



ENERGY MANAGEMENT CENTRE -KERALA

Department of Power, Government of Kerala

Thiruvananthapuram, Kerala – 695 017;

www.keralaenergy.gov.in

Expression of Interest for conducting topographic survey for Small Hydel Power Plants

Ref. No.:EMC/308/2021-JD-EOI-1

Date of Publishing	: -	25th July 2021
Final date for submission of EOI	: -	5th August 2021

The Expression of Interest may be sent to Director, Energy Management Centre-Kerala
Sreekrishna Nagar, Sreekariyam PO,

**NOTICE INVITING EXPRESSION OF INTEREST FOR CONDUCTING
TOPOGRAPHIC SURVEY FOR SMALL HYDEL POWER PLANTS**

About Energy Management Centre - Kerala (EMC)

Energy Management Centre – Kerala, Department of Power, Government of Kerala is the State Designated Agency to co-ordinate, regulate and enforce the provisions of the Energy Conservation Act 2001 and the Technical Secretariat for Small Hydro Power Development invites Expression of Interest (Eoi) from the reputed surveyors having experience in surveys having necessary Digital surveying equipment (using total station as specified) for doing the Topographical Surveys for development of Small/mini/micro hydropower projects, transmission cable route etc. The work may generally involve the following

1. Scope of work

Detailed Survey covering the entire project area at sufficient distances both upstream and downstream subjected to a minimum area of 2-3 acres considering all topographical changes for preparation of contour map of 1m contour interval and High Flood Level to be as ascertained from local enquiry. Actual spot location may be shown in the contour drawings (need not show extrapolating values generated by computer).

1.1 Longitudinal Section and Cross Section of river

L-section along the river from 200m upstream of weir up to 200m downstream of powerhouse or as specified by the Engineer-in-charge at 50m interval or at closer interval where topography changes due to rapids/fall etc. River cross sections at relevant points covering both banks at suitable interval to cover a vertical distance of 5m from the river bed or as specified by the Engineer-in-charge shall be provided. Contour map to be prepared at 1m contour interval.

1.2 Weir site

Grid levels at 5m C/C for 20m upstream and 20m downstream of weir axis (location to be shown by the Engineer-in-charge) for covering a vertical distance of 10m from river bed or up to 5m above HFL whichever is higher on both banks. Contour map to be prepared at 1m contour interval.

1.3 Water Conductor system

Strip levels of 5m width for water conductor system at 10m intervals along river bank starting at 2m above the river bed level at weir axis contour(same level) up to location of forebay/surge shaft (location to be shown by the Engineer-in-charge) and from forebay to Power House in slope for penstock.

1.4 Power House (at location as may be proposed by engineer in charge)

An area of up to 50mX50m above HFL near river bank with grid level of 5m or closer C/C. Contour map to be prepared at 1m interval. If GTs Bench mark is available nearby location (details like location and value to be provided) same is to be carried to the weir site,

FILE No.EMC/308/2021-JD

Power House site etc and provided temporary Bench marks at suitable location and topographical survey should be carried out based on GTs value .Otherwise, a suitable arbitrary value to be adopted as decided by the competent authority.

After preliminary surveys and preparation of draft drawing, the surveyor has to prepare final drawing furnishing the details as per the directions of EMC officials.

Survey works should also show all salient features like firm banks, rock, outcrops, deep channels, large shoals, important land marks, all existing structures and electrical poles etc. The survey work may have to be carried out in remote areas wherein motorable access may not be available. Surveying team may have to walk to the site at certain location and if required stay close to the surveying site in case the work involves multiple days of work. Also surveying team may have to do repeated survey to fix salient features on ground subsequent to the initial survey and after table study on the submitted draft survey drawings.

2. General conditions:

- a) Individual work order will be issued for each site at the L1 rates (base rate excluding travel) received. Other parties may also be given opportunity to provide service at the L1 rate if they are willing to take up work at the rate for future projects
- b) The survey works are to be commenced within one week after acceptance of individual work order as per the directions of EMC officials and should be completed within a maximum of ten days' time.
- c) The survey team should carry out the work as per the instructions of the EMC officials.
- d) The interested surveying teams shall quote for individual locations with variation only on travel and allied expenses (journey to nearest 4-wheeler location & local conveyance to location near site). Hence a split-up demarcating cost towards surveying work and expenses including, labour, food, etc. and service taxes and duties shall be provided.

3. Identified site(s)

List of preliminarily identified projects are given below. More projects are expected in different parts of the state. The rates provided in this EoI may be utilized in future works of similar nature.

Sl.No.	Sites	Location
1	Total Station survey work for feasibility assessment and DPR preparation of a micro hydel project to electrify three un-electrified tribal settlements in Buffer zone of Silent valley National Park and Attappady reserve forest area	Thudukki tribal area, near Mukkali Within 11°8'N, 76°28'E - 11°10'N, 76°29'E Project location (approximate) - 11° 9'24.48"N, 76°30'37.64"E

FILE No.EMC/308/2021-JD

Interested parties may send their expression of interest along with financial offer (at unit rate per day of work and/or per acre of survey basis) in the prescribed format, in covers superscribing “Expression of Interest for conducting topographic survey for small hydel power plants” by Post, along with Annexures, so as to reach to The Director, Energy Management Centre - Kerala, Sreekrishna Nagar, Sreekariyam PO on or before 5 pm, 5th August 2021 or scanned copy of the same by email to emck@keralaenergy.gov.in by the specified time. Offers received later to the said dates may not be accepted for identified site above, but may be considered in future works.

Documentary evidence of all the information are to be furnished along with the offer and all the pages of the terms & conditions and documents submitted are to be signed by authorized signatory with the seal of the firm.

**Sd/-
Director**

ANNEXURE-I

APPLICATION FOR APPOINTMENT OF SURVEYORS

1	Name of the Firm	
2	Registered address with Email Address, Phone, Fax No	
3	Branch office(s) address, Email Address ,Phone, Fax No	
4	Registration No	
5	Date of Registration	
6	Total years of experience of Firm	

2. Firm’s experience in conducting topographical surveys

Sl. No.	Name of Project	Year of study	Remarks

Certificate

I/We....., undersigned, hereby certify that all the information mentioned above is true and correct.

Date:

Place:

Sign:

Name & Designation:

List of documents, duly sealed & signed by partner of the applicant firm, required to be submitted with application:

- a) Copy of Registration Certificate.
- b) Details of experience.
- c) Details of Instruments owned by the firm.