

**MONTHLY**  
**ENVIRONMENTAL MONITORING AND AUDIT REPORT**  
**FOR**  
**CONTRACT No. HY/99/15**  
**IMPROVEMENTS TO EASTERN ISLAND CORRIDOR**  
**SECTION BETWEEN NORTH POINT INTERCHANGE AND SAI WAN HO**  
**AUGUST 2002**  
**REPORT No.: ET11145**

**Commissioned by:**

**HIGHWAYS DEPARTMENT  
3 & 6/F Homantin Gov't. Offices,  
88 Chung Hau St.,  
Homantin,  
Kowloon,  
Hong Kong.**

**Prepared By:**

**STANGER ASIA LTD.,  
G/F and 1/F,  
Din Wai Industrial Building,  
13 On Chuen Street,  
Fanling,  
N.T.**

**Our Job No.: 2.423**

**Report Date: 06 September 2002**

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## **EXECUTIVE SUMMARY.**

This is the 22<sup>nd</sup> environmental impact monitoring and audit report produced for the project of Improvements to Island Eastern Corridor Section Between North Point Interchange and Sai Wan Ho, Contract No.HY/99/15 and it covers the monitoring works conducted for August 2002.

### **Works Progress**

Works conducted this month included:

#### Construction of Bridge A

- Bridge Surface formation, installation of pre-cast beam.

#### Construction of Bridge B

- Formation of bridge surface.

#### Construction of Bridge C

- Bridge Surface formation.

#### Quarry Bay Park

- Quarry Bay Park East - Construction of support for noise barrier.
- Quarry Bay Park North – Carriageway improvements, road surfacing.
- Quarry Bay Park West – construction of retaining wall and noise barrier No.2, underpass and drainage works. Construction of noise barrier, footbridge A & B.

#### Hoi Yu Street

- Utilities installation.

#### Aldrich Bay

- Excavation, trenching for installation of pipe works, concrete wall and U-channel formation.

### **Air Quality Monitoring**

Monitoring for 24-hour Total Suspended Particulates (TSP) was carried out on five occasions with the monitoring of 1-hour TSP being carried out on thirteen occasions at each monitoring location ASR1, ASR2 and ASR3. There were no exceedances to set Action or Limit levels for either 24 or 1-hour TSP monitoring during this reported period.

### **Noise Monitoring**

Noise monitoring for the period was carried out on four occasions at monitoring locations NSR1, NSR2 and NSR3, giving a total of twelve records for normal working hours (07:00 – 19:00) in accordance with the contract requirements. There were no exceedances to the set Limit level for noise at any station during this reported period.

### **Waste**

1535 m<sup>3</sup> C&D waste was generated in this reported period, all of them were transported to barging point at Quarry Bay. Another 110m<sup>3</sup> soil and rock was reused on-site. 15 m<sup>3</sup> general refuse was transported away from site. In addition, 1200L chemical waste were disposed.



## **Site Inspections**

Four site inspections were carried out by the environmental team this month, the contractor was reminded to discharge the wastewater after proper treatment. In addition, wheel wash facilities should be provided at each of the exits. The unpaved road should be wet more frequently during dry spell.

## **Complaints and Notifications**

No complaints or notification of summonses received in this reported period.

## 1. INTRODUCTION.

### 1.1 Background

Stanger Asia has been commissioned by Gammon Skanska Ltd. to provide an Environmental Team (ET) to monitor air, noise, waste management, and to conduct regular site inspections for the construction phase of Contract No.HY/99/15. The team is to take a pro-active role in all issues that may be of environmental concern.

In this report, the air, noise, waste management monitoring and site inspections conducted in August 2002 will be detailed and reviewed. All environmental works were carried out in accordance to the specifications given in the contract documents for this project.

### 1.2 Report Structure

The purpose of this report is to detail and review air, noise, and waste management monitoring works carried out for the month of August 2002. The schedule for monitoring works for September 2002 is also given.

The report follows the format given below:

- Section 1: Introduction and background information to the content and purpose of this report.
- Section 2: This section reviews the progress of monitoring and construction works.
- Section 3: The results of air, noise, waste management, site inspections and meteorological data are presented.
- Section 4: This section audits the environmental monitoring data.
- Section 5: Exceedances to Action and Limit levels are summarized.
- Section 6: Details the review procedures and follow-up actions to any exceedances to Action and Limit levels.
- Section 7: Gives details of any complaints received, with their associated review and follow-up actions.
- Section 8: The status for solid and liquid waste management for the site is overviewed.
- Section 9: This section gives the details of the main construction activities for the forth-coming month.
- Section 10: This section gives the timetable for monitoring works for the coming month.
- Section 11: This section details proposed mitigation measures.
- Section 12: This section gives a conclusion in relation to all monitoring activities.

## 1.3 Management Structure

The Project was commissioned by the Highways Department of the HKSAR.

Mr. Allen Chiu is the Senior Project Manager for Gammon Skanska Ltd., the main contractor for the project. (Tel: 2516 8823, Fax: 2516 6260).

Mr. Gault Rice is the Senior Resident Engineer of Maunsell Consultants Asia Limited, Consulting Engineers for the project. (Tel: 2564 1621, Fax: 2856 2460).

The Environmental Team is headed by Mr. Chris Shenfield of Stanger Asia Ltd. (Tel: 2682 1203, Fax: 2682 0046).

An organization chart detailing the responsibility of the Environmental Team is given in Appendix VII of this report.

## 2. PROGRESS.

### 2.1 Completed Monitoring Works.

Table I gives the completed monitoring works for the reported period.

**Table I Completed Monitoring Works for August 2002**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				August 1	2	3
					24 – hr TSP 1 – hr TSP	
4	5	6	7	8	9	10
	1 – hr TSP		Noise 1 – hr TSP	Site Inspection 24 – hr TSP	1 – hr TSP	
11	12	13	14	15	16	17
	1 – hr TSP	Site Inspection	24 – hr TSP Noise 1 – hr TSP		1 – hr TSP	
18	19	20	21	22	23	24
	1 – hr TSP	24 – hr TSP Site Inspection	Noise 1 – hr TSP		1 – hr TSP	
25	26	27	28	29	30	31
	24 – hr TSP 1 – hr TSP	Site Inspection	Noise 1 – hr TSP		1 – hr TSP	

- Notes:
- 1-hr: 1 hour TSP (3 times in every 6 days) conducted at stations SR1, SR2 and SR3.
  - 24-hr: 24 hours TSP (once in every 6 days) conducted at stations SR1, SR2 and SR3.
  - Noise: daytime noise conducted at stations SR1, SR2 and SR3 (LAeq(30 min)) once a week.
  - SR1: Primrose Mansion; SR2: Juniper Mansion; SR3: North Point Police Station
  - Site inspection: once a week

## 2.2. Air Quality Monitoring

Impact monitoring of 24-Hour TSP was conducted on five occasions with the monitoring of 1-Hour TSP being conducted on thirteen occasions at monitoring location ASR1 in accordance with contract specifications and required frequency.

Impact monitoring of 24-Hour TSP was conducted on five occasions with the monitoring of 1-Hour TSP being conducted on thirteen occasions at monitoring location ASR2 in accordance with contract specifications and required frequency.

Impact monitoring of 24-Hour TSP was conducted on five occasions with the monitoring of 1-Hour TSP being conducted on thirteen occasions at monitoring location ASR3 in accordance with contract specifications and required frequency.

Monitoring was carried out at the stations given in Figure 1 of this report.

## 2.3 Noise Monitoring

Twelve impact monitoring records were recorded this month, four each at station NSR1, NSR2 and NSR3 in line with the contract specifications and frequency for normal working hours.

Monitoring was carried out at the stations given in Figure 1 of this report.

## 2.4 Site Inspections.

Weekly site inspections by the environmental team were carried out on four occasions in this reported month.

Site inspection reports are given in appendix X of this report.

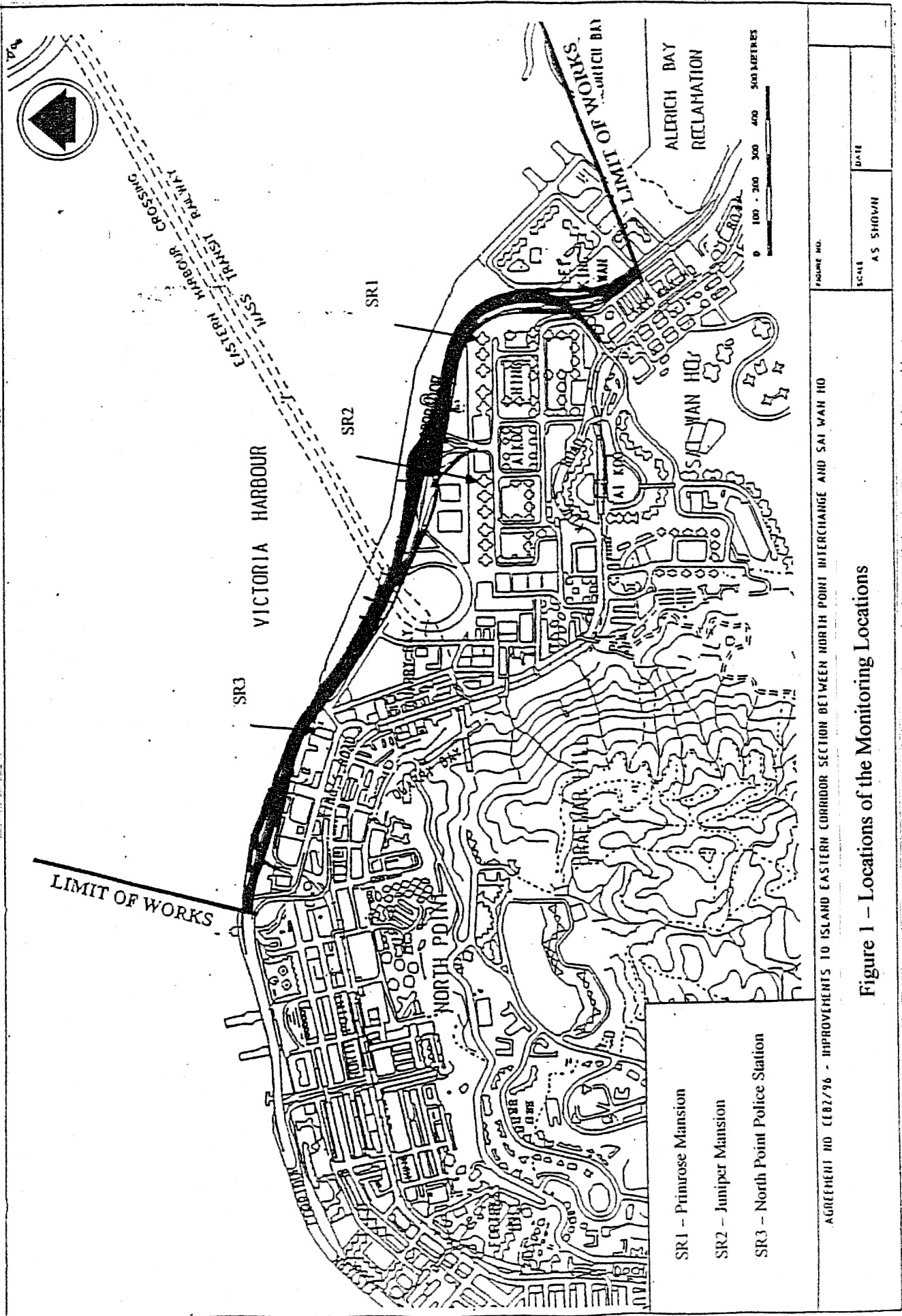
## 2.5 Waste Management

The chemical waste produced on site was collected regularly by a licensed chemical waste collector (lubricating and hydraulic oil).

The discharge license for compliance to the Water Pollution Control Ordinance for the site discharge (Aldrich Bay, Hoi Yu Street, Quarry Bay Park area, Retaining Wall No.5 and Tai Koo Shing area) have been issued. Chemical toilets have been established as temporary measures, these are emptied regularly by a licensed contractor.

1535 m<sup>3</sup> C&D waste was generated in this reported period, all of them were transported to barging point at Quarry Bay. Another 110m<sup>3</sup> soil and rock was reused on-site. 15 m<sup>3</sup> general refuse was transported away from site. In addition, 1200L chemical waste were disposed.





- SR1 - Primrose Mansion
- SR2 - Juniper Mansion
- SR3 - North Point Police Station

AGREEMENT NO CE87/96 - IMPROVEMENTS TO ISLAND EASTERN CORRIDOR SECTION BETWEEN NORTH POINT INTERCHANGE AND SAI WAN HO

FIGURE NO.	
SCALE	A5 SHOWN
DATE	

Figure 1 - Locations of the Monitoring Locations

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## 2.6 Progress of Relevant Works

Works undertaken in September 2002 included:

### Construction of Bridge A

- Bridge Surface formation, installation of pre-cast beam.

### Construction of Bridge B

- Formation of bridge beams.

### Construction of Bridge C

- Bridge Surface formation.

### Quarry Bay Park

- Quarry Bay Park East - Construction of noise barrier.
- Quarry Bay Park North – Carriageway improvements, road surfacing.
- Quarry Bay Park West – construction of retaining wall and noise barrier No.2, underpass and drainage works. Construction of noise barrier, footbridge A & B.

### Hoi Yu Street

- Utilities installation.

### Aldrich Bay

- Excavation, trenching for installation of pipe works, concrete wall and U-channel formation.