



**MUNICIPAL CORPORATION OF GREATER MUMBAI**

**STORM WATER DRAIN DEPARTMENT**

**INTERNATIONAL COMPETITIVE BIDDING (ICB)**

**BID DOCUMENT - \_\_\_\_\_**

**SPECIAL WORKS**

**PLANNING, DESIGN AND CONSTRUCTION INCLUDING SUPPLY, DELIVERY, ERECTION, COMMISSIONING OF MECHANICAL, ELECTRICAL, INSTRUMENTATION AND AUTOMATION WORKS FOLLOWED BY COMPREHENSIVE OPERATION AND MAINTENANCE OF MOGRA STORM WATER PUMPING STATION (SWPS) in K/W WARD**

**(Design, Build and Operate Contract)**

**VOLUME 3  
PRICE SCHEDULES**

**Consultants:**



**NJS ENGINEERS INDIA PVT. LTD.**

7<sup>th</sup> Floor, Gayatri Bhavan,  
90 feet road, Opposite Municipal Ground  
Thakur Complex, Kandivali (E)  
Mumbai – 400101

**Employer:**



**MUNICIPAL COMMISSIONER**

Municipal Corporation of Greater Mumbai  
Ground floor, Engineering Hub building,  
Dr. E. Moses road, Worli  
Mumbai – 400018

# **MUNICIPAL CORPORATION OF GREATER MUMBAI**

## **STORM WATER DRAIN DEPARTMENT**

### **INTERNATIONAL COMPETITIVE BIDDING (ICB)**

**PLANNING, DESIGN AND CONSTRUCTION INCLUDING SUPPLY, DELIVERY, ERECTION, COMMISSIONING OF MECHANICAL, ELECTRICAL, INSTRUMENTATION AND AUTOMATION WORKS FOLLOWED BY COMPREHENSIVE OPERATION AND MAINTENANCE OF MOGRA STORM WATER PUMPING STATION (SWPS) in K/W WARD**

**Design, Build and Operate Contract**

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### **Volume 3**

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## Preamble

1. The Contractor shall raise his invoice on the basis of the work completed in different stages. The invoice will be checked with reference to the progress of works and quality as per the Detailed Scope of Work and Technical Specifications given in Volume 2 of the E-Tender Document.

MCGM shall make all efforts to release the payment within 30-days (thirty days) of the approval and certification of the invoice submitted by the Contractor. However, no interest, whatsoever, shall be payable in case the payment is delayed beyond 30 days.

2. Bidder shall provide his price proposal information as per the provided schedules
3. No item shall be left blank
4. The prices quoted in the Volume 3: Price Schedule shall be all inclusive value for the work described including all costs and expenses which may be required in and for the execution of the work described together with all general risks, liabilities and obligations set forth or implied in the document on which the tender is based.
5. Prices for items required for execution and completeness of work but not specifically listed in the Schedule of Prices, Section 3B shall be deemed to have been included in the related item(s) in the Schedule of Prices, Section 3B. No extra claim shall be admissible on this account.

The contract shall be on Lump Sum Turnkey basis with payments made according to the schedule given in the contract document, Schedule of Payments, Section 3A.

6. The total amount entered in the Volume 3: Price Schedule shall be written in ink and shall be entered both in figures and words.
7. No separate payment whatsoever shall be made for dewatering if required to be done during excavation, laying of PCC and RCC laying and jointing of pipes, construction of manholes, testing and backfilling etc. and Contractor should quote accordingly.
8. Bidders are advised not to fill unjustifiable values in the Schedule of Prices, Section 3B, to avoid providing clarifications raised by MCGM on quantities and/ or rates which may result in change in e-tender substance leading to rejection of tender. (Refer Section 6, Volume 1, Instructions to Applicants). The price break-up of all the items should be reasonable and justifiable by documentary evidence, if required by MCGM.
9. The price quoted by Bidder for Comprehensive Operation & Maintenance works of the facility for 7 years (Part B) under Price Schedule A-5 shall not be less than 20% of Bidder's total quoted price for Part A & Part B quoted under Price Schedule A-6 : Grand Summary .
10. **Schedules A-2 to A-4 shall be considered by the Bidder as guidelines for filling in his detailed break-up of prices. Bidder shall make suitable modifications if required in the schedule of prices A-1 to A-4 to ensure completeness of his proposal.**
11. Bidders to include data sheet for various items of schedule A-3: Schedule of Prices for Mechanical works and A-4: Schedule of prices for Electrical, Instrumentation and Automation works in the format included in Volume – 2 of e-tender document.

12. The various Schedules for Prices are as follows:

Schedule A 1: Schedule of prices for survey, design, detailed engineering and documentation

Schedule A 2: Schedule of prices for Civil works

Schedule A 3: Schedule of prices for Mechanical works

Schedule A 4: Schedule of prices for Electrical, Instrumentation and Automation works

Schedule A 5: Schedule of prices for Comprehensive operation and maintenance

Schedule A 6: Grand Summary

Schedule A 7: Provisional Sums

13. All the prices quoted by the tenderer shall be inclusive of all taxes, duties, royalties, transportation of excavated material, floating material etc. as directed by the engineer in-charge, NOC's / permissions from the competent authorities of MCGM / Govt. Department, clearing, insurance, loading, unloading, supervision, storage, erection, testing, commissioning, trial runs, performance run, fuel, power, materials, man power, consumables, spares etc. all complete.
14. If there is a discrepancy between the amount quoted in figures and in words, the lowest of the two amounts shall be considered.
15. If there is a discrepancy between the total of the prices quoted under Schedule A-6 and the total of prices quoted in Schedules A-1 to A-5, the lowest of the two amounts shall be considered.

Offers of Bidder/s not complying with the above requirements are liable to be rejected.

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## **Section 3A**

### **Schedule of Payments**

## Section 3A – Schedule of Payments

Payment Schedule			
Item No.	Major Work Category	Type of Payment	Payment (in % of Total Price)
	<b>Survey works, Design, Detailed Engineering and Documentation Schedule A-1</b>		
1.1	a) Carrying out Topographic survey, Geotechnical Survey, Site Investigations, Submission of documents and their approval	P	80%
	b) On submission and approval of As built drawings, O & M manual and all documentation including permissions, approvals, NOCs etc. complete related to construction and operation of the facility	LS	15%
	c) On certification of completion of part 'A' of the Contract	LS	5%
1.2	Hydraulic analysis (Physical modelling / Testing) including reports		
	a) Approval of Hydraulic analysis	LS	80%
	b) On certification of completion of part 'A' of the Contract	LS	20%
1.3	CFD Analysis and report		
	a) Approval of CFD Analysis	LS	80%
	b) On certification of completion of part 'A' of the Contract	LS	20%
1.4.1	a) Submission and approval of Design, Detailed engineering and drawings as per tender specifications for Civil Works	P	80%
	b) On submission and approval of As built drawings, O & M manual and all documentation related to Construction and Operation of the facility	LS	15%
	c) On certification of completion of part 'A' of the Contract	LS	5%
1.4.2	a) Submission and approval of Design, Detailed engineering and drawings as per tender specifications for Mechanical Works	P	80%
	b) On submission and approval of As built drawings, O & M manual and all documentation related to Construction and Operation of the facility	LS	15%
	c) On certification of completion of part 'A' of the Contract	LS	5%
1.4.3	a) Submission and approval of Design, Detailed engineering and drawings as per tender specifications for Electrical, Instrumentation and Automation Works	P	80%
	b) On submission and approval of As built drawings, O & M manual and all documentation related to Construction and Operation of the facility	LS	15%
	c) On certification of completion of part 'A' of the Contract	LS	5%

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Payment Schedule			
Item No.	Major Work Category	Type of Payment	Payment (in % of Total Price)
<b>Civil Works : Schedule A-2</b>			
2.1 to 2.13	a) Certification of completion of Civil Works	P	90%
2.1 to 2.13	b) On successful completion of water tightness test, and leakage / water proofing tests	LS	5%
2.1 to 2.13	c) On certification of completion of part 'A' of the Contract	LS	5%
<b>Plant and Equipment for incorporation in the Works: Schedule A-3 and A-4</b>			
3.1 to 3.19 and 4.1 to 4.26	a) On successful shop test, approval for dispatch, supply at site and inspection at site on arrival of Mechanical, Electrical, Instrumentation and Automation plant and equipment	P	70%
3.1 to 3.19 and 4.1 to 4.26	b) On successful completion of Erection / Installation at site	P	20%
3.1 to 3.19 and 4.1 to 4.26	c) On successful completion, approval and certification of trial run and commissioning at site	P	4%
3.1 to 3.19 and 4.1 to 4.26	d) On Certification of completion of Part "A" of the Contract	LS	4%
3.1 to 3.19 and 4.1 to 4.26	e) On obtaining all statutory permissions	LS	2%
<b>Operation and Maintenance : Schedule A-5</b>			
5.1	Payment for Carrying Out Successful Operation and Maintenance Services in Monsoon Months (16 <sup>th</sup> May- 15 <sup>th</sup> October)	Monthly	100% *
5.2	Payment for Carrying Out Successful Operation and Maintenance Services in non-Monsoon Months (16 <sup>th</sup> October – 15 <sup>th</sup> May)	Monthly	100% *

LS : Lump Sum  
P : Progressive

\* Fuel component shall be payable as calculated based on Schedule A-5, Section 3B, Volume 3:

**Notes :**

The Tenderer shall furnish Prices in Schedule A-1, A-2, A-3, A-4 and A-5 in section 3B to facilitate payment as per above Payment Schedule.

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## **Section 3B**

### **Schedule of Prices**

## Section 3B - Schedule of Prices

### A-1 Schedule or Prices for Survey works, Design, Detailed Engineering and Documentation

Item	Description	Quantity	Rate	Per	Total Price (Rs)
1.1	Carrying out Topographic survey, Geotechnical Survey, Site Investigations, Submission of documents and their approval	JOB	-	LS	
1.2	Hydraulic analysis (Physical modelling / Testing) including reports	JOB		LS	
1.3	CFD Analysis and Report	JOB	-	LS	
1.4	Submission and approval of Design, Detailed engineering and drawings as per tender specifications				
1.4.1	For Civil Works	JOB	-	LS	
1.4.2	Mechanical Works	JOB	-	LS	
1.4.3	Electrical Works, Instrumentation and automation works	JOB	-	LS	
1.4.4	Operation and maintenance	JOB	-	LS	
1.5	Manual	JOB	-	LS	
	<b>TOTAL (To Grand Summary)</b>				
	<b>(figures in words)</b>				

*Note: All prices shall be quoted in Indian Rupees and All payments shall be made in Indian Rupees*

LS : Lump Sum

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### A-2 Schedule of Prices for Civil Works

Item	Description	Price (Rs.)			
		Qty	Rate	Per	Total Price
2.1	Making uniform slope at bottom of the Nalla from existing bridge on Creek Road upto Silt Trap upstream of Coarse screen	Job		LS	
2.2	Retaining wall on the southern side of the Nalla from existing bridge on creek road up to 25m length downstream of pumping station	Job		LS	
2.3	Retaining wall on the northern side of the Nalla from existing bridge on creek road up to 25m length downstream of pumping station	Job		LS	
2.4	Approach Road bridge (class AA load) in the nalla 7.5m wide along with crash barrier from existing bridge on Creek Road up to storm water pumping station along with crash barrier	Job		LS	
2.5	Civil structure for silt pit, installations of mechanical bar screens and trash racks	Job		LS	
2.6	Internal road (class AA load) in the pumping station of 6m width along with crash barrier to connect every individual plant and equipment for its temporary storage, installation, erection, commissioning, operation and maintenance etc along with staff and personnel movement	Job		LS	
2.7	Foundation for all civil structures in the nalla bed	Job		LS	
2.8	Column and beam grid to support superstructures such as (i) Cellar Room, Main Electrical Rooms, Administration Office, Bachelor's Staff Quarters etc. (ii) Platform for Diesel Generators (iii) Maintenance Bay (iv) Laydown Areas, (v) Water Storage Tank for Fire-fighting (vi) Diesel Storage Tank (vii) Walkways and Pathways (viii) Approach to screenings skip, Silt Skip etc.	Job		LS	
2.9	Brick work, flooring, plastering, door / windows, painting, water proofing etc. for Electrical panel room cum administration building	Job		LS	
2.10	Construction of RCC channels for installation of equipment such as u/s roller gate, gate pumps, flap gates, and D/s Roller gates including necessary approaches, foundations, ladders, support for operating equipment, instruments etc. complete	Job		LS	
2.11	Civil Structure for installation of Mitre Gates	Job		LS	
2.12	Maintenance Bay and Lay down areas	Job		LS	
<b>2.13</b>	<b>Ancillary Works related to the Pumping Station</b>				
a)	External water Supply	Job	-	LS	
b)	External Sanitary Network, pumping and transmission to nearest sewer line etc.	Job	-	LS	
c)	Compound (boundary) wall with foundation, Entry cum Exit Gate & Security Cabin	Job	-	LS	
d)	Macro Grading, Landscaping as directed by Employer's Representative	Job	-	LS	
e)	Jetting water tank & pump room	Job	-	LS	
f)	Potable water tank & pump room	Job	-	LS	
g)	Firefighting tank & pump room				

Item	Description	Price (Rs.)			
		Qty	Rate	Per	Total Price
h)	Piping network and accessories for firefighting				
i)	Earthing pits	Job	-	LS	
j)	Labour toilet and wash area near mitre gate or screen structure	Job	-	LS	
k)	Enabling works such as coffer dams, diversion of nallahs / water course, touch pile, temporary roads as necessary during construction	Job	-	LS	
2.14	Any other item (please specify)	Job		LS	
2.15	Any other item (please specify)	Job		LS	
2.16	Any other item (please specify)	Job		LS	
	Sub Total				
	<b>TOTAL (To Grand Summary)</b>				
	<b>(figures in words)</b>				

*Note : All prices shall be quoted in Indian Rupees and All payments shall be made in Indian Rupees*

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### A-3 Schedule of Prices for Mechanical Works

Item	Description	Qty	Rate	Per	Total Price (Rs)
3.1	Supply, installation & commissioning of Mechanical Bar screens, complete in all respect such as cleaning mechanism with local control panel with Emergency stop, on-off control station, PLC connectivity, rain protection shed complete in all respect as per design requirements of Storm Water Pumping Station and as specified in Volume 2, Section 2C	11		Nos.	
3.2	Supply, installation & commissioning of Trash Racks complete in all respect such as cleaning mechanism (water jetting) with local control panel with Emergency stop, on-off control station, PLC connectivity, rain protection shed complete in all respect as per design requirements of Storm Water Pumping Station and as specified in Volume 2, Section 2C	11		Nos.	
3.3	Supply, installation & commissioning of Stop logs for Inlet bay and Mitre gate area as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.4	Supply, installation & commissioning of roller gates with actuators, mounting frames, and local control panel with on –off control station, PLC connectivity complete in all respect as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	7		Nos.	
3.5	Supply, installation & commissioning of flap gates with actuators (as standby arrangement), mounting frames, and local control panel with Emergency stop on –off control station, PLC connectivity complete in all respect as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.6	Supply, installation & commissioning of submersible axial flow pumps complete with all necessary accessories, Mounting Arrangement, pump monitoring unit with PLC connectivity, emergency stop complete in all respect as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	7		Nos.	
3.7	Supply, installation & commissioning of D.G. Set(Main) with AMF panel, emergency stop and local on-off control station, PLC connectivity, acoustic enclosure, engine exhaust arrangement as specified complete in all respect as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	4		Nos.	

3.8	Supply, installation & commissioning of D.G. Set(Aux) with AMF panel, emergency stop, PLC connectivity, acoustic enclosure, engine exhaust arrangement as specified complete in all respect as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	1		Nos.	
3.9	Supply, installation & commissioning of 30 m. height stack with supporting steel structure, lightning protection and aviation lighting for D.G. set as required as per requirements of Storm Water Pumping Station design as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	4		Nos.	
3.10	Supply, installation & commissioning of main diesel storage tank, Fuel Transfer System from Main Diesel Tanks to Day Tank including level sensors, control valves, vents, pumps, local control panel, PLC connectivity etc. complete in all respect for D.G. Set (Main) & DG set (Aux.) as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.11	Supply, installation & commissioning of 990 litres Day tanks & Fuel Transfer System from Day Tank to D.G. Sets (Main) including level sensors, PLC connectivity, control valves, vents, return pipe line etc. complete in all respect as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.12	Supply, installation & commissioning of Day tank & Fuel Transfer System from Day Tank to D.G. Set (Aux) including level sensors, PLC connectivity, control valves, vents etc. complete in all respect as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.13	Supply, installation & commissioning of EOT crane including rail section complete with Control pendant, control panel, cables, maintenance platform, caged ladder, extension structure and allied work for Trash Rack and Silt Bucket operation as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.14	Providing and Installation of Superstructure above Mitre gates structure for accommodating EOT Crane covering all Mitre gates including provision of GI gratings, SS316 hand railings, area lighting, approach ladder, cathodic protection etc. complete	Lot		LS	
3.15	Supply, Installation and Commissioning of EOT crane including rail section, Control pendant, control panel, maintenance platform, caged ladder, extension structure, cables and allied work for Mitre gates and Stop logs as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	



3.16	Supply, installation & commissioning of Submersible dewatering Pump with lifting chain and guide pipe as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.17	Supply, installation & commissioning of Tidal Control Gates (Mitre Gates) including cathodic protection, control gear box with actuator, manual override and stop logs as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	7		Nos.	
3.18	Supply, installation & commissioning of Fire Fighting system including fire hydrant, valves, pumps / raw water tank, control panel, alarms etc. complete as per requirements of Storm Water Pumping Station design and as specified in Volume 2 and as approved by fire officer	Lot		LS	
3.19	Supply, installation & commissioning of Pressure jetting system arrangement including stand posts, piping, pumps, valves and specials etc complete with overhead water tank for inlet bay, pump bays as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2C	Lot		LS	
3.20	Any other item (Please specify)	Lot		LS	
3.21	Any other item (Please specify)	Lot		LS	
3.22	Any other item (Please specify)	Lot		LS	
	<b>TOTAL (To Grand Summary)</b>				
	<b>(figures in words)</b>				

*Note : All prices shall be quoted in Indian Rupees and all payments shall be made in Indian Rupees*

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#### A-4 Schedule of Prices for Electrical, Instrumentation and Automation Works

Sr. No.	Item Description	Qty.	Rate	Per	Total Price (Rs)
4.1	Supply, installation & commissioning of 6.6 kV switchgear for Main Pumps with spare panels as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	1		Nos.	
4.2	Supply, installation & commissioning of 6.6kV FCMA Soft Starters complete with PFC capacitors & dynamic compensators for submersible pump motors with spare soft starter, PLC based as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	8		Nos.	
4.3	Supply, installation & commissioning of Neutral Grounding Resistors rating 6.6 kV, to suit required Capacity of D.G. sets as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	4		Nos.	
4.4	Supply, installation & commissioning of 415 V, 62.5 kVA Prime rated black start DG set complete with acoustic enclosure, local control panel, sub-base integral day-tank and other fittings & accessories, conforming to CPCB norms as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	1		Nos.	
4.5	Supply, installation & commissioning of 6.6 kV switchgear for DG system with spare panels as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	1		Nos.	
4.6	Supply, installation & commissioning of DG set Control & Protection Panel complete with GCU to suit required Capacity of D.G. sets as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	4		Nos.	
4.7	Supply, installation & commissioning of Auto synchronising, Auto load sharing system for DG set and as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.8	Supply, installation & commissioning of 415V Switchgear for pumping station as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	1		Nos.	
4.9	Supply, installation & commissioning of 415V Switchgear for DG installation as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	1		Nos.	
4.10	Supply, installation & commissioning of 6.6/0.433 kV, transformer of rated capacity for DG power as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	2		Nos.	

Sr. No.	Item Description	Qty.	Rate	Per	Total Price (Rs)
4.11	Supply, installation & commissioning of Local Control Stations as specified in Volume 2, Section 2D	Lot		LS	
4.12	Supply, installation & commissioning of 6.6 kV cables, 3C X 240 mm sq. with cable termination kits, cable glands for 6.6 kV system as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.13	Supply, installation & commissioning of Automatic Power Factor Correction (APFC) equipment at 415V level as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	1		Nos.	
4.14	Supply, installation & commissioning of 110V SMF battery of adequate AH capacity with battery charger and DCDB as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.15	Supply, installation & commissioning of PLC and SCADA system with cabling and UPS system with back up SMF batteries including differential level measurement system and ultrasonic level measurement system for complete plant control as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.16	Supply, installation & commissioning of LV power and control cables for the entire installation as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.17	Supply, installation & commissioning of equipment / panel earthing & Earthing grid complete as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.18	Supply, installation & commissioning of Lighting system –Indoor, Outdoor & area lighting, including lighting fixtures & fittings, fans, 415V ACDBs` etc. Complete for entire pumping station as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.19	Supply, installation & commissioning of Cable carrier (trays) system for 6.6 kV & LT cables including tray covers, supports, canopy etc. Complete as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.20	Supply, installation & commissioning of Lightning Protection System complete as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	

Sr. No.	Item Description	Qty.	Rate	Per	Total Price (Rs)
4.21	Supply, installation & commissioning of Air-conditioning and ventilation works for rooms as per requirements as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.22	Supply, installation & commissioning of Safety equipment as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	Lot		LS	
4.23	Supply, installation & commissioning of 415 V panel for Fire Fighting pump and Jockey pump as per requirements of Storm Water Pumping Station design and as specified in Volume 2, Section 2D	1		Nos.	
4.24	CCTV surveillance system comprising of weatherproof CCTV cameras, memory back up, desk top computer with CPU and Flat screen monitor, cables, UPS of adequate capacity as per requirements of Storm Water Pumping Station	Lot		LS	
4.25	Approval by electrical inspector for entire electrical installation	Lot		LS	
4.26	Solar power generation and distribution system including solar panels on roof structures within the Storm Water Pumping Station	Lot		LS	
4.27	Any other item (Please specify)	Lot		LS	
4.28	Any other item (Please specify)	Lot		LS	
4.29	Any other item (Please specify)	Lot		LS	
	<b>TOTAL : (To Grand Summary)</b>				
	<b>(figures in words)</b>				

*Note : All prices shall be quoted in Indian Rupees and all payments shall be made in Indian Rupees*

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#### A-5 Schedule of Prices for Operation & Maintenance Works

Item	Description	Quantity	Rate	Per	Total Price (Rs)
5.1	Carrying Out Successful Operation and Maintenance Services in Monsoon Months (16 <sup>th</sup> May- 15 <sup>th</sup> October) for minimum specified hours -				
	a. Labour Component	35		Month	
	b. Maintenance of Pumping Station	35		Month	
	c. Fuel Component	3920		Hs	
5.2	Carrying Out Successful Operation and Maintenance Services in non-Monsoon Months (16 <sup>th</sup> October – 15 <sup>th</sup> May) for minimum specified hours -				
	a. Labour Component	49		Month	
	b. Maintenance of Pumping Station	49		Month	
	c. Fuel Component	686		Hrs	
	<b>TOTAL (To Grand Summary)</b>				
	<b>(figures in words)</b>				

Note : - All prices shall be quoted in Indian Rupees.

- In preparing this schedule the tenderer shall consider the monsoon period as 5 (five) Months and the non-monsoon period shall be considered as 7 (Seven) months in a year.
- If it rains in non-monsoon period, and the contractor is instructed by MCGM engineer to run the pumps to avoid flooding in catchment area then extra hours of pumping, if any, will be paid at the same rate as for non-monsoon period i.e. 5.2c.
- Labour component shall be payable on the basis of actual manpower deployed by the Contractor during a particular month. The minimum manpower to be deployed is specified in Section 2E, Volume 2 of this tender document. The Contractor shall produce a break-up of manpower for rates for each category of manpower at the beginning of O & M period. The break-up shall be approved by MCGM.
- Maintenance component shall be payable on the basis of actual maintenance carried out for the pumping station. At the beginning of O & M period, the Contractor shall submit a preventive maintenance schedule for various equipment and structures giving their individual rates. For example, servicing of pumps, servicing of DG sets, painting and plastering of structures etc. This shall be approved from MCGM. The Contractor should furnish a list of spares for various equipment as per manufacturer's recommendation and maintain an inventory of the same at site. It is to be noted that the Contractor is liable for penalties in case of (a) Non-performance of the pumping station & (b) Break down of equipment as per Volume 2, Section 2E.
- Fuel component will be payable on the basis of actual pump operating hours. For extra pump hours, if any, the same rate shall apply.

- \* For evaluation purpose and extra hour calculation pump hours to be considered shall be 16 hours / pump / month in monsoon and 02 hours / pump / month in non-monsoon period.

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## A-6 Grand Summary

Item	Description	Total Price (Rs)
A-1	Schedule A-1: <b>Schedule of Prices for Survey works, Design, Detailed Engineering and Documentation</b>	
A-2	Schedule A-2: <b>Schedule of Prices for Civil Works</b>	
A-3	Schedule A-3: <b>Schedule of Prices for Mechanical Works</b>	
A-4	Schedule A-4: <b>Schedule of Prices for Electrical, Instrumentation and Automation Works</b>	
A-5	Schedule A-5: <b>Schedule of Prices for Comprehensive Operation &amp; Maintenance Works</b>	
A-7	Schedule A-7 <b>Provisional Sum</b>	5,00,00,000
	<b>GRAND TOTAL</b>	
	(figures in words)	

*Note : All prices shall be quoted in Indian Rupees and all payments shall be made in Indian Rupees*

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### **A-7 Provisional Sums**

This Cost Centre allows provisional amounts to be expended at the discretion of the Employer.

<b>Item Description</b>	<b>Amount (INR)</b>
<b>Total Cost Centre A-7 Value (to Price Schedule A6 - Summary)</b>	5,00,00,000

*Note: The Tenderer should not change this Cost Centre*

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