



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
PWGSC/TPSGC Acquisitions
1045 Main Street
1st Floor, Lobby C
Unit 108
Moncton, NB E1C 1H1
Bid Fax: (506) 851-6759

Revision to a Request for a Standing Offer

Révision à une demande d'offre à commandes

Regional Individual Standing Offer (RISO)

Offre à commandes individuelle régionale (OCIR)

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Offer remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'offre demeurent les mêmes.

Comments - Commentaires

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

NB / PEI Division - Moncton Acquisitions Office
1045 Main Street
1st Floor, Lobby C
Unit 108
Moncton, NB E1C 1H1

Title - Sujet OCIR - Articles de quincaillerie		
Solicitation No. - N° de l'invitation W6837-175318/A		Date 2017-04-18
Client Reference No. - N° de référence du client W6837-175318		Amendment No. - N° modif. 004
File No. - N° de dossier MCT-6-39096 (011)	CCC No./N° CCC - FMS No./N° VME	
GETS Reference No. - N° de référence de SEAG PW-\$MCT-011-5279		
Date of Original Request for Standing Offer Date de la demande de l'offre à commandes originale		2017-03-10
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2017-04-24		Time Zone Fuseau horaire Atlantic Daylight Saving Time ADT
Address Enquiries to: - Adresser toutes questions à: Sharpe, Charlene A.		Buyer Id - Id de l'acheteur mct011
Telephone No. - N° de téléphone (506) 851-3467 ()	FAX No. - N° de FAX (506) 851-6759	
Delivery Required - Livraison exigée		
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction:		
Security - Sécurité This revision does not change the security requirements of the Offer. Cette révision ne change pas les besoins en matière de sécurité de la présente offre.		

Instructions: See Herein

Instructions: Voir aux présentes

Acknowledgement copy required Accusé de réception requis	Yes - Oui <input type="checkbox"/>	No - Non <input type="checkbox"/>
The Offeror hereby acknowledges this revision to its Offer. Le proposant constate, par la présente, cette révision à son offre.		
Signature	Date	
Name and title of person authorized to sign on behalf of offeror. (type or print) Nom et titre de la personne autorisée à signer au nom du proposant. (taper ou écrire en caractères d'imprimerie)		
For the Minister - Pour le Ministre		

N° de l'invitation - Solicitation No.
6837-175318/A
N° de réf. du client - Client Ref. No.
6837-175318

N° de la modif - Amd. No.
004
File No. - N° du dossier
MCT-6-39096

Id de l'acheteur - Buyer ID
mct011
N° CCC / CCC No./ N° VME - FMS

Modification à l'invitation à soumissionner

Titre : Articles de quincaillerie

Modification No **004** à l'invitation à soumissionner

Cette invitation à soumissionner est par la prête modifiée afin de fournir les questions et réponses suivantes :

Q9. Veuillez consulter les informations de produit ci-joint pour la Terrafix 360R à la page 3 du document ci-joint. Cela constituerait un équivalent aux MX225S et tissu 501 en ligne 36.

R9. J'ai examiné les specs pour Terrafix et il est équivalent à MX225.

Si vous avez déjà envoyé votre soumission et que vous désirez la modifier, veuillez nous faire parvenir cette modification soit dans une enveloppe scellée par la poste à l'adresse ci-dessus, ou par télécopieur (506) 851-6759 en veillant à ce qu'elle parvienne à la personne soussignée avant la date de clôture en vigueur. Le numéro de la demande de soumission et la date de clôture en vigueur doivent figurer à l'extérieur de l'enveloppe scellée ou sur le message transmis par télécopieur.

Toutes les autres conditions de l'invitation à soumissionner demeurent inchangées.

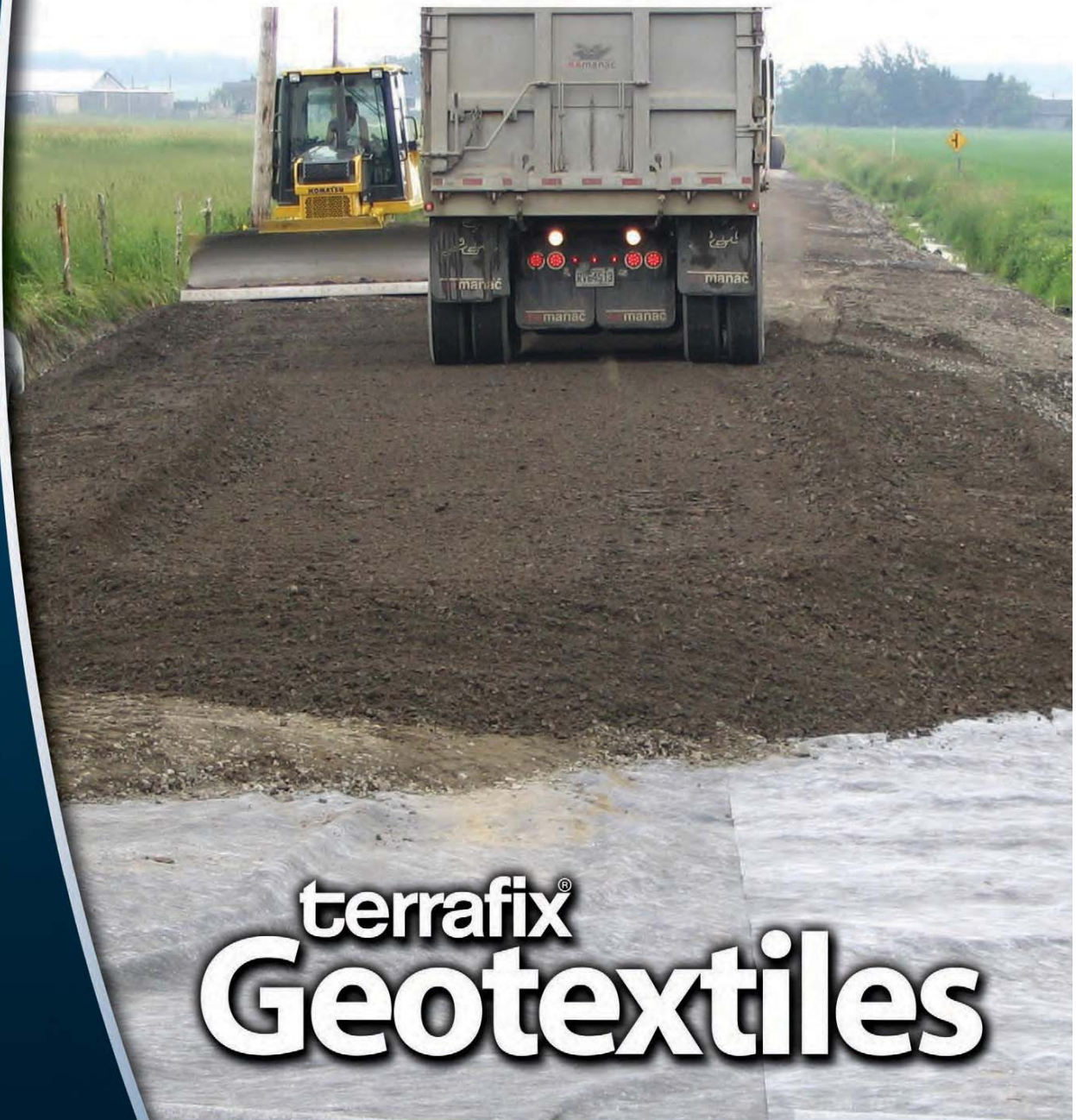
Toute question relative à cette modification doivent être adressées à :

Nom: Charlene Sharpe
N° de téléphone: (506) 851-3467
N° de télécopieur: (506) 851-6759

(Derived from - Provenant de: XNB025D, 23/01/2008)

Canada's leader of complete geosynthetic solutions

terrafix[®]
geosynthetics inc.



terrafix[®]
Geotextiles

To view our complete product line visit us at www.terrafixgeo.com

terrafix® Geotextiles

Four basic functions are defined for the geotextile:

1. Filtration
2. Drainage
3. Separation
4. Reinforcement

Filtration

Filtration functions to restrict the migration of fine soil particles from a soil mass while remaining permeable to water movement greater than, or at least equivalent to the permeability of the protected soil.

Drainage

Water is conveyed along the plane of the geotextile due to its construction, and then to an outlet. Water may be vertically or horizontally conveyed. Drainage is related to the role of filtration, and is a function of the permeability of a geotextile and its pore opening size or porometry.

Separation

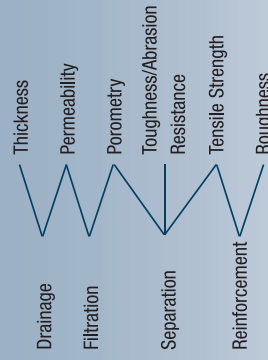
Separation is the function which prevents two distinct soils or different materials from intermixing. The key factors for a geotextile to satisfy this function are porometry, toughness and strength.

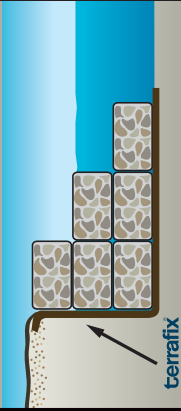
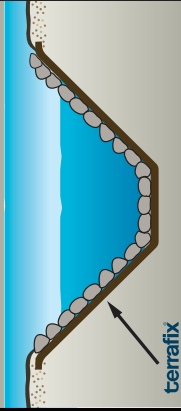
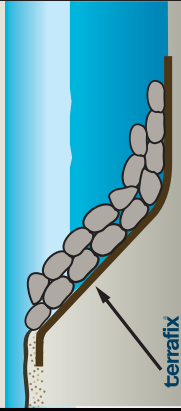

Reinforcement

This function involves the stabilization of a soil mass by provision of tensile strength to the soil-fabric system.

Geotextile selection can be expressed as a relationship between these 4 basic functions and the properties required by the design engineer in order to satisfy certain criteria, which would relate to a specific application.

The following diagram demonstrates these various relationships:
Function / Properties Required in Geotextile



Typical Application	Types of Application	Required Geotextile Functions	Recommended Geotextiles	Properties and Characteristics
	<ul style="list-style-type: none"> Subdrains French Drains Foundation Drains Trench Drains Blanket Drains 	Filtration Drainage	200R 270R	<ul style="list-style-type: none"> Good lateral drainage. Suitable for wide spectrum of soil permeabilities.
			360R	<ul style="list-style-type: none"> Used in weaker soil conditions. Used in conjunction with coarser drainage materials.
	<ul style="list-style-type: none"> Gabion Lining Retaining Walls Drop Structure Ditch Lining 	Filtration Drainage	200R 270R	<ul style="list-style-type: none"> High permeability. Medium tensile strength at high elongation. Good filtration.
			360R	<ul style="list-style-type: none"> Medium puncture resistance. Good lateral drainage. Withstands more severe hydraulic conditions.
	<ul style="list-style-type: none"> Revetments Channel Linings Rivers/Creeks 	Filtration Drainage Reinforcement	270R	<ul style="list-style-type: none"> 12" maximum rip-rap size. Not to be used under severe hydraulic conditions.
			360R	<ul style="list-style-type: none"> 18" maximum rip-rap size. Medium tensile strength at high elongation.
			420R	<ul style="list-style-type: none"> Medium tensile strength at low elongation. Woven scrim reinforcement. 24" maximum rip-rap size.
	<ul style="list-style-type: none"> Lighter Coastal Applications 	Filtration Drainage Reinforcement	420R 600R 800R	<ul style="list-style-type: none"> 24" maximum rip-rap size. Good abrasion resistance. Medium to high strength at high elongation.
			270R 24-15	<ul style="list-style-type: none"> Good tensile strength at varied elongations. Good lateral drainage. Lateral permeability.
			200W, 400W	<ul style="list-style-type: none"> High tensile strength at low elongation.
	<ul style="list-style-type: none"> Roadways Access Routes Industrial Yards Logging Roads 	Separation Reinforcement	270R	<ul style="list-style-type: none"> Under sub-ballast. In drainage ditches.
			420R	<ul style="list-style-type: none"> High abrasion resistance. High permeability. Medium tensile strength at low elongation. Recommended for track rehabilitation.
	<ul style="list-style-type: none"> Heavy Shore-line Protection Coastal Protection Scour Areas Rockfill Structures Dikes Energy Dissipators 	Filtration Drainage Reinforcement	600R 800R	<ul style="list-style-type: none"> Very high strength at high elongation. Suitable for heavy armour stone to 3 ton maximum. High level of filtration.
			1000R 1200R	<ul style="list-style-type: none"> Highest strength non-woven geotextile manufactured. Recommended use with armour stone in excess of 3 ton. High level of filtration.

Design Criteria

For most geotextile applications involving primary functions of filtration, drainage and/or reinforcement, the required design criteria in selection are soil permeability, soil gradation and where applicable hydraulic gradient, earth pressure, and/or weight and method of placement of materials in surface protection applications. For applications where separation is the primary geotextile function, required criteria to consider are: Subgrade gradation, subgrade strength, loading size and frequency (on soil mass), base materials – size and type. Other criteria may apply in certain circumstances where upon request.

GEOTEXTILES PROPERTIES

Geotextiles • Non-Wovens

Property	Test Method	Unit	200R	270R	360R	420R
Weight	ASTM D5261	g/m ²	119	140	210	271
Grab Tensile Strength	ASTM D4632	N	401	445	712	911
Grab Elongation	ASTM D4632	%	50-105	50-105	50-105	50-105
Tear Resistance	ASTM D4533	N	170	200	267	356
Puncture CBR ¹	ASTM D6241	N	1180	1320	1820	2380
Permittivity	ASTM D4491	sec ⁻¹	2.00	2.00	1.50	1.35
Water Flow	ASTM D4491	l/min/m ²	6095	5689	4480	3657
Apparent Opening Size (A.O.S.)	ASTM D4751	mm	0.300	0.300	0.212	0.212
U.V. Resistance	ASTM D4355	% @ 500h	70	70	70	70

Property	Test Method	Unit	600R	800R	1200R	370RS
Weight	ASTM D5261	g/m ²	340	395	542	445
Grab Tensile Strength	ASTM D4632	N	1110	1330	1690	1000
Grab Elongation	ASTM D4632	%	50-105	50-105	50-105	50
Tear Resistance	ASTM D4533	N	444	511	644	425
Puncture CBR ¹	ASTM D6241	N	3110	3780	4820	n/a
Permittivity	ASTM D4491	sec ⁻¹	1.20	1.00	0.70	1.00
Water Flow	ASTM D4491	l/min/m ²	3251	3055	2035	3055
Apparent Opening Size (A.O.S.)	ASTM D4751	mm	0.180	0.150	0.150	n/a
U.V. Resistance	ASTM D4355	% @ 500h	70	70	70	70

Note:

1. Burst strength (Mullen ASTM-D3786) and Puncture ¼" (ASTM-D4833) are both replaced by Puncture CBR (ASTM-D6241).

Please contact Terrafix for higher Grab Tensile Strength geotextiles.

Geotextiles • Wovens

Property	Test Method	Unit	24-15	200W	400W
Weight	ASTM D5261	g/m ²	136	170	214
Grab Tensile Strength	ASTM D4632	N	889	1100	1400
Grab Elongation	ASTM D4632	%	15	15	15
Tear Resistance	ASTM D4533	N	333	400	533
Puncture CBR ¹	ASTM D4833	N	400	444	533
Permittivity	ASTM D4491	sec ⁻¹	0.05	0.05	0.05
Water Flow	ASTM D4491	l/min/m ²	203	203	163
Apparent Opening Size (A.O.S.)	ASTM D4751	mm	0.300	0.425	0.425
U.V. Resistance	ASTM D4355	% @ 500h	70	70	70

*All the values are MARV except where specified. All information and guidelines in this material is given in good faith but without warranty, expressed or implied with respect to the quality or fitness of the products referred to herein for any particular purpose. Recommendations made herein refer to general use of geotextiles. When non-standard conditions exist the company reserves the right to be consulted prior to application.

DISTRIBUTED BY



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September 2013