



Government of West Bengal

Office of the Principal

GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE

PANCHANANTALA, KHUDRUN DIGHI, MANGALKOTE

P.O. - MAJHIGRAM; BLOCK - MANGALKOTE; SUB DIVISION - KATWA  
DISTRICT - PURBA BARDHAMAN; WEST BENGAL; PIN CODE - 713132; INDIA

Email: ggdcmanagalkote@gmail.com; Website: <https://mangalkotegovtcollege.org>

## CRITERION7 - INSTITUTIONAL VALUES AND BEST PRACTICES

### KEY INDICATOR - 7.1 INSTITUTIONAL VALUES AND SOCIAL RESPONSIBILITIES

7.1.2: The Institution has facilities and initiatives for

1. Alternate sources of energy and energy conservation measures
2. Management of the various types of degradable and nondegradable waste
3. Water conservation
4. Green campus initiatives
5. Disabled-friendly, barrier free environment

Government General Degree College, Mangalkote **has taken initiatives and has all the above-mentioned facilities.** They can found by clicking on the following links/verified through geo-tagged photos:

### 1. Alternate sources of energy and energy conservation measures:

THE LINK TO THE ENERGY CONSERVATION POLICY IS GIVEN BELOW:

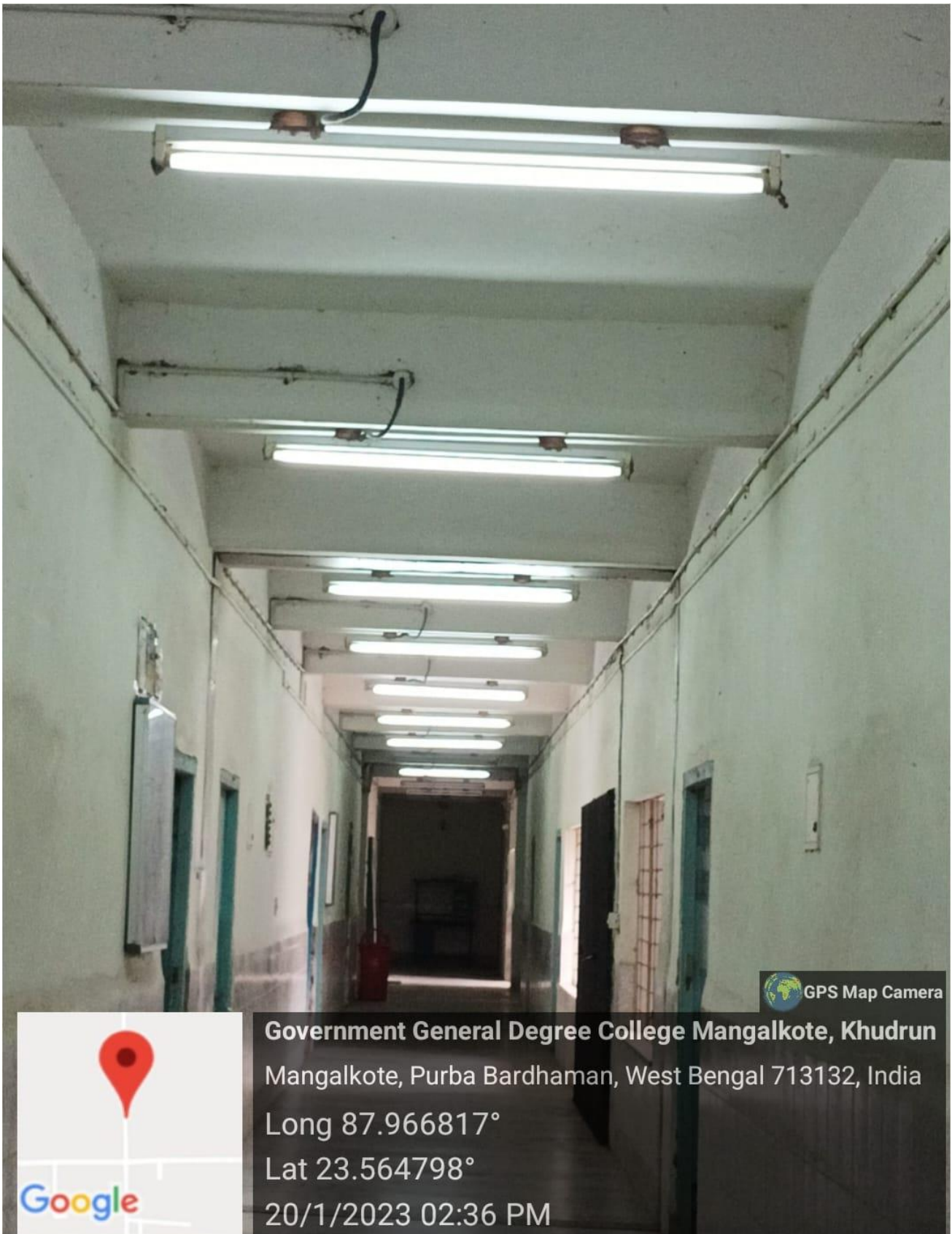
<https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/07/ENERGY-CONSERVATION-POLICY GGDCM.pdf>

WEBSITE LINK:

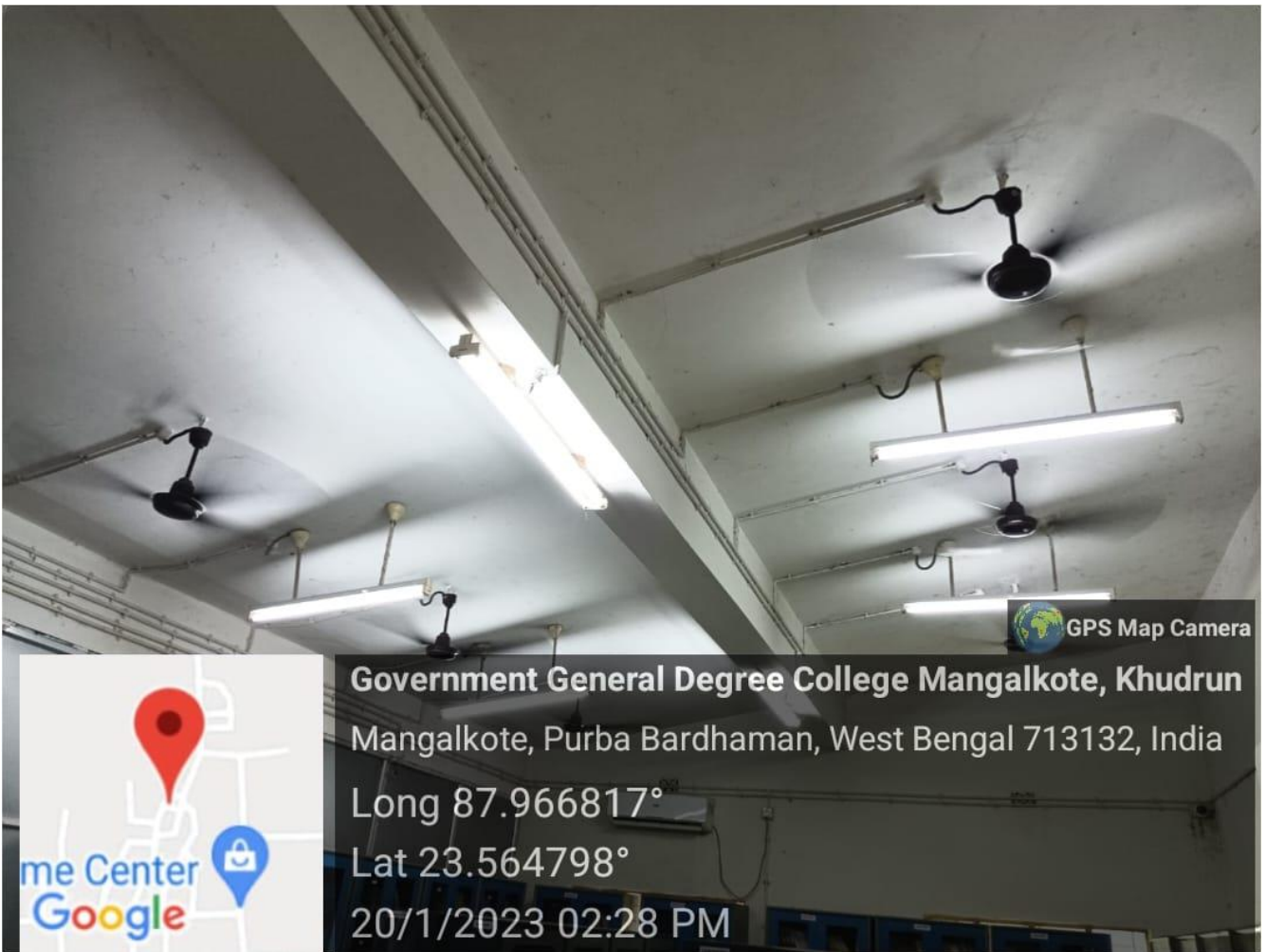
<https://www.mangalkotegovtcollege.org/quality-audits/>



Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dl, Purba Bardhaman, West Bengal- 713132



**FIG.: USE OF LED-TUBELIGHTS IN CORRIDORS OF COLLEGE BUILDING AS AN ENERGY-SAVING STRATEGY**



**FIG.: USE OF LED-TUBELIGHTS IN CLASSROOMS OF COLLEGE BUILDING AS AN ENERGY-SAVING STRATEGY**



**FIG.: USE OF LED-LAMPS TO ILLUMINATE THE COLLEGE CAMPUS AS AN ENERGY-SAVING STRATEGY**

**ADDITIONALLY, APPLICATION FOR GRANTS FOR INSTALLATION OF SOLAR PANELS IN THE COLLEGE CAMPUS, AS PART OF ENERGY CONSERVATION DRIVE, HAS BEEN SUBMITTED REPEATEDLY TO THE DEPARTMENT OF HIGHER EDUCATION, GOVT. OF WEST BENGAL BUT THE AMOUNT HAS NOT YET BEEN SANCTIONED. THE LETTERS ARE ATTACHED BELOW FOR REFERENCE:**



Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dl, Purba Bardhaman, West Bengal- 713132



**Government of West Bengal**  
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Email: ggdc mangalkote@gmail.com; Website: <http://mangalkotegovtcollege.org>  
Mobile No. 8240720525, Whatsapp: 9433172422

Memo No.: 162/MGC

Dated: 21/03/2023

From: The Officer in Charge,  
Govt. General Degree College, Mangalkote

To  
The Director of Public Instruction, West Bengal  
Bikash Bhavan, Salt Lake City  
Kolkata – 700091

**Subject: Submission of proposal and PWD vetted budget estimate of flagship project for SITC of 15 KWp on-grid with 5 KWp off grid Solar PV Power Plant and necessary LC under Development Head of Government General Degree College, Mangalkote amounting Rs. 16,16,399/- (Rupees sixteen Lakh sixteen thousand three hundred ninety nine only).**

**Ref: Previous prayer vide this office Memo No. 502/MGC, dated 19/11/2022 and 104/MGC Dated 17/02/23**

Madam,

The undersigned hereby furnishes herewith the vetted budget estimate by PWD of flagship project for SITC of 15 KWp on-grid with 5 KWp off grid Solar PV Power Plant and necessary LC under Development Head for your kind perusal:

Sl. No.	Nature of the work	Superintendence organization	Estimated amount (Rs.)	Purposes/Justifications
1	<b>Installation of SITC of 15 KWp on-grid with 5 KWp off grid Solar PV Power Plant and necessary LC</b>	PWD, Electrical Sub Division, Katwa (vetted estimate is attached)	<b>Rs. 16,16,399/-</b>	This is a flagship project towards renewable energy at its best uses. This is an alternate energy initiative and the proposal is in line with environmental consciousness and sustainability.
<b>TOTAL</b>			<b>Rs. 16,16,399/-</b>	

I hope that this proposal will be considered worthy and you will be kind enough to sanction necessary approval in this regard.

The estimated budget for the above mentioned works is **Rs. 16,16,399/- (Rupees sixteen Lakh sixteen thousand three hundred ninety nine only)**.

This is for your kind consideration and necessary action at the earliest convenience.

Thanking you,



With regards,

**Officer-In-Charge**  
**GGDC, Mangalkote**

*Dr. Pradipta Kumar Basu*  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dt. Purba Bardhaman, West Bengal- 713132



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Email: ggdc Mangalkote@gmail.com; Website: <http://mangalkotegovtcollege.org>  
Mobile No. 8240720525, Whatsapp: 9433172422

Memo No.: 387/MGC

Dated: 22/08/2022

From: The Officer in Charge,  
Govt. General Degree College, Mangalkote

To: The Executive Engineer, P.W.Dte.  
Bardhaman Electrical Division,  
Purta Bhavan,  
Dist. – Purba Bardhaman, PIN - 713103

Sub: **Request to provide budget estimate (phasing estimate by providing year wise break up if applicable) of flagship project for SITC of On-Grid Solar PV Power Plant with allied E.I. Work under Development Head of Government General Degree College, Mangalkote**

Sir,

The undersigned has to state that our college needs to install **On-Grid Solar PV Power Plant** as we know that this is a flagship project towards renewable energy at its best uses and this is an alternate energy initiative and the proposal is in line with environmental consciousness and sustainability.

**You are therefore requested to visit our College at the earliest and provide an Estimate (phasing estimate by providing year wise break up) for administrative approval and requirement of funds for onward transmission to the appropriate authority.**

Please take the matter as extremely urgent.

Thanking you,

With regards,



**Officer-In-Charge  
GGDC, Mangalkote**

*Dr. Pradipta Kumar Basu*  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dt. Purba Bardhaman, West Bengal- 713132

**Copy forwarded for information and necessary action to:**

The Assistant Engineer, P.W.Dte  
Katwa Electrical Sub-Division  
Katwa, Purba Bardhaman



*Dr. Pradipta Kumar Basu*  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dt. Purba Bardhaman, West Bengal- 713132

**GOVERNMENT OF WEST BENGAL**

**পশ্চিমবঙ্গ সরকার**

*Office of the Executive Engineer, P.W.D.  
Bardhaman Electrical Division  
Purta Bhavan (1st Floor), P.O.: Sripally,  
Dist.: Purba Bardhaman, Pin: 713103*



Office: 0342-2644095 / Telefax: 0342-2645952

E-mail- eewed2@gmail.com

*নির্বাহী বাস্তকারর কার্যালয়  
বর্ধমান তড়িৎ ভূক্তি  
পূর্ত বিভাগ  
পূর্ব বর্ধমান - ৭১৩১০৩*

Memo No. 1377

Date:- 21.11.2022

To  
The Principal  
Government General Degree College,  
Mangalkote, Purba Bardhaman.

Name of work : Submission of Estimate.

1. Repairing of Compound Illumination, Ceilling Fan repairing with necey. E.I work and SITC of LED glow sign board at Mangalkote Government General Degree College, Mangalkote in the dist. of Purba Bardhaman.
2. SITC of 15 KWp on-grid with 5 KWp off grid Solar PV Power Plant and necessary LC protection at Mongalkote Government General Degree College, Mongalkote, Purba Bardhaman.

Ref: i) Memo no. 417/MGC Dated- 05/09/2022 Office of the Principal of Government General Degree College, Mangalkote, Purba Bardhaman.  
ii) Memo no- 387/MGC dated on 22.08.2022 office of the Principal Government General Degree College, Mangalkote, Purba Bardhaman.

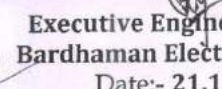
Respected Sir / Madam,

With reference to the above, the undersigned would like to forward herewith captioned estimates bearing No:- 168 & 169 of 2022-23 in duplicate amounting to Rs. 4,73,693.00 & 16,16,399.00 only for the subjected work to arrange for Administrative approval and Allotment of fund from the end of Competent Authority either in favour of the Chief Engineer Works Electrical, P.W.D. through G.O (E-bantan format) or in favour of the Executive Engineer, PWD, Bardhaman Electrical Division in the form of DRAFT/CHEQUE with a copy of the undersigned on receipt of which action will be taken to execute the jobs expeditiously.

One copy of the estimate duly countersigned along with the administrative approval & allotment of fund from competent authority may please be sent to this office for further necessary action from this end.

Enclo: 1) Estimate in Duplicate.

Yours faithfully

  
Executive Engineer, P.W. Dte  
Bardhaman Electrical Division  
Date:- 21.11.2022

Memo No.:- 1377/1(2)

Copy forwarded to :

1. The Superintending Engineer, Western Electrical Circle, PW Dte.
2. The Assistant Engineer, BMC / Bardhaman / Katwa Electrical Sub-Division, PW Dte.

Sd/- J. Chakraborty  
Executive Engineer, P.W. Dte  
Bardhaman Electrical Division



  
Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mongalkote,  
Dist. Purba Bardhaman, West Bengal-713103

EE/BED/ES-169 of 22-23

## ESTIMATE

**Name of work:- SITC of 15 KWp on-grid with 5 KWp off grid Solar PV Power Plant and necessary LC protection at Mongalkote Government General Degree College, Mongalkote, Purba Bardhaman.**

Ref:- Memo no- 387/MGC dated on 22.08.2022 office of the Principal Government General Degree College, Mongalkote, Purba Bardhaman.

SEWEC Estimate No 212/WEP 22-23

**Report:** This estimate has been framed to meet up the probable cost of expenditure for the above named work. On received of the requisition, the site has been inspected with the authority concerned has been found that 15 KWp On-grid and 5 KWp off grid solar PV Power Plant is required for power saving and uninterrupted power supply of principal chamber with office room at Mangalkote Government General Degree College, Mongalkote, Purba Bardhaman. So, SITC of 15 KWp On-grid with 5 KWp Off-grid Solar PV Power Plant with necessary LC protection has been incorporated in this estimate. Thus the estimate has been framed and sent for necessary approval & allotment of fund.

Sl.no	Description of items	Qty	Unit	Rate(Rs)	Amount(Rs)
1	Supply, Installation, Testing & Commissioning of 20kwp Solar Photovoltaic Panels. Poly Crystalline 310Wp to 335Wp (Each) <b>(Make: VIKRAM / WAREE / JINKO / SOVA/ ADANI/Tata BP)</b> The PV modules of JAKSON make allowed used must qualify to the latest edition of IEC PV module qualification test or equivalent BIS standards Crystalline Silicon Solar Cell Modules IEC 61215/IS14286 .The rated output power of any supplied module shall have tolerance of +/- 3%.The peak-power point voltage and the peak-power point current of any supplied module and/or any module string (series connected modules) shall not vary by more than 2 (two) per cent from the respective arithmetic means for all modules and/or for all module strings, as the case may be.The module shall be provided with a junction box with either provision of external screw terminal connection or sealed type and with arrangement for	20000 1	WP item	33.00 585000.00	660000.00 585000
2	Supply & Fixing Module Mounting Structure: Hot dip galvanized MS mounting structures may be used for mounting the 20kwp modules/panels/arrays. Each structure should have angle of inclination as per the site conditions to take maximum insolation.The mounting structure steel shall be as per latest IS 2062: 1992 and galvanization of the mounting structure shall be in compliance of latest IS 4Structural material shall be corrosion resistant and electrolytically compatible with the materials used in the module frame, its fasteners, nuts and bolts.Thickness of Galvanization shall be more than 75µ. Aluminium structures also can be used which can withstand the wind speed of respective wind zone. Necessary protection towards rusting need to be provided either by coating or anodization.The minimum clearance of the structure from the roof level should be 300 mm [Design to be approved by EIC before fabrication].	1300 1	Kg item	92.00 125000.00	119600.00 125000
3	Supply, Installation, Testing & Commissioning of 1 Nos. PV Array Junction Box of SURCLE & ENERTECH make for 15kwp: a) The junction boxes are to be provided in the PV array for termination of connecting cables. The Boxes (JBs) shall be made of Powder Coated Aluminium /cast aluminium/M.S alloy with full dust, water & vermin proof arrangement. All wires/cables must be terminated through cable lugs. The JB's shall be such that input & output termination can be made through suitable cable glands.b) Each Junction Box shall have High quality Suitable capacity Metal Oxide Varistors (MOVs) / SPDs, suitable Reverse Blocking Diodes. The Junction Boxes shall have suitable arrangement monitoring and disconnection for each of the groups. Voltage: Max. 1000V DC [Make: Hensel/Spielberg/Citel/ABB/L & T/schneider/Elmax].	1	job	12500.00	12500



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Government General Degree College, Mongalkote  
Dist. Purba Bardhaman, West Bengal-713132



4	Supply, Installation, Testing & Commissioning of ACDB : PV Array Junction Box ACDB of SURCLE & ENERTECH make Designed for 15kWp solar power plant with all protections as per MNRE guidelines. DC DPBs shall have sheet from enclosure of dust & vermin proof conform to IP 65 protection. The bus bars are made of copper of suitable size. Suitable capacity fuse & MCBs/MCCB shall be provided for controlling the DC power output to the PCU along with necessary surge arrestors . AC Distribution Panel Board (DPB) shall control the AC power from PCU/ inverter, and should have necessary surge arrestors. Interconnection from ACDB to mains at LT Bus bar while in grid tied mode.All switches and the circuit breakers, connectors should conform to IEC 60947, part I, II and III/ IS60947 part I, II and III. All the Panel's shall be metal clad, totally enclosed, rigid, floor mounted, air - insulated, cubical type suitable for operation on three phase / single phase, 415 or 230 volts, 50 Hz.All indoor panels will have protection of IP54 or better. All outdoor panels will have protection of IP65 or better. [Make	1	job	12500.00	12500
5	Supply, Installation, Testing & Commissioning of on-grid Solar Inverter with load islanding protection facility Rating: 15 KW, 3Ph Inverter, Make: <b>HBL / INVT/ Power-One/Kako/Havells</b> . Control : Microprocessor /DSP Capacity .Nominal AC output voltage and frequency : 220/415V, 1 Phase / 3 Phase, 50 Hz . Output frequency : 50 Hz . Max. DC input Power 15KW. MPPT Voltage Range should be 165 - 400V. Output Voltage Range - 220V/415V AC. Grid Frequency Synchronization range : +/- 5 Hz. Ambient temperature considered : -20o C to 60o C. Humidity : 95 % Non-condensing. Protection of Enclosure :: should be IP 20 compatible to IEC 60529 : 2001-02- As per MNRE requirement. Grid Frequency Tolerance range : +/- 5 Hz. Grid Voltage tolerance : 280 V to 480 V. No-load losses : Less than 1% of rated power. Inverter efficiency(minimum) : >93%. Inverter efficiency (minimum ) : > 90%. THD : < 3%. Efficiency Measurement IEC 61683/ Equivalent BIS Std.Environmental testing IEC 60068-2 (1,2,14,30) / Equivalent BIS Std.Interfacing with utility grid IEC 61727. Islanding Prevention Measurement IEC 62116. EMI/EMC : IEC 61000-6-3>16 Amps IEC 61000-6-4<16 Amps. Safety: IEC - 62109-1 (2010/4) C - 62109-2 (2011/6).Battery VDC: 120VDC/192/VDC. Charger Capacity: 50A. (Protections) Over Load For 100% Load Buzzer Indication, 101% above Load Trips and Retry for 4times then Inverter shutdown, Output Short Circuit:Circuit Breaker On Mains, Shutdown on Inverter,Battery Reverse Protection: Circuit Breaker, Low Battery:Load Disconnection, Thermal Shutdown:Below 0°C and Above. PCU Brand ENERTECH /	1	no	135000.00	135000
6	Supply & Laying of Cables DC & AC: Cable Stand: Lugs/connections withstand minimum of 100Amp DC current. Sizes of cables between array interconnections, array to junction boxes, junction boxes to Inverter etc. shall be so selected to keep the voltage drop of the entire solar system to the minimum. The cables (as per IS) should be insulated with a special grade PVC compound formulated for outdoor use. The size of each type of DC cable selected shall be based on minimum voltage drop however; the maximum drop shall be limited to 1%. The size of each type of AC cable selected shall be based on minimum	1	job	22500.00	22500
7	Supply and laying 35 Sqmm 4 Core armoured PVC/XLPE Power cable on wall for Grid connectivity (Make : PolyCab/Havells/Gloster/ RR Kabel)	120	mtrs	334.00	40080

*Pradip*



Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, G.C.E.S.  
Government College, Gangubai  
Pata, Hyderabad, Telangana - 501002

8	Supply of 230V, 5 KWP, single phase Off Grid Solar inverter. Power Conditioning Unit (PCU)/ Off Grid (Hybrid) inverter with MPPT qualifying IEC 61683-Efficiency measurement and IEC600682-Environment Standard, Safety standard suitable for single phase system, IGBT based high voltage switching inverter with MPPT technology, to take care of the variation of sunlight and will be suitably mounted inside the metal encloser . Inverter should have protection against over current, under current, over voltage, under voltage, short circuit etc. system should be able to run at low sunshine and minimum 7 to 8 hours a day run should be possible during normal sunshine condition. Inverter should have option to auto start for short trip off due to low light/cloudy situation. Inverter should be provided with a display to show the various parameter by the user such as voltage, current, solar panel dc voltage, inverter IGBT temperature, output AC voltage, output frequency, irradiation etc. the system should be capable to store the data at a set of interval and transfer it in a pen drive through USB port. It should be also monitor and save total run time.( Make:-HBL / INVT/ Power-One/Kako/Havells).	1	no.	87000.00	87000
9	Supply of MNRE approved or BIS certified 12V 200AH Solar (C10) Tubular Battery. (Make: Exide/Okaya/Spark).	8	nos.	23850.00	190800
10	Supply & Delivery of suitable size Battery rack (Suitable GI angle for 8 nos batteries).	1	no.	8500.00	8500
11	Supply of Array Junction Box (AJB) containing SPD for DC surge current, MCB/Fuse for DC isolation, terminator etc. as per MNRE standard or pre approved design by E.I.C.	1	no.	9500.00	9500
12	Supply of ACDB containing SPD for surge current, MCB for AC isolation with phase indicator as per MNRE standard or pre approved design by E.I.C.	1	no.	9500.00	9500
13	Supply of un-armoured 2 Core 6 sq. mm copper AC cable laid from inverter to ACDB then SPNDB for office as per cable layout & drawing. (Make: Polycab/MESCAB/Finolex)	60	mtrs.	224.00	13440
14	Supply, Installation, Testing & Commissioning of System Earthings : Each array structure of the PV yard should be grounded/ earthed properly as per IS:3043-1987. The array field, PCU, ACDB and DCDB should also be earthed properly. Earth resistance shall not be more than 5 ohms. It shall be ensured that all the earthing points are bonded together to make them at the same potential. Earthing with 65 mm dia GI pipe (ISI - Medium)x 3.0 Mts. long and 1 No. 50 mm x 6 mm galvanized (Hot Dip) steel strip (4 Mts. long), 20 mm dia x 125 mm long galvanized bolt, double nuts, double washers including finishing both ends by making holes etc. and S & F 65 mm dia GI pipe (ISI-Medium) protection (3 Mts. long) to be filled with bitumen partly under the ground level and partly above ground level to an average depth of 3.65 Mts.	12	no.	1410.00	16920
15	Excavation of soil for installation of Earth Electrode and filling & ramming. For soft soil	24	cu/ mtr	221.00	5304
16	Supplying & fixing earth busbar of galvanized (Hot Dip) MS flat 25 mm x 6 mm on wall having clearance of 6 mm from wall including providing drilled holes on the busbar complete with GI bolts, nuts, washers, spacing insulators etc. as required	3	mtr	161.00	483
17	Connecting the equipments to earth busbar including S & F 4 SWG GI (Hot Dip) wire of size as below on wall/floor with staples buried inside wall/floor as required and making connection to equipments with bolts, nuts, washers, cable lugs etc. as required and mending good damages.	60	mtr	13.00	780
18	Maintanance of the above system as and when required by attending service call for minor fault/breakdown/reseting etc for 2 years.	1	item	14000.00	14000

*Pradipta*



Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, W.B.E.S.  
Government Central Degree College, Narayana  
Raipur, Chhattisgarh, West Bengal-711122

19	Supply & fixing of Air-terminals made of 15 mm dia 1500 mm long GI pipe (ISI Medium) having five prongs of 4 SWG GI (Hot Dip) wire at top with 85 mm dia 6 mm thick GI base plate at bottom incl. necessary holes etc. duly grouted on the parapet etc. in CC mortar (4:2:1).	8	nos.	555.00	4440
20	Cutting cornices/ steps etc. including cutting recess in buildings etc. & supply & fixing 15 mm bore (TATA-Medium) GI pipe protection as below and mending good damages to the building works: (a) Length upto 0.5 Mtr	16	nos.	96.00	1536
21	Making soldered joints between conductors,conductors and air terminals for 4 SWG GI (Hot Dip) wire incl. supply of jointing materials and painting with 2 (two) coats of bituminous paint	98	nos.	194.00	19012
22	Supply & fixing GI (Hot Dip) strips 20 mm x 3 mm thick for horizontal run on the Parapet/Roof/ Wall with GI Saddles 1100 mm apart incl. mending good the damages to building works	110	mtrs.	64.00	7040
23	Supply & fixing of GI (Hot Dip) strips 20 mm x 3 mm thick for vertical run on wall with GI saddles spaced not exceeding 1000 mm apart incl. mending good damages to building work	240	mtrs.	90.00	21600
24	Hiring charges for scaffolding arrangement including dismantling at the end of work and carriage, for LC installation, per storey of building per vertical run	18	storey/v ertical run	160.00	2880
				<b>SUB-TOTAL</b>	<b>Rs. 1345315.00</b>
				<b>ADD @ 18% G.S.T =</b>	<b>Rs. 242156.70</b>
				<b>SUB TOTAL +GST =</b>	<b>Rs. 1587471.70</b>
				<b>ADD @ 1% CESS =</b>	<b>Rs. 15874.72</b>
				<b>ADD @ 3% WORK CONTINGENCY =</b>	<b>Rs. 47624.15</b>
				<b>SUB TOTAL +GST +CESS+ CONTINGENCY =</b>	<b>Rs. 1650970.57</b>
				<b>GRAND TOTAL =</b>	<b>Rs. 1650970.57</b>
				<b>SAY =</b>	<b>Rs. 1650971.00</b>

*P. Karan*  
Junior Engineer, PWD  
Katwa Electrical Sub-Division.

*A. Jais*  
Assistant Engineer, PWD  
Katwa Electrical Sub-Division

*P. R. L.*  
Estimator  
Western Electrical Circle, PWD

**ESTIMATE VETTED**  
*[Signature]*  
Superintending Engineer, PWD  
Western Electrical Circle

*[Signature]*  
Executive Engineer, P.W. Dte.  
Bardhaman Electrical Division  
Purba Bardhaman



*[Signature]*  
Dr. Pradipta Kumar Banerjee  
OFFICER IN CHARGE, W.B.E.S.  
Government Central Degree College, Nurgachou  
Dist. Puri, Bhubaneswar, West Bengal-751022

## 2. Management of the various types of degradable and nondegradable waste:



**FIG.: DUSTBINS FOR SEGREGATION OF WET WASTES AND DRY WASTES**

**DIFFERENT COLOURED DUSTBINS ENSURE THE SEPARATION OF BIODEGRADABLE (WET) WASTES AND NON-BIODEGRADABLE (DRY) WASTES AND HELP TO MAINTAIN AN ECO-FRIENDLY CAMPUS.**

**MOU WITH SHIMULIA II GRAM PANCHAYAT, PALSIGHRAM, DIST. PURBA BARDHAMAN, WEST BENGAL, INDIA, PIN – 713147 FOR WASTE MANAGEMENT:**

**LINK TO THE DOCUMENT DISPLAYED ON COLLEGE WEBSITE -**

[https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/06/MOU\\_GGDCM-SHIMULIA-II-GRAM-PANCHAYAT\\_1\\_1zon.pdf](https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/06/MOU_GGDCM-SHIMULIA-II-GRAM-PANCHAYAT_1_1zon.pdf)



**FIG.: INITIATIVE FOR VERMICOMPOSTING AS PART OF WASTE MANAGEMENT IN THE COLLEGE CAMPUS**

### 3. Water conservation:



FIG.: INITIATIVE FOR RAIN WATER HARVESTING

### 4. Green campus initiatives:

**LINKS TO 'GREEN CAMPUS POLICY' AND 'GREEN AUDIT' DISPLAYED ON THE WEBSITE ARE PASTED BELOW:**

**GREEN CAMPUS POLICY - <https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/07/GREEN-CAMPUS-POLICY.pdf>**

**REPORT ON GREEN AUDIT –**

<https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/07/GREEN-AUDIT.pdf>

**APART FROM THESE, SEVERAL ACTIVITIES (AS PARTS OF GREEN CAMPUS INITIATIVES) WERE CARRIED OUT WHICH ARE ENLISTED BELOW. THE DETAILED REPORTS OF SUCH ACTIVITIES CAN BE FOUND BY FOLLOWING THE CORRESPONDING LINKS:**



## CLEAN AND GREEN CAMPUS INITIATIVES IN COLLEGE CAMPUS

Sl. No.	Year	Name of the initiative	Number of participants	Date:	Link to the activity report on the website
1	2018-19	Seminar titled "Renewable Energy Sources" organized by UGC-Seminar Committee. Speaker: Dr. Debasish Kundu, Assistant Professor in Chemistry, GGDC, Mangalkote	33	20.07.2018	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/20.07.18-REPORT-1.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/20.07.18-REPORT-1.pdf</a>
2	2018-19	Seminar titled "Sustainable Development: Understanding Related Issues" organized by UGC-Seminar Committee. Speaker: Mr. Hirak Kumar Sinha Maha Patra, Assistant Professor in History, GGDC, Mangalkote	53	14.09.2018	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/14.09.18-REPORT-2.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/14.09.18-REPORT-2.pdf</a>
3	2018-19	Seminar titled "Application of Nanotechnology in Agriculture" organized by UGC-Seminar Committee. Speaker: Dr. Akash Kedia, Assistant Professor in Botany, GGDC, Mangalkote	28	12.04.2019	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/12.04.19-REPORT-1.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/12.04.19-REPORT-1.pdf</a>
4	2021-22	National Webinar titled "Interesting World of Aquatic Creatures" organized by the Department of Zoology in collaboration with UGC-Seminar Committee and IQAC. Speakers: Dr. Dipanwita Sarkar (Paria), Assistant Professor in Zoology, Chandernagore College and Dr. Maitreya Sil, Post-Doctoral Fellow, NISER, Bhubaneswar	52	28.05.2022	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/28.5.22-REPORT.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/28.5.22-REPORT.pdf</a>
5	2022-23	State-Level Webinar titled "World Environment Day: only One Earth" organized by the Departments of Chemistry and Botany and the	58	15.06.2022	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/15.6.22-REPORT.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/15.6.22-REPORT.pdf</a>





		Environmental Awareness Cell in collaboration with IQAC. Speakers: Dr. Arunava Datta, Post-Doctoral Fellow, Burdwan University and Dr. Amar Hens, Assistant Professor in Chemistry, GGDC, Ranibadh			
6	2022-23	Seminar titled “Bioplastics: A Sustainable Alternative” organized by UGC-Seminar Committee. Speaker: Dr. Dinesh Maity, Assistant Professor in Chemistry, GGDC, Mangalkote	<b>32</b>	<b>14.09.2022</b>	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/14.09.22-REPORT.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/14.09.22-REPORT.pdf</a>
7	2022-23	Seminar titled “Green Chemistry” organized as part of the NSS Special Camping Programme titled “Your Role in Clean India” organized by the NSS in collaboration with IQAC. Speaker: Dr. Debasish Kundu, Assistant Professor in Chemistry, GGDC, Mangalkote	<b>23</b>	<b>22.03.2023</b>	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/22.03.23-REPORT.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/22.03.23-REPORT.pdf</a>
8	2022-23	Seminar titled “Environment, Development & Sustainability: Role of the Youth” organized by the NSS in collaboration with IQAC. Speakers: Dr. Debraj Biswal, Assistant Professor in Zoology and Dr. Suchismita Das, Assistant Professor in Sociology, GGDC, Mangalkote	<b>22</b>	<b>24.03.2023</b>	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/24.03.23-REPORT.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/24.03.23-REPORT.pdf</a>
9	2022-23	Seminar titled “Agro-forestry” organized by UGC-Seminar Committee. Speaker: Dr. Raj Kumar Singh, Assistant Professor in Botany, GGDC, Mangalkote	<b>29</b>	<b>05.04.2023</b>	<a href="https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/Report_05.04.23.pdf">https://www.mangalkotegovtcollege.org/wp-content/uploads/2024/08/Report_05.04.23.pdf</a>



## 5. Disabled-friendly, barrier free environment



FIG.: RAMP FOR THE DISABLED STUDENTS

**APART FROM THIS, APPLICATIONS HAVE BEEN SUBMITTED TO THE DEPARTMENT OF HIGHER EDUCATION, GOVT. OF WEST BENGAL FOR TOILETS FOR THE DISABLED AND INCREASING THE NUMBER OF RAMPS TO ENSURE A DISABLED-FRIENDLY CAMPUS. THE APPLICATIONS HAVE BEEN ATTACHED BELOW FOR REFERENCE:**



Government of West Bengal  
Office of the Principal  
**GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE**  
PANCHANANTALA, KHUDRUN DIGHI, MANGALKOTE  
P.O. - MAJHIGRAM; BLOCK - MANGALKOTE; SUB DIVISION - KATWA  
DISTRICT - PURBA BARDHAMAN; WEST BENGAL; PIN CODE - 713132; INDIA  
Email: ggdc Mangalkote@gmail.com; Website: <http://mangalkotegovtcollege.org>  
Mobile No. 8240720525, Whatsapp: 9433172422

Memo No.: 286/MGC

Dated: 14/07/2023

From: The Officer in Charge,  
Govt. General Degree College, Mangalkote

To: The Director of Public Instruction, West Bengal,  
Bikash Bhavan, Salt Lake City,  
Kolkata – 700 091

**Sub: Submission of proposal and budget estimate for the construction of a new Toilet and two RAMPs for the person with disability at Govt. General Degree College, Mangalkote amounting Rs. 4,15,921/- (rupees four lakh fifteen thousand nine hundred twenty one only) and request for the administrative approval (Budgetary estimate vetted by PWD is attached)**

Madam,

With reference to the above, the undersigned writes with a very urgent request to allot funds amounting **Rs. 4,15,921/- (rupees four lakh fifteen thousand nine hundred twenty one only) for the construction of a new Toilet and two RAMPs for the person with disability** at Govt. General Degree College, Mangalkote.

The college started its journey in 2015 and every year few physically challenged students take admission and they face all kind of miserable difficulties and I, being a dutiable govt. officer, a responsible teacher and a conscientious administrator feel guilty for them. It is the opportunity to solve this problem forever and it is also a vital criterion of NAAC for the entire educational institute.

In this situation, the undersigned requests her to consider this issue as a top priority and allocate the necessary funds for the purpose already mentioned. The vetted estimate from PWD is attached herewith for your ready reference.

Thanking you,



With regards,

**(Dr. Pradipta Kumar Basu)**  
**Officer-In-Charge (M: 8240720525)**  
**GGDC, Mangalkote**

*Dr. Pradipta Kumar Basu*  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dt. Purba Bardhaman, West Bengal- 713132



Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dt. Purba Bardhaman, West Bengal- 713132



Government of West Bengal  
Office of the Principal  
**GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE**  
PANCHANANTALA, KHUDRUN DIGHI, MANGALKOTE  
P.O. - MAJHIGRAM; BLOCK - MANGALKOTE; SUB DIVISION - KATWA  
DISTRICT - PURBA BARDHAMAN; WEST BENGAL; PIN CODE - 713132; INDIA  
Email: ggdc Mangalkote@gmail.com; Website: <http://mangalkotegovtcollege.org>  
Mobile No. 8240720525, Whatsapp: 9433172422

Memo No.: 235/MGC

Dated: 19/06/2023

From: The Officer in Charge,  
Govt. General Degree College, Mangalkote

To: The Executive Engineer, Burdwan Division,  
Social Sector, Public Works Directorate, Jagat Berh, Surja Nagar,  
P.O. – Sripally, Dist. – Purba Bardhaman, PIN - 713103

Sub: Regarding some construction of new Toilets for person with disability and RAMP for the disabled persons at Govt. General Degree College, Mangalkote and to provide the estimate (phasing estimate by providing year wise break up).

Sir,

The undersigned has to state that the constructions of new Toilets for person with disability and RAMP for the disabled persons are urgently needed in the College. The Higher Education Department requested the undersigned to submit the proposal vetted by PWD in the online meeting on 15/06/2023.

The above-noted works are urgently required for smooth and proper functioning of the college as a whole.

This is for your information and taking necessary action. **You are requested to visit our College at the earliest and provide an Estimate (phasing estimate by providing year wise break up) for requirement of funds for onward transmission to the appropriate authority.**

Thanking you,

With regards,



Officer-In-Charge  
GGDC, Mangalkote

**Dr. Pradipta Kumar Basu**  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dt. Purba Bardhaman, West Bengal- 713132



Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dt. Purba Bardhaman, West Bengal- 713132



**Government of West Bengal**  
**Office of the Executive Engineer,**  
**Burdwan Division, Social Sector P.W. Directt.**  
**Jagatberh, Surya Nagar, P.O.-Sripally, Dist. Purba Bardhaman**  
**Ph.No.0342-2644154. Pin Code-713103**  
**Email Address : eeburdwandivcb@gmail.com**

**Memo No:-1201/DW-15**

**Dated:- 11.07.2023**

To  
The Officer-In-Charge  
GGDC, Mangalkote  
Purba Bardhaman.

**Sub:-** Submission of vetted estimate for the work Construction of new toilet and ramp for person with disability, in Government General Degree College, Mangalkote, Purba Bardhaman, of amounting **Rs.4,15,921.00.**

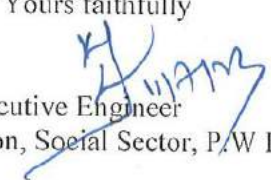
**Ref:-** His office memo no-235/MGC dt: 19.06.2023.

Sir,

In connection with the above subject and reference, the undersigned is sending herewith the above mentioned estimate along with prefacing report for obtaining administrative approval and placement of fund.

Encl: Estimate 01 (one) set.

Yours faithfully

  
Executive Engineer

Burdwan Division, Social Sector, P/W Dte.

**Memo No:-1201/1(1)/DW-15**

**Dated:-11.07.2023**

Copy forwarded for information to:

1. The Assistant Engineer Katwa Sub-Division, Social Sector, P.W.Dte.

**Sd/-Kanak Kumar Saha**

Executive Engineer

Burdwan Division, Social Sector, P.W Dte



  
Dr. Pradipta Kumar Basu  
OFFICER IN CHARGE, W.B.E.S.  
Government General Degree College, Mangalkote  
Dist. Purba Bardhaman, West Bengal-713102

## PREFACING REPORT

- Name of work :- ESTIMATE FOR CONSTRUCTION OF NEW TOILET AND RAMP FOR PERSON WITH DISABILITY , IN GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE, PURBA BARDHAMAN
- Estimated amount :- Rs 4,15,921.00 (Rupees Four lakh Fifteen Thousand Nine Hundred Twenty One only inclusive of 3% contingency )
- Brief history:- The estimate has been prepared as per letter of The Officer in Charge, Govt. General Degree College, Mangalkote vide his memo no-235/MGC, dated-19.06.2023 . New P.H toilet will be constructed by modifying the existing space of ground floor toilet block and also 2 nos new ramps will be constructed. For construction of new toilet existing drinking water zone will be shifted in new place. For this total construction necessary items has been considered For smooth functioning of the college.
- Rates & specification :- The latest S.O.R. / Bldg. Works of P.W.D./ W.B. , effective from 01.11.2017 and respective corrigendas are followed to prepare this estimate.
- Mode of execution :- The work will be executed by the Burdwan Division, Social Sector, P.W.Dte. according to the Govt procedure in force after receiving fund from the concerned department.

  
3.7.23  
Junior Engineer  
Katwa Sub-Division  
Social Sector  
P.W. Directorate

  
08/8/23  
Assistant Engineer  
Katwa Sub-Division  
Social Sector  
P.W. Directorate

  
Executive Engineer  
Burdwan Division  
Social Sector P.W. Dto.





Government of West Bengal  
Office of the Principal  
**GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE**  
TANCHANANTALA, KHUDRUN DIGHI, MANGALKOTE  
P.O. - MAJHIGRAM; BLOCK - MANGALKOTE; SUB DIVISION - KATIWA  
DISTRICT - PURBA BARDHAMAN; WEST BENGAL; PIN CODE - 713132, INDIA  
Email: ggdcwmangalkote@gmail.com; Website:  
Mobile No. 8240720325, Whatsapp: 9433172422

Memo No.: 235/MGC No. DW-15 Dated: 19/06/2023

From: The Officer in Charge,  
Govt. General Degree College, Mangalkote

Sl. No. 1122  
Date: 19/6/23

Govt. of West Bengal  
Office of the Assistant Engineer  
Katra Sub-Division Social Sector  
P.W.Dte.

To: The Executive Engineer, Burdwan Division,  
Social Sector, Public Works Directorate, Jagat Berh, Surja Nagar,  
P.O. - Sripally, Dist. - Purba Bardhaman, PIN - 713103

Sl. No. 91  
File No. W-143  
Date: 19.06.23

Sub: Regarding some construction of new Toilets for person with disability and RAMP for the disabled persons at Govt. General Degree College, Mangalkote and to provide the estimate (phasing estimate by providing year wise break up)

The undersigned has to state that the constructions of new Toilets for person with disability and RAMP for the disabled persons are urgently needed in the College. The Higher Education Department requested the undersigned to submit the proposal vetted by PWD in the online meeting on 15/06/2023.

The above-noted works are urgently required for smooth and proper functioning of the college as a whole.

This is for your information and taking necessary action. You are requested to visit our College at the earliest and provide an Estimate (phasing estimate by providing year wise break up) for requirement of funds for onward transmission to the appropriate authority.

Thanking you,

Memo No. 1106/DW-15  
19/6/23  
AJE (Katra)

Pl. inspect the bill  
and submit estimate

For S. Das, JE  
Pl. visit site and  
submit estimate  
21/6/23

Officer-In-Charge  
GGDC, Mangalkote



**ESTIMATE FOR CONSTRUCTION OF NEW TOILET AND RAMP FOR PERSON WITH DISABILITY , IN GOVERNMENT GENERAL DEGREE COLLEGE, MANGALKOTE, PURBA BARDHAMAN**

Estimated amount :- ₹ 4,15,921.19

Sl. No.	P.B.No. / It. No.	Description of Item	Qty.	Unit	Rate	Amount
1	P-10/1	Dismantling all types of masonry excepting cement concrete plain or reinforced, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m. In First Floor	3.21	m3	447.00	1433.19
2	P-10/2	Dismantling all types of plain cement concrete works, stacking serviceable materials at site and removing rubbish as directed within a lead of 75 m. (a) upto 150 mm. thick	0.62	m3	939.00	581.01
3	P-15/7	Brick work with 1st class bricks in cement mortar (1:4) (a) In foundation and plinth	1.50	m3	5013.18	7519.77
4	P-2/4	(A) Filling in foundation or plinth by silver sand in layers not exceeding 150 mm as directed and consolidating the same by thorough saturation with water, ramming complete including the cost of supply of sand. (payment to be made on measurement of finished quantity) (B) Do - by fine sand	2.70	%cum	64086.00	1730.32
5	P-46/3	Supplying and laying Polythene Sheet (150gm / sq.m.) over damp proof course or below flooring or roof terracing or in foundation or in foundation trenches.	14.25	sqm	24.00	342.00
6	P-15/8	Brick work with 1st class bricks in cement mortar (1:6)	0.78	cum	4990.06	3867.30
7	P-16/16	125 mm. thick brick work with 1st class bricks in cement mortar (1:4) in ground floor.	29.45	m2	656.53	19334.81
8	P-16/18	Extra for using approved H.B netting in every third layer in 16 & 17 above in any floor	29.45	sqm	41.00	1207.45
9	P-24/4	Ordinary Cement concrete (mix 1:2:4) with graded stone chips (20 mm nominal size) excluding shuttering and reinforcement, if any, in ground floor as per relevant IS codes. a) Pakur Variety Ground floor	1.07	cum	4658.81	4979.10
10	Page - 189/ It - 1	Plaster (to wall, floor, ceiling etc.) with sand and cement mortar including rounding off or chamfering corners as directed and raking out joints including throating, nosing and drip course, scaffolding/staging where necessary (Ground floor). [Excluding cost of chipping over concrete surface] (i) In Ground floor (i) With 1:6 cement mortar (b) 15 mm thick plaster	71.30	m2	133.55	9522.12



*(Signature)*



Sl. No.	Page No. / It. No.	Description of Item	Qty.	Unit	Rate	Amount
11	P-280 / It-1	Supplying and laying true to line and level Anti-Skid, Full Body, Homogeneous & Granular finish Vitrified Tiles conforming to IS:15622-2006 & IS 4457-2007 and testing shall be made in accordance with IS:13630 [Non- modular sizes for tiles with Skid resistance > 0.5, Mohr's hardness > 5.0, Staining resistance: Class-1, Water Absorption: E < 0.5%], MOR > 35 N/sq.mm in Internal area of building e.g. Toilet Block, Passage, Corridor, Accessible Open Terrace etc. set in 20 mm sand cement mortar (1:4) and 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg./Sq.m or using Polymerised Adhesive (6 mm thick layer applied directly over finished artificial stone floor/ Mosaic etc without any backing course) laid after application slurry using 1.75 Kg of cement per Sqm below mortar only, joints grouted with admixture of white cement and colouring pigment to match with colour of tiles/ epoxy grout materials of approved make as directed and removal of wax coating of top surface of tiles with warm water and polishing the tiles using soft and dry cloth upto mirror finish complete including the cost of materials, labour and all other incidental charges complete true to the manufacturer's specification and direction of Engineer-in-Charge. (White cement, synthetic adhesive and grout material to be supplied by the contractor). b) In Ground Floor: Sizes-600 mm x600mm x10 mm with breaking strength > 1500 N (i) In ground Floor	8.25	Sqm	1580.99	13043.17
12	P-64 / 35	Supplying, fitting & fixing 1st quality Ceramic tiles in walls and floors to match with the existing work & 4 nos. of key stones (10mm) fixed with araldite at the back of each tile & finishing the joints with white cement mixed with colouring oxide if required to match the colour of tiles including roughening of concrete surface, if necessary or by synthetic adhesive & grout materials etc. B.Wall With Sand Cement Mortar (1:3) 15 mm thick & 2 mm thick cement slurry at back side of tiles using cement @ 2.91 Kg/Sq.m & joint filling using white cement slurry @ 0.20kg/Sq.m. (b) Area of each tile above 0.09 Sq.m (i) Coloured decorative	36.75	Sqm	1087.43	39963.05
13	Page - 204/ It - 5	(b) Rendering the surface of walls and ceiling with white cement based wall putty of approved make and brand(1.5mm thick)	31.25	m2	110.00	3437.50
14	P-195/7	Applying Interior grade Acrylic Primer of approved quality and brand on plastered or concrete surface old or new surface to receive Distemper/ Acrylic emulsion paint including scraping and preparing the surface throughly, complete as per manufacturer's specification and as per direction of the EIC. (In Ground Floor) (a) One Coat i) Water based interior grade Acrylic Primer	31.25	%sqm	3080.00	962.50
15	P-201/4	Applying Acrylic Emulsion Paint of approved make and brand on walls and ceiling including sand papering in intermediate coats including putty (to be done under specific instruction of Superintending Engineer): (Two coats)i) Standard Quality	31.25	sqm	62.00	1937.50



Sl. No.	Pg No. / It. No.	Description of Item	Qty.	Unit	Rate	Amount
16	P-115/3	Supplying, fitting and fixing fibre reinforced polymer (FRP) Composite door frame as per approved section with glass fibre reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS: 4020 door testing performance criteria.. (ii) 66mm x 90mm	10.40	mtr	497.00	5168.80
17	P-125/14	Supplying, fitting & fixing fibre reinforced polymer (FRP) Composite door shutters as per approved design with glass fibre reinforced plastic moulded skins and a special sandwich core, so as to impart monolithic composite structure as per approved technology of Department of Science and Technology (DST) to satisfy IS:4020 door testing performance criteria. 32 mm thick.	4.20	Sqm	2763.00	11604.60
18	P-140/4	Supplying, fitting and fixing M.S. clamps for door and window frame made of flat bent bar, end bifurcated with necessary screws etc. by cement concrete(1:2:4) as per direction. (Cost of concrete will be paid separately) (a) 40mm X 6mm, 250mm Length	12.00	each	29.00	348.00
19	P-140/5	Iron butt hinges of approved quality fitted and fixed with steel screws, with ISI mark. (ii) 100mm, X 58mm, X 1.90mm.	6.00	each	47.00	282.00
20	Page- 144, It-26	Anodised aluminium barrel / tower / socket bolt (full covered) of approved manufactured from extruded section conforming to I.S. 204/74 fitted and fixed with cadmium plated screws; (x) 300mm long x 12mm dia. bolt.	4.00	each	151.00	604.00
21	Page- 141, It-10	(i) Brass hasp bolt of approved quality fitted and fixed complete (oxidised) with 16mm dia rod with centre bolt and round fitting. (c) 300mm long.	2.00	each	657.00	1314.00
22	P-145/30	Anodised aluminium D-type handle of approved quality manufactured from extruded section conforming to I.S. specification (I.S. 230/72) fitted and fixed complete: (a) With continuous plate base (Hexagonal / Round rod) (vi) 150 mm grip x 10 mm dia rod	4.00	each	97.00	388.00
23	Page- 119(1) / Sl. No.	Supplying, fitting and fixing PVC pipes of approved make of Schedule 80 (medium duty) conforming to ASTM D - 1785 and threaded to match with GI Pipes as per IS : 1239 (Part - I), with all necessary accessories, specials viz. socket, bend, tee, union, cross, elbo, nipple, long screw, reducing socket, reducing tee, short piece etc. fitted with holder bats clamps, including cutting pipes, making threads, fitting, fixing etc. complete in all respect including cost of all necessary fittings as required, jointing materials and two coats of painting with approved paint in any position above ground. (Payment will be made on the centre line measurements of total pipe line including all specials. No separate payment will be made for accessories, specials. Payment for painting will be made separately)				
		(B) For Concealed Work (i) 15 mm dia.	15.00	mtr	137.00	2055.00
23.01		(ii) 20 mm dia	10.00	mtr	158.00	1580.00
23.02		A) For Exposed Work (ii) 40 mm dia. medium quality	20.00	mtr	292.00	5840.00
23.03		(iii) 32 mm dia. medium quality	10.00	mtr	236.00	2360.00
23.04		(iv) 25 mm dia. medium quality	10.00	mtr	177.00	1770.00
23.05		(v) 50 mm dia. medium quality	20.00	mtr	384.00	7680.00



Sl. No.	Pg no. / It. No.	Description of Item	Qty.	Unit	Rate	Amount
24	P-84/28(A)	Supplying, fitting & Fixing EWC (Size- 710x370x810 mm)in white glazed vitreous chinaware of approved make supplying, fitting and fixing in position complete with necessary nut and bolts. (Model Code No. S10221114-P Trap (CRUSE SET) of CERA or equivalent.)	1.00	each	5446.00	5446.00
25	P-84/28(B)(a)	Supplying, fitting and fixing 10 litre white glazed vitreous chinaware of approve low-down cistem of approved make with either side or bottom inlet, side overflow, brackets complete with all internal fittings. (Model Code No. S1060106 of CERA or equivalent.) White	1.00	each	2406.00	2406.00
26	P-84/28(B)b	Soft Close seat cover of approved make with lid and C.P. hinges, rubber buffer and brass screws supplng, fitting and fixing complete. E W C (Model Code No. B1520118 of CERA or equivalent.) White	1.00	each	1299.00	1299.00
27	P-84/28(B)c	Supplying, fitting and fixing Stainless steel Wall Mounted Grab Bar. Load bearing capacity 150 kg, covered by Nylon surface with contour finish (for better grip) with Anti-bacterial surface complete. (Model Code No. B2210106 of CERA or equivalent.) 600mm Long	1.00	each	1825.00	1825.00
28	P-84/28(B)d	Supplying, fitting and fixing Stainless steel Wall Mounted Hinged hand rail (750X100 mm) covered by Nylon surface with contour finish (for better grip) with two brackets.(Model Code No.B2210108 of CERA or equivalent.)	1.00	each	6760.00	6760.00
29	P-84/28(B)e	Supplying, fitting and fixing 15 mm Twin Flush Fitting (Model Code No. B1810112 of CERA or equivalent).	1.00	each	1041.00	1041.00
30	P-84/28(B)f	Supplying, fitting and fixing 15 mm Spatula Single Lever Basin Mixer (Model Code No. F9030451 of CERA or equivalent).	1.00	each	1973.00	1973.00
31	Page- 80 / 6	Supplying, fitting and fixing Flat back urinal (half stall urinal) in white vitreous chinaware of approved make in position with brass screws on 75 mm X 75 mm X 75 mm wooden blocks complete.(i) 635 mm X 395 mm X 420 mm	2.00	each	2869.00	5738.00
32	Page-43/ Sl. No. 9	Supplying, fitting and fixing approved brand P.V.C. CONNECTOR white flexible, with both ends coupling with heavy brass C.P. nut, 15 mm dia.  (iii) 600 mm long	6.00	each	107.00	642.00
33	Page- 43/ Sl. No. 10	Supplying,fitting and fixing approved brand 32 mm dia.P.V.C. waste pipe, with PVC coupling at one end fitted with necessary clamps.  (iii) 900 mm long	8.00	each	75.00	600.00
34	Page- 44/ Sl. No. 17	Supplying, fitting and fixing Waste fittings complete.  (a) C.P. over brass, (ii) 32 mm	8.00	each	190.00	1520.00
35	Page- 82 / 22	Supplying, fitting and fixing towel rail with two brackets.(a) C.P. over brass (ii) 25 mm dia. and 600 mm long	2.00	each	430.00	860.00
36	Page- 81 / Sl. No. 15	Supplying, fitting and fixing bevelled edged mirror 5.5 mm thick silver red as per I.S. 3438 / 1965 together with brass C.P. hinges.ii) 600 mm X 450 mm	2.00	each	484.00	968.00
37	Page- 82 / Sl. No. 17	Supplying, fitting and fixing liquid soap container (b) PTMT(Prayag or equivalent)	2.00	each	210.00	420.00




Sl. No.	Pg no. / It. No.	Description of Item	Qty.	Unit	Rate	Amount
38	Page- 5 / 7	Supplying, fitting and fixing bib cock or stop cock. e) (ii) Chromium plated Bib Cock with wall flange (Equivalent to Code No. 5047 & Model - Florentine of Jaquar or similar brand).	8.00	each	861.00	6888.00
38.01		(d) (i) Chromium plated angular Stop Cock with wall flange (Equivalent to Code No. 5053 & Model - Florentine of Jaquar or similar brand).	8.00	each	815.00	6520.00
39	Page- 41/ Sl. No. I	Wash basin vitreous china of approved make (without fittings) supplied, fitted and fixed in position on 75mm X 75 mm X 75 mm wood blocks and C.I. brackets including two coats of painting of C.I. brackets. ii) 550 mm X 400 mm size	4.00	each	1383.00	5532.00
40	Page- 45 / Sl. No.19	Supplying, fitting and fixing pillar cock of approved make. c) CP Pillar Cock - 15 mm. (Code No. 5011 & Model - FLORENTINE of JAQUAR or equivalent).	4.00	each	857.00	3428.00
41	P-74/ It No-47	Supplying & laying 20 mm designer chequered tiles of any shade and of approved quality as per IS: 1237: 1980 laid in patterns as directed in pavement, footpath including necessary underlay 25 mm thick average cement mortar (1:3) complete in all respect with all labour and materials [using cement slurry @ 4.4 kg/Sq.m at back side of tiles. Cement of mortar & slurry will be supplied by the Department. Border concrete if necessary to be paid separately].	6.00	sqm	814.00	4884.00
42	P-109 /22	Supplying, fitting and fixing Stainless Steel railing consist of 38mm dia and 900mm height vertical balustrade at every two alternative steps, 50mm dia top rail, 3 (three) nos 19mm dia horizontal Strainless steel pipe and base/cover plate with Strainless Steel GRADE 304 containing 7.5% nickle (Interior Grade) Brushed/Mat finish, complete as per direction of the Engineer-in-charge. Weight of Strainless Steel railing per metre 6.5 Kg (approx)	13.00	mtr	9077.00	118001.00
43	P-46/1	Dismantling wash basin with brackets with or without waste fittings.	4.00	No	35.00	140.00
44	Page- 68 / Sl. No. 23	Supply of UPVC pipes(B- type) & fittings conforming to IS-13592-1992 (A) (i) Single Socketed 3 Meter Length, b)110 mm dia	10.00	mtr	292.00	2920.00
44.01		(B) Fittings (iii) Door Tee, b)110 mm dia	2.00	no	195.00	390.00
44.02		x) Bend 87.5°, b)110 mm dia	2.00	no	120.00	240.00
44.03		xv) Vent Cowl, b)110 mm	2.00	no	33.00	66.00
44.04		xvi) Pipe Clip, b)110 mm	10.00	no	21.00	210.00

Sl. No.	Pg no. / It. No.	Description of Item	Qty.	Unit	Rate	Amount
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45	Page- 74 /Sl. No. 24	Labour for fitting and fixing U.P.V.C. pipes for above ground work including cost of jointing materials etc. fitting and fixing all necessary specials, cutting pipes, cutting holes in walls or R.C. floor where necessary and mending good all damages excluding the cost of masonry or concrete work, if necessary, but including the cost and fitting and fixing holder bat clamps (any floor) or for underground work including cutting trenches upto 1.5 metre and refilling the same complete as per direction of the Engineer-in-charge. (Payment will be made on centre line measurement of the total pipeline including specials.(A)Above ground	10.00	mtr	57.00	570.00
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(ii) 110 mm dia.

46	Page- 87 /Sl. No. 1	Constructing Inspection pit of inside measurement 600mm X 600mm X upto 600mm (depth) with 250 mm thick 1st. class brick work in cement mortar (1:4) on all sides, bottom of the pit consisting of 100 mm thick cement concrete (1:3:6) with stone chips over a layer of jhama brick flat soling, 15 mm thick (1:4) cement plaster to inside walls and out-side walls upto G.L. and 20 mm.thick (1:4) plaster to bottom of the pit, providing necessary invert with cement concrete (1:3:6) with stone chips as per direction, neat cement finishing to entire internal surfaces, top of the pit covered with 100 mm thick R.C.C. slab (1:1.5:3) with stone chips and necessary reinforcements upto 1% and shuttering including 6 mm thick cement plaster (1:4) in all external surfaces of the slab and one 560 mm dia. R.C.C. manhole cover of approved make supplied, fitted and fixed in the slab with necessary fittings, necessary earthwork in excavation in all sorts of soil, filling sides of the pit with earth and removing spoils after work complete in all respect with all costs of labour and materials. i) With Pakur variety. (ii) Other than SAIL/ TATA/ RINL. <b>CJSW/ JSPL (SHAYAM /SRMB)</b>	1.00	no	6679.00	6679.00
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338821.19

Add 18% GST (+) 60988.00

399809.19

Add 1.0% Cess (+) 3998.00

403807.19

Add 3% contingency (+) 12114.00

415921.19

  
3.7.23  
Junior Engineer  
Katwa Sub-Division  
Social Sector  
P.W. Directorate

  
03/8/23  
Assistant Engineer  
Katwa Sub-Division  
Social Sector  
P.W. Directorate

Estimate Votted  
  
Executive Engineer  
Burdwan Division, Social Sector, P.W. Dte



Dr. Pradipta Kumar Basu  
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