

કાર્યપાલક ઈજનેર સેન્ટ્રલ ઝોન		સુરત મહાનગરપાલિકા સેન્ટ્રલ ઝોન, નવુ વહીવટી ભવન મુગલીસરા મેઈન રોડ, સુરત. Ext.૨૦૫ કન્ટ્રોલ રૂમ : ટે.નં.૨૪૨૦૫૪૭ ફેક્સ : ૨૪૨૦૫૪૮
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પ્રતિ,

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વિષય:- સેન્ટ્રલ ઝોન દક્ષિણ વિસ્તારમાં આવેલ ગોપીતળાવ ખાતે Bathymetric Survey કરાવવા નું કામ.

મહાશય,

ઉપરોક્ત વિષયે જણાવવાનું કે, સેન્ટ્રલ ઝોન દક્ષિણ વિસ્તારમાં આવેલ ગોપીતળાવ ખાતે Bathymetric Survey કરાવવા ની કામગીરીનું ભાવપત્રક ઈ.એમ.ડી. રૂ.૫,૦૦૦/- (ડીમાન્ડ ડ્રાફ્ટ/ પે ઓર્ડર) સહિત નીચે જણાવ્યા મુજબનાં ફોર્મેટમાં ભરી અત્રેની કચેરીમાં તા. ૦૬/૦૭/૨૦૨૪ સાંજે ૫:૦૦ કલાક સુધીમાં નીચે સહી કરનારને મળે એ રીતે મોકલવાના રહેશે.

Sr. No.	ITEM	Area	Unit	Rate	Amount
1	સેન્ટ્રલ ઝોન દક્ષિણ વિસ્તારમાં આવેલ ગોપીતળાવ ખાતે Bathymetric Survey કરાવવા નું કામ	35281.00	Sq.mt.		
Total Amount Rs.					0.00

—:શરતો:—

૧. અર્નેસ્ટમની ડીપોઝીટની રકમ કમિશનરશ્રી, સુરત મહાનગર પાલિકાના નામનો સુરતની રાષ્ટ્રીયકૃત શીડયુલ બેંકના ડીમાન્ડ ડ્રાફ્ટ / પે. ઓર્ડરથી ભાવપત્રક સાથે રૂ. ૫,૦૦૦/-ની આપવાની રહેશે.
૨. ઈજારદારે રજીસ્ટ્રેશન/ સંસ્થાનું નોંધણી પત્રકની પ્રમાણિત નકલ ભાવપત્રક સાથે આપવાની રહેશે.
૩. ઈજારદારે છેલ્લા ૦૧ (એક) વર્ષના આઈ. ટી. રીટર્ન ભાવપત્રક સાથે આપવાના રહેશે.
૪. ઈજારદારે ચાલુ કામો/પૂર્ણ કરેલ કામના અનુભવના સર્ટીફિકેટ (Form 3A) ની પ્રમાણિત નકલ ભાવપત્રક સાથે આપવાની રહેશે.
૫. ઈજારદારે GST રજીસ્ટ્રેશન સર્ટીફિકેટની પ્રમાણિત નકલ ભાવપત્રક સાથે આપવાની રહેશે.
૬. ઈજારદારે પાન કાર્ડ રજૂ કરવાનું રહેશે.
૭. કોઈપણ અથવા બધા જ ભાવપત્રકો રદ કરવાનો અધિકાર સુરત મહાનગરપાલિકાને અબાધિત રહેશે તે અંગે કોઈપણ કારણો આપવામાં આવશે નહીં.
૮. તમામ પ્રકારના વેરા ઈજારદારે ભોગવવાના રહેશે (Excluding GST) .
૯. તમામ સરકારી / અર્ધ સરકારી લાગુ પડતા કાયદાનું ઈજારદારે પાલન કરવાનું રહેશે.
૧૦. સદર કામગીરી બાબતે અત્રેના હાઉસીંગ વિભાગના ટેકનીકલ સ્ટાફનો સંપર્ક કરવો.

કાર્યપાલક ઈજનેર
સેન્ટ્રલ ઝોન
સુરત મહાનગરપાલિકા

સ.ર. એકઝી. આસી.શ્રી(આઈ.એસ.ડી.) પ્રતિ,

સેન્ટ્રલ ઝોન દક્ષિણ વિસ્તારમાં આવેલ ગોપીતળાવ ખાતે Bathymetric Survey કરાવવા ના કામે ભાવપત્રક મંગાવવામાં આવેલ છે. જેને સુરત મહાનગરપાલિકાની વેબસાઈટ પર પ્રસિધ્ધ કરવાનું હોય, આ પત્ર અપલોડ કરવા ઘટતું થવા વિનંતી.

કામનું નામ	:—	સેન્ટ્રલ ઝોન દક્ષિણ વિસ્તારમાં આવેલ ગોપીતળાવ ખાતે Bathymetric Survey કરાવવા નું કામ
શરૂઆતની તારીખ	:—	તા. ૨૮/૦૬/૨૦૨૪ ના સાંજે ૫.૦૦ કલાક થી
અંતિમ તારીખ	:—	તા. ૦૬/૦૭/૨૦૨૪. ના સાંજે ૫.૦૦ કલાક

નં. સી.ઝેડ/એન્જી./આઉટ/૧૪૮૧
તા. ૨૮ / ૦૬ /૨૦૨૪

કાર્યપાલક ઈજનેર
સેન્ટ્રલ ઝોન
સુરત મહાનગરપાલિકા

સ.ર. એકઝી. આસી.શ્રી(આઈ.એસ.ડી.) પ્રતિ,

સેન્ટ્રલ ઝોન દક્ષિણ વિસ્તારમાં આવેલ ગોપીતળાવ ખાતે Bathymetric Survey કરાવવા ના કામે ભાવપત્રક મંગાવવામાં આવેલ છે. જેને સુરત મહાનગરપાલિકાની વેબસાઈટ પર પ્રસિધ્ધ કરવાનું હોય, આ પત્ર અપલોડ કરવા ઘટતું થવા વિનંતી.

કામનું નામ	:—	સેન્ટ્રલ ઝોન દક્ષિણ વિસ્તારમાં આવેલ ગોપીતળાવ ખાતે Bathymetric Survey કરાવવા નું કામ
શરૂઆતની તારીખ	:—	તા. ૨૮/૦૬/૨૦૨૪ ના સાંજે ૫.૦૦ કલાક થી
અંતિમ તારીખ	:—	તા. ૦૬/૦૭/૨૦૨૪ ના સાંજે ૫.૦૦ કલાક

નં. સી.ઝેડ/એન્જી./આઉટ/૧૪૮૧
તા. ૨૮ / ૦૬ /૨૦૨૪

કાર્યપાલક ઈજનેર
સેન્ટ્રલ ઝોન
સુરત મહાનગરપાલિકા



Bathymetric Survey in Gopitalav

1. Site Details

Surat Municipal Corporation (SMC) is intended to conduct survey work for the Lakes in Surat city and in this regard, SMC intends to conduct survey in the Gopitalav Lake.

The brief details of survey site is as follows:

- Diameter: approx. 212.00 m
- Survey area: Approx. 35,281.04 sq.m.
- Tentative coordinates of Gopitalav Lake are as follows:
 - i. Lat 21°18'92.85"N Long 72°82'87.83"E
 - ii. Lat 21°18'77.68"N Long 72°82'99.34"E

2. Scope of Work

2.1 Bathymetric Survey

- Survey work to be carried out by survey agency for Gopitalav Lake.
- The agency should mobilize a suitable survey vessel capable for operating in the proposed survey area. The vessel thus employed should be registered and it should have valid insurance.
- There should be sufficient clear deck space on the vessel for preparation, lowering and retrieving/trailing of survey instruments like echo sounder, DGPS etc and sufficient space to install and operate positioning systems.
- Proper noise, electrical noise and generator noise should not cause any interference with recording equipment and sensors and in turn should not reflect on quality of the data.
- The agency shall provide the specifications and the details of the equipment and vessel to be mobilized for review and approval of Engineer In charge (EIC) of SMC, prior to deployment at site.
- **Survey Equipment and Instruments:**

i. Survey Vessel

Provision and Operation of Survey Vessel

The Survey agency shall provide for his own use and operate to the satisfaction of Engineer In charge (EIC) of Surat Municipal Corporation and his Engineers a fully equipped hydrography survey vessel for accurate echo sounding of the areas of work and such other equipment as required for the Hydrography surveys.

Specification of Survey Vessel

The survey vessel shall have:

- Sufficient size and stability to safely and properly carry out the survey work under the prevailing site conditions;
- Good manoeuvrability even at low speeds
- Enough space for instruments and space for Engineer's staff, besides the crew and Survey agency's surveyor.
- A suitable shallow draught vessel to assist in the surveys near bank protection structure.



ii. Dual frequency echo sounder

The echo sounder for Hydrography surveys shall in principle be operated in the 210 kHz range (for low depth). It shall not be permitted for any reason to use a lower operational frequency of the eco sounder for survey work.

At the start of each Hydrography survey, DGPS is to be calibrated to the specified accuracy. To this effect, the Survey agency shall establish a fixed point/s with known co-ordinates such that the survey boat can easily be positioned with the transducer of the echo sounder always in the same position relative to the calibration point. Heave, pitch and roll compensators should be used. A multi-beam echo sounder shall be used to detect high spots as and when required by EIC. Eco sounder shall be of high accuracy.

iii. EPS

Provision of EPS

The Survey agency shall provide, install, operate and maintain a Electronic Positioning System (EPS) ie DGPS/RTK/LRK system with sub-meter accuracy, acceptable to EIC, which shall fully cover the entire work and be constantly in operation during the course of the dredging work.

Composition of EPS

The system shall consist of masters or receivers, distance measuring units, the requisite number of shore stations, interfaces, track plotters, data storage facilities and sufficient spares to enable uninterrupted operation of the system, to the accuracy specified and on board computer and printer and suitable software.

Installation and Testing

The system shall be installed, tested and set to work for continuous operation during all survey operations. The system shall be fully operational, a minimum of 3 days before surveying operations commence including field calibration and base line check.

Failure of EPS

The EPD should have one hundred percentage in-built standby equipment to cater for the failure of any individual components.

Giving Notice of any Irregularities

The Survey agency shall inform the EIC forthwith of any breakdown irregularities or otherwise, affecting the positioning of his vessels or other equipment. Delays incurred in the dredging operation due to malfunctioning of EPS shall not be reimbursed under the contract and will not entitle the Survey agency to an extension of time for completion. EPS to be used shall be of high accuracy.

iv. Tide gauge/ tide pole

v. HYPACK survey data acquisition software/ equipment

vi. Personal Computer/ Laptop for data acquisition, processing and backup

vii. Any other equipment necessary to complete the scope of the survey work.

- Water level should be carried out at every Lake bridge during the survey period at every hour interval.

2.2 Topographic Survey

- Establishing DGPS Primary Control Pillars along the project stretch using DGPS having a size of 30cm x 30cm x 60cm and inter visibility shall be maintained between pair of pillars.
- Carry out topographic survey for entire stretch including all bridges across the lake or any other type



- of permanent like compound wall, diaphragm wall, retaining wall, gabion pitching, road along the Lake etc. / temporary structure within and at the end of lake boundaries. The topographic survey includes traversing and levelling and submission of drawings (in hardcopy and in softcopy).
- Traverse survey shall be conducted from one pair of DGPS Control Pillar to another DGPS Control Pillar. Electronic total station shall be employed to do the traverse survey between DGPS control pillars.
 - Traverse closure accuracy shall be better than 1: 20000 and shall be distributed. If the error is more, the entire traverse shall be repeated till accuracy better than 1: 20000 is obtained. All computation shall comply with the following:
 - i. Traverse adjustment by Bowditch Method
 - ii. Least Square Adjustment.
 - The Engineer-in-Charge shall be approving the traverse closure and Control Point's co-ordinates before starting detailed survey.
 - After completion of DGPS survey, control levelling shall be carried out connecting all the DGPS and secondary control pillars. For the purpose of height control, Benchmarks provided by SMC shall be used for starting and closing of level lines. Level Instrument of standard model shall be used. Fore sight and back sight distances shall be as far as possible equal.
 - The closing error on a level circuit shall not exceed $12\sqrt{K}$ in mm, where K is distance in meter. The closing error shall be distributed to all the Benchmarks in network. In case the closing error is more than the above specified limit, the observations shall be repeated.
 - Topographic survey shall be started only after all Control Points, Benchmarks and Co-ordinate system are established and got approved by the Engineer-in-Charge.
 - Any kind of pipe/box/flap gate falling into Lake shall be surveyed and mentioned in the map with level.
 - Lake bridge piers and lake bridge beam bottom with level shall be shown in the map.
 - Bathymetry and topography survey shall be integrally shown in one map

2.3 Volume Calculation

- The volume of Lake water shall be computed using data acquisition software like Hypack or equivalent software acceptable to the EIC. A copy of raw data generated during the survey including the topography, depths, position and water levels recorded shall be given to SMC so that the post processing can be independently carried out by SMC to compute the volumes.
- Apart from software report, Survey agency has to give volume calculations using Simpson Rule as well. This will be applicable to intermediate surveys and final dredged survey.

2.4 Survey Report

survey work has to be done for entire Lake portion for 212 m Diameter. Final survey report to be prepared and submitted to SMC by survey agency, showing all the details of equipment used, benchmark levels & co-ordinates, water levels at various Lake locations, quantity calculations using software and using Simpson's rule and cross sections at every 10 m



chainages showing water level. Apart from all these, Survey agency is required to submit area map of bathymetry survey done and LS of Lake levels. All data shall be validated and authenticated by TPI/PMC appointed by SMC.

2.5 Data Submission

i. Intermediate Report:

The intermediate survey details to be submitted in 02 (two) sets in hardcopy and in softcopy.

ii. Final Survey Report:

Final survey report including all the details of equipment used, benchmark levels & co-ordinates, water levels at Lake locations, quantity calculations using software and using Simpson's rule and cross sections at every 10 m chainages showing lake level with water level; bathymetry survey area map, LS map, shall be submitted in 03 (three) sets in hard copy.

- iii. The Agency should submit all requisite data in file format supported by Hypack/equivalent software as well as in CAD format in pen drive.
- iv. Design depths shall be provided by SMC and agency shall compute/ calculate volume based upon the surveyed data and submit.
- v. All the drawings and Survey data shall become the absolute property of SMC and the Agency shall have no right to use the same anywhere else. Such drawings and Survey data shall not be issued to any other person, firm or authority or used by the Agency itself for any other project. No copies of any drawings or documents shall be issued to anyone except SMC.

2.6 Terms of Payment

Payment shall be made based on area surveyed in sq.m. for the said Lake portion. Survey area shall be considered the area between retaining walls on both banks and elsewhere actual water boundaries considered for area calculation.

Intermediate Payment shall be done based on satisfactory completion of survey work and submission of necessary documents as per scope of work and same shall be verified and validated by TPI/PMC (If any)appointed by SMC.

Final bill payment shall be done after the bill clearance from Audit department of SMC.

2.7 Rate validity

The price quoted in this document shall be valid for the variation in quantity upto $\pm 30\%$.

2.8 Security Deposit

- The successful bidder has to submit initial security deposit at 2% of quoted price in form of Cash/Demand Draft/Pay Order within 15 days after awarding the work to that agency and 2% of security deposit shall be deducted in each running bill based on actual workdone amount. Total 4% of security deposit shall remain with SMC.
- 2% of initial security deposit shall be released at the time of final bill.
- 2% of security deposit deducted in running bills shall only be released after the satisfactory completion of work and after clearance of final bill by Audit Dept.
- If the Security Deposit is not paid within 15 days from the date of L.O.I. / Work Order than penalty at



the rate of 0.065% per day of the amount of Security Deposit will charged. If the Security Deposit is not paid within one month, the contract shall be terminated by SMC.

2.9 Duration

- Survey agency has to complete the survey work & submission of necessary documents within **21 (Twenty One)** days.

Signature of Authority of Survey Agency
with Seal

Executive Engineer
Central Zone
Surat Municipal Corporation

Bill of Quantity (BoQ)

Description	Quantity (sq.m.)	Rate/sq.m. (INR)	Amount (INR)
Bathymetric survey in Gopitalav Lake as per Scope of Work mentioned above along with submission of data.	35,281.00		
Total			

Note: Above quoted rate shall be exclusive of GST.

Signature of Authority of Survey Agency
with Seal

Executive Engineer
Central Zone
Surat Municipal Corporation



Special Conditions

Quotation Submission

The **B**idder must submit above documents to the **Executive Engineer, Central Zone Office, In front of Muglisara, Surat- 395001** in the sealed envelope clearly marked following details

- on the envelope:
 - a. Name of Work
 - i. Name of Bidder with Address

Successful bidder has to sign and seal on each page of this document and submit it to this office as per intimation given by EIC.

Taxes

GST (Goods & Service Tax) has come in existence from 1st July, 2017. Survey agency / Successful Bidder is bound to pay any amount of GST prescribed by the Govt. of India as per the terms of Contract agreed upon during the course of execution of this Contract at the Rates prevailing at material time.

Recently R & B Department (Road & Building), Govt. of Gujarat vide their Resolution No. TNS / 102022 / 457 / C Dt. 05.04.2022, after considering the representation made by the Gujarat Contractor Association, had resolved that any tender floated after Dt. 25.04.2022, will be exclusive of GST. Following the said Resolution, Hon'ble Commissioner of Surat Municipal Corporation, upon the power vested to him under BPMC Act, 1949, had also decided to implement the said Resolution of R & B Department (Road & Building), Govt. of Gujarat to all the Tenders of SMC.

Therefore, this tender will be exclusive of the GST, if applicable. If during the course of execution of Contract, there is any Upward / Downward Revision of GST (Goods & Service Tax) by the Government, the same shall not be reimbursed / recovered separately by SMC. No Price Revision / Tax Reimbursement will be allowed under the contract due to change in the Tax Structure. No disputes will be considered / entertained in any case.

During the course of execution of Contract, if there is any change in GST/ rate of GST (Goods & Service Tax) by the Government, the same shall be reimbursed / recovered separately by SMC, subject to the submission of original Receipt / Proof for the amount actually remitted by the successful bidders/ Survey agency to the competent Authority along with a certificate from chartered Accountant of Survey agency/ Successful bidder certifying that the amount of GST paid to the Government and the same shall be intimated /submitted / claimed within 30(Thirty) Days from the date of payment. Remittance of GST within stipulated period shall be the sole responsibility of the Successful bidder /Survey agency, failing which, SMC may recover the amount due, from any other payable dues with SMC. Further the non payment of the GST to the Government may lead to the termination of contract and forfeiture of Security Deposit /Performance Guarantee Amount.

Further, to comply with the provision of CGST Act, 2017 & Rules made thereunder will be complete liability and responsibility of the Survey agency and SMC shall not be held responsible for any lapse / lacuna / non-compliance under GST Law.

The Survey agency must clearly mention their GST Registration number in their offers and Invoices indicating the Applicable Rates. In order to enable SMC to avail tax benefits like Input Tax Credit (ITC), the Survey agency shall ensure submission of GST Invoice as per the prescribed formats by the statutory authorities indicating both Survey agency as well as SMC GST Reg. Number.



The SMC will deduct the GST TDS under Section 51 of the CGST Act, 2017 @ Rate of 2% on payment made to Survey agency of Taxable Goods or Services, where the total value of such Supply or Services under individual contract is in excess of Rs 2.50 Lacs.

If any other new taxes / Duties / Levies / Cess or any other incidentals etc. are imposed or any increase in the existing Taxes / Duties / Levies / Cess or any other incidentals etc. (Excluding GST) are imposed during the course of the contract, the same shall be borne by Survey agency / successful bidder only, in no case SMC shall be liable for the same and obliged to reimbursed and no dispute regarding same shall be entertained by SMC.

Income Tax

Income tax at the rate of 10% (or at the prevailing rate) on the gross amount billed shall be deducted from the Survey agency's bills as per the Income Tax Act and relevant rules/laws from time to time prevailing.

Agreement

The successful bidder shall have to enter into an agreement, undertaking and surety bond on a non-judicial stamp paper of Rs. 300/- each.

Liquidated damages

In case of delay in execution of work, the liquidated damages at the rate of 0.2% of contract value per day subject to the maximum of 10% of the contract value, shall be payable by the Contractor to the Corporation towards compensation.

Quantity

The quantities given in the Bill of Quantities are estimated and provisional. The basis of payments shall be as per the actual quantities of work carried out, as measured by the survey agency and verified by the SMC/PMC/TPI and valued at the rates and prices inclusive of all taxes duties etc..

Force Majeure

Any delays in or failure of the performance of either part here to shall not constitute default hereunder or give rise to claims for damages, if any, to the extent such delays or failure of performance is caused by occurrences such as Acts of Gods or the public enemy; expropriation or confiscation of facilities by Government authorities, compliance with any order or request of any Governmental authorities, acts of war, rebelling or sabotage or fires, floods, explosions, riots or illegal strikes. The Survey agency shall keep records of the circumstances referred to above and bring these to the notice of the Engineer-In-Charge in writing immediately on such occurrences.

Forfeiture of Retention Money

Whenever any claim against the Survey agency for the payment of a sum of money arises out of or under the contract, the SMC shall be entitled to recover such sum by appropriating in part or whole of the retention money of the Survey agency. In case, the retention money is insufficient or if no retention money has been taken from the Survey agency, then the balance or the total sum recoverable, as the case may be, be deducted from any sum then due or which at any time thereafter may become due to survey agency. The Survey agency shall pay on demand any balance remaining due.



No Compensation for Alteration in or Restriction of Work

If at any time after the commencement of the work, the corporation shall for any reason whatsoever not require the whole or part thereof as specified in the tender to be carried out, the Engineer-In-Charge shall give notice in writing of the fact to the Survey agency, who shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been by reason of any alterations having been made in the original specifications, drawings, designs and instruction which shall not involve any curtailment of the works as originally contemplated.

Accident Liabilities

The Survey agency shall be responsible for all liabilities under workman compensation act and criminal liability under Indian penal code, as under:

- a) On occurrence of accident, resulting in death of workman employed by the Survey agency which is so serious as is likely to result in death of such workman who meet with accident, the Survey agency shall within 24 hours of accident, will intimate in writing to Engineer-In-Charge of such incidence. The Survey agency shall indemnify client, against all criminal liability and loses/damages sustained by the client resulting directly or indirectly from his failure to give such intimation to client including penalties/fines if any, payable by client as a consequence of client's failure to give notice under workman's compensation act or otherwise to conform the provision of this act in regard to such accidents.
- b) In case when such compensations as above becomes payable under workman's compensation act, whether by Survey agency or by client as principal employer, it shall be law full for the Engineer-In-Charge to retain out of money due and payable to the Survey agency, such sum or sums of money as may in the opinion of the Engineer-In-Charge be sufficient to meet such a liability, the opinion of the Engineer-In-Charge shall be final in regard to all matters arising under this clause.

Insurance

The Survey agency shall take necessary Insurance Policy for all workers and labours of survey agency and client working at site. The insurance policy so taken by the Survey agency for such purpose shall be in the joint name of the Survey agency and the client and the policy shall be deposited with the client.

Google Map



Signature of Authority of Survey Agency
with Seal

Executive Engineer
Central Zone
Surat Municipal Corporation
