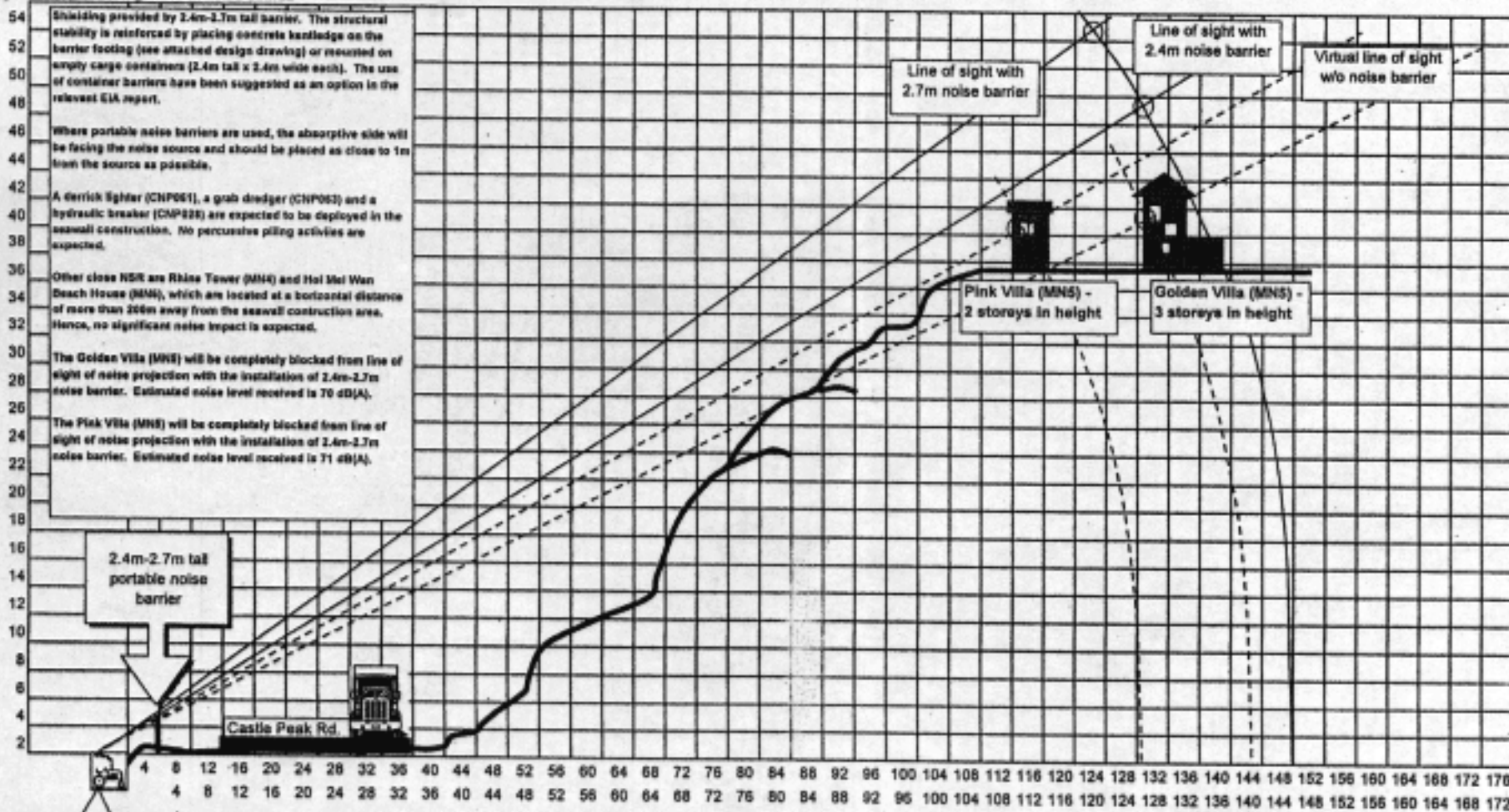




Portable Noise Barrier Vertical Coverage
EP-095/2001

Height in meters from ground at noise source



Shielding provided by 2.4m-2.7m tall barrier. The structural stability is reinforced by placing concrete kantledge on the barrier footing (see attached design drawing) or mounted on empty cargo containers (2.4m tall x 2.4m wide each). The use of container barriers have been suggested as an option in the relevant EIA report.

Where portable noise barriers are used, the absorptive side will be facing the noise source and should be placed as close to 1m from the source as possible.

A derrick lighter (CNP061), a grab dredger (CNP062) and a hydraulic breaker (CNP028) are expected to be deployed in the seawall construction. No percussive piling activities are expected.

Other close NSR are Rhine Tower (MNS) and Hal Mei Wan Beach House (MNS), which are located at a horizontal distance of more than 260m away from the seawall construction area. Hence, no significant noise impact is expected.

The Golden Villa (MNS) will be completely blocked from line of sight of noise projection with the installation of 2.4m-2.7m noise barrier. Estimated noise level received is 70 dB(A).

The Pink Villa (MNS) will be completely blocked from line of sight of noise projection with the installation of 2.4m-2.7m noise barrier. Estimated noise level received is 71 dB(A).

2.4m-2.7m tall portable noise barrier

Castle Peak Rd

Noise sources from seawall construction
CNP061 +
CNP063 +
CNP028
= 123 dB(A)

103	100	98	94	92	90	89	88	87	86	85	84	84	83	82	82	81	81	80	80	79	79	79	78	78	78	77	77	77	76	76	76	75	75	75	75	74	74	74	74	73
103	95	91	89	87	85	84	83	82	81	80	79	79	78	77	77	76	76	75	75	74	74	74	73	73	73	72	72	72	71	71	71	70	70	70	69	69	69	69	68	

Distance Attenuation

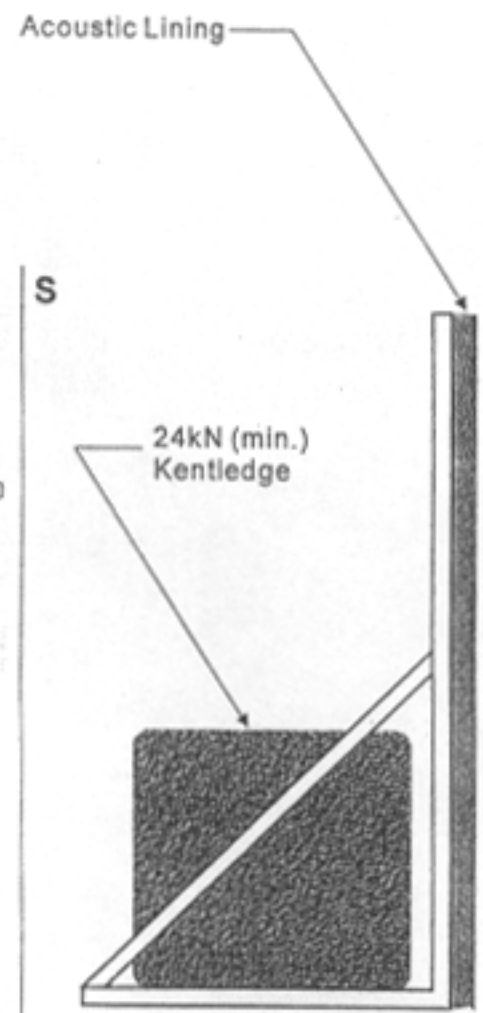
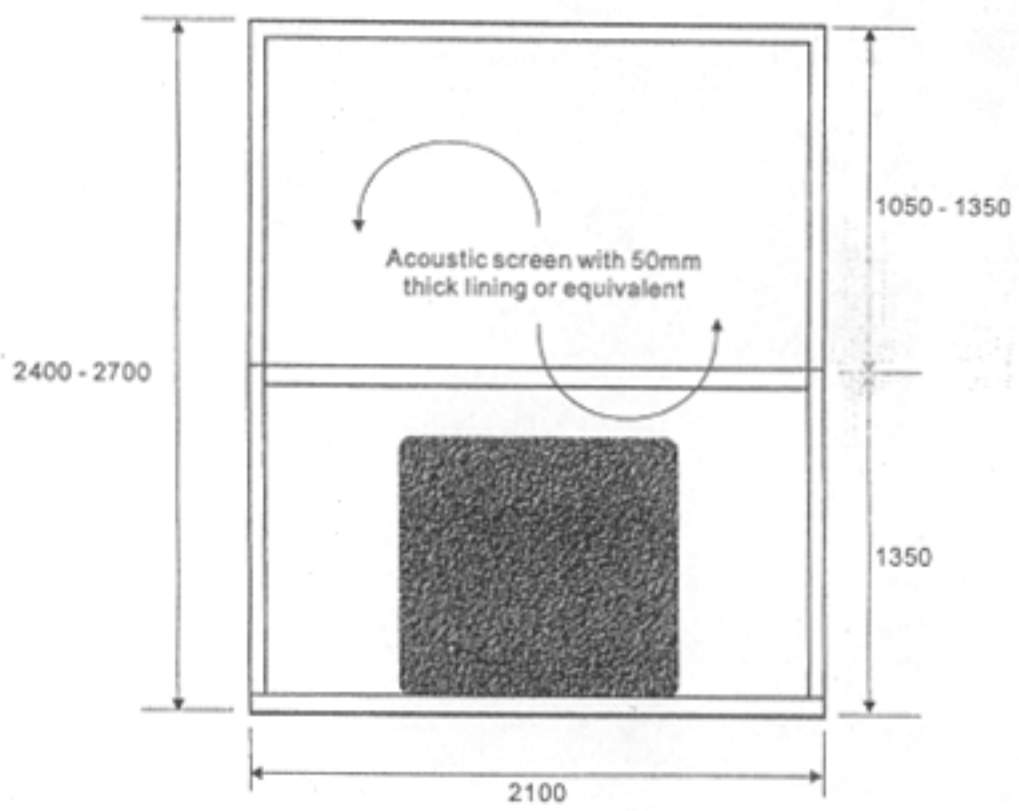
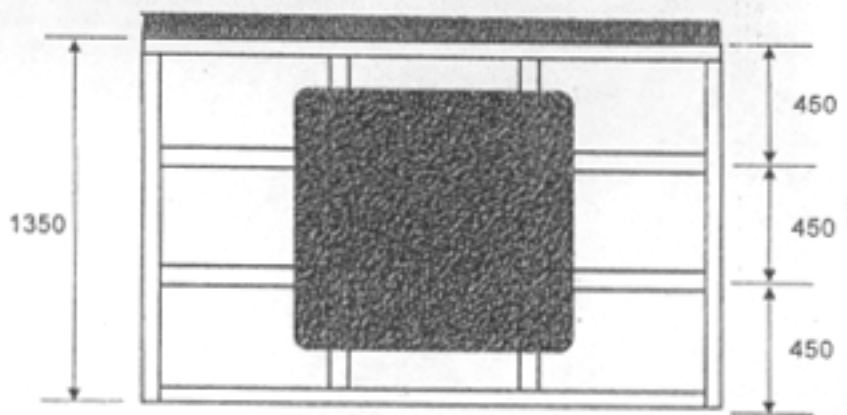
Remarks:
The "Technical Memorandum on Noise From Construction Work Other Than Percussive Piling" (TM) was used to calculate the figures shown on this chart.

In accordance with Section 2.11, Step 11 of the TM, 3 dB(A) has been added to the figures to account for acoustic reflection at buildings.

Distance in meters from source
Distance in meters from barrier

Single source. Not attenuated by noise barrier. Adjusted for acoustic reflection.

Attenuated with mineral wool of 50mm thickness and 0.9g/m³ density insulated noise barrier. Adjusted for acoustic reflection.



- Remarks:**
1. All measurements, unless otherwise stated, are in mm
 2. Screen shall be 13mm plaster board or 18 mm chipboard or equivalent with surface mass of no less than 7kg/m² (BS5228)
 3. Acoustic lining shall be 50mm thick woodwool slabs or equivalent with average absorption coefficient between 0.25Hz and 4000Hz of no less than 0.6 (BS5228)
 4. All members should be made of structural steel of 76x38x6.7kg/m channels of grade 43 to BS4360
 5. Electrodes shall comply with BS639 Section 1.2
 6. All fillet weld shall be 5mm unless stated otherwise
 7. All butt joint connection shall be single bevel butt weld
 8. At least 5 of the shown screen shall be horizontally joint together without gaps to achieve the criteria of length = 5 X height (BS5228)

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

Contract No. HY / 99 / 19

Contract Title
Castle Peak Road Improvement
Between Ting Kau and Sham Tseng,
Tsuen Wan

Drawing Title
Portable Noise Barrier

Prepared WY	Checked CSL
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Scale Not to scale	Date 18 November 2002
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Drawing No.	Rev.
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本署檔號
OUR REF:
來函檔號
YOUR REF:
電話
TEL NO.:
圖文傳真
FAX NO.:

(14) in An(2) to EP2/N2/C/30 IV
HY/9/19/M45/100-0830
2835 1102
2591 0558

Hong Kong Government
Environmental Protection Department
Headquarters
28th Floor, Southorn Centre,
130 Hennessy Road,
Wan Chai, Hong Kong.

環境保護署總部
香港灣仔
軒尼詩道
一百三十號
修頓中心廿八樓

30 December 2002

By Fax: 2417 0134

Mouchel Halcrow JV
12/F., MLC Tower
248 Queen's Road East
Wanchai, Hong Kong
(Attn: Mr. Lo Kai-wing, Michael)

Dear Mr. Lo,

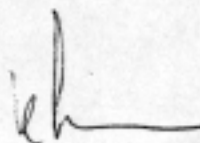
Contract No. HY/99/19

Castle Peak Road Improvement between Ting Kau and Sham Tseng, Tsuen Wan
Construction of Reclamation and Associated Seawall at Sham Tseng East (EP-095/2001)
Submission of Portable Noise Barrier

I refer to your letter referenced above enclosed the proposed portable noise barrier design submitted on 10.12.2002 under Condition 2.3 of the Environmental Permit Number EP-095/2001.

I am pleased to inform you that the portable noise barrier design meets Condition 2.3 of the EP-095/2001. It will be placed in the EIA Ordinance Register Office for the public's information and may in future be placed on the EIAO Internet Website.

Yours faithfully,



(K H TO)

Ag. Principal Environmental Protection Officer
for Director of Environmental Protection

c.c. – with a copy of f(13)

S(UW)3

S(TA)2

EO(EA) – for your arrangement to place in the EIAO Register Office for public information, as a normal practice

c.c. (w/o encl)

HyD

(Attn : Mr. Simon W K Lau)

Fax : 2714 5289

Hyder

(Attn : Ms. Jacquelyn Anderson)

Fax : 2805 5028

CSHK

(Attn : Mr. Andrew Tse)

Fax : 2865 5939

Mouchel Halcrow JV

12/F., MLC Tower
248 Queen's Road East
Wanchai, Hong Kong
Tel : (852) 2503 6688
Fax : (852) 2807 1577

Site Tel No. : 2417 3820
Site Fax No. : 2417 0134
2492 6201

Your Ref. :
Our Ref. : HY/99/19/M45/100-0830

10 December 2002

Environmental Protection Department
Urban Assessment Group
27th Floor, Southorn Centre
130 Hennessy Road
Wanchai
Hong Kong

RECEIVED

13 DEC 2002

EIAO Register
Office

Attn.: Ms Clara P S Yu

Dear Sir,

Contract No. HY/99/19

**Castle Peak Road Improvement between Ting Kau and Sham Tseng, Tsuen Wan
Construction of Reclamation and Associated Seawall at Sham Tseng East
Environmental Permit No. EP-095/2001 – Submission of Portable Noise Barrier**

Pursuant to Clause 2.3 of the Permit Condition, I submit for your approval details of the portable noise barrier on behalf of the permit holder HyD/MWPMO. A copy of the IC(E)'s letter ref. 910-05/E02-78114 dated 3 December 2002 is also attached for your information.

I would be grateful if you could approve the submission at your earliest convenience.

Yours faithfully,

Lo Kai Wing

Lo Kai Wing, Michael
Senior Resident Engineer

Encl.

c.c. HyD/MWPMO - Mr. Simon W.K. Lau
Hyder - Ms Jacquelyn Anderson
CSHK - Mr. Andrew Tse



Consulting

安誠工程顧問有限公司
香港銅鑼灣
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Fax : (852) 2805 5028
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Website : www.hyder-consulting.com

Hyder Consulting Limited is incorporated in Hong Kong with limited liability.
COI Number 126012

3 December 2002

BY POST & FAX (2417 0134)

Mouchel Halcrow JV
12/F MLC Tower
248 Queen's Road East
Wanchai
Hong Kong

Your Ref: HY/99/19/M45/201-0769
Our Ref: 910-05/E02-78114

For attention of: Mr. Michael Lo - Senior Resident Engineer

Dear Mr. Lo

**Contract HY/99/19
Castle Peak Road Improvement between Ting Kau and Sham Tseng,
Tsuen Wan- Proposal for Portable Noise Barrier**

I refer to your letter dated 27 November 2002 enclosing the revised proposal for portable noise barrier prepared by China State. We do not have further comment on the proposal.

Yours sincerely

Jacquelyn Anderson
Principal Environmental Consultant
HYDER CONSULTING LIMITED

JAL/KY/cl



Directors: EKH Leung OBE JP (Chairman) GS Tyler (Managing Director) DA Hirst (Finance Director) AW Clover RKN Ko LYW Lee K Yam
Technical Directors: FWC Kung YY Kwok KY Ng R Renshaw
Associate Directors: RE Baker TTF Chan T Chapman O Boumendjel-Gama AWS Yu
Consultants: JKW Chan RCC Lau RYS LI MT Pang JWM Po

T:\EA-JOB\Ea00910\letter\02078114.doc

12/F., MLC Tower
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Wanchai, Hong Kong
Tel: (852) 2503 6688
Fax: (852) 2807 1577

Site Tel No. : 2417 3820
Site Fax No. : 2417 0134
2492 6201

Your Ref. :
Our Ref. : HY/99/19/M45/201-0769

27 November 2002

Hyder Consulting Limited
3/F Somerset House
Taikoo Place
979 King's Road
Quarry Bay
Hong Kong

Attn.: Ms Jacquelyn Anderson

Dear Sir,

Contract No. HY/99/19
Castle Peak Road Improvement between Ting Kau and Sham Tseng, Tsuen Wan
Proposed Portable Noise Barrier (Rev. 1)

I enclose for your comment a copy of the Contractor's submission ref. CSHK/CBN/2002/220/WY/2060 dated 20 November 2002 enclosing his revised proposal for the portable noise barrier in response to EPD's and your comments.

If you have no further comment on this revised submission, please endorse and return for my onward submission to EPD.

) Yours faithfully,

Original signed by Michael Kai Wing, Lo

Lo Kai Wing, Michael
Senior Resident Engineer

Encl.



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

Your Ref.: HY/99/19/M45/201-0681

Our Ref.: CSHK/CBN/2002/220/WY/2060

20 November 2002

The Engineer's Representative
Mouchel Halcrow JV
12/F MLC Tower
248 Queen's Road East
Wanchai
Hong Kong

By Hand

Attn.: Mr. Michael K.W. Lo

Dear Sir,

**Contract No. HY/99/19 – Middle Section
Castle Peak Road Improvement between Ting Kau and Sham Tseng, Tsuen Wan
Proposed Portable Noise Barrier (Rev. 1)**

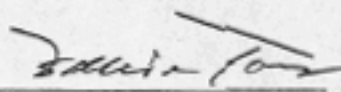
With reference to your letter to us dated 14 November 2002 enclosing comments on the subject structure by EPD and your IC(E), please find enclosed for your review and onward submission to your IC(E) for endorsement the revised design of the portable noise barrier. The said comments have been incorporated.

Please note that the Engineer is presently reviewing the marine works design at the designated area and dredging may not be required.

We trust this re-submission is to your satisfactory. Should you require any further details, please feel free to contact the undersigned or our Mr. Winston Yeung at 2492 8029.

Thank you for your attention.

Yours faithfully,
For and on behalf of
China State Construction Engrg. (Hong Kong) Ltd.


Eddie Tang
Deputy Project Manager

ET/PJC/WY/ata

Encl.

c.c. Head Office – w/o encl.

香港軒尼詩道一三九號
中國海外大廈二十九樓
29/F, China Overseas Building
139 Hennessy Road, Hong Kong
電話Tel: (852) 2823 7888
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網址 Web Site: <http://www.cchl.com>