				3524.72				
	d) Overhead Charges @ 10 % on (a+b+c)				352.47				
	Total (a+b+c+d)				3877.19				
	d) Add GST 12% on above	@12.0%			465.26				
	Total Rate Per CUM				4342.45				

	Rigid and smooth centering and shuttering for R.C.C. works including false works and dismantling them after casting including cost of materials complete in ground floor								
	i) R.C.C. floor and roof slabs, landings,balconies, projecting sun shades and chajjas upto 4.3m height. Details for 9 sqm.								
	a) Materials								
	Non sal wood scantling	cum	0.112	18057.40	2022.43				
	planks 38mm	cum	0.34	18057.40	6139.52				

A	120mm dia sal bullah	mtr	56	99.3	5560.80				
	Carriage of wood	cum	1.142	180	205.56				
	Total				13928.30				
	Considering 10 times use of the materials, for use once				1392.83				
	b) Labour								
	Carpenter (second class)	day	2.75	401	1094.50				
	semi-skilled mulia	day	2.75	351	957.00				
	Total				2051.50				
	c) Overhead Charges @ 10 % on (a+b)				344.43				
	Total (a+b+c)				3788.76				
	d) Add GST 12% on above	@12%			454.65				
	Total				4243.42				
	Rate per 1 Sqm = (a+b+c)/9 =				471.49				
B	iii) R.C.C. stairs excluding landing but including railing . details for 5 Sqm								
	a) Materials								
	Non sal wood 38mm thick planks	cum	0.228	18057.40	4117.09				
	Non sal wood scantling	cum	0.039	18057.40	704.24				
	120mm dia non sal bullah	mtr	6.5	80.91	525.92				
	Carriage of wood	cum	0.35	180	63.00				
	Total				5410.24				
	Considering 10 times use of the materials, for use once				541.02				
	b) Labour								
	Carpenter (second class)	day	2.75	401	1094.50				
	semi-skilled mulia	day	2.75	351	957.00				
	Total				2051.50				
	c) Overhead Charges @ 10 % on (a+b)				259.25				
	Total (a+b+c)				2851.78				
C	d) Add GST 12% on above	@12.0%			342.21				
	Total				3193.99				
	Rate per 1 Sqm = (a+b+c)/5 =				638.80				
	iv) R.C.C. foundation , plinth band and footings bases of columns mass concrete precast slabs etc details for 10 Sqm								
	a) Materials								
	25mm thick non sal planks	cum	0.267	18057.40	4821.33				
	Non sal bullah 80mm dia for strutting	mtr	12.6	44.13	556.04				
	Carriage of wood	cum	0.3284	180	59.11				
	Total				5436.48				
	Considering 10 times use of the materials, for use once				543.65				
	b) Labour								
	Carpenter (second class)	day	0.5	401	199.00				
	semi-skilled mulia	day	0.5	351	174.00				
	Total				373.00				
	c) Overhead Charges @ 10 % on (a+b)				91.66				
	Total (a+b+c)				1008.31				
D	d) Add GST 12% on above	@12.0%			121.00				
	Total				1129.31				
	Rate per 1 Sqm = (a+b+c)/10 =				112.93				
	v) R.C.C. beams, column, grider and bressmer, etc. Data for 4.2sqm								
	a) Materials								
	38mm thick non sal planks	cum	0.218	18057.40	3936.51				
	120mm dia sal bullah	mtr	15.2	99.3	1509.36				
	80mm dia sal bullah for bracing	mtr	8	91.94	735.52				
	Carriage of wood	cum	0.456	180	82.08				
	Total				6263.47				
	Considering 10 times use of the materials, for use once				626.35				
	b) Labour								
	Carpenter (second class)	day	2.75	401	1094.50				
	semi-skilled mulia	day	2.75	351	957.00				
	Total				2051.50				
E	c) Overhead Charges @ 10 % on (a+b)				267.78				
	Total (a+b+c)				2677.85				
	d) Add GST 12% on above	@12.0%			353.48				
	Total				3299.11				
	Rate per 1 Sqm = (a+b+c)/4.20 =				785.50				
	vi) R.C.C. Lintels . Data for 7.8 sqm								
	a) Materials								
	38mm thick non sal planks	cum	0.413	18057.40	7457.71				
	120mm dia non sal bullah	mtr	21	80.91	1699.11				
	Carriage of wood	cum	0.689	180	124.02				
	Total				9280.84				

E	Considering 10 times use of the materials, for use once				928.08			
	b) Labour							
	Carpenter (second class)	day	1.25	401	497.50			
	semi-skilled mulia	day	1.25	351	435.00			
	Total				932.50			
	c) Overhead Charges @ 10 % on (a+b)				186.06			
	Total (a+b+c)				2046.64			
	d) Add GST 12% on above	@12.0%			245.60			
	Total				2292.24			
	Rate per 1 Sqm = (a+b+c)/7.80 =				293.88			
F	vii) R.C.C. walls and fins including attached pillars . Data for 23.90 sqm							
	a) Materials							
	38mm thick non sal planks	cum	0.954	18057.40	17226.76			
	Non sal wood scantling	cum	0.269	18057.40	4857.44			
	120mm dia non sal bullah	mtr	100.8	80.91	8155.73			
	Carriage of wood	cum	2.461	180	442.98			
	Total				30682.91			
	Considering 10 times use of the materials, for use once				3068.29			
	b) Labour							
	Carpenter (second class)	day	13.5	401	5373.00			
	semi-skilled mulia	day	13.5	351	4698.00			
	Total				10071.00			
	c) Overhead Charges @ 10 % on (a+b)				1313.93			
	Total (a+b+c)				14453.22			
	d) Add GST 12% on above	@12.0%			1734.39			
	Total				16187.61			
	Rate per 1 Sqm = (a+b+c)/23.90 =				1154.50			
	x) Centering and shuttering for shell roof 1) upto 5.50m height. Details for 9.30sqm							
	a) Materials							
	non sal wood 38mm planks	cum	0.353	18057.40	6374.26			
	120mm dia sal bullah	cum	110	99.3	10923.00			
	80mm dia non sal bullah	mtr	15.23	44.13	672.10			
	Non sal wood scantling 25mm	cum	0.2258	18057.40	4077.36			

G	Carriage of wood	cum	1.8987	180	341.77			
	Total				22388.49			
	Considering 10 times use of the materials, for use once				2238.85			
	b) Labour							
	Carpenter (second class)	day	4.12	401	1639.76			
	semi-skilled mulia	day	4.12	351	1433.76			
	Total				3073.52			
	c) Overhead Charges @ 10 % on (a+b)				531.24			
	Total (a+b+c)				5843.61			
	d) Add GST 12% on above	@12.0%			701.23			
	Total				6544.84			
	Rate per 1 Sqm = (a+b+c)/9.30 =				703.75			
	2) For each additional height of 0.30m over 5.50m and upto 7.5m height. Details for 9.30sqm							
	a) Materials							
	120mm dia sal bullah	cum	4.8	99.3	476.64			
	Carriage of wood	cum	0.054	180	9.72			
	Total				486.36			
	Considering 10 times use of the materials, for use once				48.64			
	b) Labour							
	Carpenter (second class)	day	0.225	401	89.55			
	semi-skilled mulia	day	0.225	351	78.30			
	Total				167.85			
	c) Overhead Charges @ 10 % on (a+b)				21.65			
	Total (a+b+c)				238.13			
	d) Add GST 12% on above	@12.0%			28.58			
	Total				266.71			
	Rate per 1 Sqm = (a+b+c)/9.30 =				28.68			

	Reinforced Cement concrete work of M-25 grade concrete with 20 mm down graded crusher broken hard granite chips (per Cum)						IV - 05	
(a)	Material							
	(i)Granite chips 10 mm	5.4 Cum @ ₹	1066.67	Per Cum.	₹	5760.02		
	(ii)Granite chips 20 mm	8.1 Cum @ ₹	1007.62	Per Cum.	₹	8161.72		
	(iii)Sand	6.75 Cum @ ₹	46.67	Per Cum.	₹	315.02		
	(iv)Cement	60.5 Qntl @ ₹	491.74	Per Qntl.	₹	29750.27		
(b)	Labour							
	(i)Mason 2 nd Class	1.5 No. @ ₹	401.00	Per day	₹	601.50		
	(ii)Mate	0.86 No. @ ₹	351.00	Per day	₹	301.86		
	(iii)Female Mulia	20 No. @ ₹	311.00	Per day	₹	6220.00		
(c)	Machinery							
	(i)Concrete Mixer	6 Hour @ ₹	153.91	Per Hour	₹	923.46		
	(ii)Generator 33KV	6 Hour @ ₹	208.70	Per Hour	₹	1252.20		
(d)	Add Overhead Charges @ 7.5%	7.50%	on (a+b+c)			₹	3996.45	
(e)	Add Contractor Profit @ 7.5%	7.50%	on (a+b+c)			₹	3996.45	
					Rate per 15 Cum	₹	61278.96	
(f)	Royalty & Carriage							
	(i)Granite chips 10 mm	5.4 Cum @ ₹	631.67	Per Cum.		3411.02		
	(ii)Granite chips 20 mm	8.1 Cum @ ₹	631.67	Per Cum.		5116.53		
	(iii)Sand	6.75 Cum @ ₹	387.07	Per Cum.		2612.72		
	(iv)Cement	60.5 Qntl @ ₹	16.17	Per Qntl.		978.41		
					Rate per 15 Cum	₹	73397.63	
					Rate per Cum	₹	4893.18	per cum
(g)	Add Labour Cess @ 1%	1%	on (a+b+c+d+e+f)			48.93		
						4942.11	per cum	
	Supplying, fitting and placing uncoated HYSD bar reinforcement complete as per drawing and technical specification.						IV - 09	
	Data for 1MT							
(a)	Material							
	(i)HYSD bars including 5 % overlaps and wastage	1.05 MT @ ₹	57493.14	Per MT	₹	60367.79		
	(ii)Binding Wire	8 Kg @ ₹	65.53	Per Kg	₹	524.24		
	(iii)Blacksmith 1st Class	3 No. @ ₹	461.00	Per day	₹	1383.00		
(b)	Labour							
	(i)Mate	0.44 No. @ ₹	351.00	Per day	₹	154.44		
	(ii)Man mulia	8 No. @ ₹	311.00	Per day	₹	2488.00		
(c)	Add Overhead Charges @ 7.5%	7.50%	on (a+b)			₹	4868.81	
(d)	Add Contractor Profit @ 7.5%	7.50%	on (a+b)			₹	4868.81	
						₹	74655.09	Per MT
(e)	Royalty & Carriage							
	HYSD bars including 5 % overlaps and wastage	1.05 MT @ ₹	161.72	Per MT		169.81		
						74824.90	Per MT	
(f)	Add Labour Cess @ 1%	1%	on (a+b+c+d+e)			748.25		
						75573.15	per MT	

		Reinforced Cement concrete work of M-15 grade concrete with 20 mm down graded crusher broken hard granite chips (per Cum)						IV - 03 (Ref :-A/R - 2006, P-49, Item No - 03)	
	(a) Material								
	(i)Granite chips 10 mm	0.36	Cum @ ₹	1066.67	Per Cum.		₹ 384.00		
	(ii)Granite chips 20 mm	0.54	Cum @ ₹	1007.62	Per Cum.		₹ 544.11		
	(iii)Sand	0.45	Cum @ ₹	46.67	Per Cum.		₹ 21.00		
	(iv)Cement	2.8	Qntl @ ₹	491.74	Per Qntl.		₹ 1376.87		
	(b) Labour								
	(i)Mason 2 nd Class	0.1	No. @ ₹	401.00	Per day		₹ 40.10		
	(ii)Mate	0.06	No. @ ₹	351.00	Per day		₹ 21.06		
	(iii)Female Mulia	1.33	No. @ ₹	311.00	Per day		₹ 413.63		
	(c) Machinery								
	(i)Concrete Mixer	0.4	Hour @ ₹	153.91	Per Hour		₹ 61.56		
	(ii)Generator 33KV	0.4	Hour @ ₹	208.70	Per Hour		₹ 83.48		
	(d) Add Overhead Charges @ 7.5%	7.50%	on (a+b+c)				₹ 220.94		
	(e) Add Contractor Profit @ 7.5%	7.50%	on (a+b+c)				₹ 220.94		
							₹ 3387.70	per cum	
	(f) Royalty & Carriage								
	(i)Granite chips 4.7 mm	0.36	Cum @ ₹	631.67	Per Cum.		227.40		
	(ii)Granite chips 12 mm	0.54	Cum @ ₹	631.67	Per Cum.		341.10		
	(iii)Sand	0.45	Cum @ ₹	387.07	Per Cum.		174.18		
	(iv)Cement	2.8	Cum @ ₹	16.17	Per Qntl.		45.28		
							₹ 4175.66	per cum	
	(g) Add Labour Cess @ 1%	1%	on (a+b+c+d+e+f)				41.76		
							₹ 4217.42	per cum	
		Rigid and smooth centering and shuttering for R.C.C. works including false works and dismantling then after casting including cost of materials						IV - 10	
	(A) R.C.C. floor and roof slabs, landings, balconies, projecting sun shades and chajjas upto 4.3m height. (Details for 9 sqmt.)							IV - 10i	
	(a) Material								
	(i)Wood	0.112	Cum @ ₹	16298.76	per cum		1825.46		
	(ii)Planks	0.34	Cum @ ₹	16298.76	per cum		5541.58		
	(iii)120 mm Dia Sal bullah	56	Mtr @ ₹	82.99	per Mtr.		4647.44		
	(iv)Carriage of wood 10 times use	1.142	Cum @ ₹	161.72	per 1.25 cum		147.75		
							12162.23		
	Considering 10 times use						₹ 1216.22		
	(b) Labour								
	(i)Carpenter 2nd class	2.75	No. @ ₹	401.00	Per day		1102.75		
	(ii)Sangi Mulia	2.75	No. @ ₹	351.00	Per day		965.25	2068.00	
	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)				₹ 246.32		
	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)				₹ 246.32		
				Total for 9 Sq. Mtr.			₹ 3776.85		
					Per 1 Sq. Mtr		₹ 419.65		
	(f) Add Labour Cess @ 1%	1%	on (a+b+c+d+e)				4.20		
							₹ 423.85		
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
	Material Cost	1351.36	1621.63	1945.96	2335.15	2802.18	3362.61	4035.13	4842.16
	Labour Cost	229.78	275.73	330.88	397.06	476.47	571.76	686.11	823.34
	Add Overhead Charges @ 7.5%	118.59	142.30	170.76	204.92	245.90	295.08	354.09	424.91
	Add Contractor Profit @ 7.5%	118.59	142.30	170.76	204.92	245.90	295.08	354.09	424.91
		1818.31	2181.97	2618.36	3142.03	3770.44	4524.53	5429.43	6515.32
	Add Labour Cess @ 1%	18.18	21.82	26.18	31.42	37.70	45.25	54.29	65.15
		1836.49	2203.79	2644.55	3173.45	3808.15	4569.77	5483.73	6580.48
	(B) R.C.C. stairs excluding landing but including railing. (Details for 5 sqmt.)								IV - 10ii
	(a) Material								
	(i)Non Sal Wood 38 mm	0.228	Cum @ ₹	16298.76	per cum		3716.12		
	(ii)Non Sal scantling	0.039	Cum @ ₹	16298.76	per cum		635.65		
	(iii)120 mm Dia bullah	6.5	Mtr @ ₹	58.09	per Mtr.		377.59		
	(iv)Carriage of wood 10 times use	0.35	Cum @ ₹	161.72	per 1.25 cum		45.28		
							4774.64		
	Considering 10 times use						₹ 477.46		
	(b) Labour								
	(i)Carpenter 2nd class	2.75	No. @ ₹	401.00	Per day		1102.75		
	(ii)Semi skilled Mulia	2.75	No. @ ₹	351.00	Per day		965.25	2068.00	
	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)				₹ 190.91		
	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)				₹ 190.91		
				Total for 5 Sq. Mtr.			₹ 2927.28		
					Per 1 Sq. Mtr		₹ 585.46		
	(f) Add Labour Cess @ 1%	1%	on (a+b+c+d+e)				5.85		
							₹ 591.31		
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
	Material Cost	954.93	1145.91	1375.10	1650.11	1980.14	2376.16	2851.40	3421.68
	Labour Cost	413.60	496.32	595.58	714.70	857.64	1029.17	1235.00	1482.00
	Add Overhead Charges @ 7.5%	102.64	123.17	147.80	177.36	212.83	255.40	306.48	367.78
	Add Contractor Profit @ 7.5%	102.64	123.17	147.80	177.36	212.83	255.40	306.48	367.78
		1573.81	1888.57	2266.28	2719.54	3263.44	3916.13	4699.36	5639.23
	Add Labour Cess @ 1%	15.74	18.89	22.66	27.20	32.63	39.16	46.99	56.39

		1589.54	1907.45	2288.94	2746.73	3296.08	3955.29	4746.35	5695.62
(C) RCC Foundation and plinth band, footings, base of columns mass concrete etc. (Details for 10 sqmt.)							IV - 10 iv		
C	(a) Material								
	(i)Wood 25 mm	0.267	Cum @ ₹	16298.76	per cum			4351.77	
	(ii)Non Sal Bullah 80 mm	12.6	Mtr @ ₹	39.83	per Mtr.			501.86	
	(iii)Carriage of wood 10 times use	0.3284	Cum @ ₹	161.72	per 1.25 cum			42.49	
								4896.11	
	Considering 10 times use							₹	489.61
	(b) Labour								
	(i)Carpenter 2nd class	0.5	No. @ ₹	401.00	Per day			200.50	
	(ii)Semi skilled Mulia	0.5	No. @ ₹	351.00	Per day			175.50	376.00
	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)					₹	64.92
D	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)					₹	64.92
					Total for 10 Sq. Mtr.			₹	995.45
						Per 1 Sq. Mtr		₹	99.55
	(f) Add Labour Cess @ 1%	1%	on (a+b+c+d+e)						1.00
									100.55
	(D) RCC Beams, Columns griders and bressmer, etc. (Details for 4.2 sqmt.)							IV - 7v	
	(a) Material								
	(i)Wood 38 mm	0.218	Cum @ ₹	16298.76	per cum			3553.13	
	(ii)80 mm Dia sal bullah	8	Cum @ ₹	82.99	per Mtr.			663.92	
	(iii)120 mm Dia sal bullah	15.2	Mtr @ ₹	82.99	per Mtr.			1261.45	
	(iv)Carriage of wood 10 times use	0.456	Cum @ ₹	161.72	per 1.25 cum			59.00	
								5537.49	
	Considering 10 times use							₹	553.75
	(b) Labour								
	(i)Carpenter 2nd class	2.75	No. @ ₹	401.00	Per day			1102.75	
E	(ii)Semi skilled Mulia	2.75	No. @ ₹	351.00	Per day			965.25	2068.00
	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)					₹	196.63
	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)					₹	196.63
					Total for 4.2 Sq. Mtr.			₹	3015.01
						Per 1 Sq. Mtr		₹	717.86
	(e) Add Labour Cess @ 1%	1%	on (a+b+c+d)						7.18
									725.04
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
	Material Cost	131.85	158.21	189.86	227.83	273.39	328.07	393.69	472.43
	Labour Cost	492.38	590.86	709.03	850.83	1021.00	1225.20	1470.24	1764.29
F	Add Overhead Charges @ 7.5%	46.82	56.18	67.42	80.90	97.08	116.50	139.79	167.75
	Add Contractor Profit @ 7.5%	46.82	56.18	67.42	80.90	97.08	116.50	139.79	167.75
		717.86	861.43	1033.72	1240.46	1488.55	1786.27	2143.52	2572.22
	Add Labour Cess @ 1%	7.18	8.61	10.34	12.40	14.89	17.86	21.44	25.72
		725.04	870.05	1044.06	1252.87	1503.44	1804.13	2164.95	2597.94
	(E) RCC Lintels. (Details for 7.8 sqmt.)							IV - 7 vi	
	(a) Material								
	(i)Wood 38 mm	0.413	Cum @ ₹	16298.76	per cum			6731.39	
	(ii)120mm dia non sal bullah	21	Mtr @ ₹	58.09	per Mtr.			1219.89	
	(iii)Carriage of wood 10 times use	0.689	Cum @ ₹	161.72	per 1.25 cum			89.14	
								8040.42	
	Considering 10 times use							₹	804.04
	(b) Labour								
	(i)Carpenter 2nd class	1.25	No. @ ₹	401.00	Per day			501.25	
G	(ii)Semi skilled Mulia	1.25	No. @ ₹	351.00	Per day			438.75	940.00
	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)					₹	130.80
	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)					₹	130.80
					Total for 7.8 Sq. Mtr.			₹	2005.65
						Per 1 Sq. Mtr		₹	257.13
	(e) Add Labour Cess @ 1%	1%	on (a+b+c+d)						2.57
									259.70
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
	Material Cost	103.08	123.70	148.44	178.13	213.75	256.50	307.80	369.36
	Labour Cost	120.51	144.62	173.54	208.25	249.90	299.87	359.85	431.82
H	Add Overhead Charges @ 7.5%	16.77	20.12	24.15	28.98	34.77	41.73	50.07	60.09
	Add Contractor Profit @ 7.5%	16.77	20.12	24.15	28.98	34.77	41.73	50.07	60.09
		257.13	308.56	370.27	444.33	533.19	639.83	767.80	921.36
	Add Labour Cess @ 1%	2.57	3.09	3.70	4.44	5.33	6.40	7.68	9.21
		259.71	311.65	373.98	448.77	538.53	646.23	775.48	930.57
	(F) RCC Walls & fins including attached pillaster								
	(a) Material								
	(i)Wood 38 mm	0.954	Cum @ ₹	16298.76	per cum			15549.02	
	(ii)Battens	0.269	Cum @ ₹	16298.76	per cum			4384.37	
	(iii)120mm dia non sal bullah	100.8	Mtr @ ₹	58.09	per Mtr.			5855.47	
	(iv)Carriage of wood 10 times use	2.461	Cum @ ₹	161.72	per 1.25 cum			318.39	
								26107.25	
	Considering 10 times use							₹	2610.72
	(b) Labour								
	(i)Carpenter 2nd class	13.5	No. @ ₹	401.00	Per day			5413.50	
I	(ii)Semi skilled Mulia	13.5	No. @ ₹	351.00	Per day			4738.50	10152.00

F	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)					₹ 957.20	
	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)					₹ 957.20	
				Total for 23.90 Sq. Mtr.				₹ 14677.13	
					Per 1 Sq. Mtr			₹ 614.11	
	(e) Add Labour Cess @ 1%	1%	on (a+b+c+d)					6.14	
								620.25	
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
	Material Cost	109.24	131.08	157.30	188.76	226.51	271.81	326.17	391.41
	Labour Cost	424.77	509.72	611.67	734.00	880.80	1056.96	1268.36	1522.03
	Add Overhead Charges @ 7.5%	40.05	48.06	57.67	69.21	83.05	99.66	119.59	143.51
	Add Contractor Profit @ 7.5%	40.05	48.06	57.67	69.21	83.05	99.66	119.59	143.51
		614.11	736.93	884.31	1061.17	1273.41	1528.09	1833.71	2200.45
	Add Labour Cess @ 1%	6.14	7.37	8.84	10.61	12.73	15.28	18.34	22.00
		620.25	744.30	893.16	1071.79	1286.14	1543.37	1852.05	2222.46

G	(G) Double stage centering and shuttering for roof slabs Balconies and projections above 3.60mand up to 7.20m heights. (Details for 9.30)						IV - 7 viii		
	(a) Material								
	(i)Wood 38 mm	0.7068	Cum @ ₹	16298.76	per cum	11519.96			
	(ii)120 mm Dia sal bullah	112	Mtr @ ₹	82.99	per Mtr.	9294.88			
	(iii)Non Sal Bullah 80 mm	24.38	Mtr @ ₹	39.83	per Mtr.	971.06			
	(iv)Non-sal wood scanting 25 mm	0.2438	Cum @ ₹	16298.76	per cum	3973.64			
	(v)Carriage of wood	2.339	Cum @ ₹	161.72	per 1.25 cum	302.61			
						26062.15			
	Considering 10 times use					₹ 2606.21			
	(b) Labour								
	(i)Carpenter 2nd class	6.05	No. @ ₹	401.00	Per day	2426.05			
	(ii)Semi skilled Mulia	6.05	No. @ ₹	351.00	Per day	2123.55	4549.60		
	(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)			₹ 715.58			
	(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)			₹ 715.58			
				Total for 9.30 Sq. Mtr.		₹ 8586.97			
					Per 1 Sq. Mtr	₹ 923.33			
	(e) Add Labour Cess @ 1%	1%	on (a+b+c+d)			9.23			
						932.56			
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
	Material Cost	280.24	336.29	403.54	484.25	581.10	697.32	836.79	1004.14
	Labour Cost	489.20	587.05	704.45	845.35	1014.41	1217.30	1460.76	1752.91
	Add Overhead Charges @ 7.5%	76.94	92.33	110.80	132.96	159.55	191.46	229.75	275.70
	Add Contractor Profit @ 7.5%	76.94	92.33	110.80	132.96	159.55	191.46	229.75	275.70
		923.33	1108.00	1329.60	1595.51	1914.62	2297.54	2757.05	3308.46
	Add Labour Cess @ 1%	9.23	11.08	13.30	15.96	19.15	22.98	27.57	33.08
		932.56	1119.08	1342.89	1611.47	1933.76	2320.52	2784.62	3341.54

			932.30	1119.06	1342.69	1611.47	1933.76	2326.32	2784.62	3341.54
(H) Triple stage centering and shuttering for roof slabs, Balconies and projections above 7.20 m and up to 10.8m heights. (Details for 9.30										
(a) Material										<i>IV - 7 viii</i>
(i)Wood 38 mm	1.0602	Cum @ ₹	16298.76	per cum			17279.95			
(ii)120 mm Dia sal bullah	168	Mtr @ ₹	82.99	per Mtr.			13942.32			
(iii)Non Sal Bullah 80 mm	36.57	Mtr @ ₹	39.83	per Mtr.			1456.58			
(iv)Non-sal wood scanting 25 mm	0.3657	Cum @ ₹	16298.76	per cum			5960.46			
(v)Carriage of wood	3.5086	Cum @ ₹	161.72	per 1.25 cum			453.93			
							39093.23			
Considering 10 times use								₹	3909.32	
(b) Labour										
(i)Carpenter 2nd class	10	No. @ ₹	401.00	Per day			4010.00			
(ii)Semi skilled Mulia	10	No. @ ₹	351.00	Per day			3510.00		7520.00	
(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)						₹	1142.93	
(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)						₹	1142.93	
			Total for 9.30 Sq. Mtr.					₹	13715.18	
							Per 1 Sq. Mtr	₹	1474.75	
(e) Add Labour Cess @ 1%	1%	on (a+b+c+d)							14.75	
									1489.50	
			<i>Gnd Floor</i>	<i>1st Floor</i>	<i>2nd Floor</i>	<i>3rd Floor</i>	<i>4th Floor</i>	<i>5th Floor</i>	<i>6th Floor</i>	<i>7th Floor</i>
Material Cost	420.36		504.43	605.31		726.38	871.65	1045.98	1255.18	1506.22
Labour Cost	808.60		970.32	1164.39		1397.26	1676.72	2012.06	2414.47	2897.37
<i>Add Overhead Charges @ 7.5%</i>	122.90		147.48	176.97		212.36	254.84	305.80	366.97	440.36
<i>Add Contractor Profit @ 7.5%</i>	122.90		147.48	176.97		212.36	254.84	305.80	366.97	440.36
	1474.75		1769.70	2123.64		2548.37	3058.04	3669.65	4403.58	5284.30
<i>Add Labour Cess @ 1%</i>	14.75		17.70	21.24		25.48	30.58	36.70	44.04	52.84
	1489.50		1787.40	2144.88		2573.85	3088.62	3706.35	4447.62	5337.14

(I)	RCC Slope roof up to 5.50 mtr. height. (Details for 9.30 sqmt.)							IV - 7 x
(a)	Material							
	(i)Wood 38 mm	0.353	Cum @ ₹	16298.76	per cum		5753.46	
	(ii)Wood 25 mm	0.2258	Cum @ ₹	16298.76	per cum		3680.26	
	(iii)120 mm Dia sal bullah	110	Mtr @ ₹	82.99	per Mtr.		9128.90	
	(iv)80 mm Dia non-sal bullah	15.23	Mtr @ ₹	39.83	per Mtr.		606.61	
	(v)Carriage of wood	1.8987	Cum @ ₹	161.72	per 1.25 cum		245.65	
							19414.88	
	Considering 10 times use						₹	1941.49
(b)	Labour							

(i)Carpenter 2nd class	4.12	No. @ ₹	401.00	Per day		1652.12			
(ii)Semi skilled Mulia	4.12	No. @ ₹	351.00	Per day		1446.12	3098.24		
(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)				₹	503.97		
(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)				₹	503.97		
			Total for 9.30 Sq. Mtr.			₹	6047.68		
(e) Add Labour Cess @ 1%	1%	on (a+b+c+d)			Per 1 Sq. Mtr	₹	650.29		
							6.50		
							656.79		
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
Material Cost	208.76		250.51	300.62	360.74	432.89	519.47	623.36	748.03
Labour Cost	333.14		399.77	479.73	575.67	690.81	828.97	994.76	1193.72
Add Overhead Charges @ 7.5%	54.19		65.03	78.03	93.64	112.37	134.84	161.81	194.17
Add Contractor Profit @ 7.5%	54.19		65.03	78.03	93.64	112.37	134.84	161.81	194.17
	650.29		780.35	936.41	1123.70	1348.44	1618.12	1941.75	2330.10
Add Labour Cess @ 1%	6.50		7.80	9.36	11.24	13.48	16.18	19.42	23.30
	656.79		788.15	945.78	1134.93	1361.92	1634.31	1961.17	2353.40

(J) RCC Slope roof up to 3.60 mtr. height. (Details for 9.30 sqmt.)

IV - 7 xi

(a) Material									
(i)Wood 38 mm	0.394	Cum @ ₹	16298.76	per cum		6421.71			
(ii)Wood 25 mm	0.0701	Cum @ ₹	16298.76	per cum		1142.54			
(iii)120 mm Dia sal bullah	73.17	Mtr @ ₹	82.99	per Mtr.		6072.38			
(iv)80 mm Dia non-sal bullah	14.02	Mtr @ ₹	39.83	per Mtr.		558.42			
(v)Carriage of wood	1.3612	Cum @ ₹	161.72	per 1.25 cum		176.11			
						14371.16			
Considering 10 times use								1437.12	
(b) Labour									
(i)Carpenter 2nd class	3.43	No. @ ₹	401.00	Per day		1375.43			
(ii)Semi skilled Mulia	3.43	No. @ ₹	351.00	Per day		1203.93	2579.36		
(c) Add Overhead Charges @ 7.5%	7.50%	on (a+b)				₹	401.65		
(d) Add Contractor Profit @ 7.5%	7.50%	on (a+b)				₹	401.65		
			Total for 9.30 Sq. Mtr.			₹	4819.78		
(e) Add Labour Cess @ 1%	1%	on (a+b+c+d)			Per 1 Sq. Mtr	₹	518.26		
							5.18		
							523.44		
		Gnd Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	7th Floor
Material Cost	154.53		185.43	222.52	267.03	320.43	384.52	461.42	553.71
Labour Cost	277.35		332.82	399.38	479.26	575.11	690.14	828.16	993.80
Add Overhead Charges @ 7.5%	43.19		51.83	62.19	74.63	89.55	107.47	128.96	154.75
Add Contractor Profit @ 7.5%	43.19		51.83	62.19	74.63	89.55	107.47	128.96	154.75
	518.26		621.91	746.29	895.55	1074.65	1289.59	1547.50	1857.00
Add Labour Cess @ 1%	5.18		6.22	7.46	8.96	10.75	12.90	15.48	18.57
	523.44		628.13	753.75	904.50	1085.40	1302.48	1562.98	1875.57

Brick work with K.B. bricks 25cm x 12cm x 8cm size having crushing strength not less than 75 Kg/cm² with dimensional tolerance ±8 percent in cement mortar (1:6) in foundation and plinth per cum.

a) Material

K.B. Brick 25cm x 12cm x 8cm 1000 Nos 350 5138.77 1798.57

Sharp sand (Screened and Washed) cum 0.28 51.71 14.48

Cement quintal 0.672 500 336.00

Total 2149.05

b) Labour

Mason special day 0.35 461 160.30

Mason second class day 1.05 401 417.90

Man Mulia day 1.41 351 490.68

Women mulia day 1.41 351 490.68

Preparing mortar and getting water etc. day 0.14 311 43.12

Total 1602.68

Total (a+b) 3751.73

c) Overhead Charges @ 10 % on (a+b) 375.17

Total (a+b+c) 4126.90

d) Add GST 12% on above @12.0% 495.23

Total Rate Per CUM 4622.13

Honey comb masonry with 25cm x12cm x8cm size Kiln burnt bricks having crushing strength not less than 75 kg/cm² in cement mortrar (1:4) and plastered with 16mm, thick cement mortar (1:6) including white washing 2 coats Per 1 sqm

a) Material

K.B. Brick 25cm x 12cm x 8cm 1000 Nos 61 5138.77 313.46

Sharp sand (Screened and Washed) cum 0.08 51.71 4.14

Cement quintal 0.286 500 143.00

Total 460.60

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