



**Installation of Submarine Gas Pipelines and Associated Facilities from To Kwa Wan to North Point for Former Kai Tak Airport Development**  
**Environmental Certification Sheet**  
**Environmental Permit No. EP-401/2010**

**Reference Document/Plan**

Document/Plan to be Certified/ Verified:	Second Silt Curtain Design and Deployment Plan
Date of Report:	06/04/2012
Date Received by ET:	20/04/2012
Date received by IEC:	27/04/2012

**Reference EM&A Manual/ EP Requirement**

EP Condition:	Condition No. 2.9
Content:	Second Silt Curtain Design and Deployment Plan
2.9	“Five hard copies and one electronic copy of the second silt curtain design and deployment plan shall be submitted to the Director for approval no later than one month before the commencement of the dredging operation within 250m from the nearest To Kwa Wan breakwaters. Before submission to the Director, the design and deployment plan shall be certified by the ET Leader and verified by the IEC as conforming to the information and recommendations contained in the EIA Report and other relevant documents in the Register.”

**ET Certification**

I hereby certify that the above referenced <del>document</del> /plan complies with the above referenced condition of EP-401/2010.	
Ms Winnie Ko, Environmental Team Leader:	Date: 11 May 2012

**IEC Verification**

I hereby verify that the above referenced <del>document</del> /plan complies with the above referenced condition of EP-401/2010.	
Dr Anne Kerr, Independent Environmental Checker:	Date: 11 May 2012

Contract No. GSPD/SP/TKW-NP/089/2011

Installation of Submarine Gas Pipelines  
and Associated Facilities from To Kwa Wan to North Point  
for Former Kai Tak Airport Development

*Method Statement*

*For*

*Installation of Silt Curtain  
at The Breakwater of  
To Kwa Wan Typhoon Shelter*

Date : 9 May 2012

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Method Statement for Installation of Silt Curtain		

## 1. Introduction

The movable silt curtain shall be installed around 150m at the breakwater No. 1 and 200m at the breakwater No.2 in To Kwa Wan Typhoon Shelter before the commencement of dredging work.

The movable silt curtain at the breakwater No.2 shall be moved along with the dredger as work progresses so that at least 15m of the silt curtain shall extend past the dredger in each direction. Both silt curtains shall be left in place until the dredger is more than 250m from the coral communities. The general layout plan of silt curtain is shown in the Appendix A.

This method statement will explain the construction method, sequence of works and risk assessment in related to installation of silt curtain.

This statement will have to be revised and further developed as necessary as to suit the actual site conditions and situation.

## 2. Material

The silt curtain is composed of the following major material:

1. Geotextile is a woven filter geotextile namely bontec SG110/110, of which data information is enclosed in Appendix No. B.
2. Plastic pail is about 450mm high is shown in Appendix B.
3. The anchor will use boulder as weight for securing the silt curtain in position.

## 3. Potential Resource

Total length of silt curtain around 350 m

The following resources will be deployed for assembly and installation of silt curtain:

Derrick barge	1 nr.
Tug boat (for towing)	1 nr.
Work boat	1 nr.
Skilful worker	2 ~3 nr.
Small tools	

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#### 4. Construction Method

The silt curtain is composed of geotextile and plastic pails, the assembling work will be carried out before delivery to the work area of outfall basin.

Geotextile is 5m x 100m in roll and will be stitched together forming one piece. All sewing will be undertaken in our workshop and then delivered to site.

The plastic pails as floater will be wrapped up in the geotextile with seamed joints used so-called “prayer seam” by double stitches using hand-held sewing machine. The steel chain or steel wire acted as a weight will wrap up in another side of geotextile stitched together. The detail sketch of silt curtain is attached in Appendix C.

Once the assembly of silt curtain is finished, the silt curtain will be taken up by derrick barge and transport to the work area of outfall basin by tug boat. The operator of barge will lower down one end of curtain carefully into the sea. The curtain will float on the water and the wire of silt curtain will fix to the land. At the time the barge will shift and placed the other end of curtain into the sea, also the wire will be fixed to the land. Flash light will be fixed on the curtain.

Anchor weight of spacing around 20 ~25m depended on the site conditions will be placed on the seabed and the steel wire of anchor will fix to the silt curtain, so that the curtain will be secured in position.

After installation, the foreman will check the condition of silt curtain to ensure the work in order.

Regular inspection will be carried out to ensure the silt curtain in good conditions. If any damage occurs the curtain will be repaired immediately.

The dredging work near the coral communities shall stop during the repair, maintenance or replacement of silt curtain.

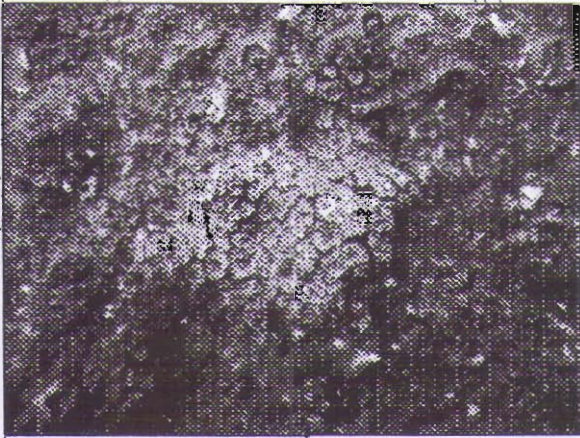
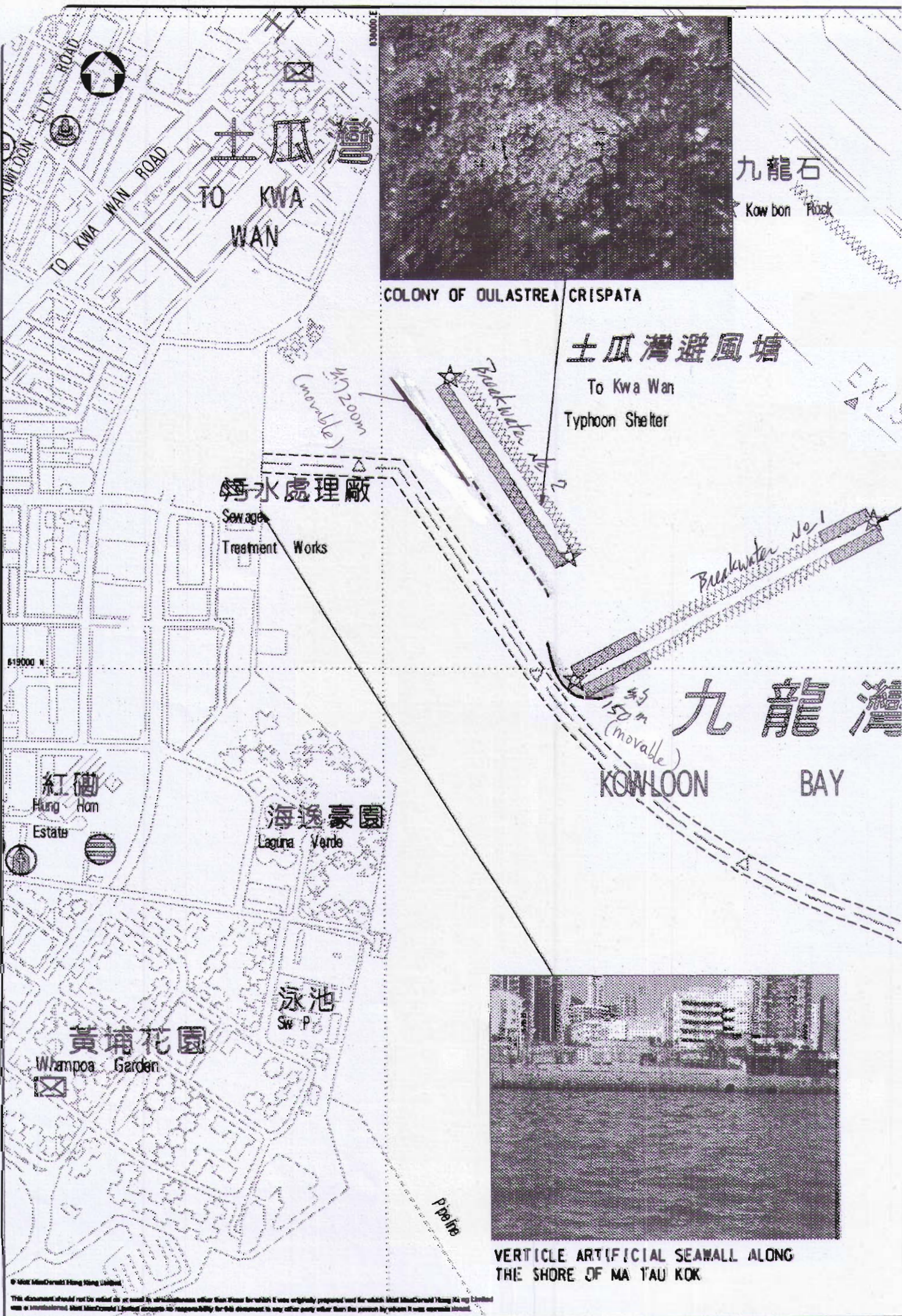
The silt curtain will be re-positioning to suit the works.

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Method Statement for Installation of Silt Curtain		

**APPENDIX A**

**Silt Curtain Layout Plan**





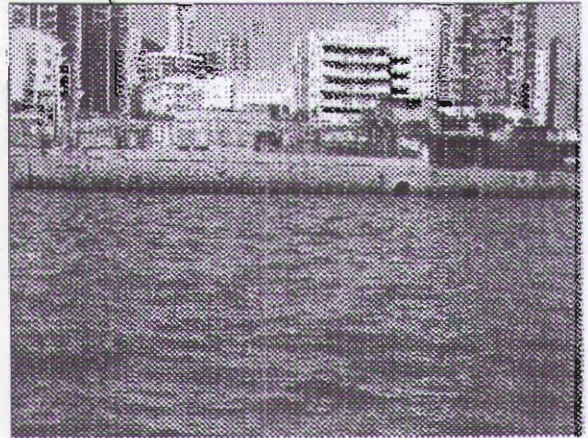
九龍石  
Kowloon Rock

COLONY OF OULASTREA CRISPATA

土瓜灣避風塘  
To Kwa Wan  
Typhoon Shelter

污水處理廠  
Sewage  
Treatment Works

九龍灣  
KOWLOON BAY



VERTICLE ARTIFICIAL SEAWALL ALONG THE SHORE OF MA TAU KOK

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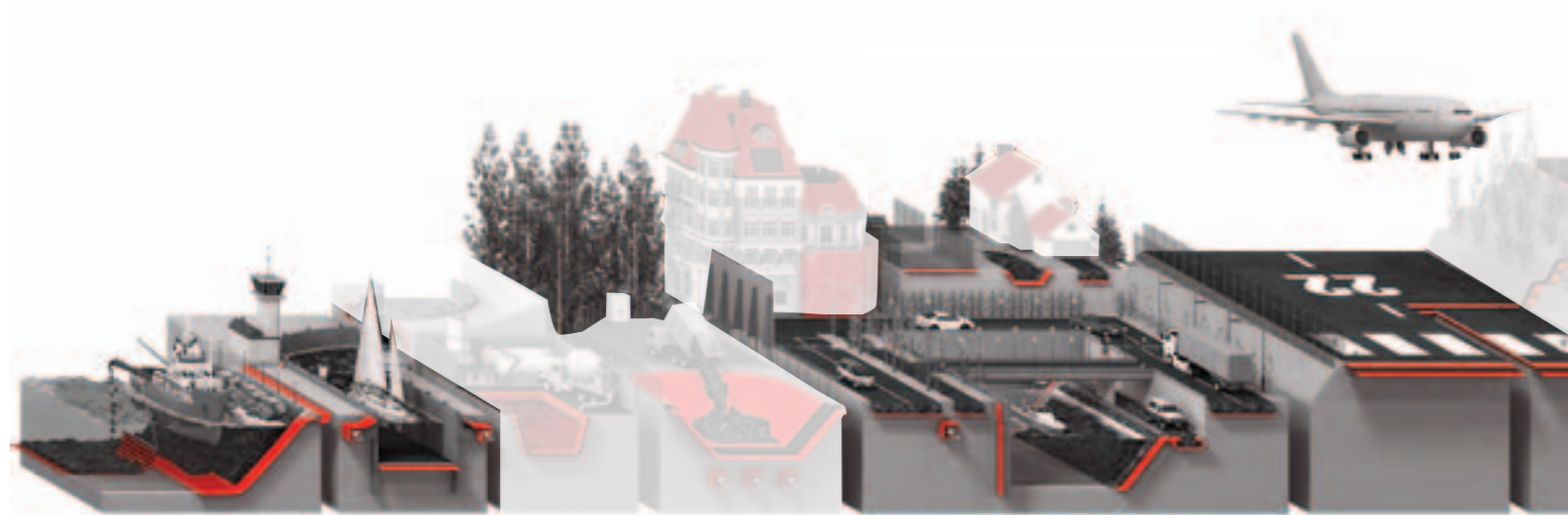


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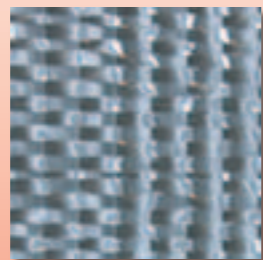
**APPENDIX B**

**Material**





# SG WOVEN GEOTEXTILES



we under<sup>cover</sup> the world

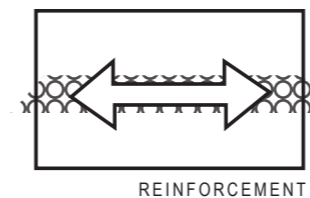
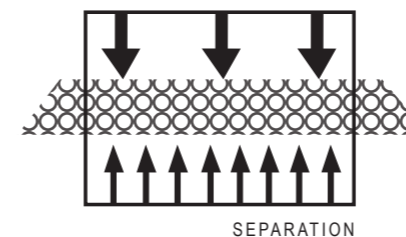
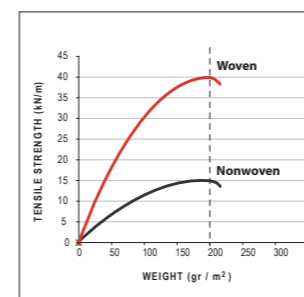
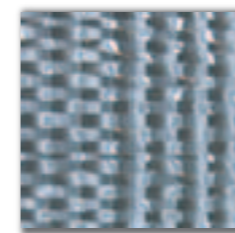


A TOTAL RANGE OF GEOTEXTILES

Headquarters:  
 BONAR TECHNICAL FABRICS NV/SA  
 Industriestraat 39  
 B-9240 Zele  
 BELGIUM  
 T.: +32 (0) 52 457 487  
 F.: +32 (0) 52 457 495  
 E-MAIL: geotextiles@bonartf.com

For UK and Ireland:  
 BONAR YARNS & FABRICS Ltd  
 St. Salvador Street  
 Dundee Scotland  
 DD3 7EU  
 T.: +44 (0)1382 346102  
 F.: +44 (0)1382 229238  
 E-MAIL: geotextiles@bonaryarns.com

website: [www.bonartf.com](http://www.bonartf.com)



Other geotextiles available within the Bontec range include Highflow, High strength Wovens and Thermally Bonded & Needle-punched Nonwovens

Visit us at our website:  
[www.bonartf.com](http://www.bonartf.com)

For UK and Ireland: **BONAR YARNS & FABRICS Ltd**  
 St. Salvador Street | Dundee | Scotland | DD3 7EU  
 T.: +44 (0)1382 346102 | F.: +44 (0)1382 229238  
 E-MAIL: geotextiles@bonaryarns.com

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 T.: +32 (0) 52 457 487 | F.: +32 (0) 52 457 495  
 E-MAIL: geotextiles@bonartf.com

"An exciting range of Standard Grade geotextiles that offer the perfect solution to your Separation requirements. With tensile strengths ranging from 10 to 300 kN/m you can be certain that an SG fabric will be available with the performance that you are looking for."

DAILY SEPARATION, SOIL STRENGTHENING OR GROUND REINFORCEMENT?

**Bontec SG woven geotextiles** are manufactured from polypropylene tapes & yarns, and exhibit an excellent chemical resistance to commonly encountered acids and alkalis at ambient temperatures. Available in a lightweight range with products from 80 to 200g/m<sup>2</sup>, and a heavyweight range from 200 to 800g/m<sup>2</sup>.

**Bontec SG facts include:**

- Tensile strengths up to 300 kN per metre (kN/m) width
  - CBR Puncture Strengths ranging from 1.800 N to 12.500 N
- SG Mechanical Properties that offer maximum strength at minimal cost and ensure the products survivability both against installation damage and in the longer term.**

Lightweight woven geotextiles typically offer greater mechanical strengths per unit weight than comparable nonwoven grades. This makes lightweight woven geotextiles the ideal choice for separation

- Waterflows normal to the plane that are generally several times more than that required by design
- A range of consistent opening sizes suited for use in soils ranging from clay to coarse granular fill.

**SG hydraulic properties that are suited to the demands of everyday separators.**

Available ex-stock in 4.5m and 5.25m wide rolls or other widths to order

**Typical applications for SG woven geotextiles include:**

- As a general purpose separator for use under site access roads and areas of hardstanding.
- As a separation and strengthening layer under new roadways, car parks, industrial units etc.
- As an erosion control layer under heavy rock armour in coastal defence projects.
- For any separation application where there exists a need to prevent the intermixing of soft foundation soils with good clean granular fill.



SG Woven Geotextiles have been manufactured as a cost effective solution to your soil separation and stabilisation applications. They are manufactured from highly durable polypropylene polymer and have a long life expectancy when used in permanent structures.

For further product information, be it a technical data sheet or to discuss your project with one of our in-house geotextile experts please do not hesitate to contact one of our offices listed below.





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Bontec SG110/110  
Woven Polypropylene Geotextile

Product Specification

# SG 110/110

Woven polypropylene geotextile made of slit film tapes

Technical data sheet according to internal specifications Bonar TF: version 06 dd. 05/01/10  
 Accompanying documents CE marking: version 04 dd. 05/01/10



1137-CPD-615  
10

<b>separation</b>	<b>filtration</b>	<b>reinforcement</b>	<b>protection</b>	<b>drainage</b>

	test method	value	tolerance
<b>Mechanical properties</b>			
Tensile strength MD	EN ISO 10319	<b>110,0 kN/m</b>	-9,9 kN/m
Tensile strength CD	EN ISO 10319	<b>110,0 kN/m</b>	-9,9 kN/m
Elongation MD	EN ISO 10319	<b>12,0 %</b>	+/-2,8 %
Elongation CD	EN ISO 10319	<b>8,0 %</b>	+/-1,8 %
Static puncture resistance – CBR	EN ISO 12236	<b>12,50 kN</b>	-2,50 kN
Dynamic perforation resistance – cone drop	EN ISO 13433	<b>10,0 mm</b>	+2,0 mm
<b>Hydraulic properties</b>			
Water permeability normal to the plane	EN ISO 11058	<b>25x10<sup>-3</sup> m/s</b>	-8x10 <sup>-3</sup> m/s
Water flow normal to the plane (*)		<b>25 l/m<sup>2</sup>.s</b>	-8 l/m <sup>2</sup> .s
Characteristic opening size (AOS)	EN ISO 12956	<b>230,0 µm</b>	+/-69,0 µm
<b>Physical properties</b>			
Thickness under 2 kPa (*)	EN ISO 9863-1	<b>1,53 mm</b>	+/-0,31 mm
Weight (*)	EN ISO 9864	<b>464,0 g/m<sup>2</sup></b>	+/-46,4 g/m <sup>2</sup>
Composition	100 % polypropylene woven geotextile		
Durability	predicted to be durable for a minimum of 25 years in natural soil with 4 < pH < 9 and soil temperatures < 25° C		

<b>roads</b>	<b>railways</b>	<b>foundations &amp; retaining walls</b>	<b>drainage systems</b>	<b>erosion control systems</b>
EN 13249:2000	EN 13250:2000	EN 13251:2000	EN 13252:2000	EN 13253:2000
<b>reservoirs &amp; dams</b>	<b>canals</b>	<b>Tunnels &amp; underground structures</b>	<b>solid waste</b>	<b>liquid waste</b>
EN 13254:2000	EN 13255:2000	EN 13256:2000	EN 13257:2000	EN 13265:2000

1. This geotextile is intended for use in both functions & applications highlighted with a bold border.
  2. It is the responsibility of all users to satisfy themselves that the above data is current.
  3. Roll dimensions are 5,25 m x 100 m. Other dimensions on demand.
  4. Bonar Technical Fabrics reserves the right to alter product specifications without prior notice.
  5. Although not guaranteed, these results do to the best of our knowledge offer a true and accurate record of the product's performance.
  6. Bonar Technical Fabrics cannot accept responsibility for the performance of these products as the conditions of use are beyond our control.
  7. Geotextile has to be covered within 2 weeks after installation
- (\*) Not mandated characteristics for CE marking.



## **G AND E COMPANY LIMITED**

Room B, 13/F Cheung Lee Industrial Bldg.

9 Cheung Lee Street

Chai Wan, Hong Kong

Tel: 2508 0058

Fax: 2570 0089

website: [www.g-and-e.com](http://www.g-and-e.com)

July 9, 2010

### **OFFICIAL ANNOUNCEMENT**

I would like to inform you that geotextile Bontec SG100/100 is upgraded to SG110/110 effective immediately, and that SG100/100 has become obsolete. The performance of SG110/110 is superior to that of SG100/100.

No adjustment and adaptation are necessary to the current application, installation method, packaging and quality control assurance program with the improved properties of SG110/110.

Bonar Technical Fabrics is Europe's premier manufacturer of woven and non-woven geotextile products, with continuous commitment to quality, product development and production improvement. One of Bonar's many advantages is that they are vertically integrated. This means they have their own fiber production which helps ensure consistent product performance. Bonar also has a high production capacity with the facility located in close proximity to the Antwerp port. These translate into more efficient supply.

I have attached the manufacturer's letter here about the change for your reference. We would be happy to answer any questions that you may have.

Thank you for your kind attention.

Best regards

*Gary Ng*

Gary Ng  
General Manager

---

**Date: 5-Jul-10**

**To: G and E – Hong Kong**  
Gary

**From: Isabelle Ruyffelaere – 0032 52 457 487**  
Philippe Grimmelprez – 0032 52 457 486

**E mail: nannette@g-and-e.com**

**Pages: 1 +**

**Your reference: Bontec® SG 110/110**

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**Our reference: G&E07052010.doc**

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Dear Gary,

We are pleased to confirm that the old name of the Bontec® SG100/100 has been replaced with the Bontec® SG 110/110.

Bonar constantly strives to increase the performance of the products over time. Thanks to improved polymers, extrusion and weaving techniques we managed to produce stronger geotextiles with the same unit weight. Hydraulic characteristics were not affected either.

Bonar uses very strict -in house- and ISO 9001:2000 quality and ISO 14001 environmental standards (in annex) and is using electricity generated from 100 % renewable sources.

We send hereby the newest datasheet as well for your information.

Should you require any further information, please do not hesitate to contact us.  
Best regards

Philippe Grimmelprez  
Global Sales & Marketing Manager





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Bontec SG110/110  
Woven Polypropylene Geotextile

Certification

# QUALITY MANAGEMENT SYSTEM CERTIFICATE

## ISO 9001 : 2000

*The BQA, sa hereby declares that the quality management system of  
Bonar Technical Fabrics NV – Site in Zele en Lokeren*



*located at Industriestraat 39 - 9240 Zele - Belgium, has been examined on 05-05-2008  
and found in conformity with the ISO 9001, edition 2000, standard for the following application field:*

***Development, manufacture and sales of a standard range of fibres and textiles such as agrotextiles, building textiles and geosynthetics, as well as similar products especially designed to customer specifications***

*This certificate has been issued by the BQA, sa according to its quality manual concerning the certification of quality systems, and after concluding the contract of certification N° DS/AJ/CER/ 05-05-2008/301, under which the company accepts a regular control of its quality management system.*

*Certificate N° BQA\_QMS019\_C\_2004301  
Valid until 04-05-2011*



*BQA N° 019-QMS*

*D.SIMOENS  
Directeur*



*DS/AJC/*

*Any person aware of misuse of this certificate may address himself to the BQA, sa. This certificate may only be disclosed in its entirety.*

*BQA, sa - rue Montoyer 24 (b9) - 1000 Brussels.*



# CERTIFICATE OF ENVIRONNEMENTAL MANAGEMENT SYSTEM ISO 14001 : 2004

*The BQA, nv hereby declares that the environmental management system of the company  
Bonar Technical Fabrics NV – Site in Zele en Lokeren*



*located at Industriestraat 39 – 9240 Zele - Belgium, has been examined on 05-05-2008  
and found in conformity with the ISO 14001, edition 2004, standard for the following application field:*

***Development, manufacture and sales of a standard range of fibres and textiles such as agrotextiles, building textiles and geosynthetics, as well as similar products especially designed to customer specifications.***

*This certificate has been issued by BQA, nv according to its quality manual EMS concerning the certification of environmental management systems, and after the contract of certification N° DS/AJ/CER-EMS/05-05-2008/84 under which the company accepts a regular control of its environmental management system.*

*Certificate N° BQA\_EMS019\_C\_200484  
Valid until 04-05-2011*



*BQA N° 019-EMS*

*D. SIMOENS  
Directeur*



*Any person aware of misuse of this certificate may address himself to the BQA, nv. This certificate may only be disclosed in its entirety.*

*BQA, nv - rue Montoyer 24 (b9) - 1000 Brussels*

*DS/AJ/CM/12-07-2004*



CONSTRUCTION  
INDUSTRY COUNCIL  
建造業議會

本會檔號：VSRS/10/06/020

伍秀吉先生  
志義興有限公司  
香港柴灣祥利街 9 號祥利工業大廈 13 樓 B 室

伍先生：

**申請加入非強制性分包商註冊制度的基本名冊**

**(申請編號：A004714)**

關於你申請加入非強制性分包商註冊制度基本名冊一事，下列工種／專長項目的申請已獲批准，並由 2010 年 6 月 2 日開始生效-

- 01.09 一般土木工程
  - 01.09.04 土力工程
- 02.06 防水層及防水工程

註冊承諾書訂明，你必須遵守《基本名冊的規則及程序》(下稱“規則及程序”，可於 <http://www.hkcic.org/vsrs/index.htm> 下載)。謹請按照規則及程序第 19 條，在獲准註冊的一年內制定公司操守準則，並在公布這些準則的 14 天內向我們提交副本，以作記錄。

此外，日後來函請註明 貴公司的註冊編號 **R004449**，以便從速處理。

非強制性分包商註冊制度  
管理委員會



(麥麗珊代行)

2010 年 6 月 14 日



# bontec

a bonar technical fabrics product

woven and non woven geotextiles

Zele, 05.10.09

## CERTIFICATION OF CONFORMANCE

The undersigned supplier BONAR TECHNICAL FABRICS, hereby states under his responsibility that the following product complies with the indicated technical properties :

Invoice F0918342

Type	NW 9 525 : 10500 m <sup>2</sup>
Type	NW 10 525 : 18375 m <sup>2</sup>
Type	NW 20 5250 : 10500 m <sup>2</sup>
Type	SG 100/100 : 5250 m <sup>2</sup>
Delivery docs :	Packing list N. T0908524 and T0908557

Manufacturer : Bonar Technical Fabrics N.V.

BONAR TECHNICAL FABRICS N.V.

BONAR TECHNICAL FABRICS N.V.

p/a Industriestraat 39  
B-9240 Zele



BONAR TECHNICAL FABRICS nv/sa  
Industriestraat 39 • B-9240 Zele • Belgium  
Tel +32 (0) 52 457 493 • Fax +32 (0) 52 457 495  
E-mail geotextiles@bonartf.com

BONAR Yarns & Fabrics Ltd  
St. Salvador Straat • Dundee DD3 7EU • United Kingdom  
Tel +44 (0) 1382 346102 • Fax +44 (0) 1362 202378  
E-mail geotextiles@bonaryarns.com





# bontec

A bonar technical fabrics product

## Fax

Date: 11-Aug-04	
To: G and E - Hong Kong Mr. Gary NG	From: Isabelle Ruyffelaere - 0032 52 457 487 Philippe Grimmelpez - 0032 52 457 486
Fax:	Pages: 1 +
Your reference: Bonar TF acquisition of Uco Technical Fabrics	
Our reference:	G&E11082004.fax

### To Whom it may concern

We hereby confirm that Bonar acquired the company UCO Technical Fabrics in October 1996 and all activities of the manufacturing and sales of Woven and Non woven geotextiles.

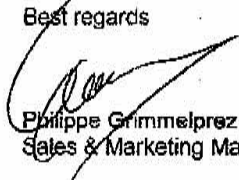
The Company changed name to **BONAR TECHNICAL FABRICS**.

Its headquarters are moved to Industriestraat 39, 9240 Zele, Belgium. At the same location is a new manufacturing plant of non woven geotextiles based.

The plant where woven geotextiles are produced is based on the old UCO location: weverslaan 15, Lokeren, Belgium.

Should you require any further information, please do not hesitate to contact us.

Best regards

  
Philippe Grimmelpez  
Sales & Marketing Manager geotextiles.



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Industriestraat 39 • B-9240 Zele • Belgium  
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E-mail nguid@bonaryarns.com



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Bontec SG110/110  
Woven Polypropylene Geotextile

List of Project Reference

## Bonar

Date	Project	Client	Consultant	Style
Feb-05	CV/2003/06 Stanley Waterfront Improvement Project - Construction Pier and Boardwalk	Sun Fook Kong (Civil) Ltd	Civil Engineering and Development Department	SG100/100 NW10
Feb-05	99/9028 Lamma Power Station	Wai Kee (Zens) Construction & Transportation Co Ltd	Maunsell Geotechnical Services Ltd	SG100/100
Feb-05	CV/2004/02 Reconst. of Wong Shek & Ko Lau Wan Public Piers	Kin Shing Construction Co Ltd	Civil Engineering and Development Department	SG100/100
Apr-05	CV/2002/04 Penny's Bay Reclamation Stage 2	Gammon Skanska Ltd Shun Tat Construction Engineering Ltd	Scott Wilson Ltd	SG100/100 SG100/100
Apr-05	HK/12/02 CED, Central Reclamation Phase III, Engineering Works	Best Leader Engineering Ltd Leighton - China State - Van Oord Joint Venture	Atkins China Ltd	SG100/100 SG100/100
May-05	03/8013 Lamma Island to Cyberport	Leader Marine Contractors Ltd Honwin Engineering Ltd	Maunsell Geotechnical Services Ltd	SG100/100 SG100/100
Jul-05	Shenzhen to Tai Po Twin Submarine Gas Pipeline Project	Honwin Engineering Ltd		SG100/100
Sep-05	TP37/03 Remaining Engineering Infrastructure Works for Pak Shek Kok Development Package 2A	Leader - Wai Kee (C&T) Joint Venture	Hyder Consulting Ltd	SG100/100
Nov-05	HY/2002/26 Stone Cutter's Bridge	Hong Kong River Engineering Co Ltd	Ove Arup & Partners HK Ltd	SG100/100
Feb-06	CV/2005/12 Fill Reception Facilities at Tseung Kwan O Area 137 Quarry Bay and Mui Wo	Penta-Ocean Construction Co Ltd	Civil Engineering and Development Department	SG100/100
Mar-06	Maintenance Dredging at Castle Peak Power Station (CPPS) Jetty	New Concepts Engineering Development Ltd	Civil Engineering and Development Department	SG100/100
Mar-06	CV/2004/04 Maintenance and Repairs to Government / Public Piers and Immersed Tubes of Hung Hom Cross-Harbor Tunnel	China Harbour Engineering Co (Group)	Civil Engineering and Development Department	SG100/100
Mar-06	HY/2005/06 Castle Peak Road Improvement West of Tsing Lung Tau	Shun Tat Construction Engineering Limited Chun Wo Construction & Engineering Co Ltd	Mouchel Halcrow JV	SG100/100 SG100/100

May-06	212 Main Works for the Proposed Third Golf Course Development at Kau Sai Chau, Sai Kung	China Harbour Engineering Co (Group)	Ove Arup & Partners HK Ltd	SG100/100
Jun-06	Hong Kong Convention and Exhibition Centre Project - Silt Screening for Intake Pipe	Wai Kee (Zens) Construction & Transportation Co Ltd Kaden - Wai Kee (C&T) Joint Venture	NA	SG100/100 SG100/100
Aug-06	EP/SP/52/06 Development of EcoPark in Tuen Mun Area 38	Kaden Construction Limited	Scott Wilson Ltd	SG100/100
Sep-06	CV/2004/06 Management and Capping of Contaminated Mud Pit IV at East of Sha Chau - Phase III	Kaden - Wai Kee (C&T) Joint Venture	Civil Engineering and Development Department	SG100/100
Oct-06	Lamma Island Cable Landing	United Marine Co Ltd	Hong Kong Electric Co Ltd	SG100/100
Nov-06	CV/2004/01  Maintenance and Repairs to Seawalls, Piers and Other Port Works	Kin Shing Construction Co Ltd	Civil Engineering and Development Department	SG100/100
Dec-06	Private project	Friendly Benefit Engineering Ltd		SG100/100
Feb-07	Prebored Socketted H-Piles at Hong Kong Convention & Exhibition Centre	Yee Hop Engineering Co Ltd	NA	SG100/100
May-07	HY/2005/06 Castle Peak Road Improvement - West of Tsing Lung Tau	Chun Wo Construction & Engineering Co Ltd	Mouchel Halcrow JV	SG100/100
May-07	CV/2004/05 Dredging Maintenance	China Harbour Engineering Co Ltd	Civil Engineering and Development Department	SG100/100
Aug-07	Dredging Project in Lai Chi Kok Shipyard	Maritime Mechanic Ltd	NA	SG100/100
Aug-07	6/WSD/06 Construction of Salt Water Supply System for Penny's Bay	Univic Engineering Ltd	Water Supplies Department	SG100/100
Nov-07	Permanent Aviation Fuel Facility Hong Kong International Airport (Contract No. H2104)	UDL Dredging Ltd	Babtie Asia Ltd	SG100/100
Dec-07	Seawall Modify, Tuen Mun Area 38	Cheer Engineering Ltd	Scott Wilson Ltd	SG100/100
May-08	DC/2007/10 Design and Construction of HK West Drainage Tunnel	Tapbo Civil Engineering Co Ltd	Ove Arup & Partners HK Ltd	SG100/100
Sep-08	CV/2006/05 Maintenance of Seawalls and Navigation Channels	China Harbour Engineering Co Ltd	Civil Engineering and Development Department	SG100/100

Sep-08	Marine Works at Maldives	Kwan Sing Engineering & Construction Co Ltd		SG100/100
Nov-08	DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River	Kwan Lee Construction Co Ltd	Maunsell Consultants Asia Ltd	SG100/100
Mar-09	DC/2007/01 Drainage Improvement Works in Ki Lun Tsuen, Kwu Tung, Ma Tso Lung and Sha Ling	Shanghai Urban Construction Group Corp	Mott Connell Ltd	SG100/100 SG40/40
Jun-09	CHEC247 Lamma Power Station - Navigation Channel Improvement	China Harbour Engineering Co Ltd		SG100/100

Updated November 26, 2009





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Bontec SG110/110  
Woven Polypropylene Geotextile

Photo References



## G AND E COMPANY LIMITED

Room B, 13/F Cheung Lee Industrial Building  
9 Cheung Lee Street,  
Chai Wan, Hong Kong  
Tel: 852-2508 0058 Fax: 852-2570 0089  
website: [www.g-and-e.com](http://www.g-and-e.com)



<b>Date</b>	Feb-10
<b>Project</b>	Contract No. HY/2009/11 Central - Wanchai Bypass - North Point Reclamation
<b>Client</b>	Highways Department
<b>Consultant</b>	AECOM
<b>Main Contractor</b>	China Harbour Engineering Company
<b>Works</b>	Silt Curtain
<b>Materials</b>	Woven Geotextile SG100/100
<b>Size</b>	3,675 sqm



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website: www.g-and-e.com



<b>Date</b>	March, 2010
<b>Project</b>	Contract No. HK/2009/01 Wan Chai Development Phase II -Central - Wanchai Bypass at Hong Kong Convention and Exhibition Centre
<b>Client</b>	Civil Engineering and Development Department
<b>Consultant</b>	AECOM Asia Co. Ltd
<b>Main Contractor</b>	Chun Wo - Leader Joint Venture
<b>Works</b>	Woven Geotextile SG100/100
<b>Size</b>	4,200 sqm
<b>Application</b>	Intake Silt Curtain





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website: [www.g-and-e.com](http://www.g-and-e.com)



<b>Date</b>	Mar 2010
<b>Project</b>	Contract No. KL/2009/01 Site formation for Kai Tak Cruise Terminal Development
<b>Client</b>	CEDD
<b>Consultant</b>	Scott Wilson Ltd
<b>Main Contractor</b>	Penta-Ocean Construction Co. Ltd
<b>Works</b>	SG100/100 as Silt Curtain
<b>Size</b>	1,050 sq m



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9 Cheung Lee Street,

Chai Wan, Hong Kong

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website: [www.g-and-e.com](http://www.g-and-e.com)



<b>Date</b>	March 2010
<b>Project</b>	KL/2009/01 Site formation for Kai Tak Cruise Terminal Development
<b>Client</b>	CEDD
<b>Consultant</b>	Scott Wilson Ltd
<b>Main Contractor</b>	Penta-Ocean Construction Co. Ltd
<b>Materials</b>	SG100/100
<b>Size</b>	1,050 sqm



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Chai Wan, Hong Kong  
Tel: 852-2508 0058 Fax: 852-2570 0089  
website: [www.g-and-e.com](http://www.g-and-e.com)



<b>Date</b>	March 2006
<b>Project</b>	Contract No. HY/2005/06 Castle Peak Road Improvement West of Tsing Lung Tau
<b>Client</b>	Highway Department
<b>Consultant</b>	Mouchel Halcrow JV
<b>Main Contractor</b>	Chun Wo Construction & Engineering Co., Ltd.
<b>Works</b>	Silt Curtain
<b>Size</b>	1,050 sqm





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Bontec SG110/110  
Woven Polypropylene Geotextile

Approval Letters

24-FEB-2005 18:57 FROM SFK

TO 25700089

P.01/01

10:2 78101

**CEDD Civil Engineering and Development Department**

Web site 網址 : <http://www.cedd.gov.hk>  
 E-mail 電子郵件 :  
 Telephone 電話 : (852) 2762 5035  
 Facsimile 傳真 : (852) 2714 2054  
 Our reference 本署編號 : (15) in PW WC/CV0306/R20/340 Pt.01  
 Your reference 來函編號 : CIV:002091/1.2/HW/SY/CC/me(S0087), CIV:002091/1.2/HW/SY/CC/me(S0118)

土木工程處  
 Civil Engineering Office

112

香港九龍公主道 101 號  
 土木工程發展署大樓 4 樓  
 4/F, Civil Engineering and Development Building,  
 101 Princess Margaret Road,  
 Kowloon, Hong Kong

18 February 2005

Sun Fook Kong (Civil) Limited  
 Rms. 3207-10,  
 Great Eagle Centre,  
 23 Harbour Road,  
 Wan Chai,  
 Hong Kong  
 (Attn: Mr. Howard KONG - Fax No.2827 6275)

Dear Sirs,

**Contract No. CV/2003/06**  
**Stanley Waterfront Improvement Project -**  
**Construction of Pier and Boardwalk**

**Fabric for Silt Curtain**

I refer to your above letters dated 21.1.2005 and 15.2.2005 proposing the SG100/100 fabric supplied by "Bonar Technical Fabrics" for silt curtain.

I have no objection to your proposed material for silt curtain.

Yours faithfully,

*Paul Y K MA*  
 (Paul Y K MA)

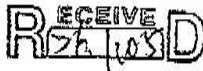
Engineer's Representative  
 Port Works Division  
 Civil Engineering and Development Department

c.c.  
 Site Office (Attn: S1OW/PIA)  
 CEG/PIA

File PW WC/CV0306/M10/300

YKM/olm

Post-It® Fax Note	7671	Date	24/2/05
To	MR. STANLEY WAN	From	CHARLES SZE - PPD
Co./Dept.	G&E	Co.	SFK
Phone #	25080028	Phone #	60347709
Fax #	25700089	Fax #	



土木工程處  
Civil Engineering Office

Web site 網址 : <http://www.cedd.gov.hk>  
E-mail 電子郵件 :  
Telephone 電話 : (852) 2760 3737  
Facsimile 傳真 : (852) 2714 2054  
Our reference 本署檔號 : ( ) in PW WC/CV0402/R20/340 Pt.1  
Your reference 來函檔號 : KS330/2005

香港九龍公主道101號  
土木工程拓展署大樓四樓  
4/F, Civil Engineering and Development Building,  
101 Princess Margaret Road,  
Kowloon, Hong Kong

Kin Shing Construction Company Limited  
1/F,  
27 Yin Chong Street,  
Mong Kok  
Kowloon  
(Attn.: Mr. Patrick P K Chau - Site Agent)

24 January 2005

**BY MAIL & FAX No. 2780 2085**

Dear Sirs,

**Contract No. CV/2004/02**  
**Reconstruction of Wong Shek and Ko Lau Wan Public Piers**

**Material Submission - Geotextile for Silt Curtain**

I refer to your letter of 14.1.2005 enclosing the particulars of the geotextile for fabrication of silt curtain.

In accordance with PS Clause 26.08(2), the proposed "SG 100/100" woven geotextile manufactured by Bonar Technical Fabrics is approved to be used under the captioned Contract.

Pursuant to PS Clause 26.08(1), you are required to submit details of the silt curtains 3 weeks before their deployment.

Contract No.	Initial	Copy	Action
CM	✓		
PM	✓		
SA			
Sub-A	✓		
Eng (1)	✓		
Eng (2)			
G.F			
Foreman			
Q.S	✓		
Safety	✓		
Material	✓		
Survey			

Yours faithfully,

*(Signature)*  
**(W H LEE)**  
Engineer's Representative  
Port Works Division  
Civil Engineering and Development Department

c.c.  
SIOW/P2B - Site Copy

cls

# Mott MacDonald Hong Kong Limited

Consulting Engineers

Chief Resident Engineer's Office  
North Lantau Development - Tung Chung  
for Territories Development Department

Our Ref : S287/NL1/25.7/283/JY

30 June 1992

China Harbour Engineering Company  
19/F, China Harbour Building  
370-374 King's Road  
North Point  
Hong Kong.

Attn : Mr. S. Y. Yu

T.D.D. CONTRACT NO. NL 1/91		
C. E. Dept.		
DATE	ACTION	INFORM
SA		llk
DSA		
OS		
ENG		
SUR		
FOREMAN		
FILE		llk

Dear Sirs,


North Lantau Development  
Contract No. NL1/91  
Tung Chung Development Phase I - Site Formation  
Materials for Subsoil Drains


I refer to your letter ref. NL1/C/0097/008/MM/145 of 10/6/92 submitting materials for subsoil drains for our approval.

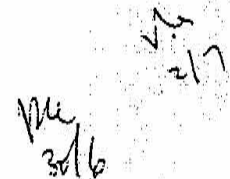
I have the following comments :

- 1) The proposed subsoil drain material - i.e. 300mm diameter ADS corrugated polyethylene subsoil drain pipes from Benpak Waterwise company is acceptable.
- 2) The proposed Geotextile SG17/15 from UCO (2 layers) as protection for subsoil drainage is acceptable in principal. Please submit further technical specification such as lapping and site storage requirements recommended by the manufacturer.
- 3) The proposed Greenfix Eromat Special type 5 from CCL is still under review. You will be notified of the outcome if a decision is made.

Yours faithfully  
for MOTT MACDONALD HONG KONG LIMITED

  
Luke Chi  
Engineer's Representative

LC/JY/ak  






**Maunsell Consultants Asia Ltd**

8/F Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, N.T., Hong Kong

茂盛(亞洲)工程顧問有限公司

香港新界沙田鄉事會路 138 號新城市中央廣場第 2 座 8 樓

T +852 2605 6262 F +852 2691 2649 www.maunsell.aecom.com

SRE's Office T +852 2669 0708 F +852 2631 2889 E sre@ltriw.com.hk

Your Ref. : DC0706/M1.2/1512 & 1529  
Our Ref. : (DC/2007/06)/R20/106(0023)

**RECEIVED**  
13 NOV 2008

BY: .....

Chiu Hing Construction & Transportation Co. Ltd.  
Room 201, 2/F Fuk Shing Commercial Building  
28 On Lok Mun Street  
On Lok Tsuen, Fanling  
New Territories, Hong Kong

Attn : Mr. Roger Lau (Site Agent)

13 November 2008

Dear Sir,

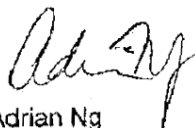
**Contract No. DC/2007/06**  
**River Improvement Works in Upper Lam Tsuen River,**  
**She Shan River and Upper Tai Po River**

**Proposed Geotextile at Gabion Wall in She Shan River and Upper Tai Po River**

I refer to your letter dated 7 November 2008 and 12 November 2008 respectively.

Please be advised that since the water flow rate of the proposed geotextile model Bontec SG100/100 meets the requirements in accordance with P.S. Clause 7.150, I have no further objections to your proposed use of woven geotextile model Bontec SG100/100, supplied by "G and E Company Ltd." at gabion wall in She Shan River and Tai Po River, subject to its satisfactory performance on site.

Yours faithfully,



Adrian Ng  
Resident Engineer

cc MCAL - Attn : Mr. Conder Yan  
Chiu Hing H.O.

AN/BC/ek

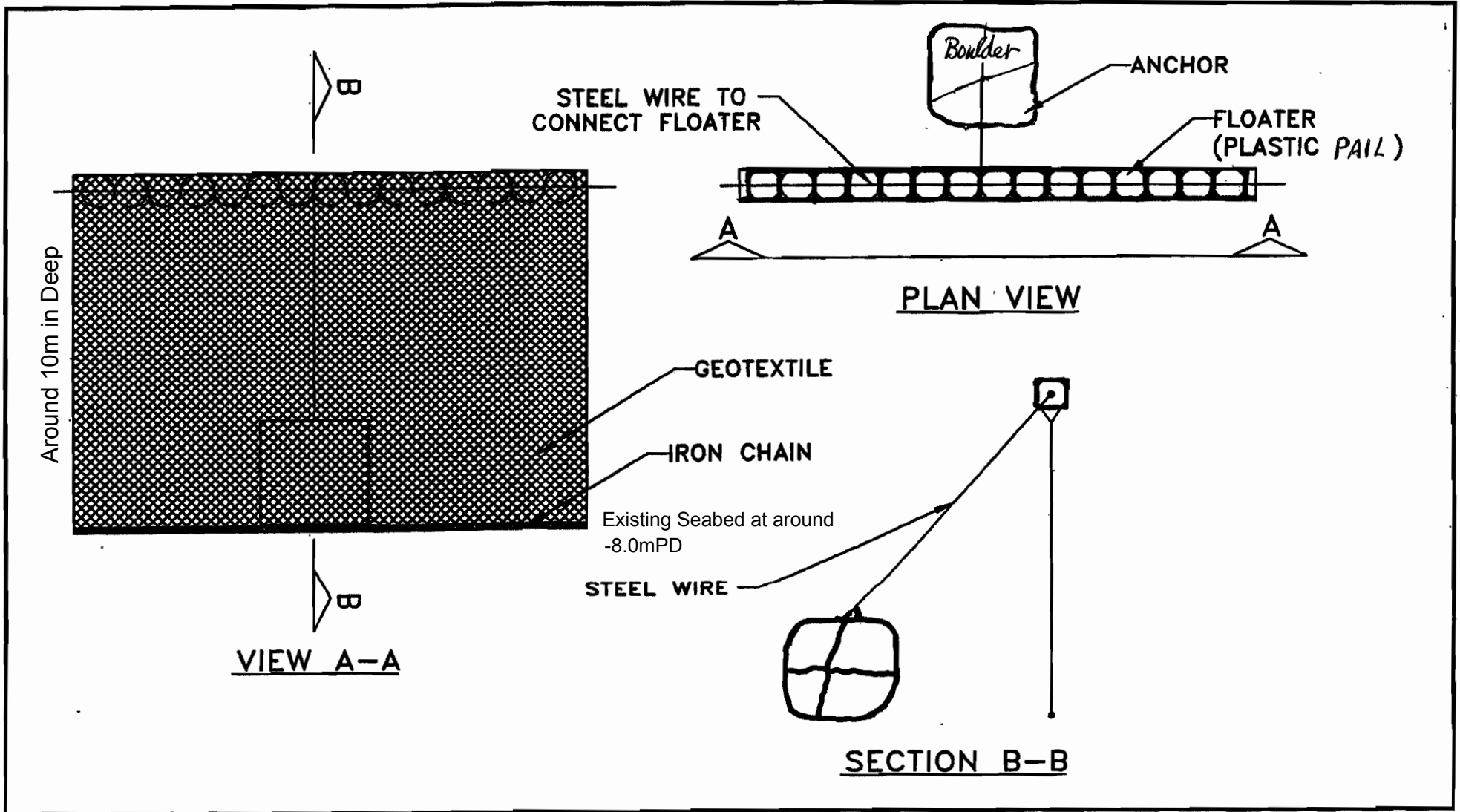


	Contract No. : GSPD/SP/TKW-NP/089/2011 Installation of Submarine Gas Pipeline and Associated Facilities from To Kwa Wan To North Point for Former Kai Tak Airport Development	Rev. No.: 0 Page 7 of 7
Method Statement for Installation of Silt Curtain		

**APPENDIX C**

**Sketches of Silt Curtain**





Silt Screen

Contract No.: GSPD/SP/TKW-NP/089/2011

Installation of submarine Gas Pipelines and Associated Facilities

From To Kwa Wan To North Point for Former Kai Tak Airport Development

Risk Assessment

Item	Cause / Initial Event	Consequence	Mitigating Controls Measures	Risk Ranking			By Whom
				F Likelihood	S Consequence	R/R Residual Risk	
1	Silt Curtain installation to demarcate the seawater working area	<ul style="list-style-type: none"> <li>a) Struck by the lifted object</li> <li>b) To damage silt curtain by other motor boat</li> <li>c) Lifting</li> <li>d) Worker Falling into water</li> </ul>	<ul style="list-style-type: none"> <li>(a1) Carry out by licensed operator (MWS) (SR)</li> <li>(a2) Before silt curtain to be lifting, all nearby persons should be notified (MWS)</li> <li>(a3) Signaller should be present in the lifting operation (MWS)</li> <li>(a4) Lifted objects should not be moved across any person (MWS)</li> <li>(a5) Experienced marine work supervisor should be nominated (E)</li> <li>(b1) Adequate reflective floating bloom (300mm diameter) should be used and tied on the top of the silt curtain to demarcate of dredging zone on water surface and alert the other operators (MWS)</li> <li>(b2) Flashing light should be installed on silt curtain to</li> </ul>	1	3	3	<ul style="list-style-type: none"> <li>- Engineer (E)</li> <li>- Marine Work Supervisor (MWS)</li> <li>- Subcontract or representative (SR)</li> <li>- Safety Officer (SO)</li> </ul>

			<p>alert the other motor boats.</p> <p>(c1) Certified sling with identified color coded. (MWS)</p> <p>(c2) Use the correct type of lifting bracket for the job (MWS)</p> <p>(c3) Pad sharp corners of the load to prevent damage to the sling (MWS)</p> <p>(c4) Always use suitable guide ropes to prevent spinning or swinging of the load. (MWS)</p> <p>(c5) Give signals to the crane drivers which are definite and clearly understood by all workers engaged in the lifting operation (MWS)</p> <p>(c6) Multi-sling should not put direct on a lifting hook unless a master link or shackle is placed in between the hook and the slings (MWS)</p> <p>(c7) A competent signaler or rigger shall carry out all rigging</p> <p>(c8) Ensure the lifting capacity of the plant and sling weight in good slinging geometry (MWS)</p> <p>(d1) All workers hold the certificate of Shipboard Cargo Handling Basic Safety Training Course issued by authorized organization before working on the boat (SO)</p> <p>(d2) Provide suitable and sufficient PPE to workers (MWS)(SR)</p>				
--	--	--	---	--	--	--	--

<b><u>Likelihood</u></b>	<b><u>Consequence</u></b>	<b><u>Likelihood x Consequence</u></b>	<b><u>Risk Rating</u></b>	<b><u>Priority</u></b>
1. Highly unlikely (Could happen, but probably never will)	1. Negligible injuries (First aid treatment only)	1 – 2	LOW	Low priority action
2. Unlikely (Could happen, but only rarely)	2. Minor injuries (Normally reversible injury of off work for up to 7 days)	3 – 6	MEDIUM	Medium priority action
3. Likely (Could happen occasionally)	3. Major injuries (Normally irreversible injuries or off work for over 7 days)	8 – 16	HIGH	High priority
4. Very likely (Could happen frequently)	4. Fatality or totally permanently			