

**Corrigendum - II**

**Project: Assam Integrated River Basin Management Program (AIRBMP)**

**Ref. no.: WRD\_GOODS3\_EMERGENCY\_BEKI&BURIDEHING**

**Assignment Title: PROCUREMENT OF GEOBAG, GEO-SHEET, SEWING THREAD INCLUDING FILLING MATERIALS OF SAND.**

Clause ref. no.	REOI Conditions	Additional clauses may be read as
	<b>Last Date of submission and opening of Bid is 04.04.2023.</b>	<b>Last Date of submission and opening of Bid is extended to 11.04.2023.</b>
	<b>Delivery Period of Geo-materials is 30 days.</b>	<b>Delivery Period of Geo-materials is 45 days.</b>
1.2.1	<p><b>1.2.1: Technical Specification</b>            Supply of non-woven Geo-textile fabric sheets of 300 GSM manufactured from 100% virgin Polypropylene (PP) fiber with minimum properties as per IS 16653: 2017            (1) Wide Tensile strength (MD) <math>\geq 15\text{KN/m}</math> &amp; Wide Tensile strength (CD) <math>\geq 15\text{KN/m}</math>            (ii) Elongation (MD) <math>\geq 50\%</math> &amp; Elongation (CD) <math>\geq 50\%</math>            (iii) Abrasion <math>\geq 95\%</math>            (iv) Trapezoidal Tear Strength (MD) <math>\geq 340\text{ N}</math> &amp; Trapezoidal Tear Strength (CD) <math>\geq 340\text{N}</math>            (v) CBR Puncture strength <math>\geq 3000\text{ N}</math>            (vi) Permittivity <math>\geq 1.25\text{ s-1}</math>            (vii) Permeability <math>\geq 60\text{l/m}^2/\text{sec}</math>            (viii) AOS <math>\leq 75\text{micron}</math>            (ix) UV Resistance @500 hours retained Tensile strength (MD) &amp; (CD) <math>\geq 80\%</math>            (x) Mass <math>\geq 300\text{gm/m}^2</math>            (xi) Thickness at 2KPa <math>\geq 3\text{mm}</math>.            Each Roll of Geo Fabric Sheet (approximately 400 sqm to 600 sqm per roll) should be supplied in properly packed <b>Bundles</b> and should be marked with the Name of Manufacturer, Batch Number &amp; its dimensions clearly on each roll with "WRD Govt of ASSAM" to be printed on it and mentioning properly the GSM and type of polymer and Test</p>	<p><b>1.2.1: Technical Specification</b>            Supply of non-woven Geo-textile fabric sheets of 300 GSM manufactured from 100% virgin Polypropylene (PP) fiber with minimum properties as per IS 16653: 2017            (i) Wide Tensile strength (MD) <math>\geq 15\text{KN/m}</math> &amp; Wide Tensile strength (CD) <math>\geq 15\text{KN/m}</math>            (ii) Elongation (MD) <math>\geq 50\%</math> &amp; Elongation (CD) <math>\geq 50\%</math>            (iii) Abrasion <math>\geq 95\%</math>            (iv) Trapezoidal Tear Strength (MD) <math>\geq 340\text{ N}</math> &amp; Trapezoidal Tear Strength (CD) <math>\geq 340\text{N}</math>            (v) CBR Puncture strength <math>\geq 3000\text{ N}</math>            (vi) Permittivity <math>\geq 1.25\text{ s-1}</math>            (vii) Permeability <math>\geq 60\text{l/m}^2/\text{sec}</math>            (viii) AOS <math>\leq 75\text{micron}</math>            (ix) UV Resistance @500 hours retained Tensile strength (MD) &amp; (CD) <math>\geq 80\%</math>            (x) Mass <math>\geq 300\text{gm/m}^2</math>            (xi) Thickness at 2KPa <math>\geq 3\text{mm}</math>.            Each Roll of Geo Fabric Sheet (approximately 400 sqm to 600 sqm per roll) should be supplied in properly packed <b>in rolls</b> and should be marked with the Name of Manufacturer, Batch Number &amp; its dimensions clearly on each roll with "WRD Govt of ASSAM" to be printed on it and mentioning properly the GSM and type of polymer and Test Certificate from approved NABL accredited and ISO</p>

	Certificate from approved NABL accredited and ISO Certified Laboratory should invariably be submitted against <b>per roll.</b>	Certified Laboratory should invariably be submitted <b>against frequency mentioned.</b>												
4.1	<p>4.1. <i>Technical Values and Test Standards:</i> The properties of the Geo-Textile to be delivered to the Site shall be tested according to the relevant standards in their latest version and meet or exceed the technical values of the following table:</p> <table border="1"> <thead> <tr> <th>Properties</th> <th>Test Standard</th> <th>Test Values</th> </tr> </thead> <tbody> <tr> <td>Permeability, (velocity index for a head loss of 50mm - <math>v_{H50}</math>)</td> <td>IS 16653:2017</td> <td><math>\geq 45</math> lt/m<sup>2</sup>/s</td> </tr> </tbody> </table> <p>*1: in case of non-isotropic material, value should be <math>\geq 14</math> kN/m for machine direction</p>	Properties	Test Standard	Test Values	Permeability, (velocity index for a head loss of 50mm - $v_{H50}$ )	IS 16653:2017	$\geq 45$ lt/m <sup>2</sup> /s	<p>4.2. <i>Technical Values and Test Standards:</i> The properties of the Geo-Textile to be delivered to the Site shall be tested according to the relevant standards in their latest version and meet or exceed the technical values of the following table:</p> <table border="1"> <thead> <tr> <th>Properties</th> <th>Test Standard</th> <th>Test Values</th> </tr> </thead> <tbody> <tr> <td>Permeability, (velocity index for a head loss of 50mm - <math>v_{H50}</math>)</td> <td>IS 16653:2017</td> <td><math>\geq 40</math> lt/m<sup>2</sup>/s</td> </tr> </tbody> </table> <p>*1: in case of non-isotropic material, value should be <math>\geq 14</math> kN/m for machine direction</p>	Properties	Test Standard	Test Values	Permeability, (velocity index for a head loss of 50mm - $v_{H50}$ )	IS 16653:2017	$\geq 40$ lt/m <sup>2</sup> /s
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1.1.1	<p><b>Technical Specification:</b> Supply of Geo-textile bags of type-A (1.03 × 0.70M) inner to inner made of Geo-textile non-woven fabric sheets of 400 GSM manufactured from 100% virgin Polypropylene (PP) fiber with minimum properties as per IS 16653: 2017</p> <p>(i) Wide Tensile strength (MD) <math>\geq 20</math>KN/m &amp; Wide Tensile strength (CD) <math>\geq 20</math> KN/m  (ii) Elongation (MD) <math>\geq 50\%</math> &amp; Elongation (CD) <math>\geq 50\%</math>  (iii) Abrasion <math>\geq 95\%</math>  (iv) Trapezoidal Tear Strength (MD) <math>\geq 450</math>N &amp; Trapezoidal Tear Strength (CD) <math>\geq 450</math>N  (v) CBR Puncture strength <math>\geq 4000</math>N  (vi) Permittivity <math>\geq 1.10 \times 10^{-1}</math>  (vii) Permeability <math>\geq 40</math>l/m<sup>2</sup>/sec  (viii) AOS <math>\leq 75</math>micron  (ix) UV Resistance @500 hours retained Tensile strength</p>	<p><b>Technical Specification:</b> Supply of Geo-textile bags of type-A (1.03 × 0.70M) inner to inner made of Geo-textile non-woven fabric sheets of 400 GSM manufactured from 100% virgin Polypropylene (PP) fiber with minimum properties as per IS 16653: 2017</p> <p>(i) Wide Tensile strength (MD) <math>\geq 20</math>KN/m &amp; Wide Tensile strength (CD) <math>\geq 20</math> KN/m  (ii) Elongation (MD) <math>\geq 50\%</math> &amp; Elongation (CD) <math>\geq 50\%</math>  (iii) Abrasion <math>\geq 95\%</math>  (iv) Trapezoidal Tear Strength (MD) <math>\geq 450</math>N &amp; Trapezoidal Tear Strength (CD) <math>\geq 450</math>N  (v) CBR Puncture strength <math>\geq 4000</math>N  (vi) Permittivity <math>\geq 1.10 \times 10^{-1}</math>  (vii) Permeability <math>\geq 40</math>l/m<sup>2</sup>/sec  (viii) AOS <math>\leq 75</math>micron  (ix) UV Resistance @500 hours retained Tensile strength (MD) &amp; (CD) <math>\geq 80\%</math></p>												

	<p>(MD) &amp; (CD) <math>\geq 80\%</math>  (x) Mass <math>\geq 400 \text{ gm/m}^2</math>  (xi) Thickness at 2 KPa <math>\geq 3 \text{ mm}</math>  (xii) Seam strength <math>\geq 80\%</math> of actual fabric strength.  Stitching of Bags should be <b>Ring Spun Yarn</b> stitches with <b>2500-3000 denier</b> double line chain stitch with overlap with stitches along the edge @ minimum 15 stitches per 100mm.  Bags are to be supplied of 100 numbers in a bundle, properly packed with each bag having proper tag with name of Manufacturer, Batch Number, the GSM, and type of polymer encrypted and stitched on top corner and each bag is to be marked with "WRD Govt of ASSAM" to be printed distinctly. Test Certificate from approved NABL accredited and ISO (Certified Laboratory) should invariably be submitted against per bundle/bale (approx. 100 Nos) of material.</p>	<p>(x) Mass <math>\geq 400 \text{ gm/m}^2</math>  (xi) Thickness at 2 KPa <math>\geq 3 \text{ mm}</math>  (xii) Seam strength <math>\geq 80\%</math> of actual fabric strength.  Stitching of Bags should be <b>PPMF yarn / thread</b> stitches with <b>2000 denier</b> double line chain stitch with overlap with stitches along the edge @ minimum 15 stitches per 100mm.  Bags are to be supplied of 100 numbers in a bundle, properly packed with each bag having proper tag with name of Manufacturer, Batch Number, the GSM, and type of polymer encrypted and stitched on top corner and each bag is to be marked with "WRD Govt of ASSAM" to be printed distinctly. Test Certificate from approved NABL accredited and ISO (Certified Laboratory) should invariably be submitted against per bundle/bale (approx. 100 Nos) of material.</p>
3.1. a. iii.	<p>The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement:  1. ISO Certification of following items:  (a) Geo-textile bags of type-A (1.03 × 0.70M)  (b) Sewing Thread/Yarn PPMF stitching thread  (c) Supply of non-woven Geo-textile fabric sheets of 300 GSM manufactured from 100% virgin Polypropylene (PP) fibre</p>	<p>The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement:  1. ISO Certification of the Manufacturer and Company as a whole</p>
3.1	<p>The Geo-Textile fabric manufacturer shall undertake all tests in independent, ISO accredited test laboratories, acceptable to the Purchaser. For example, the following institutions or their equivalent may be considered for undertaking sample tests:  (i) India GAI-LAP ii) CSMRS, New Delhi.  Others can be found in  <a href="http://www.apparesearch.com/testing_labs.html">http://www.apparesearch.com/testing_labs.html</a></p>	<p>The Geo-Textile fabric manufacturer shall undertake all tests in independent, ISO and NABL accredited test laboratories in India, acceptable to the Purchaser.</p>

**Sd/-**  
Chief Engineer  
Water Resources Department  
AWC, Basistha Guwahati 29

**GOVERNMENT OF ASSAM  
ASSAM INTEGRATED RIVER BASIN MAMAGEMENT PROJECT (AIRBMP)  
NATIONAL OPEN COMPETITIVE PROCUREMENT  
(Two-Envelope Bidding Process with e-Procurement)  
FOR PROCUREMENT OF GEOBAG, GEO-SHEET, SEWING THREAD INCLUDING  
FILLING MATERIALS OF SAND.  
RFB No. : WRD\_GOODS3\_EMERGENCY\_BEKI&BURIDEHING**

**REPLY TO QUERIES BY WRD ON THE POINTS SEEKING CLARIFICATION BY SKAPS  
INDUSTRIES INDIA PVT. LTD.**

<b>The corrigendum published and uploaded dtd. 28.03.2023 will reflect the necessary amendment against sl. No. 4, 5, 13, 14, 16, 17)</b>						
Sl. No.	Page no.	Section	Point no.	In tender documents	Seeking Clarification	Reply by WRD to the queries raised
1	39	III - Evaluation and Qualification Criteria	1/ 1.1 / (a)/ (i) - Financial Capability	<p>The Bidder shall furnish documentary evidence that it meets the following financial requirement(s):  Minimum annual turnover in any two financial years of the last five Financial Years shall be Rs. 254.83 Lakh and shall be given as tabulated below.</p> <p>The Annual Turnover shall be supported by the relative documents and shall be certified by CA.</p>	Is Annual T/O certificate by CA is enough documentary evidence to prove the Financial Capability? Or we need to attach Annual Reports to Justify that?	Annual turn-over by the bidder shall be submitted in tabulated form given in the RFB and shall be supported by the relevant documents namely audited balance sheet and statement of profit and losses and shall be certified by a Nationalised bank/CA.

2	39/40	III - Evaluation and Qualification Criteria	1/ 1.1 / (a)/ (ii) - Experience and Technical Capacity	<p>The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s):</p> <p>The Bidder must have satisfactorily completed supply contracts of similar goods for at least the quantity stipulated in Section VII-Schedule of Requirements in any one of the last three years preceding the date of bid submission.</p>	<p>Is Supply Completion certificate with Date of Completion as 17th October 2020, of which the supply commenced in November 2018 is valid for this qualification criteria.</p>	<p>It has to be any one year of the last three years preceding the date of bid submission.</p> <p>The year mentioned by the bidder does not fully comply the condition.</p>
3	39/40	III - Evaluation and Qualification Criteria	1/ 1.1 / (a)/ (ii) - Experience and Technical Capacity	<p>The Bidder must have a continuous production/supply of similar goods amounting to at least 3 times the quantity stipulated in Section VII-Schedule of Requirements mentioned above in the last three years</p>	<p>Seeking clarification that, What are the documents required to submit to prove this criteria. Also, what if, we do not have any you can we can prove our capacity to produce and supply regardless of this condition, as we do have only Tender awarded in JUNE 2021 for 1,13,500 nos. of similar goods.</p>	<p>Bidders shall submit Agreement, supply order, and completion/satisfaction certificate.</p> <p>Tender award mentioned by the bidder does not fulfil the ITB 37.1 (ii) condition of the RFB.</p>

4	40	III - Evaluation and Qualification Criteria	1/ 1.1 / (a)/ (iii) - Documentary Evidence /1.	The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement:1. <b>ISO Certification of following items:</b> (a) Geo-textile bags of type-A (1.03 × 0.70M)(b) Sewing Thread/Yarn PPMF stitching thread(c) Supply of non-woven Geo-textile fabric sheets of 300 GSM manufactured from 100% virgin Polypropylene (PP) fibre.	We can provide our ISO certificate representing company as whole with scope mentioned in to it.	Accepted.
5	40	III – Evaluation and Qualification Criteria	1/ 1.1 / (a)/ (ii) – Documentary Evidence /2	2. Documents evidencing that the goods meet the Test Standards mentioned in Para 4 of Technical Specifications in Section VII.	Technical specifications given on page no. 67/68 as well as on page no. 69 – please confirm which is to be considered.	Technical specifications mentioned in Page 67 (Geo-textile bags), page 68 (geo-fabric sheets) and page 69 (Technical Values and Test Standards of geo-textiles) – all shall prevail.  Water Permeability given on page no. 67 and 68 shall prevail.

						In page 69, it shall be read as $\geq 40$ lt/m <sup>2</sup> /s in the table instead of $\geq 45$ lt/m <sup>2</sup> /s, which conforms to table 1 (clause 4.1.1) at page no.2 of IS 16653:2017.
6	40	III - Evaluation and Qualification Criteria	1/ 1.1 / (b)/ If the bidder is not manufacturer	If a Bidder is not a manufacturer, but is offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form	Is that accepted, if we furnish the documents of <b>Sewing Thread manufacturer - Manufacturers Authorization</b>	Bid Conditions shall prevail.  Please see Bidding Forms in Section IV of the RFB which also includes Manufacturer's Authorization form (No. 6)
7	56	IV- Bidding Forms	7. DECLARATION for Claiming Excise Duty Exemption	Provided FORM states the Exemption of Excise Duty Exemption	We seek for Letter Exemption of CUSTOM DUTY as we are in SPECIAL ECONOMIC ZONE of INDIA, to avail CUSTOM DUTY WAIVER.	Bid Conditions shall prevail.  Please use the Form if you require.
8	67/68	Section VII - Schedule of Requirements	2. Technical Specifications 1.1.1 Technical Specification - TYPE A Geobags.	Page no. 67 & Page no. 69	Please clarify which page to be followed for the technical specification of TYPE A Geobags.	Technical specifications given in page no. 67.
9	67		2. Technical Specification 1.1.1	Stitching of bags should be Ring Spun yarn with 2500-3000 denier	PPMF 2000 denier as per page 33, section-II BDS	In 1.1.1 of Technical Specification, "Ring Spun Yarn stitches with 2500-

			Technical Specification			3000 denier" shall be read as " <b>PPMF 2000 denier yarn / thread</b> "
10	67		2. Technical Specification 1.1.1 Technical Specification	Minimum 15 stitches per 100mm	3.7 to 3.8 stitches per inch is minimum, whereas chances to exceed 3.8 in few cases.	Bid condition will prevail. (3.7 to 3.8 stitches per inch equals to approximately 15 stitches per 100mm)
11	68		2. Technical Specifications 1.2.1 Technical Specification - Geotextile Filter fabric Sheet	(xi)Thickness at 2KPa $\geq$ 3mm	The required Thickness of 300 GSM Geotextile seems to be higher compared to the other product TYPE A GEOBAG of 400 GSM i.e. thickness is directly proportional to GSM	Bid condition shall prevail. This specification is for Geo-Textile Filter Sheets.  Thickness at 2 kPa $\geq$ 3mm conforms to table 1 (clause 4.1.1) at page no.2 of IS 16653:2017.
12	68			Thickness at 2kPa >3mm	Thickness at 2.2 to 2.5mm	Bid condition will prevail.  Minimum thickness shall be 3mm at 2kPa
13	68			Properly packed bundles	It is packed in roll form	In 1.2.1, "bundles" shall be read as "in rolls".
14	68		1.2.1 Technical Specification	Test certificate from approved NABL lab against per roll	20000 sq.mtr. as per 73 point 9.1	Sample testing per 20,000 sqm of geo-fabric sheets shall be accepted as per clause 9.1 at page 73.



15	68		<p>2. Technical Specifications 1.2.1 Technical Specification - Geotextile Filter fabric Sheet</p>	<p>Each Roll of Geo Fabric Sheet (approximately 400 sqm to 600 sqm per roll) should be supplied in properly packed Bundles and should be marked with the Name of Manufacturer, Batch Number &amp; its dimensions clearly on each roll with “WRD Govt of ASSAM” to be printed on it and mentioning properly the GSM and type of polymer and Test Certificate from approved NABL accredited and ISO Certified Laboratory should invariably be <b>submitted against per roll</b></p>	<p>In contradiction to statement on page no. 73 - Frequency of Quality Control by the Manufacturer/Supplier: The Supplier shall undertake sampling and testing of all mechanical and hydraulic properties listed in the specifications under Clause 4 above, (excepting those named in clause 9.2), at a frequency of not less than every 20,000 m<sup>2</sup> of Geo-Textile fabrics manufactured for the purpose of making Geo-Textile bags or Geo-Textile Filter Sheets</p>	<p>Sample testing per 20,000 sqm of geo-fabric sheets shall be accepted as per clause 9.1 at page 73.</p>
16	68		<p>2. Technical Specifications 2. Sampling and Testing</p>	<p>The Geo-Textile fabric manufacturer shall undertake all tests in independent, ISO accredited test laboratories, acceptable to the Purchaser. For example, the following institutions or their equivalent may be</p>	<p>We request you to add ATIRA - Ahmedabad Textile Industries Research Association as entity to perform Third party Tests, if required you can visit the same for the approval based.</p>	<p>Test Reports from any laboratory in India accredited by NABL and ISO Certified Laboratory shall invariably be submitted against per roll.</p>

				considered for undertaking sample tests: i). India GAI-LAP ii) CSMRS, New Delhi		
17	69		4.3 Technical values and Test Standards	Permeability 50mm 45 l/sq.m/s	40 l/sq.m/s as per page 67	Water Permeability shall be read as $\geq 40$ lt/m <sup>2</sup> /s in the table at page no. 69 instead of $\geq 45$ lt/m <sup>2</sup> /s, which conforms to table 1 (clause 4.1.1) at page no.2 of IS 16653:2017.

**Sd/-**  
Additional Chief Engineer  
EAP Wing, W.R. Department  
AWC, Basistha Guwahati 29