



Panihati Municipality

Panihati , North 24 Parganas,

Pin no.- 700 114

Phone: 2553-2909/2563-4457

Fax : 2553-1487

Website- www.panihatimunicipality.in

Email ID- panihatimunicipality@yahoo.co.in

Tender no.-PM/PWD/Tender/2013-14/132

Date:- 08/11/13

Sealed Tender Paper in printed form, as specified, are invited by the Chairman, Panihati Municipality from reliable, resourceful and bonafied Agencies with Sound technical Capabilities having experience in similar type of work for **GIS Base Map preparation for Slum Free City Plan of Action (SFCPoA)** under **Rajib Awas Yojana (RAY)** at Panihati Municipality as detailed as per the Terms of Reference – Annexure A (Attached herewith)

Annexure-1

Sl. No.	Name of work	Estimated Amount (Rs.)	Estimated Total Cost (Inclusive of all tax, vat.etc.)	Earnest Money(in Demand Draft)	Time of Completion
1	GIS Base Map preparation for Slum Free City Plan of Action (SFCPoA) under Rajib Awas Yojana (RAY) at Panihati Municipality as per Terms of Reference, Annexure-A (Attached herewith)			2% of the estimated cost	2months (eight weeks)

Sl. No.	Criteria for the selection GIS Agency:
1	Previous experience of completing such GIS project.
2	Availability of required GIS and Remote Sensing Software
3	Availability of qualified and experienced GIS and Remote Sensing personal

Papers need to be furnished (for eligibility criteria):

Sl. No.	Criteria	Specification Details
1	Years of Service	Relevant years of service in the similar field.
2	Experience Statement	Relevant experience in India and West Bengal of similar nature.
3	Financial Statement	The firm should mention it's turnover for the last 3 years.
4	Company/Agency registration	The firm must be an Indian registered Firm.
5	Manpower details	The agency should have efficient manpower of its own for conducting the survey and should furnish detailed profile.
6	Documents to be submitted	Must Submit sales tax / VAT/ service tax / PAN
		Certificate of Incorporation and Trade license etc.
		Detailed company/Agency profile.

- ❖ **Last Date of Submission of Tender: 18.11.13 up to 1.00 P.M.**
- ❖ **Date of Opening of Tender: 18.11.13 at 3 P. M.**
- ❖ **Venue: PWD Section, Panihati Municipality**

Least quoted rate may not be the only selection criteria. Evaluation of the tenders received would be done on the overall basis of the Experience, rate/amount quoted, Qualifications, competence and practical experience of key staff in relevant assignment: Credentials etc.

Payment will be released only after satisfactory completion of the works, keeping aside a security deposit of 10% of the values of works for a period of six months from the date of completion.

Relevant documents & particulars may be seen during the office hours at this Office or through Municipal Website www.panihatimunicipality.in. Tender for the work along with requisite papers is to be submitted.

The Chairman, Panihati Municipality reserves the right to accept and or to cancel any/all tenders / quotations in full or in part without assigning any reason. No delayed tender will be accepted.

For any clarification pls. contact: Sri Prasun Sarkar, I.T.Coordinator(Mobile no.-9007970882)

Encl. - 1. Terms of Reference (Annexure-A)



Chairman
Panihati Municipality

(AUTHORISED SIGNATORY)

Copy forwarded for your kind information and necessary action -

1. *Sri M. N. Pradhan, IAS, Project Director, CMU, ILGUS Bhavan, HC Block, Kol-106*
2. *I.T. Expert, CMU, ILGUS Bhavan, HC Block, Kol-106 for website uploading (www.changeekolkata.org)*
3. *Executive Officer, Panihati Municipality*
4. *Finance Officer, Panihati Municipality*
5. *Assistant Engineer, Panihati Municipality*
6. *Cashier, Panihati Municipality*
7. *Notice Board, Panihati Municipality*
8. *Telmac Engineering Enterprises (for website uploading)*



Chairman
Panihati Municipality



Panihati Municipality

Panihati , North 24 Parganas,

Pin no.- 700 114

Phone: 2553-2909/2563-4457

Fax : 2553-1487

Website- www.panihatimunicipality.in

Email ID- panihatimunicipality@yahoo.co.in

Terms of Reference

Annexure A : GIS Base Map preparation for Slum Free City Plan of Action (SFCPoA) under Rajib Awas Yojana (RAY) at Panihati Municipality

Background -

Remote Sensing & Geographical information System (GIS) is a very important tool for modern urban planning and management. Essentially it integrates a large array of spatial and non spatial information with respect to various spatial information like Land use, Urban Services, Infrastructure and Socio-economic information. With the help of satellite based map and digital information all the required information are integrated in the GIS based urban management system. This not only helps to unify but also enable updating information as and when required with ease and accuracy. This information can also be made available to the citizens this has specific importance in the context of slums and informal settlements where accurate representation of the ground scenario with that of the socio-economic conditions of the people is a necessity for planning inclusively.

The basic requirement of the Slum Free City Plan of Action (SFCPoA) in RAY is to prepare a GIS base map at a suitable scale (preferably 1:5000) for the Panihati Municipal Area and it has noted that GIS data at various level is already available in Panihati Municipality. For preparation of new GIS data or completing the existing data to a complete geo-referenced base map, use of the latest technology such as high resolution satellite imageries and GPS is necessary. It is also important to mention that one of the GIS base map data layer “slum boundary” is under preparation by the Panihaty Municipality’s using GPS.

During the preparation of SFCPoA under RAY following spatial data/GIS base map related activities are envisioned;

Activity 1 : GIS Based map Preparation

Activity 2 : GIS Technical services during SFCPoA finalization

(Note : The current term of reference is only for Activity 1)

Scope of Work under Activity 1 is as follows:

1. Collection of existing all GIS data with the ULB and check the following:
 - a. Whether all GIS layers required for SFCPoA are present or not (Ref below)
 - b. Whether all layers are Geo referenced or not
 - c. Validate Slum boundary data collected through Global Positioning System (GPS), which is already available with ULB.
2. Geo-referencing (if the existing data is not Geo-referenced) and then checking of Geo-referenced data quality with the Cartosat-2 satellite imageries.



Panihati Municipality

Panihati , North 24 Parganas,

Pin no.- 700 114

Phone: 2553-2909/2563-4457

Fax : 2553-1487

Website- www.panihatimunicipality.in

Email ID- panihatimunicipality@yahoo.co.in

Terms of Reference

Annexure A : GIS Base Map preparation for Slum Free City Plan of Action (SFCPoA) under Rajib Awas Yojana (RAY) at Panihati Municipality

3. Interpretation/digitization of the Satellite imageries as per requirement of SFCoPA.
4. Cross checking if existing GIS data accuracy level including the collected geo-referenced ULB data by overlaying that on the procured satellite image.
5. Identifying mismatches between given satellite image and GIS data.
6. Identifying the gaps in existing GIS data, Layer by layer and feature by feature.
7. Digitization of the layers required for SFCoPA which is not provided by ULBs
8. Demarcation of planning Area and inclusion of likely extension of ULB area, if any on the image in consultation with the ULB
9. Updating of satellite image features which are not identifiable by their physical characteristics in the image with the help of ground truthing exercise.
10. Cleaning of the GIS data layers to resolve data redundancy and data inconsistency.
11. Creation of Topology in all the GIS layers to generate relation between objects in all the layers in GIS software.
12. Identification of demarcated slum area and vacant land on the base map done
13. Inputting unique slum ID of USHA survey data into each respective slum in the GIS environment.
14. Finalisation of city base map covering all the slums of the Planning Area (1:5000 scale) in GIS format using standardized reference frame.
15. The complete Geo-referenced GIS base map data are to be approved by Urban Planner/Technical person of the ULB in consultation with ULB RAY Nodal person.

Important SFCoPA base map layers are:

- Administrative boundary, Municipality; Planning Zone, Ward boundary
- Slum boundary
- Land use map covering all open/vacant lands (including within slum area) with their nature
- Transportation of Network, highways, roads, railways, lanes, ferry ghats
- Water bodies, canals, rivers etc.
- Important landmarks (temple, mosques etc.)
- Municipal/agglomeration boundary

Within Slum the following features may be demarcated:

- Community centres, anganwadis centres,
- Community toilets, schools, health clinics/post offices and
- Religious structures.



Panihati Municipality

Panihati , North 24 Parganas,

Pin no.- 700 114

Phone: 2553-2909/2563-4457

Fax : 2553-1487

Website- www.panihatimunicipality.in

Email ID- panihatimunicipality@yahoo.co.in

Terms of Reference

Other features that need to be captured in different layers included:

- Hospitals, health centers
- School, Educational Institutions
- Sanitation Public toilet
- Vat Garbage collecting point
- Important Commercial/industrial and non-household based features such as factories and manufacturing units.

Note: The above scope of work is indicative in nature and agency should ensure that GIS base map is complying with Guidelines issues by Ministry of Housing and Urban Poverty Alleviation (MoHUPA)

The Deliverables:

Complete GIS base map data

- 1) The characteristics of the GIS data would be; vectorised geo-referenced clean GIS data.
- 2) The Complete data will be in **.shp** format
- 3) Hardcopy in 1:5000 scale
- 4) The GIS base map should contain layers as specified above

Criteria for the selection pf GIS Agency:

- 1) Previous experience of completing such GIS project.
- 2) Availability of required GIS and Remote Sensing Software
- 3) Availability of qualified and experienced GIS and Remote Sensing personal

Table 1 : Payment Schedule

Deliverable	Time Period	Percent to Total
Inception Report containing the analysis of existing GIS data, gap analysis and geo-referencing of non geo-referenced data	End Week 2	25
Report on completion of GIS base map data	End Week 8	50
Approval of final SFCoPA		10
Total		100

Note: The payment shall be made only on the approval of reports by the ULB



Panihati Municipality

Panihati , North 24 Parganas,

Pin no.- 700 114

Phone: 2553-2909/2563-4457

Fax : 2553-1487

Website- www.panihatimunicipality.in

Email ID- panihatimunicipality@yahoo.co.in

Terms of Reference

General Terms and Conditions

- The Agency is accountable to the Panihati Municipality
- In the event of disputes between the parties, the decision of the Chairman of the Panihati Municipality shall be final towards resolving of the issue.
- Agency, agrees that, it shall not communicate to any person or other entity external to the Panihati Municipality on any unpublished information made known to them in the course of this task without written approval of Panihati Municipality and to indemnify the losses, if any, suffered by the Panihati Municipality on account of breach.
- If the work is abandoned by the Agency the Panihati Municipality the Panihati Municipality reserves the right to get the balance of the service done by another agency at the risk and cost of the Agency. The decision of the Panihati Municipality in this respect shall be final and binding to the agency.
- On the scrutiny of the information related to GIS Base Maps available with the Panihati Municipality, the agency shall prepare an inception report which should contain an outline of the residual assignment to be executed by the agencies to deliver GIS Base Map with required layers. A copy of the inception Report may be forwarded to CMU (Change Management Unit).

Time frame:

Time is of essence for this assignment and it is expected that total duration of the assignment shall be two months (eight weeks)

(AUTHORISED SIGNATORY)

On behalf of the Panihati Municipality

Chairman


Chairman
Panihati Municipality