Lam Geotechnics Limited
Ground Investigation & Instrumentation Professionals

華益土力有限公司

Ref : G1938/CS/L222/FEP-04/356/2009
Date : 27 November 2020

China State Construction Engineering (Hong Kong) Ltd.
29/F, China Oversea Building,
129 Hennessy Road,
Hong Kong

Attn: Project Director, Mr. Chris Leung

Dear Sir,

Contract No. HY/2009/15
Central – WanChai Bypass Tunnel (Causeway Bay Shelter Section)
Implementation Schedule for Silt Curtain Deployment Plan (Revision 8)

Referring to the captioned submission received through email on 14 November 2020 as requested by EPD through email on 11 May 2020, we have reviewed your submitted details and hereby certify the submission in accordance with Condition 2.8 of FEP-04/356/2009.

Should you have any enquiry, please feel free to contact the undersigned at 2839 5666.

Yours faithfully,
For and On Behalf of Lam Geotechnics Limited

Raymond Dai
Environmental Team Leader

c.c. HyD - Mr. Enoch Wong (By Fax: 2714-5289)
CEDD - Mr. Jimmy Ling (By Fax: 2301-1277)
AECOM CWB - Mr. David Kwan (By Fax: 3912-3010)
Ramboll - Mr. David Yeung (By Fax: 3465-2899)

19/F, Remex Centre, 42 Wong Chuk Hang Road, Hong Kong
Tel: (852) 2882-3939 Fax: (852) 2882-3331
Website: www.lamgeo.com Email: info@lamgeo.com

Ref.: AACWBIECEM00_0_12492L.20

27 November 2020

China State Construction Engineering (Hong Kong) Ltd.
29/F, China Oversea Building
139 Hennessy Road
Wan Chai, Hong Kong

By Post and Email

Attention: Mr. Chris Leung

Dear Sir,

Re: Contract No. HY/2009/15
Central – Wan Chai Bypass Tunnel (Causeway Bay Shelter Section)
FEP-04/356/2009
Implementation Schedule for Silt Curtain Deployment Plan (Revision 8)

Reference is made to the submission of Implementation Schedule for the Silt Curtain Deployment Plan (Revision 8) certified by the ET Leader (ET's ref.: "G1938/CS/L222/FEP-04/356/2009" dated 27 November 2020) provided via e-mail on 27 November 2020.

We are pleased to inform you that we have no adverse comments on the captioned submission. We hereby verify the captioned submission in accordance with Condition 2.8 of FEP-04/356/2009.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,

David Yeung
Independent Environmental Checker

c.c.	HyD	Attn: Mr. Enoch Wong	by fax: 2714 5289
	CEDD	Attn: Mr. Jimmy Ling	by fax: 2301 1277
	AECOM CWB	Attn: Mr. David Kwan	by fax: 3912 3010
	Lam	Attn: Mr. Raymond Dai	by fax: 2882 3331

Q:\Projects\AACWBIECEM00\02_Proj_Mgt\02_Corr\AACWBIECEM00_0_12492L.20.docx

Ramboll Hong Kong Limited 英環香港有限公司
21/F, BEA Harbour View Centre, 56 Gloucester Road, Wan Chai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
www.ramboll.com

Implementation Schedule for Silt Curtain Deployment (HY/2009/15)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Objective of Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages				Relevant Legislation and Guidelines	Implementation Status	Cross – Reference to Silt Curtain Plan
					Des	C	O	Dec			
Construction Phase											
For the Whole Project											
Section 5.6.44	Silt Curtain Deployment	Control sediment dispersion in water	Work site / During Construction Phase	Contractor	✓	✓			EIAO TM	Implemented	Section 4.0

Ref.: AACWBIECEM00_0_12127L.20

07 May 2020

China State Construction Engineering (Hong Kong) Ltd. By Post and Email
29/F, China Oversea Building
139 Hennessy Road
Wan Chai, Hong Kong

Attention: Mr. Chris Leung

Dear Sir,

Re: Contract No. HY/2009/15
Central – Wan Chai Bypass Tunnel (Causeway Bay Shelter Section)
FEP-04/356/2009
Silt Curtain Deployment Plan (Revision 8)

Reference is made to the submission of Silt Curtain Deployment Plan (Revision 8) certified by the ET Leader (ET's ref.: "G1938/CS/L097/FEP-04/356/2009" dated 6 May 2020) provided via e-mail on 7 May 2020.

We are pleased to inform you that we have no adverse comments on the captioned submission. We hereby verify the Silt Curtain Deployment Plan (Revision 8) in accordance with Condition 2.8 of FEP-04/356/2009.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,

David Yeung
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Lam Geotechnics Limited
Ground Investigation & Instrumentation Professionals

華益土力有限公司

Ref : G1938/CS/L097/FEP-04/356/2009
Date : 6 May 2020

China State Construction Engineering (Hong Kong) Ltd.
29/F, China Oversea Building,
129 Hennessy Road,
Hong Kong

Attn: Project Director, Mr. Chris Leung

Dear Sir,

Contract No. HY/2009/15
Central – WanChai Bypass Tunnel (Causeway Bay Shelter Section)
Silt Curtain Deployment Plan (Revision 8)

Referring to the captioned submission received through email on 6 May 2020, we have reviewed your submitted details and hereby certify the submission in accordance with Condition 2.8 of FEP-04/356/2009.

Should you have any enquiry, please feel free to contact the undersigned at 2839 5666.

Yours faithfully,
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中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

Central – Wan Chai Bypass Tunnel
(Causeway bay Typhoon Shelter Section)
Contract No. HY/2009/15

Silt Curtain Deployment Plan

(Revision 8)

May 2020

Prepared by: Environmental Officer	Gabriel Wong	Date: 6 May 2020

LIST OF CONTENT

Appendices

Revision Status

Revision	Summary of Revision	Prepared	
		By	Date
0	First submission	Anna Yu	16 Oct 10
1	Second submission	Anna Yu	23 Feb 11
2	Third submission	Anna Yu	29 Apr 11
3	Fourth submission	Daniel Sin	6 Sept 12
4	Fifth submission	G Wong	24 Jun 19
5	Sixth submission	G Wong	30 July 19
6	Seventh submission	G Wong	19 Oct 19
7	Eighth submission	G Wong	7 Dec 19
8	Ninth submission	G Wong	6 May 20

EPD's observation / comment via email dated 29 April 2020	**Responses**
Wan Chai Development Phase II – Central-Wan Chai Bypass Tunnel (Causeway Bay Typhoon Shelter Section) EP Condition 2.8: Silt Curtain Deployment Plan (Revision 7)	
i) S3.9, lines 1 to 5 – Please revise the paragraph to be: "~~**With respect to nature of works include trimming only, the recommend maximum dredging rate as stated in Table 2 of the FEP-04/356/2009 will not be implemented at this stage.**~~ In reference to EPD's confirmation email on 13 June 2019, in Appendix E, the seabed reinstatement works are exempt from the requirement of **the** ~~**a**~~ permit under Section 8 of the Dumping at Sea Ordinance.~~**, as such the said Works is not considered as dredging.**~~ The trimming volume of Ex-WCPCWA is expected to be 3800m3, with only one dredger will be conducting the trimming works within Ex-WCPCWA, it will not exceed the daily dredging rate of 5,000 cubic meter/day nor the hourly dredging rate of 313 cubic meter/hour as stated in Table 2 of FEP-04/356/2009."	Revised

EPD's observation / comment via email dated 7 January 2020	**Responses**
Wan Chai Development Phase II – Central-Wan Chai Bypass Tunnel (Causeway Bay Typhoon Shelter Section) EP Condition 2.8: Silt Curtain Deployment Plan (Revision 7)	
i) Please add a table showing the revision history in the cover page of the plan.	Added
ii) Silt Curtain Deployment Plan (Revision 02), dated 29 April 2011) for HY/2009/15 has already uploaded in EPD's EIAO website as follows: https://www.epd.gov.hk/eia/register/english/permit/fep0982010/documents/scdp/pdf/scdp.pdf . Please clarify why the plan is still required to be revised and submitted for EPD's vetting.	Added in Section 3.8
iii) It is known from S3.8 & S3.9 and on the plan that (i) HY/2009/15 will carry our trimming works based on the requirements of the Marine Department & (ii) the nature of works include trimming only. Please kindly advise and highlight the differences between dredging and trimming works	Added in Section 3.8
iv) We note S3.9 is revised as compared with previous version and inclusion of a new Appendix E that show the works involving seabed reinstatement works could be exempted from the requirement for a	Added in Section 3.9

permit under S8 of the Dumping at Sea Ordinance (Cap.466)**. However, the main concern for the trimming works is that the amount of sediment displaced may exceed that which is equivalent to the maximum rate of dredging in FEP-04/356/2009. Please elaborate more on how the rate of trimming works (for example, by stating daily area of trimming and therefore expected volume of sediment displacement, or other illustrations as applicable) will not generate more sediment which is equivalent to the rate in Table 2 of FEP-04/356/2009.**	
v) It is known from S5.1the plan that all other marine works except trimming (including dredging for seawall, temp. reclamation, removal of temp reclamation of TCBR1E, TCBR2 and TCBR3 & TCBR1W) has been completed. Please add the completion date of these works in the section.	Added

1. Introduction

1.1 The purpose of this deployment plan is to illustrate the general layout, the construction programme, details on the design, operation and maintenance of the silt curtains to be installed for dredging, reclamation and seabed trimming works of the entire Project in the Causeway Bay Typhoon Shelter (CBTS) and ex-Wan Chai Public Cargo Working Area (ex-WCPCWA) as recommended in the approved EIA report (Registration No.: AEIAR-125/2008).

1.2 As the permit holder of the Further Environmental Permit No. FEP-04/356/2009, China State Construction Engineering (Hong Kong) Limited (hereafter CSHK) would be responsible for installation, maintenance, repairing (if necessary) and removal of the temporary works of silt curtain.

2. List of Reference Document

2.1 The relevant clause in the Particular Specification of the Contract is listed as follows for ease of references.

PS Clause No.	Relevant Remarks
PS Appendix 25.4	Referring to Environmental Permit (EP) No. EP-356/2009 and FEP-04/356/2009 Condition 2.8, the silt curtain deployment plan should be submitted.

3. Key Factors Considered during Design for Proposed Silt Curtain

The following factors have been taken into account during the preparation for this silt curtain deployment plan:

3.1 The seawall construction and reclamation, including dredging and filling works was carried out inside the CBTS and ex-Wan Chai Public Cargo Working Area (ex-WCPCWA). CBTS is surrounded by three breakwaters and the shorelines of the Hong Kong Island, leaving only two openings in the northeast and northwest corners as navigation accesses. Ex-Wan Chai Public Working Area is surrounded by the breakwater, pier of Royal Hong Kong Yacht

Club and the shorelines of the Hong Kong Island, leaving one opening facing Victoria Harbour as navigation access.

3.2 The existing North Breakwater of the CBTS would serve as a barrier against the migration of sediment plumes, which may be generated by the dredging operation, to the water body in the Victoria Harbour.

3.3 The existing cooling seawater intake has been protected against any potential sediment plumes by the deployment silt screens following the stipulation in the conditions of the EP. According to Scenario 2B from Environmental Permit (EP) No. EP-356/2009 and FEP-04/356/2009.

3.4 To minimize loss of sediment affecting the water quality due to trimming works, the trimming works for seawall construction shall be carried out behind silt curtain(s) and any seawall gap that need to be provided for marine access shall be surrounded by silt curtain(s) as detailed shown in Appendix C1.

3.5 The rate of dredging works at CBTS and ex-WCPCWA have been strictly governed by the conditions stated in the EP, i.e. 6,000m^3 per day (i.e. 375m^3 per hour) and 5,000m^3 per day (i.e. 313m^3 per hour) respectively.

3.6 It is required by the Marine Department that the waterway at the existing accesses of the CBTS shall be maintained unobstructed for the sake of convenience and safety of the shelter users.

3.7 The existing CBTS is very congested and the marine works area is located in close proximity to the vessels in the Anchorage Area and Royal Hong Kong Yacht Club mooring area. Also the marine works area is entirely surrounded by the public navigation channels that are only 20m wide. Installation of silt curtain at the boundary between the works area and navigation channels will induce obstruction to the channel.

3.8 As per Marine Department's request, the existing CBTS seabed is to be trimmed to their desired levels. Therefore, HY/2009/15 will carry out such trimming works. Further trimming and backfiling works (seabed reinstatement works) within Ex-WCPCWA was requested by Marine Department, with the previous revision of Silt Curtain Deployment Plan stating the marine works has been completed. Works at ex-WCPCWA is trimming of local high spots within the Ex-WCPCWA as part of the seabed reinstatement works, the excavated material are the fine quality general fill material backfilled by HY/2009/15 previously onto the seabed upon completion of the temporary reclamation removal of the CWB tunnel construction.

3.9 In reference to EPD's confirmation email on 13 June 2019, in **Appendix E**, the seabed reinstatement works are exempt from the requirement of the permit under Section 8 of the Dumping at Sea Ordinance. The trimming volume of Ex-WCPCWA is expected to be 3800m^3, with only one dredger will be conducting the trimming works within Ex-WCPCWA, it will not exceed the daily dredging rate of 5,000 cubic meter/day nor the hourly dredging rate of 313 cubic meter/hour as stated in Table 2 of FEP-04/356/2009.

4. Details of Proposed Silt Curtain System

4.1 Details and Installation of Silt Curtain

4.2 Taking into account of the key factors mentioned in Section 3 above, the silt curtain system to facilitate the dredging and trimming works is designed and its details are elaborated below:

(a) The location plan of dredging and trimming areas of the designated project is shown in drawing no. CWBT/EPD/004B enclosed in Appendix A.

(b) To cater for the dynamic situation within the CBTS, silt curtain shall be set up in a way such that adequate protection towards from the nearby intake, proper tidal flushing to circulate the embayed water and navigation safety of vessels can all be ensured during the dredging operation. The technical details of silt curtain for dredging works is shown in Appendix C.

(c) Taking account of the tidal range, the station silt curtains would be extended to the seabed level as much as practicable.

(d) Apart from the silt curtain mentioned in paragraph 4.2(b), a silt curtain frame mounted on the dredger barge will be constructed with double layer of geotextile materials. The toe of the curtain will be lowered simultaneously with the increase of dredging depth so as to prevent migration of sediment plume out of the silt curtain. A sufficient clearance between the toe of the silt curtain and the seabed is maintained in order to prevent the disturbance to the seabed due to the underwater current.

4.3 Maintenance for Silt Curtain

Proper maintenance will be carried out for the proposed silt system and the procedures are laid down below:

4.3.1 Site supervisors should be responsible to inspect the condition of the silt curtain daily during the course of marine works. An inspection checklist will be filled by the site supervisors. All completed checklists should be kept on site for record purpose. A template of checklist is attached in Appendix D.

4.3.2 If any silt curtain is found damaged and repairing works are considered necessary, all dredging works at location within 50m from the damaged curtain will be temporarily ceased. The silt curtain will be lifted up from sea by chain block pulley system with the aid of crane barge if necessary so that the whole/part of silt curtain (dependent on the extent of damage) will be replaced. In case of repairing any damaged floats, temporary cessation of dredging works is not necessary.

4.3.3 Before and during removal of the damaged silt curtain, site supervisor should closely communicate with operators of other marine plants to ensure no dredging works will be carried out in region within 50m from the location of silt curtain maintenance. The ceased dredging works will be resumed after the damaged silt curtain is satisfactorily repaired.

4.3.4 As a regular maintenance, refuse or debris around the silt curtain would be collected on daily basis to avoid adverse effect to marine plants as well as to the public.

4.3.5 Spare geotextile materials and other associated components shall be kept stock for readily repairing/replacement in case of damages.

4.3.6 Trimming works inside Ex-WCPCWA will be ceased when Tropical Cyclone Signal 3 is hoisted, while works inside CBTS will be ceased when Signal 1 is hoisted. When Tropical Cyclone Signal 3 is hoisted, the silt curtain will be retracted and securely stored on board the barge. Upon the cancellation of tropical cyclone signal or the signal is below T3, all silt curtains will be re-deployed after checking prior to the resumption of works. Furthermore, a diving inspection will be carried out to ensure the integrity the silt curtain. A sample of diving inspection checklist is enclosed in Appendix D in this deployment plan.

5. Deployment Schedule

5.1 The anticipated schedule of the silt curtain deployment is shown in the table below. It is prepared based on the latest Works Programme and may subject to changes to cope with the actual site situation and progress.

	Anticipated Installation Date	Anticipated Removal Date
Other marine works		
TCBR1E		
Dredging for seawall	Completed	Completed
Temp. reclamation	Completed	Completed
Removal of temp. reclamation	Completed	Completed
Trimming Seabed	16 May 2019	5 Oct 2020
TCBR2 and TCBR3		
Dredging for seawall	Completed	03 Oct 2012
Temp. reclamation	Completed	06 Nov 2012
Removal of temp. reclamation	Completed	25 Feb 2014
Trimming Seabed	31 Oct 2019	5 Oct 2020
TCBR1W		
Dredging for seawall	Completed	Completed
Temp. reclamation	Completed	Completed
Removal of temp. reclamation	Completed	23 Nov 2013
Trimming Seabed	16 May 2019	19 Oct 2019
TPCWAE		
Dredging for seawall	Completed	Completed
Temp. reclamation	Completed	Completed
Removal of temp. reclamation	Completed	16 Oct 2013
Trimming Seabed	21 May 2019	21 June 2020
TPCWAW		
Dredging for seawall	Completed	Completed
Temp. reclamation	Completed	28 Jan 2014
Removal of temp. reclamation	Completed	28 Jan 2014
Trimming Seabed	21 May 2019	19 July 2020

6. Construction Programme

6.1 The updated Works Programme for the project is enclosed in Appendix B.

7. Technical Details of Silt Curtain

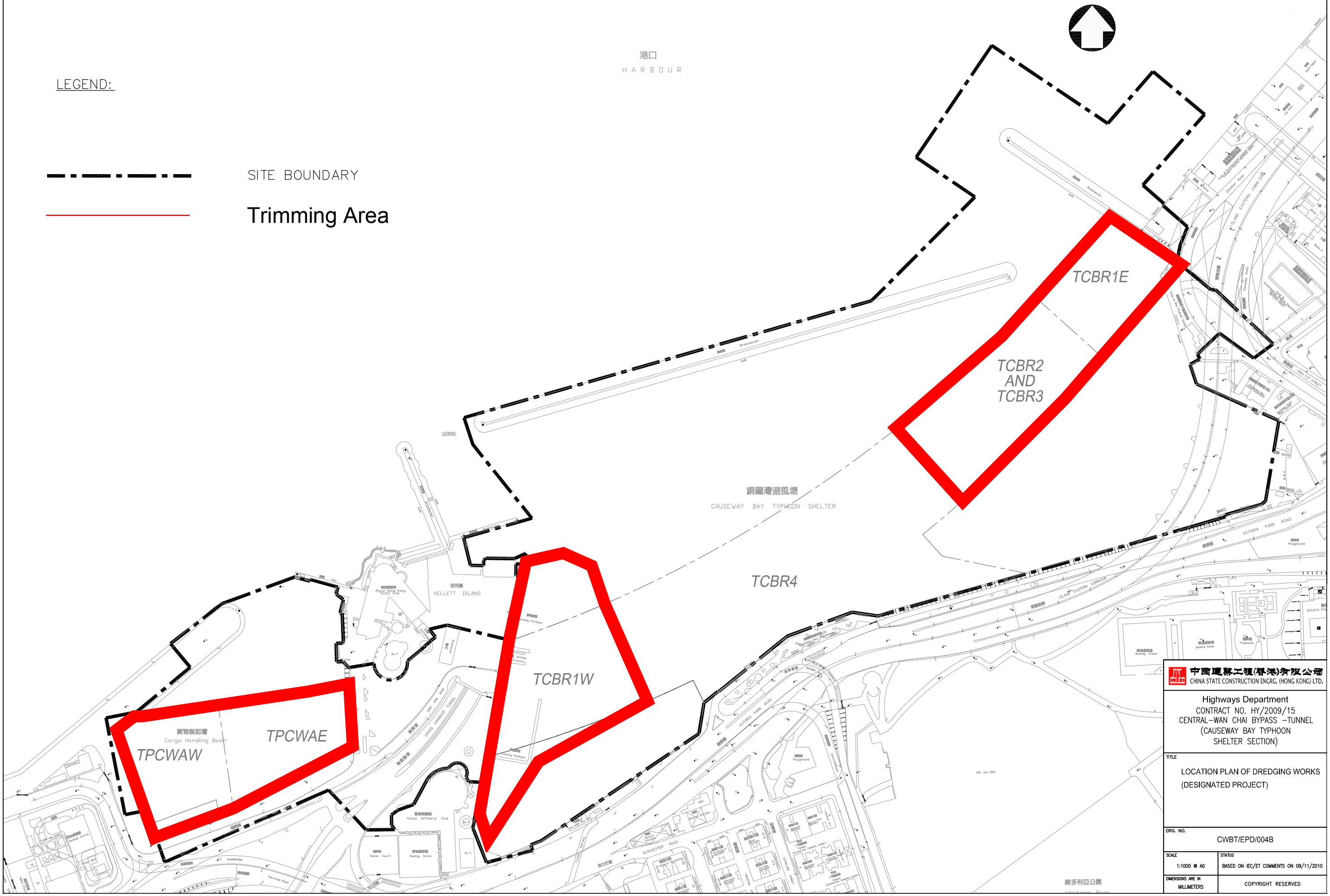
7.1 "Bontec" SG110/110 woven geotextile will be used for all proposed silt curtains and double-layered silt curtain frame. The technical data and previous job references of the proposed geotextile material is enclosed in Appendix C2.

Appendix A – Location Plans of Trimming Works

LEGEND:

SITE BOUNDARY

Trimming Area



中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGRG. (HONG KONG) LTD.

Highways Department
CONTRACT NO. HY/2009/15
CENTRAL–WAN CHAI BYPASS –TUNNEL
(CAUSEWAY BAY TYPHOON SHELTER SECTION)

TITLE

LOCATION PLAN OF DREDGING WORKS
(DESIGNATED PROJECT)

DRG. NO.
CWBT/EPD/004B

SCALE	STATUS
1:1000 @ A0	BASED ON IEC/ET COMMENTS ON 09/11/2010
DIMENSIONS ARE IN MILLIMETERS	COPYRIGHT RESERVED

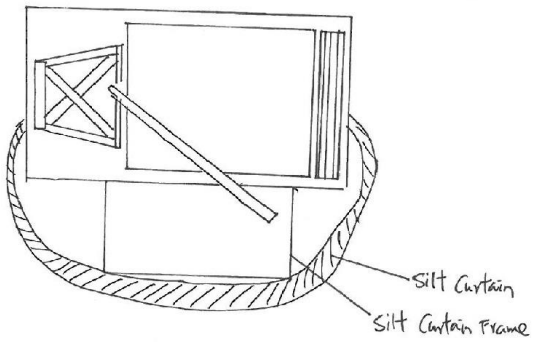
Appendix B – Works Programme

	2019								2020									
	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
TCBR1E																		
TCBR2 and TCBR3																		
TCBR1W																		
TPCWAE																		
TPCWAW																		

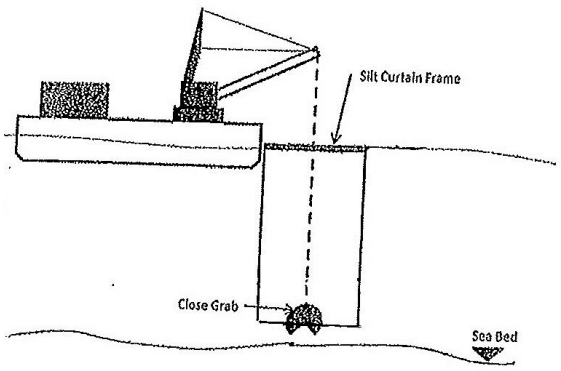
Appendix C1 – Detail Drawing of Silt Curtains

Contract No. : HY/2009/15
Central – Wan Chai Bypass – Tunnel
(Causeway Bay Typhoon Shelter Section)

Silt Curtain Arrangement during Trimming Works



PLAN



SECTION A - A

China State Construction Engineering (Hong Kong) Ltd.

Appendix C2 – Technical Details of Silt Curtain

bontec
woven and nonwoven geotextiles

BONTEC®

GEOTEXTILES AND SPECIAL ENGINEERED PRODUCTS

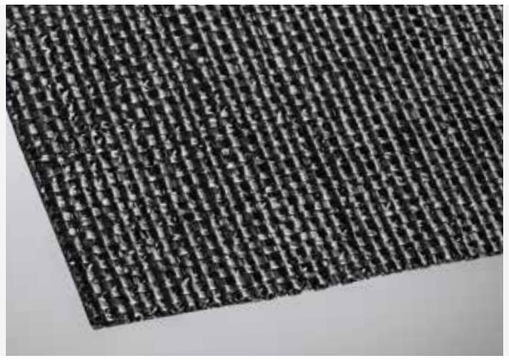
We undercover the world

Progress through performance
A Low&Bonar solution

SG

Woven geotextile for separation and reinforcement

Bontec woven geotextiles offer the perfect cost-effective solution for separation, reinforcement and filtration. Bontec woven geotextiles are manufactured from polypropylene tapes.



Functions
- Separation
- Filtration
- Reinforcement

Application areas
- Site access roads
- New roadways
- Hardstandings
- Car parks
- Industrial units
- Coastal defence projects

Features and benefits
- Durability of minimum 100 years
- Mechanical properties offer maximum strength at minimal cost
- Greater mechanical strength per unit weight compared to comparable nonwovens
- Enables water flow rates normal to the plane greater than those stipulated in the design
- Resistant to acids and alkalis at ambient temperatures
- High biological resistance
- Significant reduction of carbon footprint and costs compared to traditional methods

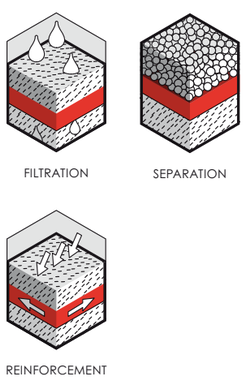
Bontec SG is used in areas such as access roads and hardstandings, roadways, car parks and coastal defence projects. One of its primary uses is in separation applications where there is a requirement to prevent intermixing of soft in-situ soils with good clean granular fill. A range of aperture sizes is available for Bontec SG woven geotextiles.

Compared to nonwovens, the Bontec SG range shows a greater mechanical strength per unit weight, providing a cost efficient and reliable solution for roads and temporary access roads.

Technical details
Bontec woven geotextiles are manufactured from highly durable polypropylene.

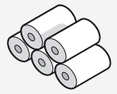
- Tensile strengths from 14 to 110 kN/m
- CBR puncture strengths ranging from 1.8 to 12.5 kN
- Available from stock in rolls of 5.25 m width as standard or other widths to order
- Standard roll length 100 m

Product functions



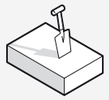
Geotextiles installation

The following information is offered in good faith to assist end users with the installation of Bontec geotextiles. As installation damage is one of the key factors that affects the integrity of the installed product, it is recommended that the following guidelines be adhered to as closely as possible.



Storage advice

The product should be stacked safely in a secure location until ready for use. The protective packing should not be removed until the product is required for use. For goods delivered with no outer packing a sacrificial layer of product should be removed and disposed of. Should product then be left uncovered then temporary exposure shall not exceed the declared time in the declaration of performance of the product, acc. to the EN 12224 standard.

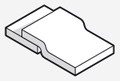


Subgrade preparation

It is possible to lay the geotextile directly on undisturbed vegetation e.g. grasses and reeds should levels so permit. Any plant vegetation such as bushes or shrubs, as well as large rocks or other similar obstacles must first be removed. All voids, wheel ruts or other deep depressions require to be either filled or leveled out to provide a smooth surface.

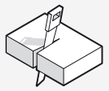
Product installation

The geotextile should be rolled out and allowed to follow the contours of the land. It should be kept as taut as possible in an effort to minimize folds but not stretched so that is spans over any hollows. Small deposits of fill material may be required across the geotextile surface to hold it in place until fill placement commences. No vehicle should traffic directly on the geotextile surface at any time.



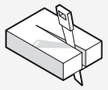
Product continuity

The simplest and quickest method of ensuring product continuity is to overlap adjacent layers. Rolls places side by side should have a minimum overlap of 300 mm whilst length on length should have a minimum overlap of 600 mm. Over soft or uneven soils these overlaps may require to be increased. Please contact our office for further advice. Should special circumstances identify a need for a mechanical joint then further details may be obtained from our office.



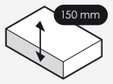
Cutting to width

Should the geotextile width have to be reduced then the product may be cut down whilst still in a roll format. Nonwoven products may be cut with a hand or power saw. This latter method will to a small degree fuse the roll end making the product slightly more difficult to unwind.



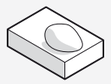
Cutting to length

Product may be cut to length using either a sharp blade or scissors.



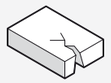
Placement of cover fill

Fill material should be end tipped at either the edge of the geotextile or on top of already placed fill before being spread to the required depth using a tracked machine. A minimum fill layer thickness over the geotextile of 150 mm is recommended prior to any trafficking or compaction.



Fill restrictions

The choice of fill placed directly on the geotextile's surface can greatly affect the amount of damage caused to it during installation. A simple piece of guidance to help minimize this damage is to use a maximum stone size no greater than half the fill layer thickness e.g. if fill is being placed and compacted in 150 mm layers then the maximum stone size should be no greater than 75 mm. This prevents any stone in direct contact with the compactor at the surface also coming into contact with the geotextile. Another option is to place a 50 mm thick sacrificial sand blanket on the geotextile prior to main fill placement.



Installation damage

Should the geotextile be damaged during fill placement then the surrounding fill material should be removed and a second geotextile layer placed over the damaged area. A minimum overlap of 1500 mm should be provided between the edge of the damaged area and the outside edge of the patch. Fill placement should then continue as before.

Disposal of waste product

A small quantity of waste is generated with each roll of geotextile product used. This can include packing, a plastic or cardboard roll center and possibly product offcuts. We would ask that you please give consideration to the environment when disposing of this material.

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

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 locates 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

bontec

a bonar technical fabrics product

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	
	Our reference: G&E07052010.doc

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

bontec

a bonar technical fabrics product

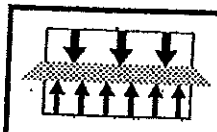
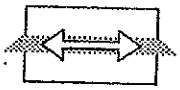
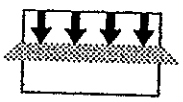
SG 110/110

Woven polypropylene geotextile made of slit film tapes

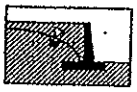
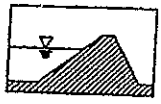
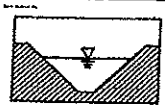
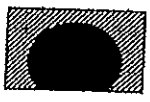
Technical data sheet according to internal specifications Bonar TF: version 06 dd. 05/01/10
Accompanying documents CE marking: version 04 dd. 05/01/10

CE

1137-CPD-615
10

				
separation	**filtration**	**reinforcement**	**protection**	**drainage**

	test method	value	tolerance
Mechanical properties			
Tensile strength MD	EN ISO 10319	**110,0 kN/m**	-9,9 kN/m
Tensile strength CD		**110,0 kN/m**	-9,9 kN/m
Elongation MD	EN ISO 10319	**12,0 %**	+/-2,8 %
Elongation CD		**8,0 %**	+/-1,8 %
Static puncture resistance – CBR	EN ISO 12236	**12,50 kN**	-2,50 kN
Dynamic perforation resistance – cone drop	EN ISO 13433	**10,0 mm**	+2,0 mm
Hydraulic properties			
Water permeability normal to the plane	EN ISO 11058	**25x10-3 m/s**	-8x10-3 m/s
Water flow normal to the plane (*)		**25 l/m².s**	-8 l/m².s
Characteristic opening size (AOS)	EN ISO 12956	**230,0 µm**	+/-69,0 µm
Physical properties			
Thickness under 2 kPa (*)	EN ISO 9863-1	**1,53 mm**	+/-0,31 mm
Weight (*)	EN ISO 9864	**464,0 g/m²**	+/-46,4 g/m²
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		

				
roads	**railways**	**foundations & retaining walls**	**drainage systems**	**erosion control systems**
EN 13249:2000	EN 13250:2000	EN 13251:2000	EN 13252:2000	EN 13253:2000
				
reservoirs & dams	**canals**	**Tunnels & under-ground structures**	**solid waste**	**liquid waste**
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 6,25 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.

BONAR TECHNICAL FABRICS
invisibly good

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BONAR Yarns & Fabrics Ltd, St. Salvador Street, Dundee DD3 7EU, UK - ☎ +44(0)1382 346102 - 🖷 +44(0)1382 202378

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

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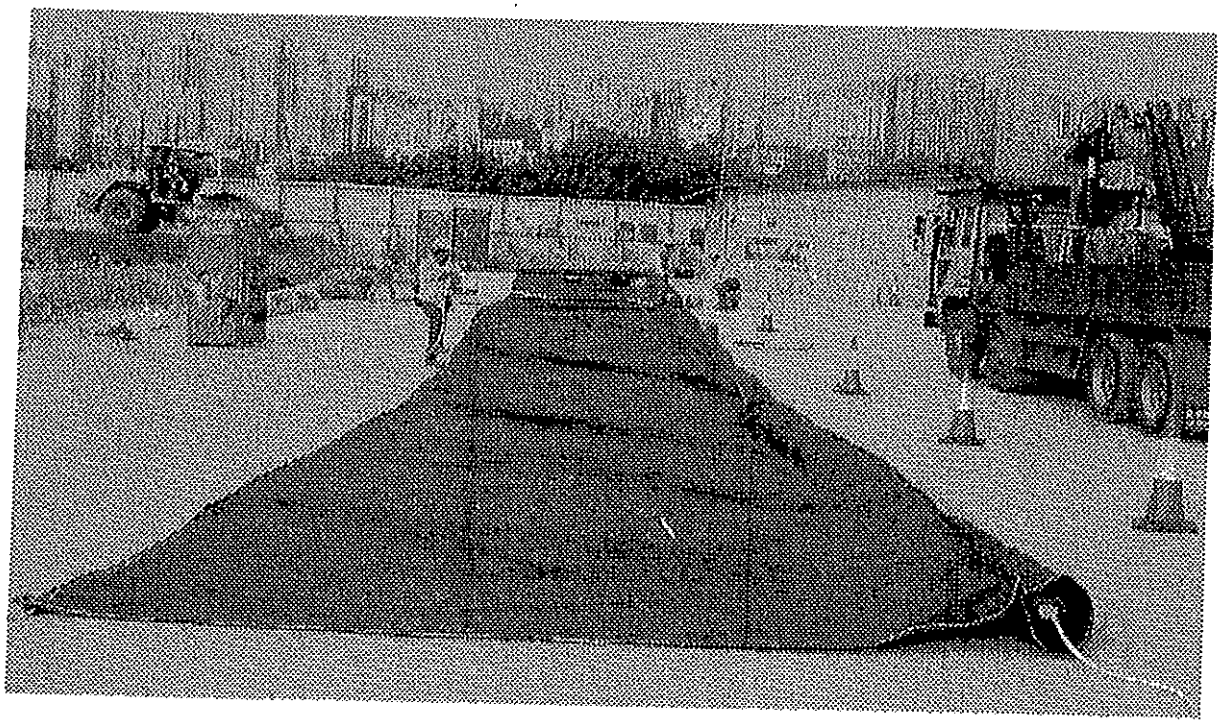

Date	Mar 2010
Project	Contract No. KL/2009/01 Site formation for Kai Tak Cruise Terminal Development
Client	CEDD
Consultant	Scott Wilson Ltd
Main Contractor	Penta-Ocean Construction Co. Ltd
Works	SG100/100 as Silt Curtain
Size	1,050 sq m

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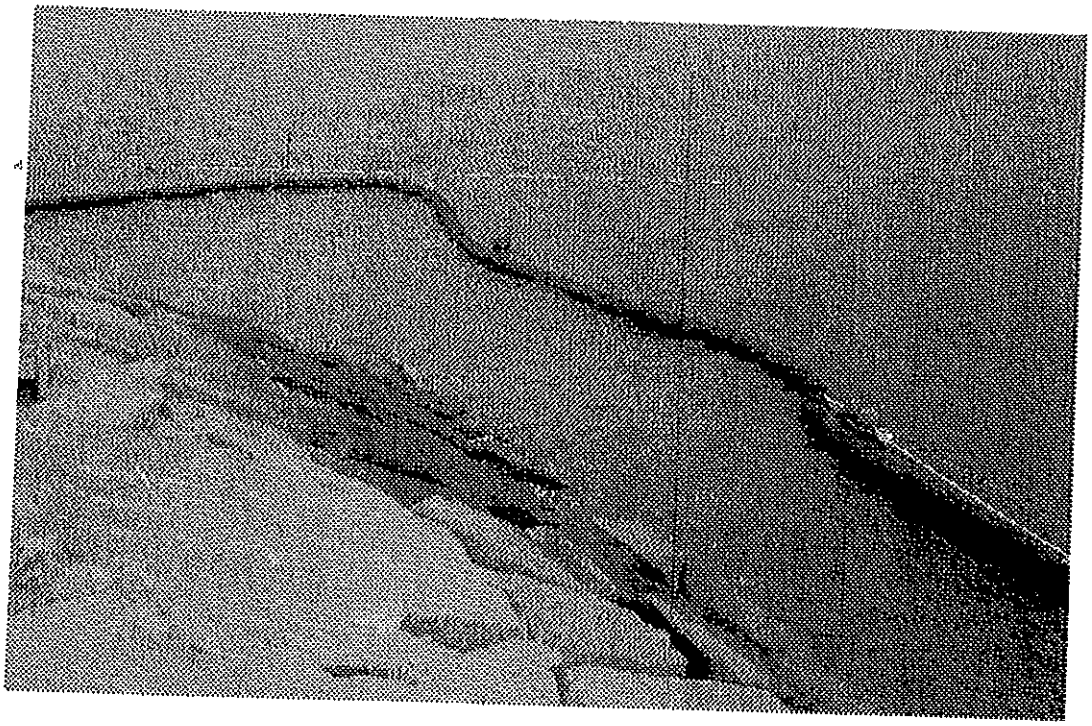
website: www.g-and-e.com



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

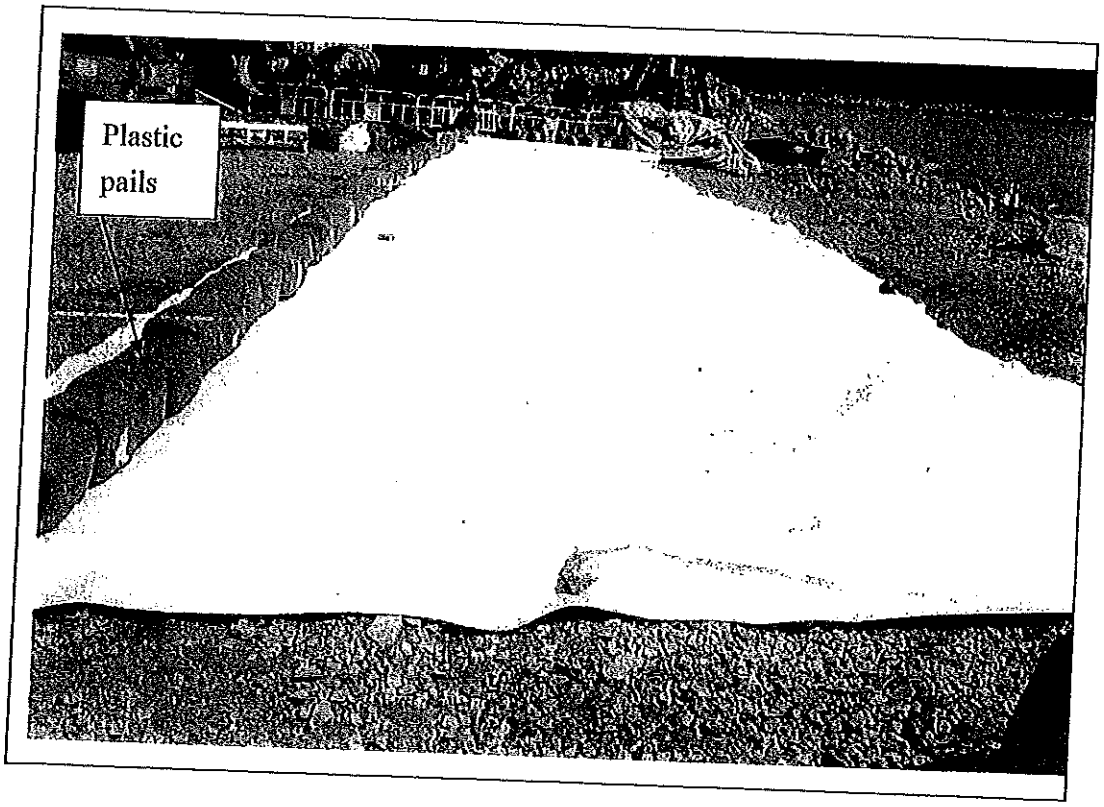


Photo shown Geotextile and Plastic Pails

Appendix D – Daily Checklist Template

隔泥布潛水員檢查表

位置: _____ 編號: _____
日期: _____ 檢查員; _____

1. 整潔	
1.1 沒有垃圾在浮架內	
1.2 已清理架內垃圾	
1.3 其他(請註明):	
2. 浮架狀況	
2.1 浮架沒有損壞	
2.2 浮架接口沒有損壞	
2.3 螺絲及繩索沒有鬆脫	
2.4 其他(請註明):	
3. 隔泥布狀況	
3.1 隔泥布沒有損壞	
3.2 隔泥布沒有鬆脫	
3.3 其他(請註明):	
簽署:	

說明: ✓ = 滿意 × = 不滿意須改善 - = 不適用

Silt Curtain每日檢查表

位置 : _____ 編号 : _____

日期 : _____ 檢查員 : _____

	星期一	星期二	星期三	星期四	星期五	星期六
1. 整潔						
1.1 沒有垃圾在浮架內						
1.2 已清理架內垃圾						
1.3 其它 (請註明):						
2. 浮架狀況						
2.1 浮架沒有損壞						
2.2 浮架接口沒有損壞						
2.3 螺絲及繩索沒有鬆脫						
2.4 其它 (請註明):						
3. 隔泥布狀況						
3.1 隔泥布沒有損壞						
3.2 隔泥布沒有鬆脫						
3.3 其它 (請註明):						
簽署 :						

說明: ✓ = 滿意 x = 不滿意須改善 - = 不適用

Appendix E – Email confirmation from EPD regarding Seabed Reinstatement Works

黃卓峯

收件者: Ip Chi Fung, Donald
主旨: RE: Seabed Reinstatement/Trimming Works at Ex-Wan Chai Public Cargo Working Area (Ex-WCPCWA) and Causeway Bay Typhoon Shelter (CBTS)

From: stephensfchung@epd.gov.hk [mailto:stephensfchung@epd.gov.hk]
Sent: Thursday, June 13, 2019 10:58 AM
To: Ip Chi Fung, Donald
Cc: Po On Yee, Annie; Norton, Denis Arthur; Mr. Li Yingrui, Ray - Highways Department; Wong Kam Keung, Eric; Chu Wa Nin, Samuel; louischan@epd.gov.hk
Subject: RE: Seabed Reinstatement/Trimming Works at Ex-Wan Chai Public Cargo Working Area (Ex-WCPCWA) and Causeway Bay Typhoon Shelter (CBTS)

Dear Mr IP,

I refer to your email of 12 Jun 2019 attaching supporting documents related to the captioned works. We note that:

- your proposed seabed reinstatement works shown in your plans with sketch no. 60095653/T2/SK0957A and no. 60095653/T2/SK0958 are within the works area delineated in the plans nos. 92995/GAZ/1000A and 92995/GAZ/1005A to 92995/GAZ/1008A;
- the works associated with the plans nos. 92995/GAZ/1000A and 92995/GAZ/1005A to 92995/GAZ/1008A are authorized under the Roads (Works, Use and Compensation) Ordinance (Cap.370); and
- the works to be carried out in association with the reclamation (i.e. "1st part of the works" as stated in your proposal) involve the reinstatement of existing sea-bed.
-

In accordance with s.4(1) of the Dumping at Sea (Exemption) Order, your proposed seabed reinstatement works are exempt from the requirement for a permit under section 8 of the Dumping at Sea Ordinance (Cap.466).

Should you have any queries, please feel free to contact me.

Regards,
Stephen Chung
Environmental Protection Department
Tel.: 2835 1189