



सत्यमेव जयते

**GOVT. OF WEST BENGAL  
OFFICE OF THE EXECUTIVE ENGINEER  
ALIPURDUAR IRRIGATION DIVISION  
COLLEGE HALT, ALIPURDUAR**

**Memo. No- 24**

**Dated – 04.01.2017**

**N.I.Q.No- 02 of 2016-17 of Executive Engineer, Alipurduar Irrigation Division**

Sealed quotation in plain paper are hereby invited for preparation of estimate in connection with the work “Extension of Sisamara embankment along the right bank of river Sisamara at its upstream portion in Salkumar-I G.P, Block- Alipurudal-I, P.O & Dist. Alipurduar ” by the undersigned for the following supply from the bonafide suppliers/ Manufacturers having experience in such type of supply works which will be received up to 3.00 p.m. on 16.01.2017 and the same will be opened at 3.30 p.m. on same day in presence of the participating suppliers who will present at the time.

Sl. No	Description of item	Qty	Unit	Rate including all taxes (If any)
1	<p>Supply of Geo synthetics Reinforced Wall (GRW) Chain of 30 M Length as per specification below.</p> <p>a) Vertical height 6 feet &amp; bottom width 8 feet; 35 Chambers @3' x 3' make one Chain – 105 feet long; interconnected baffle walls and peripheral surfaces of HSP. Manufactured with minimum 20p laminated film.</p> <p>b) Ultimate tensile strength of 27 Kn/m in CD/MD as per ASTM D4595;</p> <p>c) Wide width tensile elongation of 17%;</p> <p>d) Trapezoidal tear of 445 N (ASTM D4533);</p> <p>e) Mullen burst of 2930 KPa (ASTM D3786);</p> <p>f) Permittivity of 0.05 /sec (ASTM D4491);</p> <p>g) UV of min 70% @500 hours (ASTM G154);</p> <p>All above values are MARV except UV which is TYP of the agreed primary sample lot and all are deduced as per sampling procedures defined in ASTM D4354 for all 3-levels of testing. The trap-bag shall have 3'x3' top opening for filling and vertical height of 6' in the back and tapering off into a slope in front which ends in 1' vertical drop to meet the bottom layer measuring 8' from the rear vertical face. 35 such chambers form one chain with water-proof joining arrangements at its both ends that shall end in flaps to cover the first cell of the connected chain. Stitching (as per ASTM D4884) shall be along the cellular periphery only with not less than 300 denier PET thread while ensuring the bends are curves and not rectangles, extending into subsequent stitch lines upto a distance sufficient enough to ensure homogenous bond strength.</p>	1 No	Each	
2	<p>Supply of 430 GSM Woven PPMF Black Geo textile Rolls (Composite for cushion), as per specification below.</p> <p>a) Mass per unit area (ASTM D5261) :430 GSM</p> <p>b) Thickness (ASTM D5199) :1.2 mm</p> <p>c) Tensile strength(ASTM D4595) : warp 100 KN/m and weft 75 100 KN/m</p> <p>d) Elongation at break (ASTM D4595) : warp 25% and weft 25%</p> <p>e) Trapezoid Tear Strength(ASTM D4533) : warp 3000N and weft 3000N</p> <p>f) Grab Tensile strength (ASTM D4632): warp 2500N and weft 2500N</p> <p>g) Apparent opening size(090) (ASTM D4751) : 425µm</p> <p>h) CRB puncture strength(ASTM D6241) : 8000 N</p> <p>i) Index puncture Resistance(ASTM D4833) : 1000 N</p> <p>j) Water Permeability(ASTM D4491) : 35 /sqm/s</p> <p>k) UV resistance ( 500Hrs) (ASTM D4355) : 80%</p>	1 Sqm	Sqm	

**Contd. to page-2**

Sl. No	Description of item	Qty	Unit	Rate including all taxes (If any)
3	<p>Supply of 350 GSM Geo Composite Mega Bags (2M x1.5M) as per specification.</p> <p><b>a) Woven geo textile for the outer cover</b></p> <p>The woven geo textile is woven with UV resistant silt film tape fiber with MARV value of the following properties. It should resist UV degradation rotting and biological degradation naturally encountered acids and alkalis.</p> <p>i) Mass per unit area (ASTMD5261) : 210 g/sqm</p> <p>ii) Wide width tensile strength Machine direction (ASTMD4595) : 28KN/m</p> <p>iii) % elongation at failure in machine direction (ASTMD4595) : 22%</p> <p>iv) Trapezoidal tear strength (ASTMD 4533): &lt;450 N</p> <p>v) Puncture resistance (ASTMD 4533): &gt;500 N</p> <p>vi) Permittivity (ASTMD 4491) : 0.035 S-1</p> <p>vii) Water flow (ASTMD 4491) : 150 lit/min/sqm</p> <p>viii) AOS (ASTMD 4751) : 0.450mm</p> <p>ix) UV resistance (ASTMD4355) : 70% per 500 hours</p> <p><b>b) Non Woven geo textile for the outer cover</b></p> <p>It is needle punched non woven geo textile made of 100% polypropylene staple fibers which are formed into a random network for dimensional stability. It should resist UV degradation rotting and biological degradation, naturally encountered acids and alkali.</p> <p>i) Mass per unit area (ASTMD5261) : 140 g/sqm</p> <p>ii) Wide width tensile strength Machine direction (ASTMD4595) : 6.50KN/m</p> <p>iii) % elongation at failure in machine direction (ASTMD4595) : &gt;50%≤85%</p> <p>iv) Trapezoidal tear strength (ASTMD 4533): 190N</p> <p>v) Puncture resistance (ASTMD 4533): 350N</p> <p>vi) Permittivity (ASTMD 4491) : 1.25 S-1</p> <p>vii) Water flow (ASTMD 4491) : 3500 lit/min/sqm</p> <p>viii) AOS (ASTMD 4751) : 0.280mm</p> <p>ix) UV resistance (ASTMD4355) : 70% per 500 hours</p> <p><b>c) Details of yarn for stitching for the geo bags</b></p> <p>i) Type of yarn polyester/ polypropylene/nylon ( Multifilament twisted)</p> <p>ii) Denier-2500-3000</p> <p>iii) Strength 10 to 15kg</p> <p>iv) Type of stitch: Chain stitch (twin / double seams)</p> <p>v) Stitches: 8 to 12 stitch/100m</p> <p>All the above values are MARV, excluding AOS calculated with 60 specimens made out of 10samples as per ASTM D 4354 and interpreted as per ASTM D 4439.</p>	1 No	Each	

Quotation must be submitted with self attested Xerox copy of PAN, Professional Tax, Trade license, VAT registration certificate, Experience certificate etc.

The intending quotationers will have to quote their rates both in figure & word for the specified item of work in accordance with the specification, terms & conditions given above.

Executive Engineer  
Alipurduar Irrigation Division  
College Halt, Alipurduar

Memo. No- 24/10

Dated – 04.01.2017

Copy forwarded to the:-

- 1 ) Superintending Engineer , North East Irrigation circle –I, Debibari , Coochbehar (in duplicate).
- 2) Chairman, Alipurduar Municipality, Alipurduar.
- 3) Executive Engineer, Alipurduar Construction Division (P.W.D), Alipurduar.
- 4-6) Sub-Divisional Officer, Alipurduar /Kamakhya guri Irrigation Sub-Division and Alipurduar Investigation Sub-Division.
- 7-8) Sr. Divisional Accountants Officer/ Estimator
- 9) Office Notice Board.
- 10) Secretary, Contractors' Association, Alipurduar.
- 11) Executive Engineer, DVC Study Cell, Jhalasampad Bhawan, Kolkata-91- He is requested to publish the same in the departmental website.

Executive Engineer  
Alipurduar Irrigation Division  
College Halt, Alipurduar