

Government of West Bengal

Directorate of Forests

Office of the Divisional Forest Officer

Ex- Officio Manager, West Bengal Wasteland Development Corporation

Parks and Gardens (North) Division
32, Girish Ghosh Sarani, Hakimpara, Siliguri-1
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Memo. No.202/2-26 Date: 02.11.2018

Notice Inviting e-Tender: - e-Tender NIT No: 74/DFO/PGN/WBWDCL/18-19 (1st Call)

The Ex-Officio Manager, West Bengal Wasteland Development Corporation Limited and Divisional Forest Officer, Parks & Gardens (North) Division, on behalf of the Governor, West Bengal invites e-tenders for the following work(s) from the eligible Contractors as detailed in the table below. [Collection (downloading) and Submission (uploading) of Tender can be made online through the website https://wbtenders.gov.in only].

NIT NO: 74/DFO/PGN/WBWDCL/18-19 (1st Call)

Name of the project work

Creation of External Infrastructures for management of Eco-Resorts at Bhorer Alo, Gazoledoba Eco-Tourism Hub.

Amount: Rs. 4,71,84,140/-

TENDER FEE: Rs. 10,000/- EMD: Rs. 9,43,683/-

Period of Completion: 180 Days.

Cost of tender document/tender fees and Earnest Money Deposit (EMD) should be deposited online at the website www.wbtenders.gov.in through RTGS/NEFT Challan or through online payment gateway.

Note: Cost of Tender document/ Tender fees and Earnest Money deposit (EMD) for 1st Call to be released & the Bidder has to deposit the Cost of Tender Document/ Tender fees and Earnest Money Deposit (EMD) afresh for 2nd Call and so on, if any.

NOTICE INVITING TENDER No. NIT No: 74/DFO/PGN/WBWDCL/18-19 (1st Call) DATED: 02.11.2018

General Guidance for e-Tendering

1.1 Instructions / Guidelines for tenderers for electronic submission of the tenders online have been shown in Web site https://wbtenders.gov.in

1.2 Registration of Contractors

Any contractor willing to take part in the process of e-tendering will have to be enrolled and registered with the Government e-Procurement System.

1.3 Digital Signature Certificate (DSC)

Each contractor is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders

1.4 Collection of Tender Documents

The contractor can search and download NIT and tender documents electronically from computer once he logs on to the website mentioned in Clause 1.1 using the Digital Signature Certificate. This is the only mode of collection of tender documents

1.5 Participation in more than one work

A prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. A prospective Tenderer (including his participation in partnership) shall be allowed to participate in a single work or more than one or as many project works as mentioned in the List of Work(s) of this NIT.

2. Submission of Tenders

2.1General process of submission

Tenders are to be submitted online through the website stated in Clause 1.1 in two folders, at a time for each work, one is **Technical Proposal** and the other is **Financial Proposal**, before the prescribed date and time mentioned in the list attached. Using the Digital Signature Certificate (DSC), the documents are to be uploaded virus scanned and digitally signed. Tenderers should specially take note of all the addendum/corrigendum related to the tender and upload the latest documents as part of the tender.

2.2Technical Proposal

The Technical Proposal should contain scanned copies and/or a declaration in standardized formats of the following in two covers (folders).

2.3Contractors Responsibility

<u>Successful tenderer will conduct soil investigation and design the foundation on the basis of soil investigation report for all structures and get the approval of the same design from the Competent Authority prior to the execution.</u>

A. Technical File (Statutory Cover) containing

- i. NOTICE INVITING TENDER (Including Instructions to Bidders, General Terms & Conditions Of Contract, Technical Specification.) (**To be submitted in "NIT" Folder**)
- ii. Section B (Form I,Form III, Form IV and AFFIDAVIT Y) (to be submitted in "EMD AND TECHNICAL DOCUMENTS" Folder.)
- b) Addenda/Corrigenda: if published. Contractors are to keep track of all the Addendum/Corrigendum issued with a particular tender and upload all the above digitally signed along with the NIT. Tenders submitted without the Addendum/Corrigendum will be treated as informal and liable to be rejected.

2.3. Financial Proposal

- i) The financial proposal should contain the Bill of Quantities (B.O.Q.) in one cover (folder). The contractor is to quote the percentage rate (Presenting Excess / Less / Excess or Less 0.00% or to indicate at par) online through computer in the space marked for quoting rate in the BOQ.
- ii) Only downloaded copy of the B.O.Q. are to be uploaded quoting the rate, virus scanned & digitally signed by the contractor.

3. Eligibility Criteria for participation in tender:

(a) All categories of intending Tenderers shall have satisfactorily completed as a prime agency during the last 5 (five) years prior to the date of issue of this Tender Notice and as per Notification no. 03-A/PW/O/10C-02/14dated 12.03.2015

For 1st Call of NIT:

i) Intending tenderer should produce credentials of similar nature of completed work of the minimum value of **40% of the estimated amount** put to tender during 5(five) years prior to the date of issue of the tender notice;

or,

ii) Intending tenderers should produce credentials of 2(two) similar nature of completed work, each of minimum value of **30% of the estimated amount** put to tender during 5(five) years prior to the date of issue of the tender notice:

or

iii) Intending tenderers should produce credentials of 1(one) single running work of similar nature which has been completed to the extent of 80% or more and value of which is not less than the desired value at (i) above; In case of running works, only those tenderers who will submit the certificate of satisfactory running work from the Competent authority, or equivalent competent authority will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily and also that no penal action has been initiated against the executed agency, i.e., the tenderer.

For 2nd Call of NIT:

i) Intending tenderer should produce credentials of similar nature of completed work of the minimum value of 30% of the estimated amount put to tender during 5(five) years prior to the date of issue of the tender notice:

or,

ii) Intending tenderers should produce credentials of 2(two) similar nature of completed work, each of minimum value of **25% of the estimated amount** put to tender during 5(five) years prior to the date of issue of the tender notice:

or

iii) Intending tenderers should produce credentials of 1(one) single running work of similar nature which has been completed to the extent of **75% or more** and value of which is not less than the desired value at (i) above; In case of running works, only those tenderers who will submit the certificate of satisfactory running work from the Competent authority, or equivalent competent authority will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily and also that no penal action has been initiated against the executed agency, i.e., the tenderer.

For 3rd Call of NIT:

i) Intending tenderer should produce credentials of similar nature of completed work of the minimum value of **20% of the estimated amount** put to tender during 5(five) years prior to the date of issue of the tender notice;

or,

- ii) Intending tenderers should produce credentials of 1(one) single running work of similar nature which has been completed to the extent of **70% or more** and value of which is not less than the desired value at (i) above; In case of running works , only those tenderers who will submit the certificate of satisfactory running work from the Competent authority, or equivalent competent authority will be eligible for the tender. In the required certificate it should be clearly stated that the work is in progress satisfactorily and also that no penal action has been initiated against the executed agency, i.e., the tenderer.
- (a) All categories of intending Tenderers shall have satisfactorily completed as a prime agency during the last 3 (three) years prior to the date of issue of this Tender Notice at least one work of similar nature with an estimated cost equal to or more than the estimated cost put to this notice.
- (b) Provided that such similar works should have been implemented in Government Department, Zilla Parishad, Government undertaking / Statutory Bodies constituted under the statute of the Government. Completion Certificate indicating Estimated Amount, Value of work-done, date of completion of the work and detail communicational address along with contact number of the Client should be submitted.

[Non-statutory Documents]

(c) All categories of prospective Tenderers shall have to submit valid and up to date documents regarding taxes and charges as applicable, Income Tax Return Acknowledgement Receipt, PAN Card issued by Income Tax Department, Voter ID Card , Trade License, GST Registration, ESI, PF in respect of the prospective Tenderer..

[Non-statutory Documents]

(d) Where an individual person holds a Certificate in his own name duly issued to him against the company or the firm of which he happens to be a director or partner, such individual person shall, while submitting any tender for and on behalf of such company or firm, invariably submit a copy of registered power of attorney showing clear authorization in his favour, by the rest of the directors of such company or the partners of such firm, to submit such tender. The Power of Attorney shall have to be registered in accordance with the provisions of the Registration Act, 1908.

[Non-statutory Documents]

(e). Neither prospective Tenderer nor any of the constituent partners had been debarred to participate in any Tender by the P.W.D., P.W.(R)D & P.W.(C.B.)D, Housing Department, W.B. or C.P.W.D. or M.E.S or Railways; during the last 5 (five) years prior to the date of this NIT. Such debarring will be considered as disqualification towards eligibility. (A declaration in this respect has to be furnished by the prospective bidders as per prescribed format).

[Non statutory Documents]

(f) The partnership firm shall furnish the registered Partnership Deed and the Company shall furnish the memorandum of Association (MOA) and Article of Association (AOA)

[Non- statutory documents]

(g) Registered Un employment Engineers Co- operative Societies/ Labour Co- Operatives are required to furnish the following documents:-

[Non statutory documents]

- (i) Current "No objection Certificate" from the assistant Registrar of Co- operative Societies.
- (ii) By- laws duly approved by the Assistant Registrar of Co- Operative Societies,
- (iii) Name with address and signature (in original) of the present board of Directors of the Co- operative Society.
- (iv) Copies of Minutes of last Annual General Meeting and Audit Report of the Co-operative Society with the evidence of submission of the same to the concerned Authorities, duly attested.
- (h). The prospective Tenderer or any of their constituent partner shall neither have abandoned any work nor any of their contract have been rescinded during the last 5 (five) years. Such abandonment or rescission will be considered as disqualification towards eligibility.
- (i). Joint Ventures will not be allowed.
- (j). A prospective Tenderer shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. If the prospective Tenderer is found to have applied severally in a single job, all his applications will be rejected for that job.
- (k) Conditional / Incomplete Tender will not be accepted under any circumstances.

B. My Document (Non-Statutory Cover)

Sl.	Category Name	Sub-Category		Document Name					
No.		Description							
1.	CERTIFICATES	CERTIFICATES	1	P.T. deposit receipt					
] 1		Challan	1 1				
			2	All up-to-date					
				documents regarding					
	1			taxes & charges as	1 1				
				applicable.					
			3	I.T.R.					
				Acknowledgement					
	1			Receipt					
			4	PAN Card					
			5	Voter ID Card	1 1				
			6	Enlistment Certificate					
	_		7	ESI, PF & GST					
				Registration					
				Certificate					
2.	COMPANY	COMPANY	1	Proprietorship Firm - Trade License.					
	DETAILS	DETAILS							
]		2	2 Partnership Firm - Regis	tered Partnership				
				Deed,					
]			Registered Power of Attorney, Trade licence					
			3	Pvt. Ltd. Company - Regis					
]		under Company's Act,					
				Registered Power of Attor					
			4	Registered Un-employed					
	CDEDELIES :	GD ED ELVEN A		Labour Co-operative Socie					
3.	CREDENTIAL	CREDENTIAL		Completion Certificate fro					
]	1	Supervisor which is applic					
			1	in this bid [According to Cl. 6(i) of NI					
<u>4.</u>	Technical Person	echnical Person Contract/agreement/engag		Graduate/ Diploma Civil Engineer					
<u></u>		ement of technical Person	2	Graduate/ Diploma Electrical Engineer					

Sl. No.	Category Name	Sub-Category Description		Document Name				
5.	Financial information	P/L & Balance sheet 2015-16 P/L & Balance sheet 2016-17 P/L & Balance sheet 2017-18	2.	Audit Report 2015-16 Audit Report 2016-17 Audit Report 2017-18				

4. Opening of Technical Proposal

Technical proposals will be opened by the authorized representatives electronically from the website stated in Clause 2.1, using their Digital Signature Certificate.

Intending tenderers may remain present, if they so desire.

Cover (Folder) for Statutory Documents should be opened first, if found in order, Cover (Folder) for Non-statutory Documents will be opened. If there is any deficiency in the Statutory Documents, the tender will summarily be rejected.

Decrypted (transformed into readable formats) documents of the Non statutory Cover will be downloaded, and handed over to the Tender Evaluation Committee (constituted for evaluation of tenders).

5. Uploading of summary list of technically qualified Tenderer (1st round)

Pursuant to scrutiny and decision by Technical Analysis Committee (TAC) & will be Evaluated by Technical Evaluation Committee (TEC) formed by the order of competent authority the summary list of eligible tenderers with the serial number of work(s) for which their Financial Proposals will be considered will be uploaded in the web portals. While evaluation, the Committee may summon the tenderers and seek clarification / information or additional documents or original hard copy of any of the documents already submitted and if these cannot be produced within the stipulated time frame, their proposals will be liable for rejection.

6. Final publication of summary list of technically qualified Tenderer

Date of opening of financial bid will be done after completion of all procedural formalities.

7. Opening and Evaluation of Financial Proposal

Financial proposals of the Tenderer declared technically eligible by the Tender Analysis Committee (TAC) and the Technical Evaluation Committee (TEC) formed by the order of Competent Authority will be opened electronically from the web portal stated on the prescribed date.

8. Acceptance of Tender (Technically eligible/qualified)

Lowest valid rate should normally be accepted. However, the Tender Accepting Authority does not bind him/herself to do so and may reserves the right to reject any or all the tenders, for valid reasons and also reserves the right to distribute the work amongst more than one tenderer.

9. Penalty for suppression / distortion of facts

If any tender fails to produce the original hard copies of the documents or any other documents on demand of the Tender Evaluation Committee within a specified time frame or if any deviation is deleted in the hard copies from the uploaded soft copies or if there is any suppression, the tenderer will be suspended from participating in the tenders on e-Tender platform as deemed fit. In addition, his user ID will be deactivated and Earnest Money Deposit will stand forfeited. Besides, the WBFOR may take appropriate legal action against such defaulting tenderer.

10. Schedule of Dates:

Sl No.	- Particulars	Date	Time
1	Date of uploading N.I.T.Documents—Online		11.00am.
	(Publishing Date)	05.11.2018	
2	Documents download start date (Online)		11.15am.
		05.11.2018	
3	Bid submission start date (Online)	05.11.2018	11.20am
4	Pre-Bid Meeting at office building of P&G (N), SILIGURI	26/11/2018	11:30 am.
5	Documents download end date (online)	07.12.2018	05.15 pm.
6	Bid submission closing date (Online)	07.12.2018	05.20 pm
7	Bid opening date for Technical Proposal (Online)	10.12.2018	11.00 am

- Note: 1). In case of any unscheduled holiday or on days of Bandh or natural calamity on the aforesaid dates, the next working day will be treated as scheduled / prescribed date for the same purpose.
 - 2). The Tender Inviting Authority may change the venue of opening the Technical or Financial Bids in case of exigent circumstances like breakdown of communications link or conditions of force majeure.
- 3). The Tender Inviting Authority reserves the right to defer the date of opening of either Technical or Financial Proposal or both, if required.

12. Brief details on the nature of work:

Sl No.	Name of the project work	Amount
1	Creation of External Infrastructures for management of Eco-Resorts at Bhorer Alo, Gazoledoba Eco- Tourism Hub. (Estimate Attached)	Rs. 4,71,84,140/-

13. Tender Document costs (Tender Fees) & Earnest Money Deposit (EMD):

- a) Cost of tender document/tender fees and Earnest Money Deposit (EMD) should be deposited online at the website www.wbtenders.gov.in through RTGS/NEFT Challan or through online payment gateway.
- b) There is no exemption of any kind for any of the eligible contractors towards cost of tender document fee or EMD.

c) Refund of EMD: The EMD of the unsuccessful Tenderer deposited shall be automatically refunded through online process. The refund of EMDs will be paidto the bidders to the accountfrom which the EMD transaction got initiated by the bidder. Accordingly, for internet banking transactions, the EMD will be refunded back to the internet banking account from which the bidder initiated the transaction. If the bidder has made EMD payment through RTGS/NEFT mode, the refund will go back to the account from which the RTGS/NEFT transaction got initiated.

HELPDESK

For any queries or issues on EMD payments made through Internet banking or Payment gateway, RTGS/NEFT mode or any Refunds Contact Helpdesk: 03340267513/ 03340267512

- d) Intending Tenderers should download the Tender Documents from the website http://wbtenders.gov.in directly with the help of Digital Signature Certificate.
- e) Both Technical Bid and Financial Bid should be submitted duly digitally signed by the Tenderer through the website http://wbtenders.gov.in as per the 'Date & Time Schedule' stated in Sl. No.03 of this N.I.T. (Details of which has been narrated in 'Instruction to Bidders')

14. Opening of Tender:

- 1. (a) The Technical Bid shall be publicly opened by the authority receiving tender or by his authorized representative, as per the Date & time Schedule mentioned in NIT. (Stage I)
- (b) Each applicant have to submit the relevant sample, as applicable before opening of the technical bidon the specific date mentioned in the NIT at the office of the Ex-Officio Manager, WBWDCL &Divisional Forest Officer, Parks & Gardens (North) Division, Girish Ghosh Sarani, Hakimpara, Siliguri-734001.
 - (c) Prospective Tenderer or their authorized representatives may be present during the opening process.
 - (d) Financial Bids of only those Tenderer who would qualify in the Technical Bid Evaluation will be opened. (Stage II).
 - (e) The Ex-Officio Manager, West Bengal Wasteland Development Corporation Limited and Divisional Forest Officer, Parks & Gardens (North) Divisionor his authorized representative opening the Financial Proposal may call for Open Bid/Seal Bid after opening of the said tender to obtain the suitable rate further, if required. If any of the Tenderers or their representatives fails to attend during this process no subsequent objection would be entertained under any circumstances at any later date or time.
- 2. The intending Tenderer shall clearly understand that whatever may be the outcome of the present Invitation of Tender, no cost of Tendering shall be reimbursable by the Government. The Ex-Officio Manager, West Bengal Wasteland Development Corporation Limited and Divisional Forest Officer, Parks & Gardens (North) Division reserves the right to reject any tender or all Tenders without assigning any reason whatsoever and is not liable for any cost that might have incurred by any Tenderer at any stage of Tendering.
- 3. The acceptance of the tender rests with the Ex-Officio Manager, West Bengal Wasteland Development Corporation Limited and Divisional Forest Officer, Parks & Gardens (North) Division, West Bengal who does not bind herself to accept the lowest tender and reserves to herself the authority to reject any or all the tenders received without assigning any reason thereof.
- 4. Intending Tenderer at their own cost and risk are encouraged to inspect the site of work and get them thoroughly acquainted with the local condition and all factors which may affect their rates. Prior to the site visit the intending Tenderers must inform the Ex-Officio Manager, West Bengal Wasteland Development Corporation Limited and Divisional Forest Officer, Parks & Gardens (North) Division about the time and date of the visit.

- 5. The selected Contractor must arrange to procure all materials required for the proper maintenance work. The Employer will not on any account be responsible for procuring the same.
- 6. Emergency/Special direction works may be carried out through Ex-Officio Unit Manager & Range Officer as or when required.
- 7. Payment will be made as per actual work done in the field on monthly basis. The claim should be accompanied by completion certificate of concerned Ex-Officio Unit Manager and Range Officer.
- 8. The detailed estimate will be available at the office of The Ex-Officio Manager, West Bengal Wasteland Development Corporation Limited and Divisional Forest Officer, Parks & Gardens (North) Division, Girish Ghosh Sarani, Hakimpara, Siliguri-734001.
- 9. If required in emergency or in exigency or in case of special direction from competent authority the successful tenderer or concerned Ex-Officio Unit Manager and Range Officer may take up same type & nature of additional work at same less & same rate & payment will be done accordingly on availability of fund within the completion of the project period based on the actual measurement of additional work.
- 10. The selected contractor will remain solely responsible for any liability in respect of works and labourers engaged by him for the said purpose. He shall make his own arrangement for temporary acquisition of land for storing his material and for the housing of his staff at his own expenses.

15. VALIDITY OF BIDS:

Bid shall remain valid for a period for 365 Days. Bid validity for a shorter period (than as given date) shall berejected by Tender Accepting Authority as non-responsive. If any Tenderer withdraws his offer before Tender Closing period without giving any satisfactory explanation for such withdrawals, he may be disqualified for submitted tender to this Office and Directorate of Forests, Government of West Bengal for a minimum period of 1 (one) year and legal action will be taken against him.

16. VERIFICATION OF CREDENTIALS/ONSITE PROJECTS:

Before issuance of the work order, the Tender Accepting Authority may verify the credential and other documents of the lowest Tenderer if found necessary. After verification, if it is found that such documents submitted by the lowest Tenderer is either manufactured or false in that case, work order will not be issued in favour of the Tenderer under any circumstances and legal action will be taken against him.

17. CANCELLATION OF TENDER:

The Divisional Forest Officer, Parks & Gardens (North) Division, West Bengal reserves the right to cancel this N.I.T. due to unavoidable circumstances and no claim in this respect will be Entertained.

18. SECURITY DEPOSIT:

The 2% EMD will be adjusted against Security Deposit & rest 8% of Security Deposit will be deducted from running bill.

19. EXECUTION OF WORK: The Tenderer shall be bound to execute work according to the direction givenfrom time to time by the undersigned authorized officer of this Division and any complaint against the tenderer from the said officer for deviation for his direction will cause violation of the condition of the contract and forfeiture of security money as well as discontinuation /dismissal of agreement and work order.

20. DEDUCTION OF TAXES ETC:

Deduction of Income Tax & other taxes from the Contractor's Bill will be made as per existing Govt. rules.

21. REMOVAL OF DISCREPANCY:

If any discrepancy arises between two similar clauses on different notification, the clause as stated in later notification will supersede former one in following sequence:-

- a. Form of Agreement.
- b. Tender Form.
- c. Technical Specifications including Sample materials Submission.
- d. General Terms and Conditions.
- e. Instructions to Bidders.
- f. N.I.T.
- 22. MOBILISATION ADVANCE/ COST OVER RUN: No Mobilization Advance and Secured Advance will be allowed. . Time / cost overrun and consequent cost of escalation for any materials, labour, P.O.L. etc. will not be allowed.
- 23. Canvassing in connection with the tender is strictly prohibited in the Tender submitted by the Contractor.
- 24. The successful Tenderer will have to start the work as per the work order to commence the work.
- 25. The materials, tool and plants specifically lawn mower be required for the project will be of best quality and will have to be as per the full satisfaction of undersigned or his/ her authorized officer. The authority will have the power to reject at any stage the defective and/ or inferior materials and then the the replacement shall at once be made at the Contractors own expense.
- 26. The Successful Tenderer shall have to comply with the provision of the Minimum Wages Act, 1948 (d) and the subsequent amendments thereof or other laws relating thereto and the rules made and orders issued there under from time to time, failure to do so will be treated as breach of contract and the Ex-Officio Manager, West Bengal Wasteland Development Corporation Limited and Divisional Forest Officer, Parks & Gardens (North) Division may in his discretion cancel the contract. The contactor shall also be liable for any liability arising on account of any violation by him of the provisions of the Act and rules made there under time to time.
- 27 .The successful Tenderer shall not be entitled for any compensation for any loss suffered by him due to delay arising out for modification of the work, due to non-delivery of the possession of site and / or modification of drawing and design.
- 28. No tender shall be deemed to be fit for consideration unless the tender documents are completely filled in. All information that may be asked from the Tenderer must be unequivocally furnished. The eligibility of a Tenderer will be ascertained on the basis of the documents submitted by a Tenderer in support of eligibility criteria. If any document submitted by a Tenderer is found to be incomplete/incorrect/ manufactured / fabricated or false, his Tender will be out rightly rejected at any stage and legal action will be taken against him.
- 29. A Tenderer is to quote in figures as well as in words, his rates in the following forms as applicable in his cases against the estimated value put to tender of the tender form.
- 30. In the event of a tender being submitted by a firm, it must be signed by a member or members of the firm having legal authority to do so and if called for, legal documentations in support thereon must be produced for inspection and in the case of a firm carried out by one member or a joint family it must disclose that the firm is duly registered under the Indian Partnership Act.

- 31. Scope of work of the Successful bidder may be changed during execution as per approval of Competent Authority or instruction of Project- in-Ccharge deployed by the client.
- 32. <u>Contingency expenditure as shown in the BOQ will be at the discretion of the Tendering</u> Authority for necessary payment.
- 33. The scope of work as floated in the tender may also vary in physical and financial terms, based on site specificity.
- 34. The project cost floated in the tender shall include applicable GST within it and TDS under GST shall be deducted as and when applicable. Income Tax will be deducted from bill amount (excluding GST amount) as applicable.
- 35. Payment will be done after receiving of fund from Competent Authority.
- 36. In case of deposition of security deposit, notification issued by Audit Branch of Finance Department vide No. 4608-F(Y) Dated. 18.07.2018 should be strictly followed.
- 37. Applicable GST will be paid from the Project Cost. Only.
- 38. The primary scrutiny of technical bids will be done by Technical Analysis Committee formed vide this Office memo no. 1094(17)/2-14 dated. 06.09.2018 which will be further evaluated by Technical Evaluation Committee.
- 39. All intending bidders or their authorized representatives may attend Pre- Bid meeting as scheduled.

s/d

Ex-Officio Manager, WBWDCL & Divisional Forest Officer, Parks & Gardens (North) Division

Memo. No. 202(8)/2-26 Date: 02.11.2018

Copy for information and wide circulation through his office notice board to:

- The Principal Chief Conservator of Forests, (HoFF) West Bengal, Aranya Bhaban, Salt Lake, Kolkata-700098.
- 2. The Managing Director, West Bengal Wasteland Development Corp. Ltd.
- 3. The Chief Conservator of Forests, MIS Cell, Aranya Bhaban with a soft copy for uploading in Department Website. PDF Format mailed to the mail id pccfwb@vsnl.net.
- 4. The General Manager, West Bengal Wasteland Development Corp. Ltd.
- 5. The General Manager (Operations), West Bengal Wasteland Development Corp. Ltd.
- 6. The Deputy Director Tourism, North Bengal.
- 7. Concerned Ex-Officio Unit in- charge and Range Officer for wide publicity at Local Level.
- 8. Office Notice Board.
- 9. The Guard File.

s/d

Ex-Officio Manager, WBWDCL & Divisional Forest Officer, Parks & Gardens (North) Division

1. OPENING & EVALUATION OF TENDER A) Opening of Technical Proposal

- i) Technical proposals will be opened by the Tender Opening Authority or his authorized representative as per the Date & Time schedule mentioned in the N.I.T. electronically from the website stated in Clause 2 of this NIT using their Digital Signature Certificate.
- ii) Intending tenderers are encouraged to be present for observing the tendering opening procedure.
- Iii) Statutory Cover shall be opened first and if found in order, Non-Statutory cover will be opened. If there is any deficiency in the statutory documents the tender will summarily be rejected.
- iv) Decrypted (transformed in to readable formats) documents of the Statutory and Non Statutory Cover will be downloaded by the Tender Opening Authority.

V) Declaring summary list of technically qualified tenderers:-

- a. Pursuant to scrutiny and decision of the Tender Opening Authority, the summary list of technically qualified tenderers and the serial no. of work for which their proposal will be considered will be uploaded in the web portal and also that of the Directorate of Forests, Government of West Bengal as per feasibility. The list would be displayed vide notice board of the Tender Inviting a authority, viz. Divisional Forest Officer, Parks & Gardens (North) Division, West Bengal.
- b. While evaluation, the Tender Opening Authority may summon the tenderers and seek clarification /information or additional documents or original hard copy of any of the documents already submitted and if these are not produced within the stipulated time frame, their proposals will be liable for rejection.
- c. All prospective tenderers who fulfill the eligibility criteria conditions of this NIT become technically qualified for further process.

B) Opening of Financial Proposal

- i. The financial proposal of the technically qualified tenderers will be opened by the Tender Opening Authority or his Authorized representative electronically as per the Date & Time Schedule mentioned in the N.I.T. from the website using their Digital Signature Certificates.
- ii) Intending technically qualified tenderers are encouraged to be present during this process.
- iii) Decrypted (transformed in to readable formats) B.O.Q. would be downloaded by the Tender Opening Authority.

PENALTY FOR SUPPRESSION / DISTORTION OF FACTS

If any Tenderer fails to produce the original hard copies of the documents (specifically the completion certificates and audited balance sheets), or any other documents on demand of the Tender Opening Authority within specified time frame or if any deviation is detected in the submitted documents or if there is any suppression of facts, the tender will be rejected outright and appropriate legal action may be taken by the Government against such Tenderer.

AWARD OF CONTRACT

a) The Tender Inviting Authority reserves the right to accept or reject any Tender and to cancel the tendering processes and reject all Tenders at any time and prior to the Award of Contract without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Bidder or Bidders of the ground for Employer's action.

- b) The Bidder who's Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through acceptance letter.
- c) The notification of award will constitute the formation of the Contract.
- d). The Agreement will incorporate all agreements between the Tender Accepting Authority and the successful Bidder. All the tender documents including NIT & B.O.Q. will be the part of the Contract Document.

s/d
Ex-Officio Manager, WBWDCL &
Divisional Forest Officer,
Parks & Gardens (North) Division.

Section - B

FORM-I

APPLICATION

To

The Ex-Officio Manager, WBWDCL & Divisional Forest Officer, Parks & Gardens (North) Division
Subject: (Name of the Work with Tender reference no.)
Reference :(N.I.T. No.)
Dear Sir/Madam,
Having examined the Statutory, Non-statutory and NIT documents; I/We hereby submit all the necessary information and relevant documents for evaluation.
The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms for application and for completion of the contract documents is attached herewith.
I/We are interested in bidding for the work mentioned above I/We understand that (a) Tender Inviting Authority and Accepting Authority can amend the scope and value of the Contract bid under this project (b) Tender Inviting Authority and Accepting Authority reserve the right to reject any tender without assigning any reason.
The application is made by me/us on behalf ofin the capacity of
duly authorized to submit the tender.
Enclosure: (1) Technical Proposal (Envelop-
1/Folder) Date:
Signature of authorized officer of the firm
Title & Capacity of the officer

Name of the Firm with Seal

Section – B AFFIDAVIT – Y

(To be furnished in Non-judicial stamp paper of appropriate value duly notarized)

(I) I, the undersigned do certify that all the statements made in the case of any information submitted proved to be false or conceasobjection/claim will be raised by the undersigned.	
(II) The undersigned also hereby certifies that neither our firm M/S nor any of constituent partners had been debarred to particip /Government of West Bengal or any of the Statutory Bodies or C credentials are preferred by the undersigned towards eligibility crite the date of this N.I.T.	ate in tender by the Directorate of Forests Government Organizations in favour of whom
(III) The undersigned would authorize and request any Bank, per information as deemed necessary and/or as requested by the Division, W.B. herein referred to as the Tender Inviting & Accepting	ional Forest Officer, Parks & Gardens (North)
(IV) The undersigned understands that further qualifying information such information at the request of the Tender Inviting & Accepting	
(V) Certified that I have applied in the tender in the capacity of ind applied severally for the same job.	ividual/as partner of a firm & I have not
Date:	
	Signature of authorized officer of the firm
	Title & Capacity of the officer
	Name of the Firm with Seal

Section – B FORM – III

STURCTURE AND ORGANISATION

A.1. Name of the applicant (Tenderer):	
A.2. Office Address:	
Telephone No.:	
Fax No.:	
A.3. Name and address of Bankers:	
A.4. Attach an organization chart showing the structure of t technical staff with Bio-data	he company with names of key personnel and
Date:	
	Signature of authorized officer of the firm
	Title & Capacity of the officer
	Name of the Firm with Seal

Note: Application covers Proprietary Firm, Partnership, Pvt. Ltd. Company or Corporation

Section-B

FORM- IV EXPERIENCE PROFOILE

LIST OF PROJECTS COMPLETED THAT ARE SIMILAR IN NATURE TO THE WORKS [REFER PARA 3

(a) (i) (ii) (iii) -ELIGIBILITY CRITERIA]

Name of the Employer	Name, Location and nature of work	Name of authorized supervisor with designation	Contract price in Indian Rupees	Percenta ge of participati on of Company	Origin al date of startin g work	Original date of completio n of work	Actual date of starting of work	Actual date of completion of work	Reasons for delay in completion

Note: a) Certificate from the employers to be attached.	
b). Non-disclosure of any information in the schedule will	result in disqualification of the firm.
D	
Date	
	Signature of authorized officer of the firm
	Title and capacity of the officer
	Name of the firm with coal
	Name of the firm with seal

INSTRUCTION TO BIDDERS (ITB) Section – A

1. GENERAL GUIDANCE FOR e-TENDERING

Instructions / Guidelines for prospective tenderers for electronic submission of the tenders online may be obtained from the site, http://wbtenders.gov.in to participate in e-Tendering process.

2.REGISTRATION OF CONTRACTOR

Any contractor willing to take part in the process of e-Tendering will have to be enrolled & registered with the Government e-Procurement system, through logging on to http://wbtenders.gov.in; the contractor is to click on the link for e-Tendering site as given on the web portal.

3. DIGITAL SIGNATURE CERTIFICATE (DSC)

Each contractor is required to obtain a Class-II or III Digital Signature Certificate (DSC) for submission of tenders, from the approved service provider of the National Informatics Centre (NIC) on payment of requisite amount details are available at the Web Site stated in Clause 2. DSC is given as a USB e-Token.

4. COLLECTION OF NIT & TENDER DOCUMENTS

The contractor can search & download NIT & Tender Documents electronically from computer once he logs on to the website mentioned in Clause 2 using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.

5. PARTICIPATION IN MORE THAN ONE WORK

A prospective bidder shall be allowed to participate in the job either in the capacity of individual or as a partner of a firm. A prospective Tenderer (including his participation in partnership) shall be allowed to participate in a one or more than one project in this NIT.

6. SUBMISSION OF TENDER

General process of submission: Tenders are to be submitted online through the website stated in Clause 2 in two folders at a time for each work, one in Technical Proposal & the other in Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC). The documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats).

A) TECHNICAL PROPOSAL

The Technical proposal should contain scanned copies of the following Tender Documents in two covers (folders) namely Statutory Cover and Non-Statutory Cover:-

A-1) Statutory Cover containing

- i) Application (ITB, Section B (Form I, , Form III, Form IV))
 - Demand Draft towards cost of tender documents (Tender Fees) & Earnest Money as prescribed in the N.I.T.against each serial of work in favour of The Divisional Forest Officer, Parks & Gardens (North) Division, Siliguri.
- ii) NIT (properly downloaded, digitally signed and uploaded)ITB (properly downloaded, digitally signed and uploaded)
- iii) Tender Form (properly download, digitally signed on both the pages and upload the same except quoting rate, quoting rate will only be encrypted in BOQ in Financial Bid). In case any rate is quoted in Tender Form, the tender is liable to be summarily rejected.
- iv) Technical Specifications (properly downloaded, digitally signed and uploaded)
- v) Affidavit (Ref:- format shown in "Affidavit Y" of ITB, Section -B).

A-2) Non-Statutory Cover containing:

- I) (i) Certificates:
 - a) Valid and up to date Professional Tax (PT) deposit receipt challan.
 - b) VAT registration Certificate.
 - c) Income Tax Return Acknowledgement Receipt.
 - d) Income Tax PAN Card.
 - e) Voter I Card
 - f) Valid & upto date E.S.I. PF & GST Registration Certificate.
 - g) Credential Certificates.
 - (ii) Proprietorship Firm Trade Licence
 - (iii) Partnership Firm Registered Deed of partnership Firm, Registered Power of Attorney, Trade Licence.
 - (iv) Private Limited Company Registration Certificate under Company Act, Memorandum of Association (MOA) & Articles of Association (AOA), Registered Power of Attorney, Trade Licence.
 - (v)Registered Unemployed Engineers' Co-operative Societies / Labour Co.- Op. Societies are required to furnish the following valid and up to date documents:
 - a. Current "No Objection Certificate" from the Assistant Registrar of Co-operative Societies.
 - b. Supporting documents showing area of operation.
 - c. Bye-laws duly approved by the Assistant Registrar of Co-operative Societies.
 - d. Name with address and signature of the present Board of Directors of the Co-operative Society.
 - e. Minutes of last Annual General Meeting and Audit Report of the Co-operative Society with the evidence of submission of the same to the concerned Authorities.
 - vi) Credential for satisfactorily completion as a prime agency during the last 3 (three) years prior to the date of issue of this Tender Notice will be as stated below:
 - (a) Please see Point No. 3(a) of Tender Notice.
 - (b) Provided that such similar works should have been implemented in Government Department, Zilla Parishad, Government undertaking / Statutory Bodies constituted under the statute of the Government. Completion Certificate indicating Estimated Amount, Value of work-done,

date of completion of the work and detail communicational address along with contact number of the Client should be submitted. In the case of works undertaken for P.W.D./ C.P.W.D./ M.E.S./ Railways, a Completion Certificate from the concerned Executive Engineer will be treated as valid credential.

[Non-statutory Documents]

(c) Completion Certificate indicating Estimated Amount, Value of work-done, date of completion of the work and detail communicational address along with contact number of the Client should be submitted by the tenderer. Completion Certificate from the concerned Executive Engineer only will be treated as valid credential. & Experience Profile (ITB, Section – B, Form - V)

Note:- Failure of submission of any of the above mentioned documents will render the tender liable to be summarily rejected for both Statutory & Non Statutory Cover.

The above stated statutory/non-statutory/technical documents should be uploaded in the following manner Click the check boxes beside the necessary documents in the My Document list and then click the tab "Submit Non Statutory Documents' to send the selected documents to Non-Statutory folder. Next Click the tab "Click to Encrypt and upload" and then click the "Technical" Folder to upload the Technical Documents.

	ECO RESORT, GAJALDOBA (WEST BENGAL)								
	SUMMARY OF COST								
	EXTERNAL PLUMBING & SANITA	TION WO	RKS						
			AMOUN	IT					
S.NO	DESCRIPTION	WB SOR 2017 (a)	CPWD- DSR 2016 (b)	MR (c)					
1	EXTERNAL WATER SUPPLY								
•	DISTRIBUTION NETWORK FOR DOMESTIC WATER SUPPLY	384700.00	054454.00	15555.00					
(h)	DISTRIBUTION NETWORK FOR IRRIGATION WATER SUPPLY (RECYCLED)	†	654451.30 1070500.00	16000.00 52150.00					
(c)	DISTRIBUTION NETWORK FOR RISING MAIN WATER SUPPLY	37700.00	79500.00	16000.00					
	EXTERNAL SEWERAGE SYSTEM		1429134.00	3345927.50					
	EXTERNAL PIPE DRAINAGE SYSTEM	0.00		64160.00					
	Other Items	1	02 17 00:00	04100.00					
	SEPTIC TANK (10 Users) x 2 & SOAK PIT (10 Users) x 2	0.00	0.00	878667.45					
	STP	3.00	0.00	070007.43					
2.1	Electro- Mechanical Work	0.00	0.00	2,386,250.00					
2.2	Civil Work	0.00		1541250.00					
3	UG TANK, WTP & Hydropneumatic System		0.00	1041200.00					
3.1	Electro- Mechanical Work	0.00	0.00	2393440.00					
3.2	Civil Work	0.00	0.00	5137500.00					
	Total (a)	1495890.00	3758335.30	15831344.95					
	COST INDEX FOR DSR @34.31%	NA	1289484.84	NIL					
	TOTAL (b)	1495890.00	5047820.14	15831344.95					
	Net Total (Total (b) of WBSOR-2017+ CPWD-DSR-2016 + MR)	<i>t</i> 1		₹ 22,375,055.09					
	GST @ 12%			₹ 2,685,006.61					
	Sub Total	L		₹ 25,060,061.70					
	Labour Welfare Cess @ 1%			₹ 250,600.62					
į.	Add Contingency Charges @ 3%			₹ 751,801.85					
	Sub Total			₹ 26,062,464.17					
	Say			₹ 26,062,464.00					
 ::	Rupees Two Crore Sixty Lakhs Sixty Two Thousand Fo	ur Hundred	Sixty Four	Only					

	BILL OF QUANTITIES FOR ECO RESORT									
		EXTERNAL PLUMBING & SANITATION	I WOR			RATE (In Rs	.)	l Ai	MOUNT (In R	s.)
	Item No./Page No./MR	DESCRIPTION		TOTAL QTY	WBSOR 17	BSOR DSR		WBSOR 17	DSR 16	MR
	SUB HEAD (I) :- E)	CTERNAL WATER SUPPLY PIPES AND FITTINGS								
	00B NEAB (I) E/	TENNAL WATER OUT ETTIL ED AND TITTINGO								
	(a)	DISTRIBUTION NETWORK FOR DOMESTIC WATER SUPPLY								
1	,	Excavating trenches upto 1.5 meter depth in all kind of soil of required width for pipes. including excavation for sockets and dressing of sides ramming of bottoms including getting out the excavated soil & then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc & disposing of surplus excavated soil as directed within a lead of 50m or as directed at site by engg-in-charge.								
		All kinds of soil								
		Pipes etc from 80 mm and above but not exceeding 300 mm dia.	metre	1150.00	0.00	550.00	0.00	0.00	632500.00	0.00
2	ITEM-2	Supplying, fitting and fixing in position G.I.pipes of TATA make for underground works with all necessary accessories, specials viz.socket, bend, tee, union, cross, elbow, nipple, short piece etc.including cost of all materials, jointing materials, cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soil and refilling the same as directed with two coats of painting on G.I. pipes and specials with bituminous paint complete in all respect. (Payment will be made on the centre line measurement of the total pipe line including all specials No separate payment will be made for accessories, specials.Payment for painting will be made seperately)								
		External work								
	(ii)	20 mm dia nominal bore	metre	200.00	240.00	0.00	0.00	48000.00	0.00	0.00
	(iii)	25 mm dia nominal bore	metre	1000.00	319.00	0.00	0.00	319000.00	0.00	0.00
	(iv)	32 mm dia nominal bore	metre	50.00	354.00	0.00	0.00	17700.00	0.00	0.00
3	18 17 (DSR-2016)	Providing & fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)								
٦	18.17.1	25 mm dia	NOS	3.00	0.00	3000.00	0.00	0.00	9000.00	0.00
	18.17.2	32 mm dia	NOS	1.00	0.00	4500.00	0.00	0.00	4500.00	0.00
4		Supply, fixing in position, testing ISI marked cast iron double flanged sluice valves as per IS:14846-2000, (PN 10) with SS stem, bolts, nuts, 3 mm thick rubber gaskets including transporting to worksite, Complete as per drawings & directions of the Engineer-in-charge.								
	MR	32 mm nominal dia	Each	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	,	Constructing brick masonry chamber 300 x 300 x 500 mm, inside with F.P.S. brick work in cement mortar 1: 4 (1 cement : 4 coarse sand) for Isolating Valve / garden hydrant /gate valve ,including fixing of CI/SFRC cover and frame in 150 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 gradded stone aggregate of 20 mm nominal size); necessary excavation, foundation concrete 1:4:8 (1 cement :4 coarse sand: 8 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design. (The cost of cover and frame shall be seperate)	Each	3.00	0.00	1800.00	0.00	0.00	5400.00	0.00

				TOTAL		RATE (In Re	s.)	AMOUNT (In Rs.)			
S. No	Item No./Page No./MR	DESCRIPTION		QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR	
6	, ,	Constructing brick masonry chamber 600 x 600 x 1050 mm inside with F.P.S. brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for Sluice Valve , necessary excavation, foundation concrete 1:4:8 (1 cement : 4 coarse sand: 8 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1 : 3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design including fixing of Cl/SFRC cover and frame in 150 mm thick cement concrete 1:2:4 (1cement : 2 coarse sand : 4 gradded stone aggregate of 20 mm nominal size) including centering, shuttering, excavation, refilling and disposal of surplus earth as directed complete in all									
		respects. (The cost of cover and frame shall be seperate)	Each	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
7	,	Providing Precast Cement Concrete / SFRC Valve Chamber cover and frame conforming to IS: 12592-2002., The concrete mix should be not less than M 30.									
	19.19.1	L D- 2.5	F	0.00	0.00	1017.10	0.00	0.00	0054.00	0.00	
	19.19.1.1	Rectangular shape 600*450 mm internal dimensions	Each	3.00	0.00	1017.10	0.00	0.00	3051.30	0.00	
8	MR	Providing and laying cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone agg. 20 mm nominal size) for thrust blocks at bends and junctions of water lines including necessary excavation, centering, shuttering etc as directed and required at site to complete the work	Cum.	2.00	0.00	0.00	8000.00	0.00	0.00	16000.00	
		TOTAL OF (a)						384700.00	654451.30	16000.00	
	(b)	DISTRIBUTION NETWORK FOR IRRIGATION WATER SUPPLY (RECYCLED)									
1	2.10	Excavating trenches upto 1.5 meter depth in all kind of soil of required width for pipes. including excavation for sockets and dressing of sides ramming of bottoms including getting out the excavated soil & then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc & disposing of surplus excavated soil as directed within a lead of 50m or as directed at site by engg-in-charge.									
		All kinds of soil									
2		Pipes etc from 80 mm and above but not exceeding 300 mm dia. Supplying, fitting and fixing in position G.I.pipes of TATA make for underground works with all necessary accessories, specials viz.socket, bend, tee, union, cross, elbow, nipple, short piece etc.including cost of all materials, jointing materials ,cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soil and refilling the same as directed with two coats of painting on G.I. pipes and specials with bituminous paint complete in all respect. (Payment will be made on the centre line measurement of the total pipe line including all specials No separate payment will be made for accessories, specials.Payment for painting will be made seperately)	metre	1400.00	0.00	550.00	0.00	0.00	770000.00	0.00	
	/::\	External work		000.00	040.00	0.00	0.00	40000.00	0.00	0.00	
	(ii) (iii)	20 mm dia nominal bore 25 mm dia nominal bore	metre metre	200.00 1250.00	240.00 319.00	0.00	0.00	48000.00 398750.00	0.00	0.00	
	(iv)	32 mm dia nominal bore	metre	50.00	354.00	0.00	0.00	17700.00	0.00	0.00	
3		Providing & fixing brass foot valve tested to a min. pressure of 15 kg/sqcm and to be of 4 Kg/Sqcm complete with screwed ends as required. (make : CIM / Zoloto / Advance)									
	MR	20 mm dia	NOS	17.00	0.00	0.00	950.00	0.00	0.00	16150.00	
4	18.17 (DSR-2016)	Providing & fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)									
	18.17.1	25 mm dia	NOS	3.00	0.00	3000.00	0.00	0.00	9000.00	0.00	
	18.17.2	32 mm dia	NOS	1.00	0.00	4500.00	0.00	0.00	4500.00	0.00	
								l			

				TOTAL		RATE (In Re	s.)	Al	MOUNT (In R	s.)
S. No	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
5		Providing & fixing of hand lever / butterfly handle operated forged brass body full way ball valve type garden hydrant valve with brass hose nippul having forged brass hard chrome plated mirror finish ball, steel handle with PVC grip, teflon seat, screwed ends tested to a pressure of 15 kg/sqcm complete.								
	MR	15 mm nominal bore	Each	20.00	0.00	0.00	1000.00	0.00	0.00	20000.00
6		Supply, fixing in position, testing ISI marked cast iron double flanged sluice valves as per IS:14846-2000, (PN 10) with SS stem, bolts, nuts, 3 mm thick rubber gaskets including transporting to worksite, Complete as per drawings & directions of the Engineer-in-charge.								
	MR	32 mm nominal dia	Each	0.00	0.00	0.00	8105.00	0.00	0.00	0.00
7	18.32 (DSR-2016)	Constructing brick masonry chamber 300 x 300 x 500 mm, inside with F.P.S. brick work in cement mortar 1: 4 (1 cement : 4 coarse sand) for Isolating Valve / garden hydrant /gate valve ,including fixing of Cl/SFRC cover and frame in 150 mm thick cement concrete 1:2:4 (1cement : 2 coarse sand : 4 gradded stone aggregate of 20 mm nominal size); necessary excavation, foundation concrete 1:4:8 (1 cement :4 coarse sand: 8 gradded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design. (The cost of cover and frame shall be seperate)	Each	41.00	0.00	4000.00	0.00	0.00	164000.00	0.00
8	18.33 (DSR-2016)	Constructing brick masonry chamber 600 x 600 x 1050 mm inside with F.P.S. brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for Sluice Valve , necessary excavation, foundation concrete 1:4:8 (1 cement : 4 coarse sand: 8 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1 : 3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design including fixing of CI/SFRC cover and frame in 150 mm thick cement concrete 1:2:4 (1cement : 2 coarse sand : 4 gradded stone aggregate of 20 mm nominal size) including centering, shuttering, excavation, refilling and disposal of surplus earth as directed complete in all respects. (The cost of cover and frame shall be seperate)	Each	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	19.19 (DSR-2016)	Providing Precast Cement Concrete / SFRC Valve Chamber cover and frame conforming to IS: 12592-2002., The concrete mix should be not less than M 30.								
	19.19.1	L D- 2.5								
	19.19.1.1	Rectangular shape 600*450 mm internal dimensions	Each	41.00	0.00	3000.00	0.00	0.00	123000.00	0.00
10	MR	Providing and laying cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone agg. 20 mm nominal size) for thrust blocks at bends and junctions of water lines including necessary excavation, centering, shuttering etc as directed and required at site to complete the work	Cum.	2.00	0.00	0.00	8000.00	0.00	0.00	16000.00
		TOTAL OF (b)						464450.00	1070500.00	52150.00
	(2)	DICTRIBUTION NETWORK FOR RICING MAIN WATER CURRY V / DCD								
	(c)	DISTRIBUTION NETWORK FOR RISING MAIN WATER SUPPLY (DSR)								
1	2.10	Excavating trenches upto 1.5 meter depth in all kind of soil of required width for pipes. including excavation for sockets and dressing of sides ramming of bottoms including getting out the excavated soil & then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc & disposing of surplus excavated soil as directed within a lead of 50m or as directed at site by engg-in-charge.								
		All kinds of soil	metre	100.00	0.00	550.00	0.00	0.00	55000.00	0.00
	ļ	Pipes etc from 80 mm and above but not exceeding 300 mm dia.	metre	100.00	0.00	00.00	0.00	0.00	00.000.00	0.00

				TOTAL		RATE (In Re	s.)	Al	MOUNT (In R	s.)
S. No	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
2	SECTION (A) (II) ITEM-2	Supplying, fitting and fixing in position G.I.pipes of TATA make for underground works with all necessary accessories, specials viz.socket, bend, tee, union, cross, elbow, nipple, short piece etc.including cost of all materials, jointing materials, cutting pipes, making threads, cutting trenches upto 1.5 metre below surface in all sorts of soil and refilling the same as directed with two coats of painting on G.I. pipes and specials with bituminous paint complete in all respect. (Payment will be made on the centre line measurement of the total pipe line including all specials No separate payment will be made for accessories, specials. Payment for								
		painting will be made seperately)								
		External work		50.00	054.00		0.00	17700.00	0.00	0.00
	(iv)	32 mm dia nominal bore	metre	50.00	354.00	0.00	0.00	17700.00	0.00	0.00
	(v)	40 mm dia nominal bore	metre	50.00	400.00	0.00	0.00	20000.00	0.00	0.00
3	18.17 (DSR-2016)	Providing & fixing gun metal gate valve with C.I. wheel of approved quality (screwed end)								
	18.17.2	32 mm dia	NOS	1.00	0.00	4500.00	0.00	0.00	4500.00	0.00
	18.17.3	40 mm dia	NOS	1.00	0.00	6000.00	0.00	0.00	6000.00	0.00
4		Supply, fixing in position, testing ISI marked cast iron double flanged sluice valves as per IS:14846-2000, (PN 10) with SS stem, bolts, nuts, 3 mm thick rubber gaskets including transporting to worksite, Complete as per drawings & directions of the Engineer-in-charge.								
	MR	32 mm nominal dia	Each	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	18.32 (DSR-2016)	Constructing brick masonry chamber 300 x 300 x 500 mm, inside with F.P.S. brick work in cement mortar 1: 4 (1 cement : 4 coarse sand) for Isolating Valve / garden hydrant /gate valve , including fixing								
		of CI/SFRC cover and frame in 150 mm thick cement concrete 1:2:4 (1cement : 2 coarse sand : 4 gradded stone aggregate of 20 mm nominal size); necessary excavation, foundation concrete 1:4:8 (1 cement :4 coarse sand: 8 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design. (The cost of cover and frame shall be seperate)	Each	2.00	0.00	4000.00	0.00	0.00	8000.00	0.00
6	, ,	Constructing brick masonry chamber 600 x 600 x 1050 mm inside with F.P.S. brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for Sluice Valve , necessary excavation, foundation concrete 1:4:8 (1 cement : 4 coarse sand: 8 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design including fixing of Cl/SFRC cover and frame in 150 mm thick cement concrete 1:2:4 (1cement : 2 coarse sand : 4 gradded stone aggregate of 20 mm nominal size) including centering, shuttering, excavation, refilling and disposal of surplus earth as directed complete in all respects. (The cost of cover and frame shall be seperate)	Each	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	19.19 (DSR-2016)	Providing Precast Cement Concrete / SFRC Valve Chamber cover and frame conforming to IS: 12592-2002., The concrete mix should be not less than M 30.								
	19.19.1	L D- 2.5								
	19.19.1.1	Rectangular shape 600*450 mm internal dimensions	Each	2.00	0.00	3000.00	0.00	0.00	6000.00	0.00
8	MR	Providing and laying cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone agg. 20 mm nominal size) for thrust blocks at bends and junctions of water lines including necessary excavation, centering, shuttering etc as directed and required at site to complete the work	Cum.	2.00	0.00	0.00	8000.00	0.00	0.00	16000.00
		TOTAL OF (c)						37700.00	79500.00	16000.00
II	SUB HEAD (II) :- E	EXTERNAL SEWERAGE SYSTEM								

				TOTAL		RATE (In Rs	s.)	Al	MOUNT (In R	s.)
S. No	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
1	2.10 (DSR-16)	Excavating trenches of required width for pipes, cable, etc including excavation for sockets and dressing of sides, ramming of bottoms, depth upto 1.50m including getting out the excavated soil & then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc & disposing of surplus excavated soil as directed within a lead of 50m.								
		All kinds of soil								
		Pipes cables etc. exceeding 80 mm dia. But not exceeding 300mm dia.	metre	245.00	0.00	550.00	0.00	0.00	134750.00	0.00
2		Providing, Laying & Jointing of UPVC pipe SN-8 (IS : 16098-1) including lowering in trenches, laid to correct levels up to required depth and connecting with the respective manhole for Underground Sewerage with fittings complete in all respect								
	MR	160 mm OD. (140 ID) (Wall thickness: 10.0 - 11.2 mm)	metre	270.00	0.00	0.00	1350.00	0.00	0.00	364500.00
	MR	200 mm OD. (195 ID) (Wall thickness : 14.1 - 15.7 mm)	metre	770.00	0.00	0.00	2000.00	0.00	0.00	1540000.00
3		Providing and laying cement concrete 1 : 5 : 10 (1 cement : 5 coarse sand : 10 gradded stone aggregate 40 mm nominal size) alround UPVC Pipes including bed concrete as per standard design.								
	MR	160 mm diameter	metre	34.56	0.00	0.00	950.00	0.00	0.00	32832.00
	MR	225 mm diameter	metre	170.17	0.00	0.00	1200.00	0.00	0.00	204204.00
4		Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering. (for HDPE pipe bedding) by 1:4:8 (1 cement : 4 coarse sand : 8 graded stone agg. 40 mm nominal size)								
	MR	150 mm diameter HDPE	metre	34.56	0.00	0.00	975.00	0.00	0.00	33696.00
	MR	200 mm diameter HDPE	metre	170.17	0.00	0.00	1150.00	0.00	0.00	195695.50
5	SECTION (B) (IV) ITEM-2	Constructing Inspection pit 900X 750MM to a depth of 1.5 metre (inside), 250 mm thick 1st class brick work (1:4) in all sides over a layer of jhama brick soling and 150 mm thick cement concrete with stone chips (1:3:6) including necessary earth work, fitting and fixing approved type S.W. master trap, constructing masonry invert with cement concrete (1:1.5:3) with stone chips, plastering inside and outside (outside upto 300 mm below G.L.) with 20 mm thick cement plastering (1:4) and neat cement punning, including supplying, fitting and fixing one 560 mm. dia R.C.C. manhole cover of approved make with R.C.C. slab of 100 mm thick with cement concrete (1:1.5:3) with stone chips including necessary reinforcement (upto 1%) and shuttering and necessary corbelling brick work (1:4) so that the R.C.C. cover slab rests 150 mm above adjucent G.L., cement plaster (1:4) 10 mm thick on all external surfaces of the top slab as directed complete in all respect and removal of surplus earth with all costs of labour and materials (excluding the cost of master trap only).								
	(i) B	With Bazree (N.B Varity)	each	46.00	10596.00			487416.00	0.00	0.00
		Extra for depth for manholes:								
		size 90 X 75 cm								
		With Bazree (N.B Varity)	metre	4.00	4185.00			16740.00	0.00	0.00
6	19.7 (DSR-16)	Constructing brick masonry manhole in cement mortar 1:4 (1 cement: 4 coarse sand) with RCC top slab with 1:2:4 mix (1 cement: 2 coarse sand: 4 grade stone aggregate 20mm nominal size); foundation concrete 1:4:8 mix (1 cement: 4 coarse sand: 8 graded stone aggregate 40 mm nominal size) inside plastering 12 mm thick with cement mortar 1:3 (1cement: 3 coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 (1cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design								
	19.7.3	Inside size 120 x 90 cm & 90 cm deep including CI cover with frame (Medium duty) 560mm internal diameter, total wt. of cover & frame to be not less than 208 kg (wt. of cover 108 kg and wt. of frame 100 kg)								
	19.7.3.1	With common burnt clay F.P.S.(non modular) bricks of classic designation 7.5	each	30.00	0.00	32500.00	0.00	0.00	975000.00	0.00
7	19.8 (DSR-16)	Extra for depth for manholes:								

				TOTA:	1	RATE (In Rs	.)	Al	MOUNT (In R	s.)
	Item No./Page No./MR	DESCRIPTION	UNIT	TOTAL QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
	19.8.2	size 120 X 90 cm								
	19.8.2.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	metre	3.00	0.00	11500.00	0.00	0.00	34500.00	0.00
8	SECTION (B) (IV) ITEM-8	Supplying, fitting and fixing in position reinforced cement polymer concrete manhole / gully pit cover with matching frame.As per I.S- 12592(M.D) 35 MT load bearing capacity round manhole cover provided with two lifter hooks fitted with matching frame of size Cover: 700 mm X 100 mm	motro	0.00	0.00	11000.00	0.00	0.00	01000.00	0.00
		Frame: 910 mm X 185 mm								
		opening: 560mm								
		Weight: 245 kg (approx)	each	26.00	4034.00	0.00	0.00	104884.00	0.00	0.00
9	19.11 (DSR-16)	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in cement mortar 1:4 (1 cement :4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :								
	19.11.1	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the external surface shall be paid for separately):								
	19.11.1.2	With Sewer bricks conforming to IS: 4885	each	2.00	0.00	14000.00	0.00	0.00	28000.00	0.00
10	19.12	Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m		4.00		10000 00				
	19.12.2	With Sewer bricks conforming IS: 4885	metre	1.00	0.00	10000.00	0.00	0.00	10000.00	0.00
11	13.1 (DSR-16)	12 mm cement plaster of mix:						1		
l ' '	13.1.1	1:4 (1 cement: 4 fine sand)	sam	7.16	0.00	600.00	0.00	0.00	4296.00	0.00
	-	(1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
12	19.11	Constructing brick masonry circular manhole 1.22 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement :4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :								
	19.11.1	1.68 m deep with SFRC Cover and frame (heavy duty HD-20 grade designation) 560 mm internal diameter conforming to 1.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :								
	19.11.1.2	With Sewer bricks conforming IS: 4885	each	2.00	0.00	33000.00	0.00	0.00	66000.00	0.00
10	10.10	Establish for the last control of 400 miles and find the new bounds of 600 miles and 6			ļ			1		
13	19.12 19.12.2	Extra depth for circular type manhole 1.22 m internal dia (at bottom) beyond 1.68 m to 2.29 m: With Sewer bricks conforming IS: 4885	metre	1.00	0.00	15200.00	0.00	0.00	15200.00	0.00
	19.12.2	COOP. 61 MILLIOILIO CADITU IBMBC IIIIVY	metre	1.00	0.00	15200.00	0.00	0.00	10200.00	0.00
14	13.1 (DSR-16)	12 mm cement plaster of mix:						1		
'	13.1.1	1:4 (1 cement: 4 fine sand)	sqm	18.98	0.00	600.00	0.00	0.00	11388.00	0.00

			l	TOTAL		RATE (In Re	5.)	Al	MOUNT (In R	s.)
	tem No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
15		Constructing brick masonry circular manhole 1.52 m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand) inside cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size) and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :								
		2.30 m deep with SFRC Cover and frame (heavy duty HD- 20 grade designation) 560 mm internal diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg. fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately):								
	MR	With Sewer bricks conforming IS: 4885	each	15.00	0.00	0.00	38500.00	0.00	0.00	577500.00
16		Extra depth for circular type manhole 1.52 m internal dia (at bottom) beyond 2.30 m :								
10	MR	With Sewer bricks conforming IS: 4885	metre	3.00	0.00	0.00	22500.00	0.00	0.00	67500.00
\dashv	1411.1	The conditions of the condition of the c	motro	0.00	0.00	0.00	LL000.00	0.00	0.00	07000.00
17		12 mm cement plaster of mix								
	MR	1:4 (1 cement : 4 coarse sand).	Sq.m	450.00	0.00	0.00	600.00	0.00	0.00	270000.00
18		Earth work in excavation by mechanical means(Hydraulic excavator)/manual means in foundation trenches or drains(not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m								
	MR	All kinds of soil	Cum	100.00	0.00	0.00	600.00	0.00	0.00	60000.00
19	19.15 (DSR-16)	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :								
	19.15.1	With 20x20 mm square bar	each	300.00	0.00	500.00	0.00	0.00	150000.00	0.00
		TOTAL OF SUB HEAD (II)						609040.00	1429134.00	3345927.5
***	SUB HEAD (III) :- I	EXTERNAL DRAINAGE SYSTEM								
	(,	PIPE DRAIN								
1	2.1	Excavating trenches of required width for pipes, cable, etc including excavation for sockets and dressing of sides, ramming of bottoms, depth upto 1.50m including getting out the excavated soil & then returning the soil as required, in layers not exceeding 20 cm in depth including consolidating each deposited layer by ramming, watering, etc & disposing of surplus excavated soil as directed within a lead of 50m.								
F		All kinds of soil								
j		Pipes cables etc. exceeding 80 mm dia. But not exceeding 300mm dia.	metre	100.00	0.00	550.00	0.00	0.00	55000.00	0.00
2	19.6(DSR-16)	Providing and laying Non pressure NP 2 class (light duty) RCC pipe with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1cement : 2 fine sand) including testing of joints etc. complete.								
F	19.6.3	250 mm. dia. RCC Pipes	metre	100.00	0.00	950.00	0.00	0.00	95000.00	0.00
3	4.1.8(DSR-16)	Providing and laying in position cement concrete excluding the cost of centering and shuttering. (in all type of work upto plinth level) by 1:4:8 (1 cement : 4 coarse sand : 8 graded stone agg. 40 mm nominal size)	CUM.	30.00	0.00	1,275.00	0.00	0.00	38250.00	0.00
4	4.1.3(DSR-16)	Providing and laying in position cement concrete excluding the cost of centering and shuttering (in all type of work upto plinth level) by 1:2:4 (1 cement : 2 coarse sand : 4 graded stone agg. 20 mm nominal size) for				,				
1		RCC bedding	CUM.	30.00	0.00	8,000.00	0.00	0.00	240000.00	0.00

				TOTAL		RATE (In Rs	s.)	Al	MOUNT (In R	s.)
S. No	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
5	19.27(DSR-16)	Constructing brick masonry road gully chamber 50x45x60 cm with bricks								
		in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm								
		pre-cast R.C.C. horizontal grating with frame complete as per standard								
	10.07.1(DOD.10)	design:								
	19.27.1(DSR-16)	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	each	1.00	0.00	10000.00	0.00	0.00	10000.00	0.00
6	19.29(DSR-16)	Constructing brick masonry road gully chamber 110x50x77.5 cm with	Cacii	1.00	0.00	10000.00	0.00	0.00	10000.00	0.00
۰	13.23(DOTT 10)	bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450								
		mm pre-cast R.C.C. horizontal grating with frame and vertical grating								
		complete as per standard design :								
	19.29.1(DSR-16)	With common burnt clay F.P.S. (non modular) bricks of class								
	, ,	designation 7.5	each	1.00	0.00	15000.00	0.00	0.00	15000.00	0.00
7	19.9(DSR-16)	Constructing brick masonry circular type manhole 0.91 m internal dia at bottom and 0.56m dia at top in								
		cement mortar 1:4 (1 cement :4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3								
		(1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1								
		cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in								
		cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished								
		with a floating coat of neat cement, all complete as per standard design:								
	19.9.1	0.91 m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal								
		diameter conforming to I.S. 12592, total weight of cover and frame to be not less than 182 kg., fixed in								
		cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)								
		including centering, shuttering all complete. (Excavation, foot rests and 12mm thick cement plaster at the								
		external surface shall be paid for separately) :								
•	19.9.1.2	With Sewer bricks conforming to IS: 4885	each	1.00	0.00	14000.00	0.00	0.00	14000.00	0.00
8	19.10 19.10.2	Extra depth for circular type manhole 0.91m internal dia (at bottom) beyond 0.91 m to 1.67 m With Sewer bricks conforming IS: 4885		0.50	0.00	10000.00	0.00	0.00	5000.00	0.00
	19.10.2	With Sewer bricks comorning 15 . 4665	metre	0.50	0.00	10000.00	0.00	0.00	5000.00	0.00
9		12 mm cement plaster of mix:								
	MR	1:4 (1 cement: 4 fine sand)	sqm	3.60	0.00	0.00	600.00	0.00	0.00	2160.00
10	2.6	Earth work in excavation by mechanical means(Hydraulic excavator)/manual means in foundation trenches								
		or drains(not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of								
		bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as								
		directed, within a lead of 50 m								
	2.6.1	All kinds of soil	Cum	50.00	0.00	550.00	0.00	0.00	27500.00	0.00
11	19.15(DSR-16)	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1								
	19.13(D3H-10)	cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :								
	10.15.1	, , ,		50.00	0.00	500.00	0.00	0.00	05000.00	0.00
	19.15.1	With 20x20 mm square bar	each	50.00	0.00	500.00	0.00	0.00	25000.00	0.00
12		Extra for depth for manholes:								
12	MR	For 455x610 mm size	metre	2.00	0.00	0.00	6000.00	0.00	0.00	12000.00
	MR	For 1100 x 500 mm inner size	metre	2.00	0.00	0.00	8000.00	0.00	0.00	16000.00
								1		
13		Supply, installing, testing and commissioning of non clog submersible type drainage / dewatering pump								
		suitable for automatic operation, float valve operated, automatic / manual operation, including NRV & all								
		accessories, nlet & outlet arrangements, required cable etc. complete in all respects. (Make : Grundfos /								
		ITT / WILO / DP / Nocchi / KSB)								

				TOTAL		RATE (In Rs	i.)	Al	MOUNT (In R	s.)
	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
		2 lps at 10 meter, 10 mm max particle size, 50 Hz, 240 volts, IP 68, F insulation, Float level switches, impeller in CI / Polypropylene, casing in CI / polyurethan and shaft in stainless steel (1 set comprises of two number dewatering pumps - for pump house drainage)								
	MR	Pump	set	1.00			30000.00	0.00	0.00	30000.00
14		Supplying, fitting and fixing of flexible pipe of required Dia to the drainage pump for dewatering at site with necesarry accesaries compelete in all respect.	metre	20.00			200.00	0.00	0.00	4000.00
		TOTAL OF SUB HEAD (III)						0.00	524750.00	64160.00

ECO RESORT, GAJALDOBA (WEST BENGAL) SUMMARY OF COST

EXTERNAL ELECTRICAL WORKS

			AMOUNT	
S. No	DESCRIPTION	WBSOR-2017 (a)	CPWD-DSR-2016 (b)	MR (c)
I	LT PANEL AND FEEDER PILLARS	0.00	0.00	857180.00
II	CABLE & ACCESSARY	58368.00	0.00	664075.00
III	MISCELLANEOUS	0.00	495124.00	0.00
IV	EARTHING	0.00	245162.00	0.00
V	LIGHTING PROTECTION SYSTEM	0.00	0.00	412883.90
VI	EXTERNAL LIGHTING SYSTEM	0.00	0.00	7236000.00
	Total (a)	58368.00	740286.00	9170138.90
	COST INDEX FOR DSR @34.31%	NA	253992.13	NIL
	Total (b)	58368.00	994278.13	9170138.90
	Net Total (Total (b) of WBSOR-2017+ CPWD-DSR-2016 + MR)			₹ 10,222,785.03
	GST @ 12%			₹ 1,226,734.20
	Sub Total			₹ 11,449,519.23
	Labour Welfare Cess @ 1%			₹ 114,495.19
	Add Contingency Charges @ 3%			₹ 343,485.58
	Sub Total			₹ 11,907,500.00
	Say			₹ 11,907,500.00
	Rupees One Crore Nineteen Lakhs Seven	Thousand Five Hund	red Only	

		BILL OF QUANTITIES FO								
	Item	EXTERNAL ELCTRIC	CAL W	ORKS	5					
SI.n o.	No./Pag	Description of items	Unit	Qty	R	ATE (In R	ts.)	AI	MOUNT (In	Rs.)
					WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
I		SUB HEAD (I) :- L.T PANEL & FEEDER PILLARS								
1		Main L.T. Panel Design, manufacture, supply, testing and commissioning of MAIN LT PANEL fabricated out of 16 SWG CRCA sheet steel, IP52, wall / floor mounting type. The sheet steel shall undergo minimum 9 tank treatment followed by finishing powder coating of min 60 micron thickness. the board includes 415 V electrolitic Aluminium Bus Bar, removable gland plates, cable glands, including connection with outgoing feeders complete in all respect. The incoming MCCB shall be thermal-magnetic based with inbuilt O/L & S/C release with E/F protection and all Outgoings MCCB's shall be thermal-magnetic based with inbuilt O/L & S/C release. All MCCB's shall be Ics = 100% Icu, with rotary handle & pad locking arrangement, with adjustable O/L & S/C trip setting as per load requirement. All TP MCCB shall be with solid isolable neutral link. The breaking capacity specified is Ics value. All outgoing MCB's shall be C type with 10 KA breaking capacity.								
		The above board shall be complete with 3 nos. phase indicating lights, flush mounted Ammeter, Voltmeter, CT's, PT's, selector switches, protective fuses etc. at Incomer with all inter connections by min. 2.5 sq.mm. Copper wires.								
		INCOMER : 630 AMP FP MCCB								
		BUS BAR : 800 AMP, 500 Volts, 3 phase 50 HZ TPN high conductivity electrolytic Aluminium bus bar of suitable length, insulated by heat shrinkable sleeves. The current density of bus bar shall be minimum 1.00 sq mm / amp.								

	Item No./Pag									
Sl.n	_		Unit	Qty	R	ATE (In	Rs.)	A	MOUNT (I	n Rs.)
).	No./MR	Description of items	Onne							
					WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
	MR	The Maximum allowable temperature for the Bus bar to be restricted to 85 deg C. The temperature rise should be restricted to 35 deg C above ambient temperature.								
		OUT GOINGS:								
		2 nos. 200 AMP TPN MCCB (25 KA)								
		4 nos. 100 AMP TPN MCCB (25 KA)								
		7 nos. 63 AMP TPN MCB (25 KA)	SET	1.00			341071.00	0.00	0.00	341071.00
2		External Feeder Pillar for Building								
		Design, manufacture, supply, installation, testing and commissioning of FEEDER PILLAR fabricated out of 16 SWG CRCA sheet steel, wall / floor mounting type. The sheet steel shall undergo minimum seven tank treatment followed by finishing powder coating of min 60 micron thickness. the board includes 415 V electrolitic Aluminium Bus Bar, removable gland plates, cable glands, including connection with outgoing feeders complete in all respect.								
		The MCCB's shall be lcs = 100% lcu, with rotary handle & pad locking arrangement, with trip setting as per load requirement. TP MCCB shall be with solid isolable neutral link. The breaking capacity specified is lcs value. All MCCB's shall be thermomagnetic type. All outgoing MCB's shall be C type with 10 KA breaking capacity.								
	MR	The above board shall be complete with 3 nos. phase indicating lights, flush mounted Ammeter, Voltmeter, CT's, PT's, selector switches, protective fuses etc. at Incomer with all inter connections by min. 2.5 sq.mm. Copper wires.								
	Α	Feeder Pillar for Buildings								
		INCOMER : 100 AMP FP MCCB								
		BUS BAR : 200 AMP TPN Aluminium								
		OUTGOINGS :8 Nos 63 AMP TPN MCB	SET	3.00			96076.00	0.00	0.00	288228.00

Item No./Pa SI.n e - o. No./MR		No./Pag e -		Unit	Qty	R	ATE (In I	Rs.)	AMOUNT (In Rs.)		
						WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
		Same as above	e item								
	В	Feeder Pillar 1	for Buildings								
		INCOMER	: 200 AMP FP MCCB								
		BUS BAR	: 250 AMP TPN Aluminium								
		OUTGOINGS	:3 Nos 100 AMP TPN MCCB								

SI.n	Item No./Pag e -			Qty	F	RATE (In I	Rs.)	A	MOUNT (II	n Rs.)
	No./MR	Description of items	Unit							
					WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
		OUTGOINGS :4 Nos 63 AMP TPN MCB	SET	1.00			111643.00	0.00	0.00	111643.00
	С	Feeder Pillar for External Lighting								
		INCOMER : 63 AMP FP MCCB								
		OUTGOINGS :4 Nos 63 AMP DP MCB								
		BUS BAR : 160 AMP TPN Aluminium	SET	3.00			38746.00	0.00	0.00	116238.00
						TOTAL		0.00	0.00	857180.00
		SUB HEAD (II) :- CABLES & ACCESSORIES								
		Supply of ISI marked aluminium conductor XLPE insulated cable as per IS								
1		7098, armoured, served, sheathed 1100 volts grade.								
	MR	3.5 x 185 sq.mm	М	120			910	0.00	0.00	109200.00
	MR	3.5 x 70 sq.mm	М	245			391	0.00	0.00	95795.00
	MR	3.5 x 35 sq.mm	М	250			266	0.00	0.00	66500.00
	MR	4 x 25 sq.mm	М	10			289	0.00	0.00	2890.00
	MR	4 x 16 sq.mm	М	250			241	0.00	0.00	60250.00
	MR	4 x 10 sq.mm	М	120			202	0.00	0.00	24240.00
	MR	2 x 16 sq.mm	М	200			151	0.00	0.00	30200.00
	MR	2 x 10 sq.mm	М	2200			125	0.00	0.00	275000.00
2	7/F-4	Supplying and fixing compression type gland complete with brass gland, brass ring & rubber ring for dust & moisture-proof entry of XLPE/PVC armoured cables as below:								
	a)	for 2 core								
	,	upto 10 sqmm	Each	448.00	115.00			51520.00	0.00	0.00
		upto 16 sqmm	Each	24.00	115.00			2760.00	0.00	0.00
	c)	for 4 core								

	Item									
	No./Pag			Qty	RATE (In Rs.)			AMOUNT (In Rs.)		
SI.n	e -	Description of items	Unit							
ο.	No./MR									
					WBSOR	DSR	MR	WBSOR	DSR	MR
					17	16		17	16	IVID
		upto 10 sqmm	Each	2.00	132.00			264.00	0.00	0.00
		upto 16 sqmm	Each	6.00	132.00			792.00	0.00	0.00
		upto 25 sqmm	Each	2.00	162.00			324.00	0.00	0.00
	d)	for 3.5 core								
		upto 35 sqmm	Each	4.00	162.00			648.00	0.00	0.00
		upto 70 sqmm	Each	6.00	212.00			1272.00	0.00	0.00
		upto 185 sqmm	Each	2.00	394.00			788.00	0.00	0.00
						TOTAL		58368.00	0.00	664075.00

	Item								
	No./Pag		Qty		RATE (In R	٥)		MOUNT (In F	۱۵)
	e -	Unit	Qty		MAIE (III N	S.)	-	MINIOUNI (III F	15.)
).	No./MR Description of items				T				
				WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
III	SUB HEAD (III) :MISCELLANEOUS								
1	Providing and fixing M.V. danger notice plate of 200 mm x 150 mm made mild steel, at least 2 mm thick and vitreous enamelled white on both side and with inscription in single red colour on front side as required.								
	and with moonplion in onigio rod colour on none side do required.	NOS	2		149.00		0.00	298.00	0.00
2	Providing and fixing H.T. danger notice plate of 250 mm x 200 mm made mild steel, at least 2 mm thick and vitreous enamelled white on both side and with inscription in single red colour on front side as required.		2		163.00		0.00	326.00	0.00
3	4.14(DSF Providing, laying and fixing following dia RCC pipe NP 2 class (light duty) ground complete with RCC collars, jointing with cement mortar 1:2 (1cemer 2 fine sand) including trenching (75 cm deep) and refilling etc as required.	in	2		163.00		0.00	320.00	0.00
	14.14.1 100 mm dia	М	600.00		355.00		0.00	213000.00	0.00
	14.14.2 150 mm. dia.	М	400.00		405.00		0.00	162000.00	0.00
-	14.14.3 250 mm dia	М	250.00		478.00		0.00	119500.00	0.00
					TOTAL		0.00	495124.00	0.00
٧	SUB HEAD (IV) :- EARTHING SYSTEM								
1	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick include accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke a salt as required.	ng	14		4327.00		0.00	60578.00	0.00
2	Earthing with G.I. earth pipe 4.5 meter long, 40 mm dia including accessories, a providing masonry enclosure with cover plate having locking arrangement a watering pipe etc. with charcoal/ coke and salt as required.	nd			2072 05				
		Set	12		3672.00		0.00	44064.00	0.00

SI.n o.	No./Pag e - No./MR		Unit	Qty	RATE (In Rs.)			AMOUNT (In Rs.)			
) .	NO./IVIK	Description of items	-		WBSOR 17	DSR 16	MR	WBSOR	DSR 16	MR	
3	5.9(DSR)	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)		20		85.00		0.00	1700.00	0.00	
4	, ,	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	Metre	30		351.00		0.00	10530.00	0.00	
		Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	IVICTIC	2770		37.00		0.00	102490.00	0.00	
6	5.15(DSR)	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Metre	200		129.00		0.00	25800.00	0.00	
						TOTAL		0.00	245162.00	0.00	

SI.n o.	Item No./Pag e - No./MR	Description of items	Unit	Qty	RATE (In Rs.)			.) AMOUNT (In Rs.)				
					WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR		
		SUB HEAD(V):-LIGHTING PROTECTION SYSTEM										
		Supply & installation of Advance Lightning Protection System including all necessary fixing accessories & effective connections complying the detailed technical specifications given therein including aviation light at the top of terrace with LA										
		Supply, installation, Testing and commissioning of Early Streamer Emission type Lightning Protection complete with the Lightning Air Terminal - Configured as a Spheroid which is comprised of separate electrically isolated 4 panels (stainless steel) surrounding an earthed central finial. The Insulation material used to electrically isolate the panels (stainless steel) shall be comprised of a base polymer which provides high Ozone & UV resistance with a di-electric strength of 24-38 KV/mm tested as per NFC 17-102 & IEC 60-1:1989. As per NFC 17 – 102, the ESE air terminal shall be tested with the "Switching Impulse Voltage" of 700 KV and "Direct Voltage" of 70 KV and certified by an international testing laboratory. The early streamer emission terminal shall be tested & certified by CPRI (Central Power Research Institute), Govt. of India for the Impulse current of 45 KA (8/20 micro sec) with 5 positive & 5 negative impulse. The ESE terminal shall not have any electronic circuit or any batteries inside and it shall not depend on wind or solar to operate.										

il.n	Item No./Pag e -			Qty	R	ATE (In l	Rs.)	AI	MOUNT (li	n Rs.)
	No./MR	Description of items	Unit							
					WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
		The ESE terminal shall be tested and certified by any international laboratory as per IEC 60 1:1989 for an impulse current (8/20 micro sec) of more than 160 KA. The serial number displayed on the ese lightning arrester shall be duly supported with the "certificate of country of origin" issued and duly sealed by the respective country (exported) "Chamber of Commerce & Industry" indicating the serial number of the product supplied. The ESE terminal shall offer protection radius below at Level 1 / High protection and preferably to be mounted on the roof top & centre. complete in all respect								
1	MR	Model: - 86 mtrs radius of protection (Level 1/ High Protection)	No's	2			97004.80	0.00	0.00	194009.60
2	MR	Supply & installation of Mast (G.I. pipe of 5 mtrs height) for mounting the terminal & adaptor with the Stormaster ESE Air Terminal along with supporting stray wires, etc.complete in all respect	No's	2			2185.00	0.00	0.00	4370.00
3	MR	Supply & installation of advance maintenance free Chemical Gel Earthing of Dual Pipe Technology (GI) of 3mtr long 80mm dia. of outer shell (MS) with the 50mm dia. of inner shell (MS) with 80-100 microns galvanized filled with highly conducting metallic compounds with the permanent sealings at both the ends with the lead terminal of 50x10mm size at the top along with 50 Kgs of RESLOW (mixture of Sulphate, Silica, Alumina, Iron Oxide, Titanium Oxide, Calcium Oxide, Potassium Oxide, Chloride, Nickel Oxide, Magnesium Oxide, Sodium Oxide, Zinc Oxide, etc) Resistance Lowering Grounding Minerals. The loss on ignition by mass of the chemical compound RESLOW shall be less than 20%. The chemical compound should be tested and certified by any International accredited and BIS (Bureau of Indian Standards) accredited laboratory. The testing laboratory should be ISO 9001 & ISO 14001 certified. The material shall be duly tested & certified by CPRI (Central Power Research Institute), Govt. of India for a minimum short circuit current of 30 KA rms. complete in all respect		4			23784.30	0.00	0.00	95137.20
		The chemical earth electrode manufacturer shall be an ISO 9001:2008 & ISO 14001:2004 certified organization.		T				0.00	0.00	33.07.20

SI.n	Item No./Pag e - No./MR	Description of items	Unit		ATE (In F	Rs.)	AMOUNT (In Rs.)			
		Decemples of Remo			WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
4	MR	Supply & installation of heavy duty weather proof environment friendly polyplastic earth pit chamber with cover of autolocking facility with the following dimensions - 254mm dia. (top), 330mm dia. (bottom) and 260mm height. 4 knock-out openings are provided for the easy interconnection of earth strips between the earth pits to form a grid. complete in all respect		4			5365.90	0.00	0.00	21463.60
5	MR	Supply & installation of Lightning Strike Recorder - 7 digits mechanical display to record the lightning current in an IP 67 enclosure with the minimum sensitivity of 1500A & maximum capacity of 220 KA (8/20 micro second waveform). The recorder shall be of non-resettable type with the electro mechanical display. No LCD screen is permitted as it may depend upon the battery life to energize the LCD. The lightning strike recorder shall be duly tested & certified inline with the ese lightning arrester in an international laboratory for an impulse current (8/20 micro sec) of more than 160 KA as per IEC 60-1:1989 standard. The lightning strike recorder is tested & certified by CPRI (Central Power Research Institute), Govt. of India for the Impulse current of 45 KA (8/20 micro sec) with 5 positive & 5 negative impulse. complete in all respect		2.00			20866.75	0.00	0.00	41733.50
6	MR	Supply & installation of Down conductor of 70 sq.mm single core insulated flexible Copper cable with necessary accessories, etc.complete in all respect	Meter	100.00			518.00	0.00	0.00	51800.00

Item No./P I.n e - . No./M		Unit	Qty	R	ATE (In F	Rs.)	Al	AMOUNT (In R			
. 1101/11	Description of terms			SSOR 17	DSR 16	MR	WBSOR	DSR 16	MR		
7	Supply & installation of Providing and fixing of test link in weather proof 1.6 mm thick MS box of approved make & design. complete in all respect	No's	2.00			2185.00	0.00	0.00	4370.00		
					TOTAL		0.00	0.00	412883.90		
	SUB HEAD(VI):-EXTERNAL LIGHTING SYSTEM										
1 MF	Supply of LED Bollard with 96 low power LEDs,Light Color Warm white (3000K), Lumens:WW: 300 lm NW: 400lm CRI >75 ,Closed, diffuser Optic cover Poly carbonate diffuser board Resistance to heat and fire GWT= 850°C for plastics parts Mains cabling Via 1 x M16 cable gland accepting cable 3 core x >1.0mm² Connection Push in connector in 3 poles accepting wires 3core x >1.0mm²,Extrusion Aluminum material housing. Poly carbonate diffuser,Color Dark grey (RAL 7043),Operating temperature -20°C < Ta < 40°C with Life of 25,000 hours @70% lumen maintenance with System power of 8W Electronic Driver 220-240V / 50-60Hz, integrated (non-dimmable) and THD< 30% Class I and IP65 / IK10,Weight: 1.85 Kg (0.8m),CCC, CE and RoHS compliance ,such as Philips BCP151 LED150/WW PSU 220-240V 7043 .		300.00			12420.00	0.00	0.00	3726000.00		
2 MF	::: /: t:: === = : = : := :: = = = :: : : = = : : : : : : : : = :		250.00			12940.00	0.00	0.00	3235000.00		
3 MF	ERECTION OF EXTERNAL LIGHTING FIXTURES Installation, testing and commissioning of CFL / HPSV / MH / CDMT type LED Bollard/ Step Light/Spot Light/Flood Light with required lamps complete with, control gears, ballast, capacitor etc. including connection with 3x1.5 sqmm flexible fire retardant copper connecting wire of required length complete as required.		550.00			500.00	0.00	0.00	275000.00		
					TOTAL		0.00	0.00	7236000.00		

	ECO RESORT, GAJALDOBA (V			
	SUMMARY OF COS			
	CCTV & PA SYSTE	:M		
			AMOUNT	
S. No	DESCRIPTION	WBSOR-2017 (a)	CPWD-DSR-2016 (b)	MR (c)
	PUBLIC ADDRESS SYSTEM	0.00	0.00	1068872.00
II	CCTV CAMERA	0.00	0.00	419670.00
	TOTAL	0.00	0.00	1488542.00
	COST INDEX FOR DSR @34.31%	NA	0.00	NIL
	G.TOTAL	0.00	0.00	1488542.00
	Net Total (Total (b) of WBSOR-2017+ CPWD-DSR-2016 + MR)			₹ 1,488,542.00
	GST @ 12%			₹ 178,625.04
	Sub Total			₹ 1,667,167.04
	Labour Welfare Cess @ 1%			₹ 16,671.67
	Add Contingency Charges @ 3%			₹ 50,015.01
	Sub Total		<u> </u>	₹ 1,733,853.72
	Say			₹ 1,733,854.00
	Rupees Seventeen Lakhs Thirty Three Thousand B	Eight Hundred Fifty Fou	r Only	

		BILL OF QUANTITIES FOR E	CO R	RESOR	Τ					
		CCTV & PA SYST	EM							
					RA	TE (In Rs	s.)	AMO	OUNT (In	Rs.)
	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
		SUB HEAD (I) - PA SYSTEM								
1.0		Control Equipment & Paging Console								
1.1		Supply, Installation, Testing & Commissioning of Public Address and Emergency Sound System Controller complying to International standards) with following features:								
1.1.1	MR	The Voice Alarm Controller Having audio and control data transmission, & annoucement to 12 zones expendable to 60 zones with & including built in 240 W booster amplifier, 16 priority levels & emergency, music to selected zones can be played. The system is configured using DIP switches for basic mode and, PC programmable for advance functions, External alarm inputs/alarm tones/messages, with 12 contact trigger inputs for businees & emergency calls, volume control for each zone level of priorities, system can be integrated with fire alarm panel, one no, hot stand by for amplifiers in case of working amplifier failure.								
			Sets	1.00			551660.00			551660.00
2.0		Announcement Console.								
a)	MR	Supply, Installation, Testing & Commissioning of Voice Alarm Call Stations at control room with High Quality goose neck Condensor Microphone along with 8 button keypad for six (6) zone selection, key and an all call key, PTT Switch fault acknowledge and reset any number of zone selection, by adding keypad with selectable gain speach filter & limiter for improved intelligibility with LED indication for Zone selection fault & emergency state complete as required.		1.00			64912.00			64912.00
b)	MR	SITC of Voice alarm Remote Call Stations with High Quality Gooseneek Condensor Miscrophone alongwith 8 buttons keypad for six (6) zone selections, key & an all call key PTT (Push to talk) switch fault acknoledge and reset any number of zone selection, by adding keypad with selectable gain speach filter & limiter for improved interlligibility with LED indication for Zone selection fault & emergency state complte with required Interface Unit complete in all respect as required.					123750.00			123750.00
3.0		Amplifier & Speakers								
a)		SITC of 240 W Booster Amplifier for RMS power out put 70V and 8 OHM out put 100 V input for slave opertion on 100 volts speaker lines also having temperature control in built fan for high reliablity with sensitivity/level control complte as required with following features.								
b)	MR	For 240W Amplifier	Nos	1.00			139580.00			139580.00
4(a)	MR	SITC and Commissioning of 6 W ceiling loudspeakers with built in LMT suitable for		05.00			1000 00			07050 05
b)	MR	both music and speech complete as required. SITC and Commissioning of 15W economy Horn loudspeaker complte as required.	Nos Nos	1.00			1090.00 9520.00			9520.00
5.0		Music Source			İ			1		
а	MR	SITC and Commissioning of Back Ground Music source (BGM) with CD/MP3 player & with wireless remote control provision having integrated CD player complete as required.		1.00			65600.00			65600.00
6.0				1.00			65600.00			_

	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
а		SITC and Commissioning of 19" Presidential equipment rack of 24U size made out of CRCA Sheet steel duly powder quoted & provided with PVC Channel to house all the control equipments, amplifiers with wiring & switches complete in all respect (custom)					R/O			
b)	MR	SITC and laying of Call Station Cable for inter connection of remote call station (CAT5)					70.00			0500.00
c)	MR	as required. SITC and laying of 2 core 1.5 mm PVC insulatedd twin-twisted copper conductor wires in existing conduit/trunking as required.		50.00 300.00			160.00			3500.00 48000.00
d)		SITC and laying in position the following sizes of Rigid PVC conduits including providing all accessories concealed/exposed complete as required.								
e)		25mm dia PVC conduit		300.00			110.00			33000.00
f)	MR	25mm dia PVC flexible pipe	RM	30.00			70.00			2100.00
		TOTAL SUB HEAD (I) - PA SYSTEM								1068872.00
II		SUB HEAD (II) - CCTV								
1	MR	Supply, installation, testing and commissioning of 21" LED TV complete with all required features. (Make: Sony/Samsung/LG).	Each	2.00			34070.00			68140.00
2	MR	Supply, installation, testing and commissioning of Transient/WD Hard Disc 2 TB for 32 Port DVR	Each	2.00			6790.00			13580.00
3	MR	Supply, fixing, testing of outdoor Bullet camera 1.3 MP , HD Infrared Waterproof, Latest DSP Digital Signal Processing technology, Exclusive Korean latest prgram, Image stabilization technology, automatically adapt to the digital noise reduction.		50.00			2980.00			149000.00
4	MR	Supply, installation, testing and commissioning of Rohs DVR 32 Port (H.264), DDNS setting is needless, Customized UI is available, Friendly GUI,easy to operate, Support IMAC,IOS,Windows,Android ect.system, Support trouble shooting and upgrades by remote, Support chrome,safari,firefox,IE6,7,8,9 browser, Support lphone,Android,Blackberry,Symbian ect. mobile systems, Software logo and model No. can be changed easily by user.		2.00			63950.00			127900.00
5	MR	Supply, installation, testing and commissioning of Power Supply 32 Channel(16x2) 16	Each	4.00			2490.00			9960.00
6	MR	Supply of CCTV coaxial 3+1 wire for CCTV cameras.	Mtr	1350.00			16.00			21600.00
7	MR	Supply of CAT-6 for DVR.	Mtr	10.00			24.00			240.00
8	MR	Supply and laying of BNC Pin Connector.	Nos.	100.00			33.00			3300.00
9	MR	Supply and fixing of DC Power Pigtails Plug Lead Cord for CCTV Cameras.	Nos.	50.00			19.00			950.00
10	MR	Commissioning & Servicing	Set	1.00			_			25000.00
		TOTAL SUB HEAD (II) - CCTV								419670.00

ECO-RESORT, GAJALDOBA (WEST BENGAL) SUMMARY OF COST

FIRE DETECTION & ALARM SYSTEM

			AMOUNT	
S. No	DESCRIPTION	WBSOR-2017 (a)	CPWD-DSR-2016 (b)	MR (c)
1	PANEL AND DETECTORS	0.0	0.00	134020.00
II	CABLES AND ACCESSORIES	0.0	0.00	879600.00
	TOTAL(a)	0.00	0.00	1013620.00
	COST INDEX FOR DSR @34.31%	NA	0.00	NIL
	TOTAL(b)	0.00	0.00	1013620.00
	Net Total (Total (b) of WBSOR-2017+ CPWD-DSR-2016 + MR)			₹ 1,013,620.00
	GST @ 12%			₹ 121,634.40
	Sub Total			₹ 1,135,254.40
	Labour Welfare Cess @ 1%			₹ 11,352.54
	Add Contingency Charges @ 3%			₹ 34,057.63
	Sub Total			₹ 1,180,664.58
	Say			₹ 1,180,665.00
	Rupees Eleven Lakhs Eighty Thousai	nd Six Hundred Sixty Five C	Only	

		FIRE DETECTION & ALARM SY	STEM							
		FIRE DETECTION & ALARIM ST	SILIVI		R/	ATE (In F	Rs.)	AMO	UNT (In R	s.)
S.No	Item No./Page No./MR	DESCRIPTION	UNIT	QTY	WBSOR 17	DSR 16	MR	WBSOR I)SR	MR
		CONVENTIONAL FIRE DETECTION AND ALARM SYSTEM								
ı		SUB HEAD I - PANEL & DETECTOR								
1	MR	Providing, fixing, testing and commissioning of UL / FM / EN / VDS listed / approved conventional automatic fire Alarm detectors					-			-
	MR	(a) Optical /Photoelectric type smoke detectors of photo-optic sensing chamber, 12/24 volt D.C., twin visual alarm indicator "Blink" in stand by and "Steady" in alarm (LED's) complete in all respects with base as required.		40			1350.00		54	1,000.00
2	MR	(b) Fixed cum rate of rise temprature type heat detectors , 57 to 60oC (135oF.) (fixed) and 15oF per minute rate of rise twin visual alarm indicators (LED's) "Blink" in stand by and "Steady" in alarm complete in all respects with base as required.	NOS	4			1255.00		5	5,020.00
3	MR	Providing, fixing, testing and commissioning of manual call points break glass type housed in sheet steel / Polymer housing in surface/recess including making connections with wires complete in all respects and as per specifications. The manual call point should have an indicator, which should "blink" in stand by condition.	NOS	20			1070.00		21	1.400.00
4	MR	Providing, fixing, testing and commissioning of electronic hooters (hooters shall also be able to work as public address system sounders) housed in sheet steel / Polymer housing suitable for wall / ceiling and surface / recess mounting including making connections with wires complete in all respects and as per specifications.		20			1290.00			5.800.00
5	MR	Providing,fixing,testing and commissioning of response indicators with dual LED suitable for operation on 12/24 volts D.C., sheet steel / Polymer housing suitable for surface/recess mounting including making connections with wires complete in all respects.		40			320.00			2.800.00
6	MR	Providing, fixing, testing and commissioning of microprocessor based Zonal / local fire alarm control and indicating panel with indicating lights etc complete in all respects for proper working of the system and as per specifications. The control wires between the local control panel and the main control panel should be monitored and give a fire and fault indication at the Main Panel in the event of a fire / fault. The power to LCP will be supplied by main panel. (Make : Agni Suraksha (ASES), Safeway, Honeywell)					323.00			.,555.00
		8-Zone main control panel	SET	1			15000.00		15	5,000.00
		TOTAL SUB HEAD I - PANEL & DETECTOR							134	1,020.00

	Item No./Page	DESCRIPTION	UNIT	QTY	WBSOR	DSR	MR	WBSOR		MR
	No./MR				17	16		17	16	
II		SUB HEAD II - CABLES AND ACCESSORIES								
7		Supply and fixing of ISI marked (IS:3419 & 2509) 2 mm thick PVC conduit in concealed /								
		exposed system in wall, ceiling or on floor including cutting of brick work, laying of conduit and								
		fixing it with M.S. hooks and then plastering with cement, sand motar finished to the level, on								
		floor the conduit shall be covered in PCC 1:2:4 for protection, including cost of threading of								
		conduit and providing necessary sockets, bends, tees etc as directed at site by the engineer-in-								
		charge with supply of all material labour and T & P required for proper completion of work.								
		conduit being laid either in concealed system in ceiling slab or wall or on surface or under the								
	MR	frame of false ceiling including flexible conduits or through wooden partition including clamping								
 	IVII	arrangements as required 25 mm dia. conduit	М	6200			92.00			570.400.00
8		Supplying, receiving, storing, handling, fixing, wiring for fire alarm system wiring using ISI		0200			32.00			370,400.00
		marked (IS 694) 1100 Volts grade, PVC insulated, flexible, flame retardant low smoke (FRLS)								
		copper conductor wire, drawn in existing solid / flexible conduits / casing caping including								
		connections to the detectors, manual call points , hooters, response indicators, accessories, fire								
		alarm control panel etc. including termination with bottle type copper lugs as required to								
	MR	complete the system.								
		2 x 1.5 sq mm	М	6200			46.00			285,200.00
9		Providing and fixing of self illuminated / auto glow "EXIT" signs printed on photoluminescent								
		sheet containing self illuminated base chemical, of appropriate size not less than 400 x 150 mm,								
		suspended from ceiling or fixed to the walls with accessories as required and as directed at site.								
	MR		NOS	20			1,200.00			24,000.00
		TOTAL OUR LIFAR II. CARLED AND ACCESSORIES								070 000 00
		TOTAL SUB HEAD II - CABLES AND ACCESSORIES								879,6

	FCO DECORE CA IAI DODA (ME	CT DENCAL)			
	ECO RESORT, GAJALDOBA (WE SUMMARY OF COST				
	FIRE FIGHTING SYST				
	FIRE FIGHTING STST		AMOUNT	•	
			AMOUNT		
S.NO	DESCRIPTION	WBSOR 2017 (a)	CPWD-DSR 2016 (b)	MR (c)	
I	COST OF CIVIL WORKS	0.00	0.00	3900819.50	
ll	COST OF ELECTRICAL & MECHANICAL WORKS	0.00	0.00	1507540.00	
	Total(a)	0.00	0.00	5408359.50	
	Total(b)	0.00	0.00	5408359.50	
	Net Total (Total (b) of WBSOR-2017+ CPWD-DSR-2016 + MR)			₹ 5,408,359.50	
	GST @ 12%			₹ 649,003.14	
	Sub Total		₹ 6,057,362.64		
	Labour Welfare Cess @ 1%		₹ 60,573.63		
	Add Contingency Charges @ 3% Sub Total			₹ 181,720.88 ₹ 6,299,657.15	
	Say			₹ 6,299,657.10	
	Rupees Sixty Two Lakhs Ninety Nine Thousand Six		n Only	,,	

		FIRE FIGHTING SYSTE	EM							
					RATE (In Rs.)			AMOUNT (In Rs.)		
S.No	Item No./Pag e No./MR	DESCRIPTION	UNIT	TOTAL QTY	WBSOR 17	DSR 16	MR	WBSOR 17	DSR 16	MR
		CUR UEAD (IV. CIVIL PART								
1		SUB HEAD (I):- CIVIL PART Supply & erection of ISI marked portable fire extinguishers, wall mounted type, wall brackets complete in all respect as per standard item with all accessories, delivery hose & nozzle whereever required, including fixing on walls as per the directions of Engineer-in-charge.								
	MR.	CO2 gas type. 4.5 kg. Capacity (IS:2878)	Each	3			8740.00			26220.00
	MR.	Water CO2 type. 9 Lt.capacity (IS:940)	Each	3			3450.00			10350.00
2	MR.	Supply & fixing of 4 nos. G.I. round bottom fire buckets of 9.5 liters capacity filled with sand including proper supporting / mounting arrangements in MS angle iron frame, painted by fire red colour over two coats of red oxide paint and written with white paint "FIRE" complete in all respects as per the directions of Engineer-in-charge.		3			4600.00			13800.00
3		Supply, erection and testing of ISI marked M.S. pipes (Class B - heavy duty) and specials etc. (as per IS:1239) for above ground laying for hydrants system including transportation of materials upto the worksite, cutting the pipes to required length, edge preperation, welding, fixing / erection of pipes including specials i.e. bends, tees, reducers, flanges, expansion joints wherever required, washers, nuts, bolts etc. in proper position including all supports at maximum 3 meter spacing by 3 mm thick G.I. hangers / clamps / Tie rod supports with G.I. nuts, bolts, anchor fastner and washer for hydrant / sprinkler piping, jointing by welding, aligning the pipe line, painting with two primer coat by zinc chromate primer and two coats of synthetic enamel fire red colour, providing tapping for pressure gauges and for other instruments etc. Hydrostatic testing of system as specified, flushing & cleaning by water etc. complete as per drawings & direction of the Engineer-in-charge.								
		The pipes and accessories will be provided with all type of supports (Maximum Support spacing = up to 25 mm dia @ 2 m, 32 mm to 100 mm dia @ 2.5 m, 150 mm & above dia @ 3 m) by minimum 3 mm thick G.I. clevis / sprinkler hangers / clamps / Tie rod supports with G.I. nuts, bolts, anchor / dash fastner and washer for hydrant / sprinkler piping, for 100 & 150 mm dia pipe the support will be through 50x50x6 mm painted / pre galvanized MS angle iron along with G.I. U clamp, nuts, washers, anchor fasteners etc as the case may be.								
		The quoted rates shall also include for making holes in masonry / RCC slab, wall, chases in wall, providing sleeves in RCC wall & slabs with puddle flanges whereever required & making good the same by sealing the opening to original conditions.								
		upto 40mm dia. pipe threaded forged fittings and threaded joints shall be provided and for 50mm dia & above pipes welded joints with MS / malleable iron fittings shall be used.								
	MR.	100 NB	Meter	100			1449.00			144900.0

	MR.	150 NB	Meter	10]	1903.00	19030.00
	MR.	200 NB	Meter			3450.00	.0000.00
4	1411 (.					0.00.00	
•		Supply, laying & jointing of ISI marked Mild Steel pipes (class C - heavy duty) (as per					
		IS: 1239) including all fittings i.e. reducer, elbows, tees, flanges, washers, nuts,					
		boltsetc. below ground including transportation of all materials to work site, earth work					
		in excavation in all kinds of soil upto 1.50 meter depth, edge preparation, jointing by					
		welding, laying the pipes in trenches in proper alignment, providing 150 mm thick fine					
		sand layer above pipe, back filling the trenches in layers of 20 cms, consolidation of					
		Each deposited layer, watering, ramming, disposal of surplus earth within a lead of 200					
		m and as directed, hydrostatic testing of the complete pipe work, providing 1:2:4					
		concrete thrust blocks of suitable size at all bends, tees and junctions with form works,					
		completing the work in all respect as per drawings & direction of the Engineer-in-charge.					
		The rates will include providing and laying 4 mm thick "Pypkote" tar based polymeric					
		corrosion protection tape over two coat of zinc chromate primer as per manufacturers					
		specs, as directed and as per IS:10221.					
	MR.	100 MM NB	Each	10		1840.00	18400.00
	MR.	150 MM NB	Each	1000		2300.00	2300000.00
5		Same as in item above but of G. I. Class B - medium duty for drainage pipe.					
	MR.	80 NB	Meter	10		1293.75	12937.50
6		Providing & fixing neoprene rubber single arch expansion joint (anti vibration bellow)					
		as per manufacturers specifications. Tested to a pressure of 16 Kg/Cm ² including all					
		necessary fittings complete as required.					
	MR.	80 mm dia.	Each	1		2012.00	2012.00
	MR.	150 mm dia.	Each	2		4600.00	9200.00
	MR.	200 mm dia.	Each	2		6900.00	13800.00
7		Supply & fixing in position ISI marked cast iron double flanged butterfly valves (PN 20					
		MPa) as per IS:13095, with SS disc, shaft, seating rings, internal fastening, nuts, bolts					
		including transporting to worksite, 3 mm thick rubber gaskets etc. including testing,					
		Complete as per drawings & directions of the Engineer-in-charge.					
	MR.	80 MM NB	Each	2		5175.00	10350.00
	MR.	100 MM NB	Each	1		6325.00	6325.00
	MR.	150 MM NB	Each	3		9200.00	 27600.00
	MR.	200 MM NB	Each	3		19500.00	 58500.00
8		Supply & fixing in position ISI marked cast iron double flanged dual plate type Non					
		Return Valves (PN 1.6 Mpa)				2005.00	 2005.00
	MR.	80 MM NB	Each	1		6325.00	 6325.00
	MR.	150 MM NB	Each	2		15525.00	 31050.00
9	MR.	200 MM NB	Each	2		25875.00	 51750.00
9		Supply, fixing, testing and commissioning of yard hydrant comprising of the following					
	+	(as per IS:908). (MAKE: Newage / Safeguard / Padmini / Getech)					
	+	1 no single headed C.I. stand post type hydrant.					
	MR.	no C.I.flange riser and duck foot bend nos taper connection from main line.	Each	18		13800.00	248400.00
	IVIT.	i nos taper connection from main line.	⊏acn	10		13000.00	240400.00

10	MR.	Supply, fixing, testing & commissioning of 20 mm bore and 30 meter long hose (high pressure rubber braided hose pipe as per IS:444) and hose reel suitable for 10				
		kg/sqcm operating pressure for first aid fire fighting conforming to IS: 884, with 180° full swing drum, fixing brackets, shut off gun metal nozzle, 40 mm dia. hand lever operated				
		isolating ball valve, connecting directly from the riser through 40 mm dia. G.l.pipe with				
		sockets, elbows, nipples etc. including providing operating instructions on a metal plate				
		and fixing it near hose reel. The system shall be complete in all respects as per				
		drawings and directions of Engineer-in-charge.	Each	18	13800.00	248400.00
11	MR.	Providing Stainless steel ISI marked 63 mm. dia. male Instantaneous pattern short				
		branch pipes with 20 mm dia. Nozzle as per IS: 903, suitable for 10 kg/sqcm operating				
		pressure and suitable for interconnections to hose pipe coupling as required.	Each	18	2875.00	51750.00
12	MR.	Providing ISI marked RRL (IS: 636, type-A) fire hose pipe 15 meter long and 63 mm	Lacii	.0	2070.00	31730.00
		dia with ISI marked (IS: 903) Stainless steel male and female coupling bound and				
		rivetted to hose pipes with copper rivets and copper wire complete as required.				
			Each	36	6900.00	248400.00
13	MR.	Providing & fixing standard carbon steel fireman axe with rubber insulated handle				
		tested to 20000 Volts.	Each	18	920.00	16560.00
14		Providing & fixing 25 mm dia air release valve with forged brass body full way ball valve				
		type isolating valve, flanges / union, suitable for sprinkler / wet riser / down comer				
	MR.	system with all necessary connections complete in all respects. 25 mm dia air release valve	Each	1	1725.00	1725.00
15	IVIT.	Providing and fixing C I body flanged S S strainer fabricated out of 1.6 mm thick	Lacii	!	1725.00	1723.00
10		Stainless Steel 304 sheet with 3 mm dia hole complete.				
	MR.	150 mm dia	NOS	1	16675.00	16675.00
	MR.	200 mm dia	NOS	1	30475.00	30475.00
16	MR.	Supply, fixing, testing & commissioning of 25 mm dia inspecting and testing assembly				
		with gun metal valve, sight glass, by pass valve and connection to the drain line as				
		required to complete the system.	Set	1	3450.00	3450.00
17		Providing & fixing dial pressure gauge complete in all respects. (Make : H Guru /				
	MD	FIBIG)	NOO	0	1150.00	0000.00
	MR.	for 80 mm diameter pipe for 150 mm diameter pipe	NOS NOS	2	1150.00 1380.00	2300.00 2760.00
	MR.	for 200 mm diameter pipe	NOS	2	1725.00	3450.00
18	MR.	Supply, installation and testing of cylindrical type flanged pressure vessel tank , 450			1725.00	3430.00
10	IVII L.	mm dia, 2 m long and of 10 mm thick M.S., common for a set of fire pumps including				
		flanged connection, suitable supporting legs etc. The air vessel tank shall be provided				
		with air release valve, stop cock, safety valve, pressure gauge, 50 mm dia drain valve,				
		suitable pressure switches to operate main pumps and jockey pumps, tested to min 25				
		KG/cm2 complete including painting with synthetic enamel paint of approved shade with				
		all accessories as per direction of the Engineer-in-charge.				
			Nos	1	46000.00	46000.00
19	MR.	Providing and fixing of cast iron body 150 mm dia Draw out connection in Under				
		ground water storage tank with heavy class MS suction pipe of required length, foot				
		valve, suction coupling in conformity with local regulations complete in all respects. (MAKE: Newage / Safeguard / Padmini)	NOS	1	9775.00	9775.00
20	MR.	Supply & installation of cast iron body 4 way 63 mm dia male instantaneous inlet		1	3113.00	3113.00
20	IVII L.	coupling complete with inbuilt NRV, cap and chain for fire brigade connection				
		conforming to IS: 904 and making connection with fire fighting pipe or under ground				
		water tank, completing the work in all respect as per the directions of the Engineer-in-				
		charge.	NOS	1	24150.00	24150.00

21	MR.	Providing and fixing weather proof standard fire hose cabinet (900 mm x 600 mm x 450 mm) outdoor type made of not less than 14 SWG MS sheet having glassed hinged door (5 mm thick glass) including necessary locking arrangement with handle for housing hydrant valve, two nos.15 meter long fire hose pipes, branch pipe as required as per drawings, including brackets for mounting accessories, painting (one coat primer and two coat of fire red colour). The cabinet shall be mounted on self standing mounted type painted MS Angle iron frame as required. The words "FIRE HOSE" to be painted on the box.		18	6325.00	113850.00
22	MR.	Supply, fixing in position, testing ISI marked cast iron double flanged sluice valves as per IS:14846-2000, (PN 20) with SS stem, bolts, nuts, 3 mm thick rubber gaskets including transporting to worksite, Complete as per drawings & directions of the Engineer-in-charge. (MAKE: Kirlosker / IVC / Zoloto / Venus / Audco / Advance)				
	MR.	150 MM NB (zoloto)	NOS	2.00	17825.00	35650.00
23	MR.	Constructing brick masonary chamber 90 x 90 x 120 cm inside with FPS brick work in cement mortar 1:5 (1 cement:5 fine sand) for sluice valve with S.F.R.C. cover and frame (heavy duty HD-20 grade designation), 560 mm internal diameter confirming to IS:12592, total weight of cover and frame to be not less than 182 Kg in cement concrete 1:2:4 and RCC top slab 1:2:4 mix (1cement: 2 coarse sand: 4 graded stone aggregate 20 mm nominal size) necessary excavation, foundation concrete 1:5:10 (1 cement: 5 fine sand: 10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:4 (1 cement: 4 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design.				
		of hour complete as per standard design.	NOS	2	17250.00	34500.00
		TOTAL SUB HEAD (I)				3900819.50
II		SUB HEAD (II) :- ELECTRICAL & MECHANICAL WORKS				
1		Providing and laying of ISI marked Aluminium conductor, XLPE insulated, armoured, served, sheathed Cable 1100 V grade with terminal joints by palm or pin type cable sockets (lugs), insulating with tapes, double compression type brass and nickle plated compression glands. On surface, the cable run shall be on MS cable trey or fixed on M.S. clamps etc.of suitable size or as directed by engineer-in- charge, complete in all respects. In ground the cable shall be laid at a depth of 750 mm from ground Level including a cushion of 75 mm thick. Fine river sand alround, duly protected by bricks on sides and top including excavation and back filling of soil or laid in RCC hume pipe as called for. The armouring shall be properly connected with the earth conductor by clamps etc.				
	MR.	4 core 10 sq.mm.	meter	60	460.00	27600.00
2		Supply, Fixing, Testing & Commissioning of fire authority approved electrical motor driven fire pump , suitable for automatic operation consisting of following : (Main Pump for hydrant, sprinkler, water curtain system) (MAKE : Kirloskar / Mather + Platt)				

	(a)	Horizontally mounted, multi stage, split casing Centrifugal fire pump with operating speed not exceeding 1500 rpm, as per IS:1520 complete for delivery of under mentioned discharge against desired mentioned head so as to ensure a minimum pressure of 35 meter at the highest and farthest outlet at the specified flow complete with necessary strainers, 100 mm dia dial pressure gauge of calibration 0-15 kg/sq cm including bypass arrangement for periodic testing of the working of the pumpset as well as testing of automation with required length and size of MS pipe and control valves for proper completion of work. The pump shall be capable of giving 150% of rated discharge at head not less than 65% of rated head. The pump shall be provided with Mechanical seals. The impeller shall be enclosed type and accurately balanced dynamically. The pump casing shall be of cast iron, impeller shall be of bronze and shaft shall be of stainless steel.			
	(b)	Squirrel cage, TEFC induction motor as per IS: 325, suitable for 415 V +/- 10%, 3 Phase, synchronous speed 1500 rpm, IP 55 protection and class 'F' insulation, vaccume impregnated windings with heat and moisture resisting varnish for the above pump and flexible coupling with the pump. The motor shall be rated for continuous duty and shall have HP rating necessary to drive the pump at 150% of it's rated discharge at 65% of rated head.			
	(c)	Common bed plate of fabricated mild steel channel or cast iron type, coupling guard ets as required.			
	(d)	Suitable cement concrete pump foundation and vibration clamping arrangement as required, with foundation bolts, anti vibration pads, washers etc.			
	(e)	Pressure switch for automatic operation of motor including necessary wiring upto control panel.			
	(f)	Necessary Priming arrangement (if required) for the pump including priming tank of suitable capacity, piping of medium class GI pipe, valves, connection etc. complete.			
		Discharge : 2280 liter per minute	SET 1.00	461000.00	461000.00
		Head : 65 meter			
		(Make : Kirlosker)			
		(Make : Mather & Platt)			
3		Supply, Fixing, Testing & Commissioning of fire authority approved Diesel Engine driven Fire Pump , suitable for automatic operation consisting of following: (Stand by pump). (Make: Kirloskar / Mather+Platt with Kirlosker / Cummins engine)			
	(a)	Horizontally mounted, multi stage, split casing Centrifugal fire pump with operating speed not exceeding 1500 rpm, as per IS:1520 complete for delivery of under mentioned discharge against desired mentioned head so as to ensure a minimum pressure of 35 meter at the highest and farthest outlet at the specified flow complete with necessary strainers, 100 mm dia dial pressure gauge of calibration 0-15 kg/sq cm including bypass arrangement for periodic testing of the working of the pumpset as well as testing of automation with required length and size of MS pipe and control valves for proper completion of work. The pump shall be capable of giving 150% of rated discharge at head not less than 65% of rated head. The pump shall be provided with Mechanical seals. The impeller shall be enclosed type and accurately balanced dynamically. The pump casing shall be of cast iron, impeller shall be of bronze and shaft shall be of stainless steel.			

	Water cooled Diesel engine developing suitable BHP for the above pump set, 1500 RPM including engine control panel with manual and automatic starting mechanism auto/manual selector switch, 3 attemt starting device, timers, relays, push buttons start/stop in manual mode, 2 nos. SMF lead acid batteries of 12 / 24 V & of 180 Al capacity, battery charger unit with boost & trickle charger, selector switch, 3 mm thick welded steel fabricated Diesel tank for two hours capacity complete with inlet and outle connections, fuel tubings to the engine of MS C clas, fuel filter, fuel lift pump, oil lever indication gauge, residential exhaust silencer, fly wheel, air intake manifold, air cleaner radiator, radiator fan, lub. oil pressure gauge, filter, cooling water temperature gauge and all other accessories required to complete the system. The diesel engine shall be rated for continuous duty and shall have BHP rating necessary to drive the pump a 150% of it's rated discharge at 65% of rated head.	, , , t t !			
	Diesel engine Exhaust system of required length of Class `B' MS pipe of suitable diameter with bends, expansion joints including providing suitable supporting arrangements at suitable intervals, with glass wool insulation 50 mm thick on all sides of exhaust pipe and silencer, with chicken mesh wrapping and 1 mm thick aluminium sheet cladding complete as required.	g f			
	d) Supply, installation, testing and commissioning of AMF autostart complete with necessary relays like no volt relay, over voltage and low voltage relays, contactors timer, pressure switch etc. as required for the auto start of the diesel engine in case of power failure complete with all accessories, wiring & cabling including connection to diesel engine complete as required all in conformity with the local Fire regulations. The diesel engine driven fire pump will start automatically in the event of pressure drop beyond preset limit or on mains failure or failure of electric driven pumps to start.	f o			
	e) Common bed plate of fabricated mild steel channel or cast iron type, coupling, coupling guard ets as required.	1			
	(f) Suitable cement concrete pump foundation and vibration clamping arrangement as required, with foundation bolts, anti vibration pads, washers etc.	j			
	 Pressure switch for automatic operation of motor including necessary wiring uptocontrol panel. (h) Necessary Priming arrangement (if required) for the pump including priming tank of suitable capacity, piping of medium class GI pipe, valves, connection etc. complete. 				
	Discharge: 2280 liter per minute Head: 65 meter (Make: Kirlosker) (Make: Mather & Platt)	SET	1.00	731000.00	731000.00
4	Supply, Fixing, Testing & Commissioning of fire authority approved electrical moto driven fire pump, suitable for automatic operation consisting of following: (JOCKE' PUMP). (MAKE: Kirloskar/Mather + Platt)				

	(a)	Horizontally mounted, end suction type, Centrifugal fire pump with operating speed of 2900 rpm, as per IS:1520 complete for delivery of under mentioned discharge against desired mentioned head so as to ensure a minimum pressure of 35 meter at the highest and farthest outlet at the specified flow complete with necessary strainers, 100 mm dia dial pressure gauge of calibration 0-15 kg/sq cm including bypass arrangement for periodic testing of the working of the pumpset as well as testing of automation with required length and size of MS pipe and control valves for proper completion of work. The pump shall be capable of giving 150% of rated discharge at head not less than 65% of rated head. The pump shall be provided with Mechanical seals. The impeller shall be enclosed type and accurately balanced dynamically. The pump casing shall be of cast iron, impeller shall be of bronze and shaft shall be of stainless steel.			
	(b)	Squirrel cage, TEFC induction motor as per IS: 325, suitable for 415 V +/- 10%, 3 Phase, synchronous speed 2900 rpm, IP 55 protection and class 'F' insulation, vaccume impregnated windings with heat and moisture resisting varnish for the above pump and flexible coupling with the pump. The motor shall be rated for continuous duty and shall have HP rating necessary to drive the pump at 150% of it's rated discharge at 65% of rated head.			
	(c)	Common bed plate of fabricated mild steel channel or cast iron type, coupling, coupling guard ets as required.			
	(d)	Suitable cement concrete pump foundation and vibration clamping arrangement as required, with foundation bolts, anti vibration pads, washers etc.			
	(e)	Pressure switchs (for both upper and lower levels) for automatic operation of motor			
	(f)	including necessary wiring upto control panel. Necessary Priming arrangement (if required) for the pump including priming tank of			
	(1)	suitable capacity, piping of medium class GI pipe, valves, connection etc. complete.			
		suitable capacity, piping of medium class of pipe, valves, conflection etc. complete.			
		Discharge : 180 liter per minute	SET 1.00	136390.00	136390.00
		Discharge : 180 liter per minute Head : 65 meter	SET 1.00	136390.00	136390.00
		Discharge: 180 liter per minute Head: 65 meter (Make: Kirlosker)	SET 1.00	136390.00	136390.00
		Discharge : 180 liter per minute Head : 65 meter	SET 1.00	136390.00	136390.00
5		Discharge: 180 liter per minute Head: 65 meter (Make: Kirlosker)		136390.00	136390.00

TOTAL SUB HEAD (II)						1507540.00
pumps to start.	SET	1.00		151550.00		151550.00
stand by fire pump. The diesel engine driven fire pump will start automatically in the event of pressure drop beyond preset limit or on mains failure or failure of electric driven						
1 nos. 25 AMP DP MCB for supply to annunciation/AMF panel of diesel engine driven						
1 nos. 40 AMP FP MCB as spare						-
2 nos. 80 AMP TPN MCCB as spare						
door.						
selector switch and indication lamps for "On" "Off" and "Trip" mounted on the cubicle						
switch for local/remote, auto/manual/off operation, with CT operated ammeter with						
over load protection, single phase preventor complete for automatic operation, selector						
cubicle door. 1 nos. 40 AMP TPN MCCB with star delta starter of suitable HP for jockey pump with						
with selector switch and indication lamps for "On" "Off" and "Trip" mounted on the						
selector switch for local/remote, auto/manual/off operation, with CT operated ammeter						
with over load protection, single phase preventor complete for automatic operation,						
1 nos. 80 AMP TPN MCCB with star delta starter of suitable HP for main fire pump						
Outgoings:						
amp/sqmm.						
clips on shrouds for joints. The current density of copper bus bar shall not exceed 1.25						
SMC / DMC supports, with colour coading and insulated by heat shrinkable sleeves and						
200 AMP TPN, 415 volt, 3 phase, 4 wire, 50 HZ electrolitic high conductivity Copper with						
Bus Bar :						
switch, Voltmeter with selector switch, protective fuses and phase indicating lamps.						
100 AMP FP MCCB with flush mounting square CT operated ammeter with selector						
Incomer:						
Suraksha)						
(Panel Make : Tricolite / Advance (Delhi) / Ambit / Adlec / Mile stone / ASES (Agni						
(Switchgears Make: ABB / L&T / Siemens / Schneider / Legrand)						
1 set of electric motor driven jockey pump					-	
1 set of diesel engine driven stand by pump						
1 set of Electric motor driven hydrant pump						
Following Fire fighting pumps shall have to be controlled -						
The fault withstanding capacity of panel shall be 35 KA rms for 1 sec.						
installation upto the satisfaction of engg-in-charge.						
switches, level switches of water tanks, cable trays etc required to complete the entire						
suitable sizes within the panel and from panel to various motors and engines, pressure						
connection to building automation system / Fire alarm control panel. The rates shall include necessary interconnecting armoured copper control cables of						
Provisions shall be made for providing potential free contacts to all pump starters for						
annunciation window for fault indication complete in all respects.						
various pumps in sequence as per standards consisting of relays, timers, sensors,						
operate automatically. The system controller should be capable to control operation of						
case of any failure in electric motor driven pump the diesel engine driven pump shall						
and diesel engine driven pumps so that only one pump can operate at one time and in						

	ECO RESORT, GAJALDOBA (WEST BENGAL), Infrastructure Part ABSTRACT						
SL.NO	DESCRIPTION OF WORK	AMOUNT					
1	EXTERNAL PLUMBING & SANITATION WORKS	₹ 26,062,464.00					
2	EXTERNAL ELECTRICAL WORKS	₹ 11,907,500.00					
3	CCTV & PA SYSTEM	₹ 1,733,854.00					
4	FIRE DETECTION & ALARM SYSTEM	₹ 1,180,665.00					
5	FIRE FIGHTING SYSTEM	₹ 6,299,657.00					
	TOTAL	₹ 47,184,140.00					
	Rupees Four Crore Seventy One Lakhs Eighty Four Thousand One Hundre	d Forty Only					