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Environmental Pioneers & Solutions Limited

Document Submission

Job title: **DC/2006/11 - Drainage Improvement in Southern Lantau**

Document title: **Baseline Monitoring Report**

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[User Note1]

Drainage Services Department

Agreement DP05/2005 – Employment of Consultant for Environmental and Landscaping Detailed Design for Drainage Improvement in Southern Lantau

Baseline Monitoring Report

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Baseline Monitoring Report

May 2008

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Contents[User Note3]

Executive Summary

An environmental baseline monitoring for noise, water quality, ecology and cultural heritage was undertaken in accordance with the EM&A Manual and EM&A Guidelines for the Drainage Improvement in Southern Lantau Project.

Noise monitoring was conducted from 9 September to 23 September 2007 and from 4/5 October to 19 October 2007 covering the four monitoring locations at No. 73 village house, Ling Tsui Tau Tsuen, No. 31 village house, Ling Tsui Tau Tsuen, No 5 village house adjacent to Luk Tei Tong River outlet and No. 23 village house, Tai Tei Tong River. The measured mean noise levels ranged from 45 to 53 dB(A) during non-restricted period and 46 to 53 dB(A) during restricted period. The Action and Limit Levels for construction noise are defined (Table E1). If non-compliance of the criteria occurs, action should be taken immediately in accordance with the Event/Action Plan as detailed in Section 4.

Table E1: Action and limit levels of construction noise

Time Period	Action Level	Limit Level
0700 – 1900 hours on any day not being a Sunday or public holiday	When one documented complaint is received	75dB(A) *

* reduce to 70dB(A) for schools and 65 dB(A) during school examination periods

Water quality monitoring including 4 impact stations and 3 control stations was conducted between 20 August and 14 September 2007. Based on the baseline water quality monitoring data obtained, the A/L levels are defined (Table E2). If the water quality monitoring results at any impact stations exceeded the criteria, the actions in accordance with the Event and Action Plan should be taken as detailed in Section 4.

Table E2: Action and limit levels of water quality

Parameters	Monitoring locations							
	M1		M2		M3		M4	
	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level
DO (mg/L)	5.7	4	6.2	4	5.9	4	5.9	4
SS (mg/L) [1, 2]	12.2	12.8	3.1	4.2	12.4	17.7	13.9	15.2
Tby (NTU) [1, 2]	15.2	16.9	5.3	6.5	16.8	26.0	16.2	18.0

Note:

1. The Action Levels can be 95%-ile of baseline data as mentioned above or 120% of upstream control station at the same tide of the same day according to the EM&A Manual

2. The Limit Levels can be 99%-ile of baseline data as mentioned above or 130% of upstream control station at the same tide of the same day according to the EM&A Manual

The ecological baseline monitoring was conducted between 3 September and 7 September 2007. Fauna and flora baseline survey was conducted in Pak Ngan Heung River and Luk Tei Tong River and LTT bypass channel. All recorded terrestrial fauna are common in Hong Kong. Diversity of dragonfly was higher in the Luk Tei Tong Marsh Reference Site than in other sites surveyed during

the baseline monitoring. Among the aquatic fauna i.e. fish and macro-invertebrates recorded, except Spotty band Goby *Glossogobius olivaceus* which is uncommon, all other species are common and widespread in Hong Kong. In accordance with the Event/Action Plan as recommended in the EM&A manual, action should be taken immediately if disturbance to the breeding White-shouldered Starlings is identified during construction phase.

Table E3 Monitoring of White-shouldered Starlings: Event and Action Plan

Event	Action	
	ET Leader	**Contractor**
Identification of disturbance to breeding White-shouldered Starlings	1. Increase frequency of monitoring to twice weekly	1. Check all construction actions and working methods
	2. Notify ER	2. Submit proposals for remedial action to prevent abandonment of the breeding site
	3.Review construction activities of previous week	3. Implement remedial action
	4. Identify any changes in construction activities in previous week	4. Liaise with ET and IEC regarding effectiveness of remedial actions.
	5. Discuss remedial actions with ER	

Baseline survey was carried out to establish the existing condition of the Yuen Compound as stipulated in the Final EM&A report. The 12 main buildings comprising 2 watchtowers, residential buildings and rice storage areas identified in the 2003 Built Heritage report were surveyed, reviewed, reported and photographed with respect to their exterior and where possible interior condition, architectural detail and any changes or omission since the 2003 buildings survey. In the event of any observed construction phase impacts or damage on the heritage resources within the Yuen Compound, construction shall cease and owner of the compound and the AMO should be notified immediately. Remedial actions should be proposed by ET and the contractor for agreement with the owner, the ER and IEC, and comment from AMO should also be sought.

1 Introduction

1.1 Project Description

This project relates to the drainage improvement works in Southern Lantau. Most of the watercourses in Mui Wo, Southern Lantau remain untouched at their upper reaches and are partially channelized at their downstream ends near Silver River. Pak Ngan Heung River with Ling Tsui Tau U-channel, Luk Tei Tong River and Tai Tei Tong River merge at Silver River before passing Mui Wo township to Silver Mine Bay. Some drainage improvement works at Cheung Sha River, Cheung Sha Sheung Tsuen, Lo Uk Tsuen, Pui O River in Ham Tin and San Shek Wan are also included. As these existing rivers do not meet flood protection standards, drainage improvement works are recommended accordingly.

A Preliminary Environmental Review (PER), undertaken in the PPFS stage, identified that part of the drainage improvement works in Southern Lantau is a Designated Project under Schedule 2 Part I of the Environmental Impact Assessment Ordinance (EIAO) and requires an Environmental Permit (EP) under the EIAO for its construction and operation. The Designated Project includes the drainage improvement works in Pak Ngan Heung River, Tai Tei Tong River, Luk Tei Tong River and Luk Tei Tong (2) By-pass River in Mui Wo (hereafter referred to as "the Project"). The Environmental Impact Assessment (EIA) Report and the Environmental Monitoring & Audit (EM&A) Manual for the Project had been approved under the EIAO by the Director of Environmental Protection Department (EPD) in December 2005 (Register no. AEIAR-093/2005), and the Variation of EP (VEP) (EP-237/2005/A) was issued in March 2007.

A location map for the Project is provided in Figure 1-1. The scope of work elements covered is described in the following:

Pak Ngan Heung River

A 80m long trapezoidal channel using gabion walls will be constructed with rip-rap bases and natural substrates at upstream of Pak Ngan Heung River.

A 180m long 3-cell by-pass box culvert (3m wide and 2.25m deep) will be constructed. Embankment with landscape works will be formed on the top of the box culvert.

A low flow diversion dam and low flow pipes will be provided at upstream of the meander to maintain the base flow for sustaining the natural habitat of the meander. During heavy flow, the flood waters can be diverted directly to the downstream through the by-pass box culvert. In addition, an agricultural weir and a fish ladder will be provided at the upstream of Pak Ngan Heung River.

A 100m long rectangular channel using rip-rap bedding and concrete retaining walls, with associated maintenance road and access ramp, will be constructed at downstream of Pak Ngan Heung River.

Ling Tsui Tau U-Channel

A 200m long, about 750mm wide U-channel along the downhill slope was originally proposed in the EIA to intercept runoff from Butterfly Hill and convey the flow to Pak Ngan Heung River. Recent application for VEP for a 750mm wide U-channel of about 250m long and upgrading of existing drains of about 130m long has been approved (ref. EP-237/2005/A).

Tai Tei Tong River

The works at Tai Tei Tong River will include widening of 3 bottlenecks. Existing river bed will be untouched. The river bank will be reinstated by gabion blocks.

Luk Tei Tong River and Luk Tei Tong (2) By-pass River

A 240m long trapezoidal channel will be constructed using gabion walls with masonry lined bank and natural bed in Luk Tei Tong River.

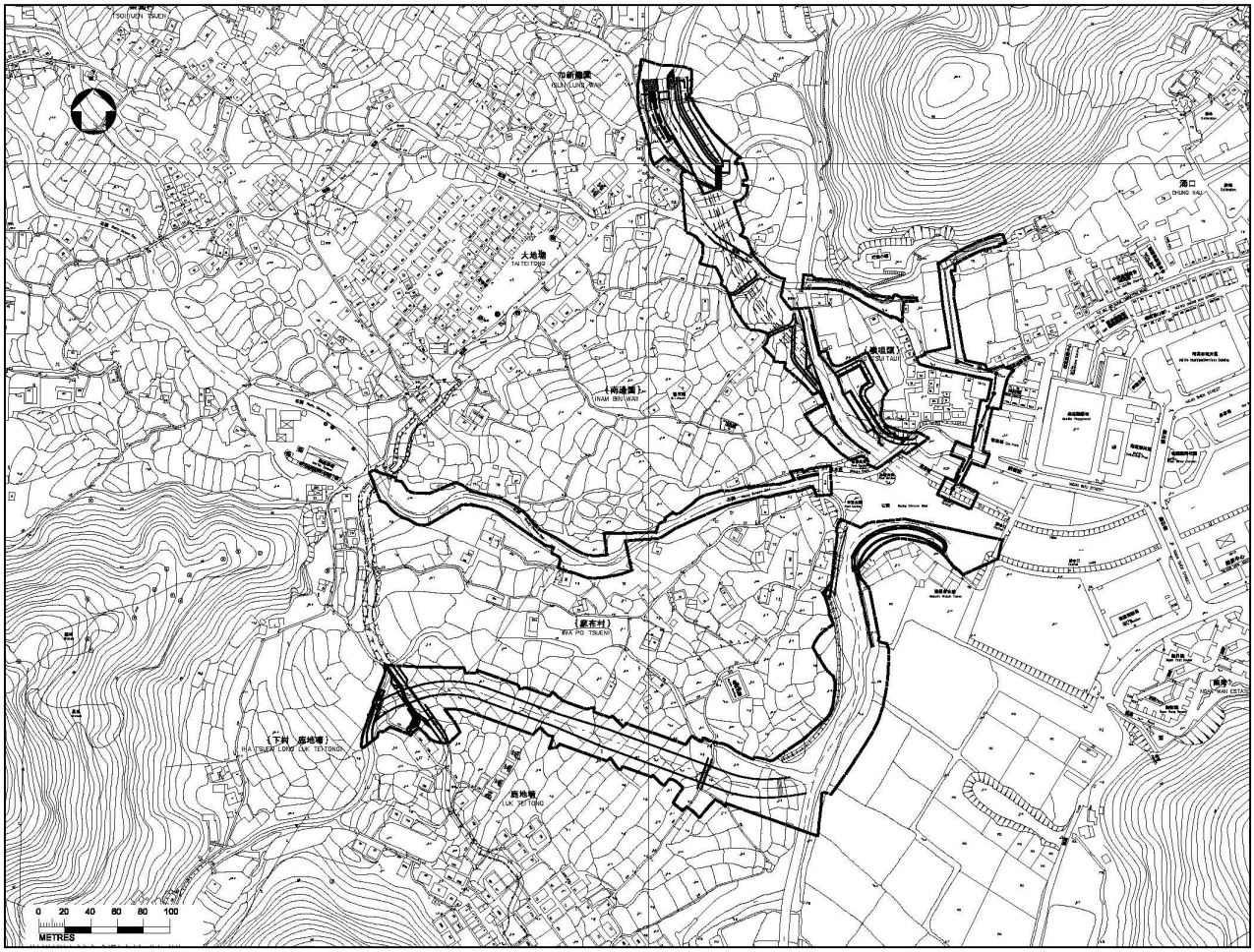
A 350m long rectangular By-pass Channel will be constructed at Luk Tei Tong (2) By-pass River passing through the existing marsh area and abandoned agricultural land. The By-pass Channel bed would be approximately 0.8m below the existing ground level, and would be maintained as compensatory marshland habitat. A low flow weir would be constructed at the downstream end of the By-pass Channel, serving to retain rainwater and some diverted flood flow in the channel. Under normal condition, the flow to the existing streamcourse will be maintained. Flood flow can be diverted directly to downstream through the By-pass Channel during high flow events. A minimum of 0.2m high earth embankment to avoid surface runoff from existing marsh overflowing to the proposed By-pass Channel will be erected. One vehicular crossing and one pedestrian crossing will be provided in the form of box culvert.

1.2 Purpose of the Report

According to the EP-237/2005/A, an EM&A programme shall be implemented in accordance with the procedures and requirements as set out in the EM&A Manual of the Project.

An environmental baseline monitoring for noise, water quality, ecology and cultural heritage was undertaken in accordance with the EM&A Manual and EM&A Guidelines for Development Projects in Hong Kong prior to the commencement of any construction activities on-site. The purpose of this report is to summarise the findings of this baseline monitoring and to establish the compliance levels for the subsequent impact monitoring during the construction stage. Other than this introductory section, the report will provide information on the monitoring methodology, monitoring results, derivation of Action and Limit (A/L) Levels, and conclusions.

Figure 1-1: Site location Plan



2 Baseline Monitoring Methodology

2.1 Airborne Construction Noise

2.1.1 Methodology, Monitoring Parameters and Equipment

Baseline noise level was measured by sound level meters in terms of A-weighted equivalent continuous sound pressure level (L_{eq}) according to the Technical Memorandum on Noise from Construction Work other than Percussive Piling (GW-TM). L_{10} and L_{90} were recorded as supplementary information for data auditing. The sound level meters and calibrators comply with the International Electrotechnical Commission (IEC) Publication 651:1979 (Type 1) specification in accordance with GW-TM. The calibration certificates for the noise monitoring equipment are given in Appendix 1. Table 2-1 summarises the equipment list for baseline noise monitoring.

Table 2-1: Equipment list for baseline noise monitoring

Equipment	Manufacturer & Model No.	Precision Grade	Qty.
Integrated sound level meter	Brüel & Kjær 2238	IEC 651 Type 1 IEC 804 Type 1	2
Windshield	Brüel & Kjær UA0237		2
Acoustical calibrator	Brüel & Kjær 4226	IEC 942 Type 1	1
LCD wind speed indicator	Kestrel Vane Anemometer	--	1

Noise measurements were not conducted in the presence of fog, rain, wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s. The wind speed was checked with a portable meter capable of measurement in m/s.

2.1.2 Monitoring Locations

The EM&A Manual specified four locations for noise monitoring including village house in Ling Tsui Tau Tsuen (PNH4), No. 73 village house in Ling Tsui Tau Tsuen (LT2), No 23 village house adjacent to Tai Tei Tong River (TTT3) and No. 4 village house adjacent to Luk Tei Tong River Outlet (LTT4). During the recent site visits in June to October 2007, PNH4 and LTT4 were vacant. The gate for access to PNH4 was locked by the owner. Site access to No. 5 village house just next to LTT4 was not granted by the dweller. The PNH4 and LTT monitoring locations were therefore relocated to No. 31 village house just outside the entrance gate and the fence wall outside No. 5 village house, respectively. Alternative monitoring locations are summarised in Table 2-2 and shown in Figure 2-1.

Table 2-2: Baseline noise monitoring locations

ID	Description [1]	Monitoring Period	Remark
N1	No. 73, Village House, Ling Tsui Tau Tsuen (roof height)	9/9/07 to 23/9/07	-
N2	No. 31, Village House, Ling Tsui Tau Tsuen (1st floor height)	5/10/07 to 19/10/07	The monitoring location was changed due to access restriction from the premises owner of PNH4.
N3[2]	Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet (equivalent roof height of the nearby village house)	9/9/07 to 23/9/07	The monitoring location was changed due to access restriction from the premises owners of LTT4 and the nearby village house.
N4	No. 23, Village House, Tai Tei	4/10/07 to 19/10/07	-

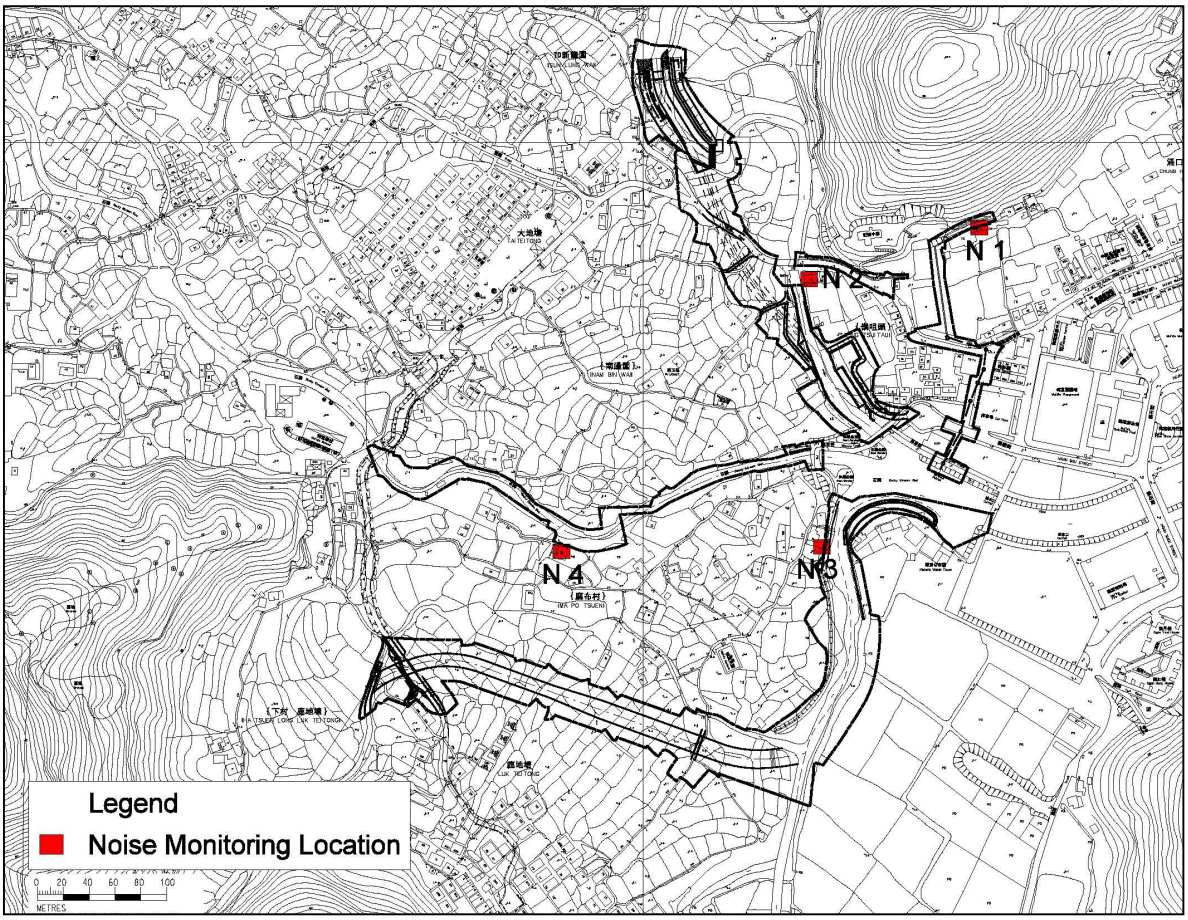
ID	Description [1]	Monitoring Period	Remark
	Tong River (roof height)		

Note:

[1] Noise measurements were taken at a point 1m from the exterior of the selected premises and at a height with no disturbance to the dweller and least obstructed view.

[2] A +3dB(A) is added to the measured noise level to account for the facade effect.

Figure 2-1: Noise monitoring locations



2.1.3 Monitoring Frequency

Baseline noise monitoring was conducted continuously for two consecutive weeks on weekdays and weekends. The noise level was measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}) in a sample period of 5 minutes $L_{eq(30min)}$, determined by taking the log average of 6 consecutive $L_{eq(5min)}$, was reported for the time period between 0700 and 1900 on normal weekdays and $L_{eq(5min)}$ was reported for all other time periods.

The actual dates of measurement are given in the schedule attached in Appendix 2.

2.2 Water Quality

2.2.1 Water Quality Parameters and Equipment

Turbidity (Tby) in Nephelometric Turbidity Unit (NTU), Dissolved Oxygen (DO) in mg/L and Suspended Solids (SS) in mg/L were monitored for this project. Tby and DO were measured

in-situ while samples were delivered to ALS Technichem (HK) Pty Ltd (HKOLAS laboratory) for analysis of SS. A summary of the water quality monitoring equipment is given in Table 2-3.

Table 2-3: Water quality monitoring equipment

Equipment	Manufacturer & Model No.	Qty
Handheld DO, Salinity & Temperature System	YSI 85	1
Turbidimeter	HACH 2100P	1
pH meter	Mettler – Toledo SG2	1
Water Sampler	Wild Co Instrument	1

In association with the water quality parameters, some relevant data were also recorded, such as monitoring location/position, time, water depth, water temperature, salinity, weather conditions, sea conditions, tidal cycle, and any special phenomena and work underway at the construction site, etc.

Dissolved Oxygen and Temperature Measuring Equipment

The equipment to measure DO and temperature complied with the following requirements:

i. The instrument (YSI 85) was a portable, weatherproof dissolved oxygen measuring instrument complete with cable and uses a DC power source. It was capable of measuring:
   - A dissolved oxygen level in the range of 0- 20 mg/L and 0-200% saturation; and
   - A temperature of 0-45^{o}C.

ii. It had a membrane electrode with automatic temperature compensation complete with a cable.

iii. It had equipped with a salinity compensation device in the DO equipment.

Turbidity Measurement Instrument

The instrument (Hach model 2100P) was a portable, weatherproof turbidity-measuring instrument. The instrument was operated by a DC power source and had a photoelectric sensor capable of measuring turbidity between 0-1000 NTU.

Suspended Solids

The suspended solids was collected for laboratory testing by the water sampler (Wild Co Instrument) comprising a transparent PVC cylinder, with a capacity of not less than 2L and could be effectively sealed with latex cups at both ends. The sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth.

Water samples for SS measurement of both the marine and freshwater environment was collected in high density polythene bottles, packed in ice (cooled at 4^{o}C without being frozen) and delivered to the laboratory within 24 hours after collection.

Water Depth Detector

A portable, battery-operated echo sounder was used for the determination of water depth at each designated monitoring.

Salinity

A portable salinometer (YSI Model 85) capable of measuring salinity in the range of 0-40 ppt was provided for measuring salinity of the water at each monitoring location.

Location of the Monitoring Site

A hand-held type DGPS was used during monitoring to ensure that the water sampling locations were correct.

Calibration and Accuracy of Instrumentation

All in-situ monitoring instruments were checked, calibrated and certified by ALS Technichem (HK) Pty Ltd. Responses of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for the DO meter was carried out before measurement at each monitoring location. The calibration certificates are attached in Appendix 3. For the on site calibration of field equipment, BS 1427:1993, "Guide to Field and on-site test methods for the analysis of waters" was adopted. Table 2-4 gives the detection limits of the in-situ and laboratory measurements.

Table 2-4: Limit of detection of water quality parameters

Determinant	Limit of Detection
DO	0.1 mg/L
Salinity	0.1 ppt
Turbidity	1 NTU
SS	1 mg/L

2.2.2 Monitoring Locations

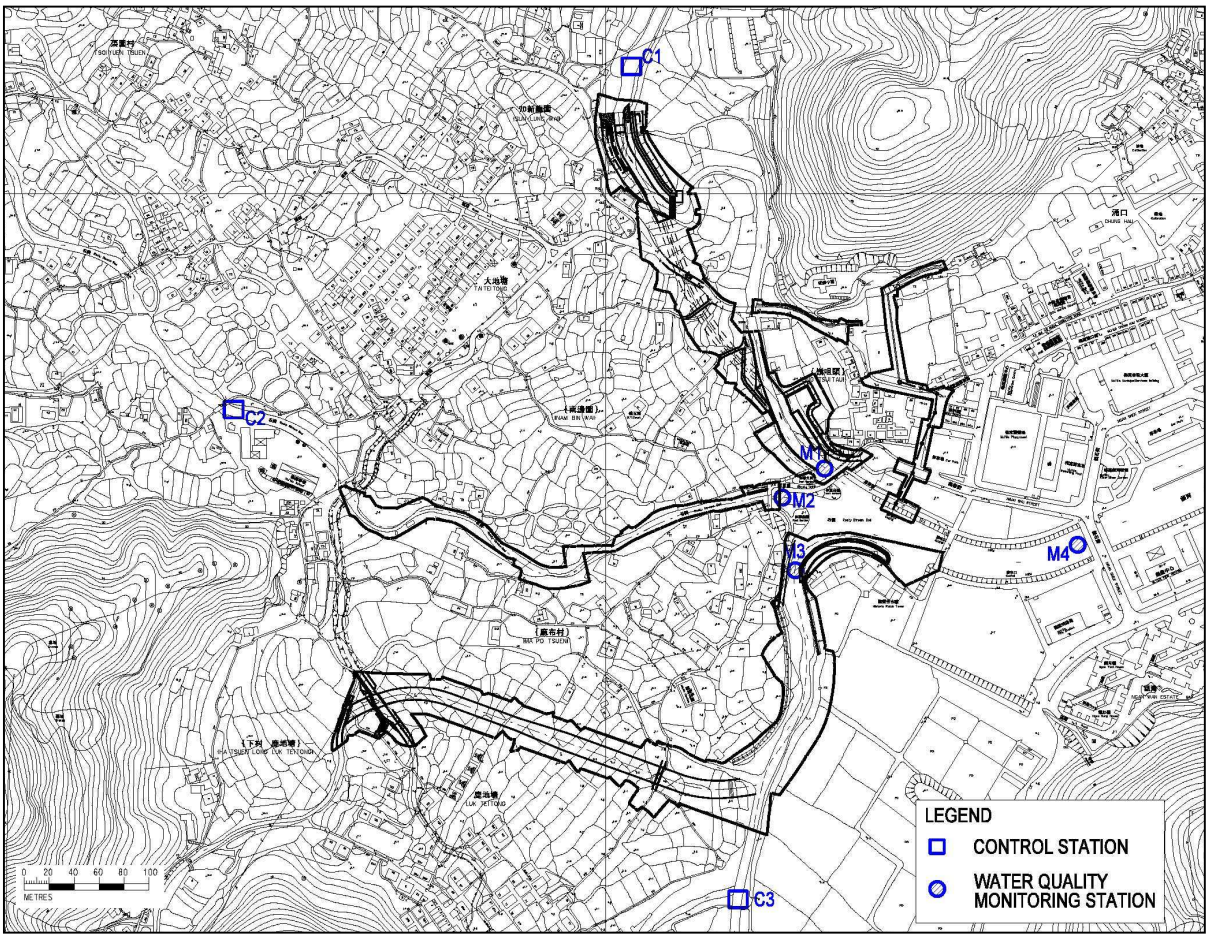
Seven locations were selected for baseline water quality monitoring and the coordinates are given in Table 2-5 and presented in Figure 2-2. Since access to previous location C1 proposed in the EM&A manual was constrained by dense vegetation and muddy soil along the periphery of the river, the monitoring location was relocated to some 50m downstream at the only accessible location. In addition, the C2 monitoring location was also shifted to some 20m upstream so that the sample could be easily taken at the middle of river channel from the footbridge.

Table 2-5: Baseline water monitoring locations

Water Monitoring Station No.	Location	
	Eastings	Northings
M1 (Impact Station)	817425	814179
C1 (Control Station)	817270	814501
M2 (Impact Station)	817391	814156
C2 (Control Station)	816952	814227
M3 (Impact Station)	817402	814098
C3 (Control Station)	817356	813834
M4 (Impact Station)	817628	814118

Measurements were taken at mid-water depth at the designated monitoring stations.

Figure 2-2 Water quality monitoring locations



2.2.3 Monitoring Frequency

Baseline water quality monitoring was conducted three times a week for four consecutive weeks to establish the water quality conditions prior to commencement of the construction works. The water quality monitoring was undertaken during ebb tide in accordance with the approved EM&A manual. Duplicate samples from each independent sampling event were taken.

The actual dates of measurement are given in the schedule attached in Appendix 2.

2.3 Ecology

Ecological baseline monitoring was carried out with reference to the requirements stipulated in the Final EM&A Manual. The methodology was proposed in accordance with the observations during the recent field visits.

The ecological baseline monitoring was conducted between 3 September and 7 September 2007. Fauna and flora baseline survey was conducted as follows:

2.3.1 Pak Ngan Heung (PNH) and Luk Tei Tong (LTT) Rivers

According to the Final EM&A Manual, the ecological survey was carried out in each of the 50m long improved sections of the river channels. A total of nine sections were divided for the two rivers (Figure 2-3) which include:

- Two sections for existing upstream of PNH river (i.e. the proposed 80m long trapezoidal channel)
- Two sections for existing downstream of PNH river (i.e. the proposed 100m long rectangular channel)
- Five sections for existing Luk Tei Tong River (i.e. the proposed 240m long trapezoidal channel)

The monitoring parameters and survey methodology for each section are described below:

Avifauna species and densities: Birds in each 50m section were surveyed quantitatively using transect count method. Five minutes were spent in each 50m section. As birds are usually more active in the morning, surveys were carried out early in the morning and completed before 10 a.m. Birds within the boundary of the proposed work areas (i.e. including the river channel and riverbank) were identified to species and their abundance was recorded. Birds flew over/across the proposed work areas without landing were not considered utilising the area and thus excluded from the records. Birds flushed by the surveyor and left the proposed work areas were counted. Nomenclature of birds followed Viney et al. (2005).

Aquatic macroinvertebrate community species composition and abundance: Surveys on aquatic fauna focused on determination of the diversity and abundance of stream aquatic communities. Kick sampling was found not suitable for the surveyed stream sections as either the substrates of the stream bed was sandy (in the PNH upstream), or the flow rate was not sufficient for kick sampling (in the PNH downstream). A twenty-minute search was conducted in each of the 50m section. Sampling methods included active searching, direct observation, and hand netting. In each section, macroinvertebrates were identified and their relative abundance was recorded. All species were released on site once they have been examined and recorded during the survey.

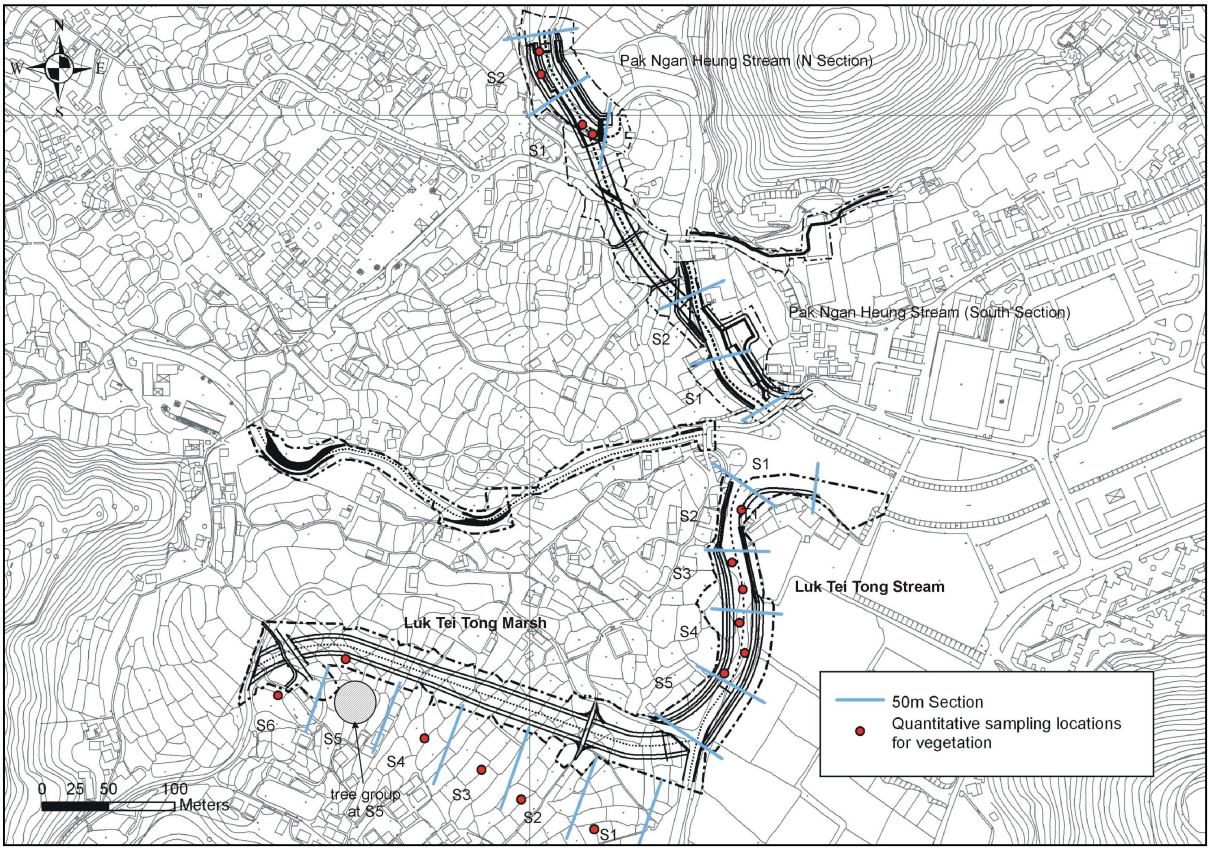
Fish community species composition and abundance: Surveys on fish focused on determination of the diversity and abundance of fish communities. A twenty-minute search was conducted in each of the 50m section. Sampling methods included active searching, direct observation, and hand netting. In each section, fishes were identified and their relative abundance was recorded. All species were released on site once they have been examined and recorded during the survey.

Adult odonate community species composition and abundance: Adult dragonflies in each 50m section were surveyed quantitatively. Twenty minutes were spent in each 50m section. As insects are ectothemic and more active when the ambient temperature is higher (New 1998), surveys were carried out between late morning and mid afternoon (i.e. 10 a.m. – 4 p.m.). Adult dragonflies within the boundary of the proposed work areas (i.e. within the river channel and on the riverbank) were identified to species and their abundance was recorded. Grasses on riverbank provide habitats for damselflies. These microhabitats were searched carefully as damselflies are mostly small in size. As some dragonfly species (e.g., Fiery Emperor *Anax immaculifrons*, Pale-spotted Emperor *Anax guttatus*) are strong flyers and seldom perch, dragonflies flew over/across the proposed work areas were also recorded. Species requiring close examination were netted. Nomenclature of dragonfly followed Wilson (2004). All species were released on site once they have been examined and recorded during the survey.

Aquatic, emergent and riparian vegetation community species composition and abundance: Line-intercept method was adopted to determine the relative plant cover. One to two line transects were set perpendicular to the stream channel at each section, and plant intercepting the transect line (including tree and shrub canopy and herbaceous species with intercept more than 1cm) was recorded by species. The two sections in PNH downstream

and sections 1 and 5 in LTT river however were channeled with vertical rock gabion and was little vegetated, which forbid quantitative sampling. Transect sampling was therefore conducted at PNH upstream and sections 2 to 4 in LTT river only. The summed transect length represents the sample for each section, and relative plant cover was computed. This will provide an estimate of weighted average cover that is not affected by total transect length. Relative cover of species X = Length of sampled line for species X/Total length of sampled line with vegetation cover * 100. Other than quantitative sampling, walk over surveys were also conducted to record plant species along the stream section. The relative abundance, conservation status of the species and their habitats recorded in Hong Kong as well as the overall summary of vegetation composition was described.

Figure 2-3: Location of stream and marsh sections and quantitative sampling locations for vegetation

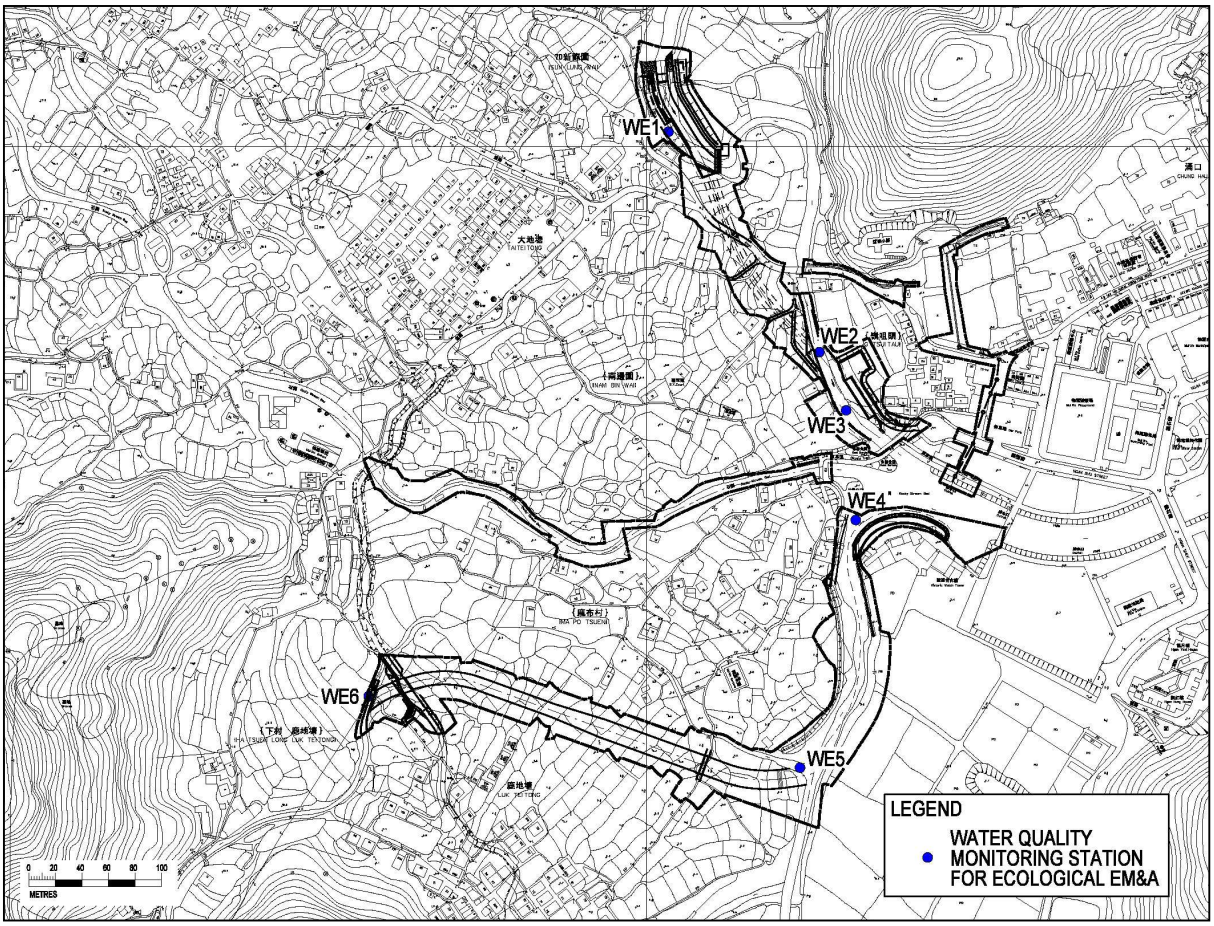


Water Quality: The monitoring locations are given in Figure 2-4. The parameters measured include DO, pH, salinity, Biochemical Oxygen Demand (BOD), SS, ammonia, nitrate and phosphate concentrations and water flow. Other physical parameters including monitoring location/position, time, water depth, temperature, weather conditions and any special phenomena were recorded on site. The monitoring methodology for DO, pH, salinity, temperature and SS is described in S.2.2.1 above. The BOD, ammonia, nitrate and phosphate concentrations were analysed in a HOKLAS accredited laboratory and the analyses followed the standard methods according to APHA Standard Methods for the Examination of Water and Wastewater, 19th Edition, or equivalent. The laboratory analytical methods for BOD, ammonia, nitrate and phosphate concentrations are given in Table 2-6 below.

Table 2-6 Laboratory analytical methods

Parameter	Method	Limit of Detection
Nitrate	APHA 4500-NO3:F/NO2:B	0.01 mg/L
Ammonia	APHA 4500 NH3:G	0.01 mg/L
Reactive Phosphorus	APHA 4500 P:F	0.01 mg/L
BOD	APHA 5210B	2 mg/L

Figure 2-4: Location of water quality monitoring stations for ecology



Sediment Characteristics: Sediment samples were also collected by sediment corer or grab sampler at the same locations and the same frequency as the water quality monitoring for ecology described above. One sample was collected in each of the proposed monitoring locations. The samples were stored in clean plastic bag for the subsequent particle size distribution analysis. The collected samples were cooled at 4ºC in the dark and were not frozen. All samples were delivered to the laboratory (Geotechnics & Concrete Engineering (HK) Ltd) within 24 hours of sampling. The analyses followed the standard method according to Geo Spec No 3 - Model Specification for Soil Testing 2001.

2.3.2 LTT Bypass Channel

As stipulated in the Final EM&A Manual, baseline monitoring was conducted along a strip of existing marsh habitat adjacent to the proposed channel alignment (i.e. Reference Site). The ecological surveys were carried out in every 50m section (Figure 2.3).

The LTT marshland was not in a state of stream. Aquatic macroinvertebrate and fish surveys and water quality monitoring for ecology were therefore not able to be conducted. The reference site was divided into six 50m sections. The monitoring parameters and survey methodology for each section are described below:

Avifauna species and densities: Birds in each 50m section were surveyed quantitatively using transect count method. Five minutes were spent in each 50m section. As birds are usually more active in the morning, surveys were carried out early in the morning and completed before 10 a.m. Birds within the Reference Site were identified to species and their abundance was recorded. Birds flew over/across the Reference Site without landing were not considered inhabiting the area and thus were excluded from the records. Birds flushed by the surveyor and left the Reference Site areas were counted. Nomenclature of birds followed Viney et al. (2005).

Adult odonate community species composition and abundance: Adult dragonflies in each 50m section were surveyed quantitatively. Twenty minutes were spent in each 50m section. As insects are ectothemic and more active when the ambient temperature is higher (New 1998), surveys were carried out between late morning and mid afternoon (i.e. 10 a.m. – 4 p.m.). Adult dragonflies within the Reference Site were identified to species and their abundance was recorded. Grasses within the Reference Site provide habitats for damselflies. These microhabitats were searched carefully as damselflies are mostly small in size. As some dragonfly species (e.g., Fiery Emperor *Anax immaculifrons*, Pale-spotted Emperor *Anax guttatus*) are strong flyers and seldom perch, dragonflies flew over/across the Reference Site were also recorded. Species requiring close examination were netted. Nomenclature of dragonfly followed Wilson (2004). All species were released on site once they have been examined and recorded during the survey.

Aquatic, emergent and riparian vegetation community species composition and abundance: A 10m line transect was randomly laid in each 50 m section, and six 1m x 1m quadrats were placed regularly along the line transect. Percentage cover of each species within the quadrat was recorded to the nearest 10% (except "1" = present but insignificant cover, normally 1-2 individuals, and 5% = up to 5%). Other parameters were recorded within the quadrat, including average surface water depth to the nearest cm, modal vegetation height judged by eye and measured to the nearest cm. The average percentage cover of each species, average modal height and water depth at each section was computed. Other than quadrat sampling, walk over surveys were also conducted to record plant species. The relative abundance, conservation status of the species and their habitats recorded in Hong Kong as well as the overall summary of vegetation composition was described.

Herpetofauna community species composition and abundance: Herpetofauna surveys within the Reference Site were surveyed qualitatively by active searching in potential habitats. Since most herpetofauna are nocturnal, night surveys were conducted. Twenty minutes were spent in each 50m section. Reptiles were identified and their abundance was recorded. Amphibians were identified by their calls and the number of calling males in each section was recorded. Nomenclature of amphibians followed Chan et al. (2005) and that of reptiles followed Karsen et al. (1998).

2.3.3 Disused Watchtowers in LTT River

The disused watchtowers next to LTT river were checked for the nesting of White-shouldered Starling *Sturnus sinensis* prior to commencement of the construction works.

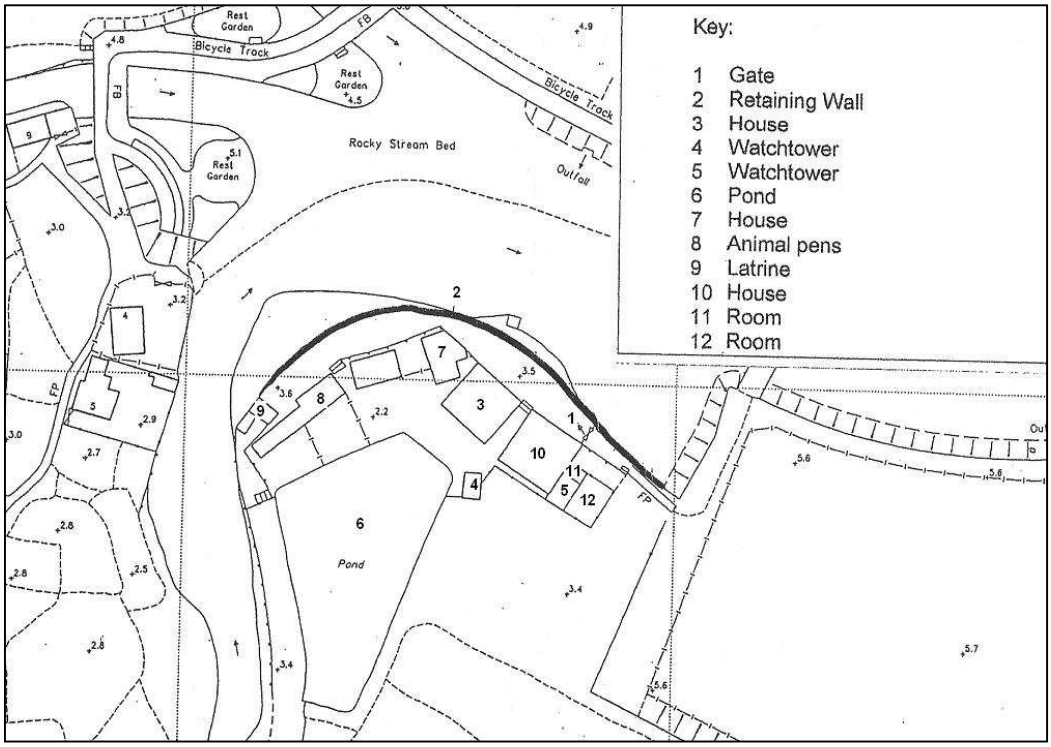
Surveys were carried out in wet season (i.e. including September). In order to minimize the disturbance to the nesting birds, observations were made at a distance from the watchtowers (> 30m). No attempt was made to go up the watchtowers. The watchtowers were visited in two sessions in a day – morning session and evening session. Each observation session lasted for 30 minutes. Breeding of the White-shouldered Starlings was determined by checking signs of attempt to breed or sign of breeding which include carrying nesting materials, to-and-fro movement of adults carrying food, presence of recently fledged juveniles, etc (Sharrock 1976). The number of breeding pairs and the site observation were recorded whenever possible.

2.4 Cultural Heritage

Baseline survey was carried out to establish the existing condition of the Yuen Compound as stipulated in the Final EM&A report. The Yuen Compound is a privately owned residence established in the 1920s. All of the original buildings are constructed of cut granite blocks quarried from Lai Chi Yuen Hill in Mui Wo. The compound includes 12 main buildings comprising 2 watchtowers, residential buildings and rice storage areas (Figure 2-5).

A field visit was conducted to the Yuen Compound and surrounds. The 12 main buildings identified in the 2003 Built Heritage report were surveyed, reviewed and photographed with respect to their exterior and where possible interior condition, architectural detail and any changes or omission since the 2003 buildings survey. Photographs were taken for record during the survey.

Figure 2-5 Location map of Yuen Compound showing buildings and structures



3 Baseline Monitoring Results

3.1 Noise

3.1.1 Weather Conditions and Other Factors

Noise monitoring was conducted from 9 September to 23 September 2007 for N1 and N3 and from 4/5 October to 19 October 2007 for N2 and N4. The weather was generally sunny and fine during the periods. Major noise sources during the monitoring periods were observed to originate from running stream water, human activities and occasional dog barking.

3.1.2 Summary Results

Noise monitoring results are summarised in Tables 3-1 and 3-2 for different monitoring periods, and details are attached in Appendix 4. Graphical presentations are shown in Figures 3-1 to 3-4.

Table 3-1: Baseline noise monitoring results in non-restricted period

Period	Location	Mean Noise Level, $L_{Aeq, 30mins}$ dB(A)
Daytime (0700-1900 hrs) on normal weekdays	N1	45.3
	N2	52.5
	N3	52.3
	N4	53.2

Table 3-2: Baseline noise monitoring results in restricted period

Period	Location	Mean Noise Level, $L_{Aeq, 5mins}$ dB(A)
Evening time (1900-2300 hrs) on normal weekdays	N1	48.3
	N2	51.3
	N3	52.5
	N4	52.3
Night time (2300-0700 hrs) on normal weekdays	N1	47.4
	N2	47.6
	N3	50.9
	N4	51.4
Sunday & public holiday	N1	46.0
	N2	48.6
	N3	51.4
	N4	52.7

Figure 3-1: Baseline noise monitoring results (mean $L_{eq(30mins)}$, daytime, normal weekday)

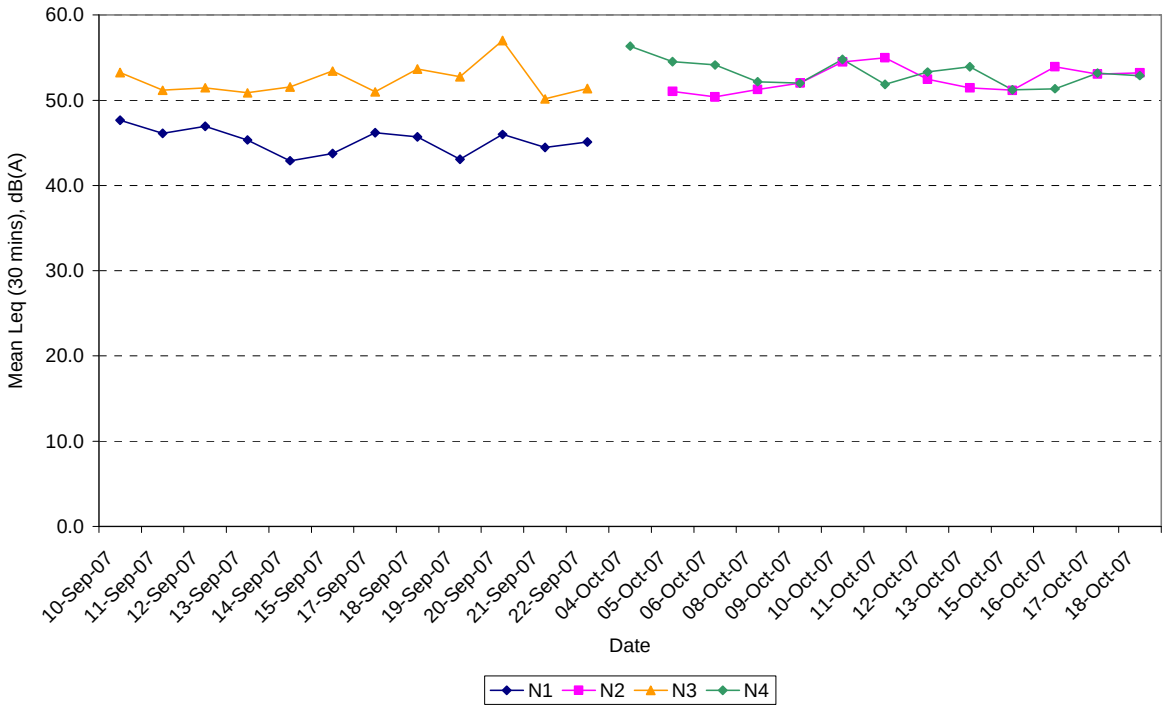


Figure 3-2: Baseline noise monitoring results (mean $L_{eq(30mins)}$, evening, normal weekday)

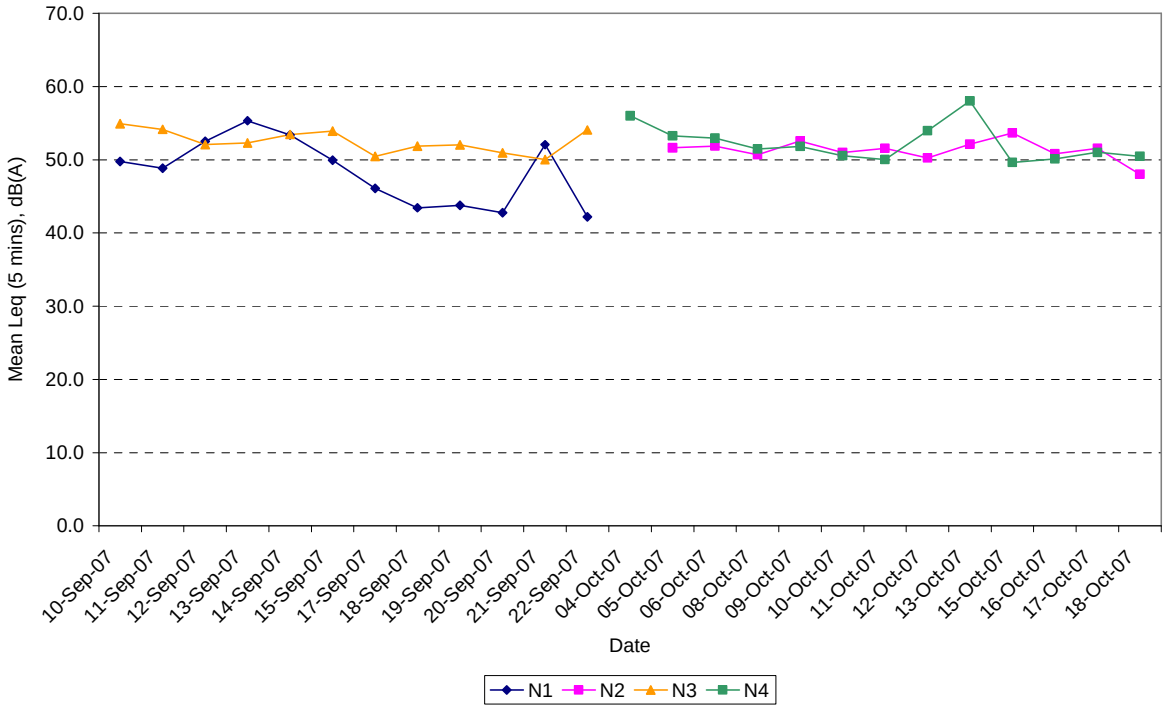


Figure 3-3: Baseline noise monitoring results (mean $L_{eq(30mins)}$, nighttime, normal weekday)

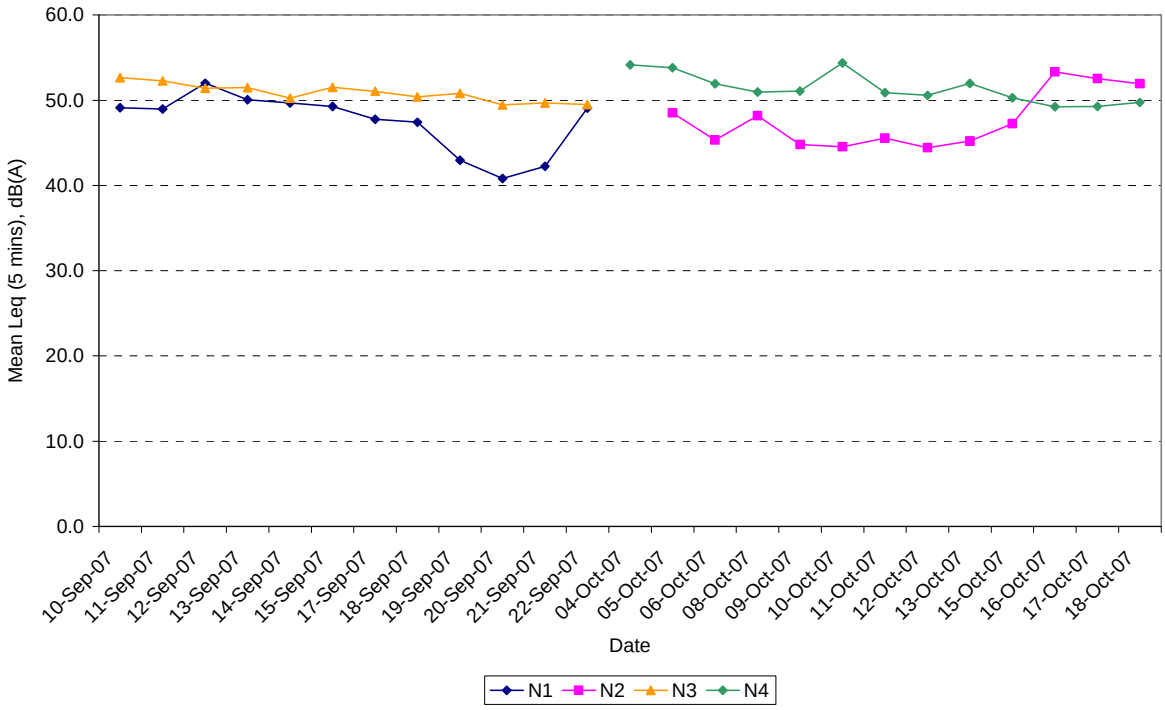
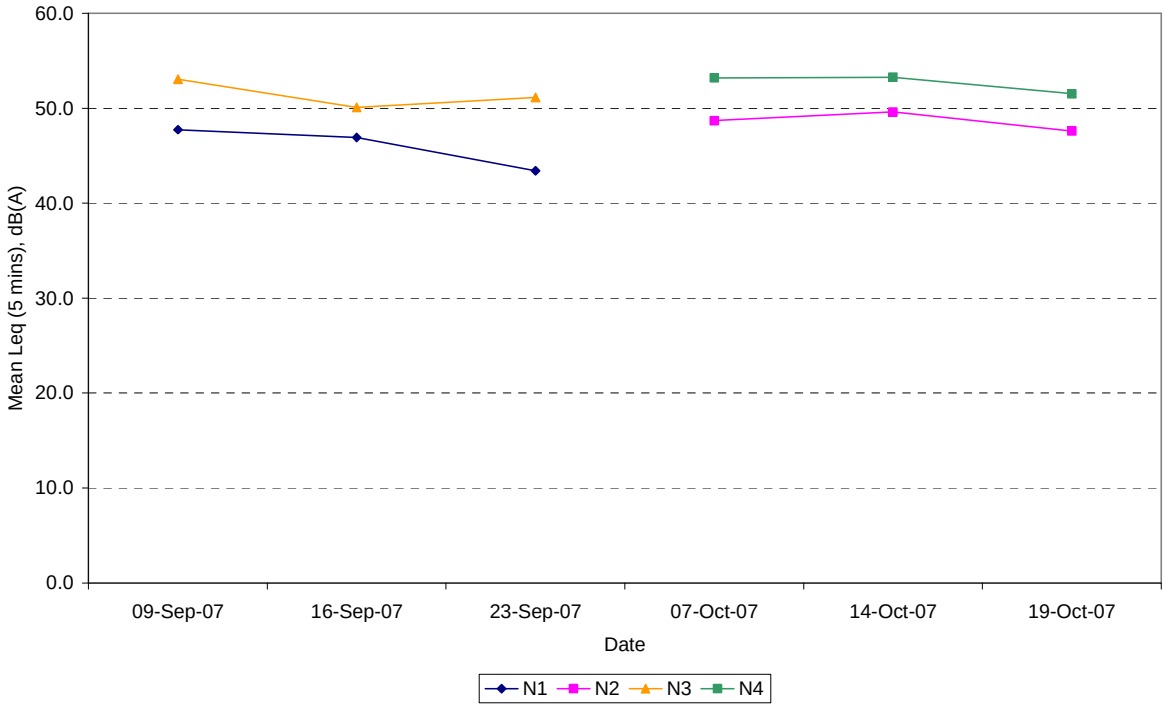


Figure 3-4: Baseline noise monitoring results (mean $L_{eq(30mins)}$, Sunday and public holiday)



3.2 Water Quality

3.2.1 Weather Conditions and Other Factors

Water quality monitoring was conducted between 20 August and 14 September 2007. The weather was mainly sunny and fine during the period.

3.2.2 Summary Results

The monitoring results are summarised in Tables 3-3 and graphical presentations are shown in Figures 3-5 to 3-7. Details of the monitoring and QA/QC results are attached in Appendix 5. The data in Tables 3-3 are the averaged results from the two duplicated samples at the same depth and same position.

Table 3-3: Baseline water quality monitoring results at ebb tide

Water Quality Monitoring Location	Parameters		
	Average DO in mg/L (Range)	Average Turbidity in NTU (Range)	Average SS in mg/L (Range)
M1	6.55 (5.72 - 7.23)	9.45 (3.77 – 17.35)	6.88 (1.50 – 13.00)
M2	6.65 (6.20 – 7.29)	2.75 (1.19 – 6.77)	1.63 (1.00 – 4.50)
M3	6.53 (5.82 – 7.72)	7.14 (2.37 – 28.30)	5.71 (2.50 – 19.00)
M4	6.62 (5.35 – 7.21)	8.64 (4.17 – 18.50)	6.46 (2.00 – 15.50)
C1	6.36 (6.17 – 6.73)	3.69 (1.21 – 7.40)	2.29 (1.00 – 6.50)
C2	6.28 (5.45 – 7.11)	2.19 (1.11 – 4.41)	1.38 (1.00 – 4.00)
C3	6.01 (5.10 – 6.83)	3.31 (1.54 – 8.35)	1.92 (1.00 – 4.50)

Figure 3-5: Baseline water quality monitoring results – dissolved oxygen at ebb tide

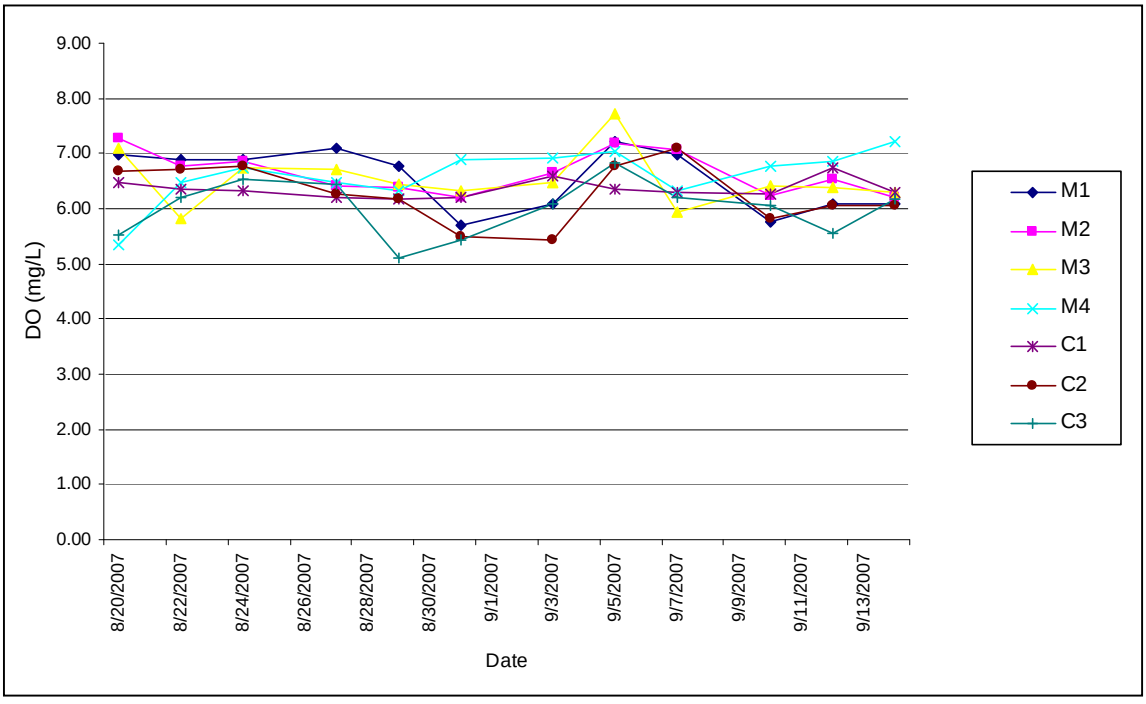


Figure 3-6: Baseline water quality monitoring results – turbidity at ebb tide

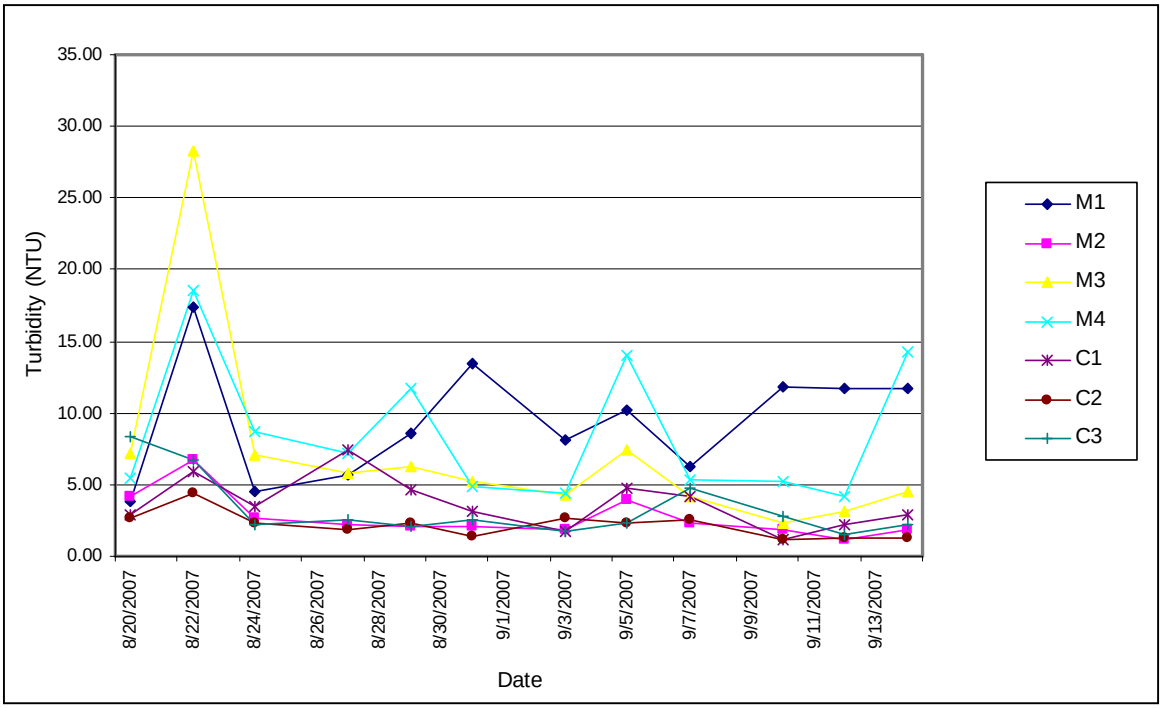
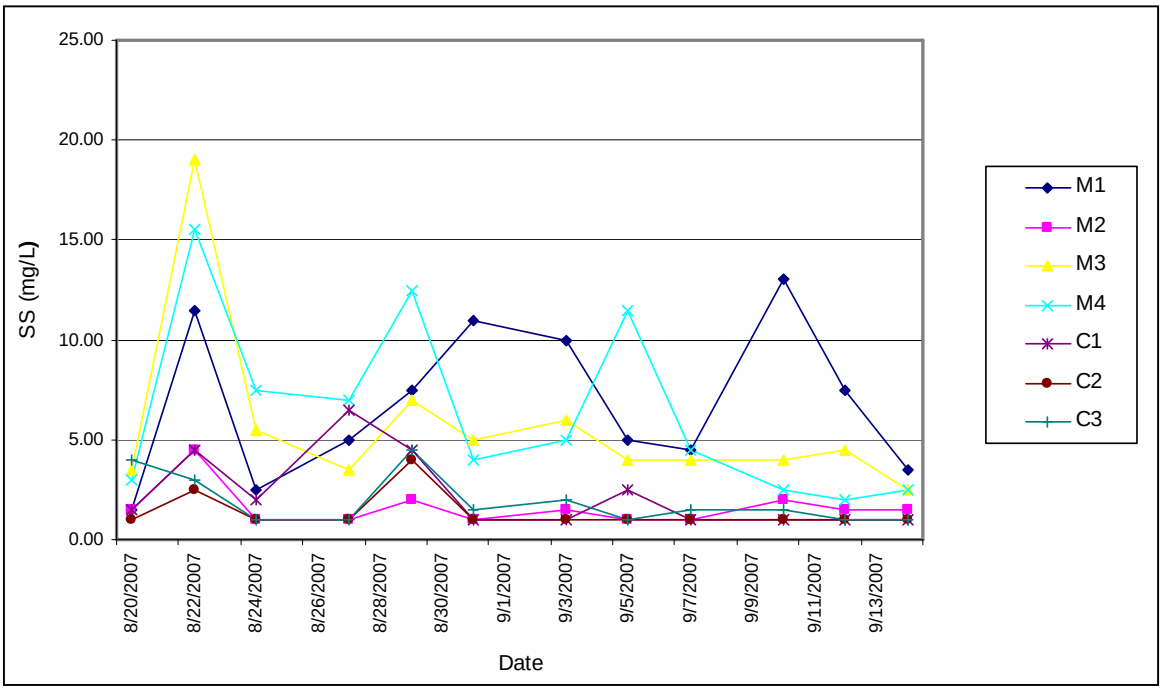


Figure 3-7: Baseline water quality monitoring results – suspended solids at ebb tide



The monitoring results indicated that the DO level was similar in both impact and control stations; while turbidity and SS was in general higher in the impact stations except M2. The tidal effect and possible discharge from agricultural ditch adjacent to the control station are possible influencing factors to the monitoring results at downstream and upstream C1 during/after rainstorm, respectively.

3.3 Ecology

3.3.1 Luk Tei Tong Marsh Reference Site

3.3.1.1 Vegetation

A total of 33 species was recorded within quadrats along the 6 sections of the reference site. The marsh was fairly heterogeneous in terms of species composition. Only *Mikania micrantha* was recorded at all sections; while most of the other species were only recorded in one or two sections. Average cover of vegetation varied from 145.0% to 188.2%, indicating mild to moderate overlap of canopy of species, for example, Mikania overgrown on other plants, or grasses and herbs grown under broadleaved species (Table 3-4). Average modal height of vegetation ranged from 60.6cm to 100.4cm. During the survey, the substrate of the reference site was soft and saturated from Section 1 to Section 3 and standing water was recorded at the Colocasia field, while Section 4 to Section 6 were relatively dry.

A total of 64 species was recorded at and around the reference section (Appendix 6). Forty-seven were native while 17 were exotics. They are mainly composed of grasses, remnants of commercial crops, exotics or pantropical weeds. The marsh was wet agricultural field grown with *Colocasia esculenta* (yam) and *Hedychium coronarium* (ginger flower) and was abandoned for probably more than 20 years. The remnants of these crops were still seen in "wetter" part of the marsh. Some native pioneer tree and shrub species as well as exotic landscape trees established within the marsh as tree stands or isolated individuals within the site. No species recorded are protected under local regulations or known to be of conservation interest in Hong Kong. According to the approved EIA and findings from the previous site visit during dry season of 2005 and the present baseline survey, both the impacted area (i.e. the proposed LTT bypass channel) and the reference site represented the relatively drier portion of the whole Luk Tei Tong Marsh.

Table 3-4: Percentage cover and modal height of vegetation at the reference site of Luk Tei Tong Marsh

Species	Total Percentage Cover					
	Section 1	Section 2	Section 3	Section 4	Section 5*	Section 6
Ageratum conyzoides					46.0	0.2
Apluda mutica			30.0			
Colocasia esculenta		26.0	46.0			
Commelina diffusa	10.2	68.0	0.4			
Conyza canadensis						2.0
Cyclosorus interruptus			5.2			
Cyperus imbricatus				3.0		
Echinochloa crusgalli	6.0					
Eupatorium catarium	0.4					
Fimbristylis sp.				13.0	1.0	0.3
Hedychium coronarium			1.0	2.0	31.2	
Hedyotis diffusa				0.2		
Hydrocotyle sibthorpioides				1.6		
Ipomoea cairica					9.0	
Isachne globosa	15.2			34.0		
Kyllinga brevifolia					0.2	
Lindernia cordifolia				0.2		
Ludwigia octovalvis	35.0			13.0		
Microstegium ciliatum					14.0	68.0
Mikania micrantha	19.0	68.0	64.0	17.0	7.0	1.0

Species	Total Percentage Cover					
	Section 1	Section 2	Section 3	Section 4	Section 5*	Section 6
Panicum maximum						10.0
Panicum repens						0.2
Paspalum conjugatum	10.0				0.2	2.4
Paspalum orbiculare	48.0				0.2	
Paspalum paspaloides				98.0		
Phyllodium puchellum						16.0
Polygonum perfoliatum	1.2		5.0		0.2	
Pueraria phaseoloides					2.0	36.0
Pycreus flavidus				3.2		
Rhynchospora rubra				3.0		
Sapium sebiferum					1.0	
Urena lobata					10.0	1.0
Wedelia trilobata						8.4
Total Cover	145.0	162.0	151.6	188.2	122.0	145.5
Modal Height (cm)	82.8	60.6	84.0	96.2	89.8	100.4
Water Depth (cm)	0.0	2.0	2.0	0.0	0.0	0.0

Note: * Quadrats in Section 5 were shifted sideward to avoid a tree group at the reference site, but it was found later that the quadrats fell within the project area which will be encroached during construction. Data was retained in the result since the species composition was similar to that found in other quadrat samples and percentage cover and modal height fell within the range of other samples.

3.3.1.2 Terrestrial Fauna

All recorded avifauna and dragonfly species are common in Hong Kong. A total of nine species of birds were recorded in the reference site of the Luk Tei Tong marsh. High number of birds in the first and second sections was found mainly due to the presence of trees, which provide roosting and foraging habitats.

Table 3-5: Avifauna recorded in Luk Tei Tong Marsh Reference Site

Common names	Latin names	Section						Commonness & distribution
		1	2	3	4	5	6	
Chinese Bulbul	*Pycnonotus sinensis*		2					CW
Red-whiskered Bulbul	*Pycnonotus jocosus*		3	2				CW
Oriental Magpie Robin	*Copsychus saularis*				1		1	CW
Common Tailorbird	*Orthotomus sutorius*			1				CW
Japanese White-eye	*Zosterops japonica*			6				CW
Crested Myna	*Acridotheres cristatellus*	15		12				CW
Black-necked Starling	*Sturnus nigricollis*	2						CW
Black Drongo	*Dicrurus macrocercus*		1		1			CW
Rufous-backed Shrike	*Lanis schach*			1		1		CW

Note: CW = common and widespread

A total of 10 species of dragonfly was recorded in the 6 sections of Luk Tei Tong marsh reference site. Diversity of dragonfly was higher in the Luk Tei Tong Marsh Reference Site

than in other sites surveyed during the baseline monitoring (see below sections), which is attributed to the high vegetation cover on the marsh. In addition, grasses on the marsh also provided both foraging and perching habitat.

Table 3-6 Dragonfly recorded in Luk Tei Tong River Marsh Reference Site

Common names	Latin names	Section						Commonness & distribution
		1	2	3	4	5	6	
Orange-tailed Sprite	*Ceriagrion auranticum*		8	12				A
Common Bluetail	*Ischnura senegalensis*	10	10	25	5			A
Asian Pintail	*Acisoma panorpoides*					2		C
Common Red Skimmer	*Orthetrum pruinosum*				1			A
Red-faced Skimmer	*Orthetrum chrysis*						1	C
Green Skimmer	*Orthetrum sabina*			2		1	1	C
Blue Dasher	*Brachydiplax chalybea*					2		C
Russet Percher	*Neurothemis fulvia*			2				A
Pied Percher	*Neurothemis tullia*	1	1		1			C
Wandering Glider	*Pantala flavescens*				5		15	A

Note: A = abundant, C = common

No herpetofauna (reptile and amphibian) was recorded in any surveyed sections.

3.3.2 Pak Ngan Heung River

3.3.2.1 Vegetation

The Pak Ngan Heung upstream section was also modified but to a lesser extent. Part of the west bank was lined with rock gabion bank and occupied by village houses, while part was abandoned agricultural field. The upstream channel was wider than the downstream section, but the stream bank was still fairly narrow and steep in gradient. Compared to the downstream section, the upstream section was relatively shaded due to presence of more trees with larger canopy. The walk through survey recorded a total of 40 species, including 13 trees, 4 shrub, 11 herb, 6 grass, 3 climber and 3 fern species. 33 of the species recorded are natives, while 7 were exotics (Appendix 6). The quantitative sampling recorded 18 species at the upstream section. The grass *Microstegium ciliatum* and the weedy climber *Mikania micrantha* dominated the stream bank of both sections. Other species recorded include common and typical native pioneer forest and streamside tree species. No species of conservation interest was recorded.

Table 3-7: Relative percentage cover of vegetation recorded at Pak Ngan Heung Upstream

Species	Relative % cover	
	Section 1	Section 2
Alocasia macrorrhiza		6.3
Centotheca latifolia	4.3	
Christella parasitica		0.9
Cleistocalyx operculata	0.7	
Commelina paludosa	6.4	
Ipomoea cairica		0.6
Lantana camara		0.9

Species	Relative % cover	
	Section 1	Section 2
Ludwigia perennis		0.6
Macaranga tanarius		15.5
Mikania micrantha	32.6	20.0
Microstegium ciliatum	39.7	20.6
Panicum maximum		30.9
Paspalum paspaloides	2.8	
Phyllanthus urinaria	2.8	
Pogonatherum crinitum		3.2
Polygonum chinense	1.4	
Pueraria phaseoloides	2.1	0.5
Sterculia lanceolata	7.2	
Total	100	100
Total Transect Length (m)	13	40

The Pak Ngan Heung downstream section was highly modified. Both banks were lined with rock gabions and were occupied by village houses immediately behind the channel. The stream channel was lack of riparian zone and vegetation. A total of 17 species recorded, 9 of which were native and 8 were exotic. It was composed of isolated individuals of mangrove (*Kandelia obovata*), backshore species (*Clerodendrum inerme*), native (*Celtis sinensis*) and planted trees (*Acacia confusa*). No species of conservation interest was recorded.

3.3.2.2 Terrestrial Fauna

All recorded avifauna and dragonfly species are common in Hong Kong. A total of seven species of birds were recorded in the proposed work area of the Pak Ngan Heung River.

Table 3-8 Avifauna in Pak Ngan Heung

Common names	Latin names	Upstream section		Downstream section		Commonness & distribution
		1	2	1	2	
Little Egret	*Egretta garzetta*				1	CW
Common Kingfisher	*Alcedo atthis*				1	CW
White Wagtail	*Motacilla alba*		1		1	CW
Chinese Bulbul	*Pycnonotus sinensis*			2		CW
Common Tailorbird	*Orthotomus sutorius*	1				CW
Oriental Magpie Robin	*Copsychus saularis*			1		CW
Japanese White-eye	*Zosterops japonica*		2			CW

Note: CW = common and widespread

A total of seven species of dragonfly was recorded in the proposed work area of the Pak Ngan Heung River.

Table 3-9 Dragonfly in Pak Ngan Heung

Common names	Latin names	Upstream section		Downstream section		Commonness & distribution
		1	2	1	2	
Orange-tailed Sprite	*Ceriagrion auranticum*		2			A
Common Bluetail	*Ischnura senegalensis*		6			A

Common names	Latin names	Upstream section		Downstream section		Commonness & distribution
		1	2	1	2	
Common Red Skimmer	*Orthetrum pruinosum*			1		A
Red-faced Skimmer	*Orthetrum chrysis*		1			C
Crimson Dropwing	*Trithemis aurora*				1	A
Indigo Dropwing	*Trithemis festiva*	1				A
Wandering Glider	*Pantala flavescens*	1				A

Note: A = abundant, C = common

3.3.2.3 Aquatic Fauna and Fish

The water quality results showed that all sampling stations were of fair water quality. The BOD of all three sampling stations in Pak Ngan Heung River were below 2 mg/L, while the DO ranged between 6.4 – 6.8 mg/L, both indicating low level of organic materials and thus low pollution level. Data of other parameters including ammonia, nitrate, and phosphorus did not show any abnormality. A low salinity was recorded. Analysis of particle size distribution indicated that the sediment sample comprises mainly sand and gravel with 46% and 53% respectively at upstream WE1. The particle size distributions of the samples at downstream WE2 and WE3 are similar, with about 5% of clay and silt, 65% of sand and 30% of gravel. Detailed monitoring and QA/QC results are given Appendix 7. The baseline conditions of water quality and sediment characteristics were established so as to facilitate comparisons with construction phase and operational phase. Any changes of water quality and sediment characteristics identified would provide the basis to distinguish the causes (e.g. whether or not due to the project construction works) of impacts, in any, on ecological conditions.

6 species of fish and one crustacean were recorded in the four sections at PNH. Among them, Spotty Band Goby *Glossogobius olivaceus* is considered uncommon (Lee et al. 2004), while others are common and widespread in Hong Kong. Abundant individuals of a species of cichlid fish, probably to be released/introduced into the stream, were found just upstream to the existing weir. The two fish species of conservation concern reported in the EIA report, i.e. Flagtail *Kuhlia marginata* and Predaceous Chub *Parazacco spilurus* were not recorded in PNH during the baseline monitoring survey.

Table 3-10: Aquatic Invertebrates and fish in Pak Ngan Heung

Common names	Scientific names	Upstream section		Downstream section	
		1	2	1	2
Crab	*Varuna litterata*			+	+
Chameleon Goby	*Tridentiger trigonocephalus*			+	
Tropical Sand Goby	*Papillogobius reichei*		+	++	
Spotty Band Goby	*Glossogobius olivaceus*			+	
Tilapia (cichlid fishes)		+++			
Jarbua Terapon	*Terapon jarbua*			++	++
Mullet	*Mugil cephalus*			++	++

Note: + = Occasional, less than 5 individuals were found; ++ = Common, 5 - 20 individuals were found; +++ = Abundant, more than 20 individuals were found.

3.3.3 Luk Tei Tong River

3.3.3.1 Vegetation

The Luk Tei Tong river section was highly modified. The stream banks from Section 1 to 4 were largely lined with rock gabions or concrete while stream bank of section 5 were fully lined with wired rock gabions and was little vegetated. Vegetation only established on

isolated muddy patches at the estuary and remaining semi-natural bank which was fairly narrow and steep in gradient. The whole section appeared to be subject to tidal influence, as mangrove associated or backshore species were recorded along the whole channel. The walk through survey recorded a total of 30 species, including 9 tree, 5 shrub, 1 herb, 4 grass, 1 fern, 5 climber and 5 fern species. 24 of the species recorded are natives, while 6 were exotics. The quantitative sampling recorded 13 species at the north section. Section 2 was dominated by *Premna serratifolia* and *Paspalum paspaloides*, while Section 3 and 4 was dominated by *Hibiscus tiliaceus* and *Clerodendrum inerme* respectively. A list of plant species recorded is given in Appendix 6.

Due to the patchiness of streamside vegetation, the quantitative data should be interpreted with cautions and used as a reference only.

Table 3-11 Relative percentage cover of vegetation recorded at Luk Tei Tong River

Species	Relative % cover		
	Section 2	Section 3	Section 4
Acanthus ilicifolius	6.7		
Celtis sinensis	5.6		
Clerodendrum inerme		2.5	50.9
Cyperus malaccensis		0.6	
Derris trifoliata		4.3	
Fimbristylis ferruginea			15.2
Fimbristylis sp.	1.1		
Hibiscus tiliaceus		62.1	33.9
Kandelia obovata		30.5	
Paspalum paspaloides	28.1		
Premna serratifolia	28.1		
Terminalia catappa	10.1		
Wollastonia biflora	20.3		
Total	100.0	100.0	100.0
Total Transect Length (m)	9.0	22.8	16.5

3.3.3.2 Terrestrial Fauna

All recorded avifauna and dragonfly species are common in Hong Kong. The proposed work area of Luk Tei Tong River was divided into 5 sections. A total of eight species of birds was recorded in these sections. No bird was recorded in Section 3.

Table 3-12 Avifauna in Luk Tei Tong River

Common names	Latin names	Section					Commonness & distribution
		1	2	3	4	5	
Little Egret	*Egretta garzetta*	1					CW
White-breasted Waterhen	*Amaourornis phoenicurus*		1				CW
White Wagtail	*Motacilla alba*	1					CW
Chinese Bulbul	*Pycnonotus sinensis*					2	CW
Oriental Magpie Robin	*Copsychus saularis*				1		CW
Japanese White-eye	*Zosterops japonica*						CW
Crested Myna	*Acridotheres cristatellus*					1	CW
Black-necked Starling	*Sturnus nigricollis*				1		CW

Note: CW = common and widespread

A total of 5 species of dragonfly was recorded in the five sections of Luk Tei Tong River.

Table 3-13 Dragonfly in Luk Tei Tong River

Common names	Latin names	Section					Commonness & distribution
		1	2	3	4	5	
Common Red Skimmer	*Orthetrum pruinosum*				1		A
Red-faced Skimmer	*Orthetrum chrysis*			1			C
Crimson Dropwing	*Trithemis aurora*			1			A
Indigo Dropwing	*Trithemis festiva*		1		1		A
Wandering Glider	*Pantala flavescens*	2	1		1	5	A

Note: A = abundant, C = common

3.3.3.3 Aquatic Invertebrates and Fish

The water quality results showed that all sampling stations were of fair water quality. The BOD of all three sampling stations in Luk Tei Tong River were below 2 mg/L, while the DO ranged between 5.7 – 7.6 mg/L, both indicating low level of organic materials and thus low pollution level. Data of other parameters including ammonia, nitrate, and phosphorus did not show any abnormality. WE4 is located in section under the tidal influence. A high salinity (i.e. 7.6 g/L) was recorded. Analysis of particle size distribution indicated that the sediment samples comprise high percentage of sand at downstream WE4 near outlet (> 80%) and high percentage of gravel at upstream WE6 (>60%). Detailed monitoring and QA/QC results are given in Appendix 7. The baseline conditions of water quality and sediment characteristics were established so as to facilitate comparisons with construction phase and operational phase. Any changes of water quality and sediment characteristics identified would provide the basis to distinguish the causes (e.g. whether or not due to the project construction works) of impacts, in any, on ecological conditions.

6 species of fish, 2 species of crustacean and 3 species of mollusks were recorded in the 5 sections at LTT. All are common and widespread in Hong Kong. The two fish species of conservation concern reported in the EIA report, i.e. Flagtail *Kuhlia marginata* and Predaceous Chub *Parazacco spilurus* were not recorded in LTT during the baseline monitoring survey.

Table 3-14 Aquatic invertebrates and fish in Luk Tei Tong River

Common names	Scientific names	Section				
		1	2	3	4	5
Crab	*Varuna litterata*	+		+	+	
Uca crab	*Uca lactea*	+	++	+++		
Mangrove clam	*Geloina erosa*			+	+	
Snail	*Melanoides tuberculata*	+	+	+++	+++	+++
Tropical Sand Goby	*Papillogobius reichei*					
Common mudskipper	*Periophthalmus cantonensis*	++	++	++	++	
Tilapia		++	++			
Jarbua terapon	*Terapon jarbua*	+	+	+		
Mullet	*Mugil cephalus*	++	++			

Note: + = Occasional, less than 5 individuals were found; ++ = Common, 5 - 20 individuals were found; +++ = Abundant, more than 20 individuals were found.

3.3.4 Disused Watchtowers

There was no sign (e.g., adults carrying food or nesting materials) of use of the watchtowers as nesting habitat by White-shouldered Starling. No White-shouldered Starling was

observed in the nearby areas too. Actually, the space between the bars of the windows of the tower is wide enough for potential predators (e.g., Magpie *Pica pica*, Large-billed Crow *Corvus macrorhynchus*) to enter. Therefore, the watchtower is not considered optimal nesting habitat for White-shouldered Starling.

3.4 Cultural Heritage

The 12 structures of the Yuen Compound were surveyed using the same numbering as that of the 2003 survey. This is to allow continuity of monitoring, to allow straightforward comparison of building condition over the past years.

3.4.1 No 1 - Entrance Gate

The entrance fence and gate to the Yuen Compound on the eastern side of the settlement is some 2.5m high with two square columns constructed of granite blocks on either side of a gate of iron bars within the centre of the fence and about 1m wide. The fence spans the entrance pathway and extends from another square granite brick column set on the river-edge retaining wall to the north across to building No. 10 into the south. A semi-circular plaster decoration sits above the gateway lintel. The metal bars have been painted grey and the granites blocks have been painted yellow.

The condition of the gateway and associated masonry is fair with some cracks within the mortar particularly around the column bases. The condition of the gate appears altered since 2003.

Photo 1: No 1 - Entrance Gate

3.4.2 No 2 - Retaining – Riverside Wall

A riverside masonry retaining wall of some 3m high extends the length of the compound for about 110 metres and forms the northern boundary of the Compound located on the southern bank of the Luk Tei Tong River. The wall is up to 22 courses high, composed of cut granite blocks and is stepped in an upper and lower phase. The base of the wall is

underwater at high tide, while some parts of the southern riverbank and a number of mature banyan trees are exposed above the water.

The condition of the retaining wall is poor and collapsing in the middle section for a length of about 40 metres. The condition of the rest of the wall is fair.

Photo 2: No 2 - Retaining – riverside wall

3.4.3 No 3 - Large Central House of "Yu Tak Li Wai"

The Large Central House of Yu Tak Li Wai is a large square two storey building with two main sections: (1) part of the rear half of the building which has a pitched roof and a plain ridge; (2) the front half which has a flat roof and balustraded balcony which overlooks the pond. The rear part of the building has a central section which is open from the ground floor to the roof. To the rear of this and two side sections have two floors. The ground floor ceilings and roof are supported by stone columns.

The front part of this building has a central hall used as a family shrine, with a recessed entrance. There are rooms on either side of the shrine. The second floor is open at the front where it overlooks the pond via a balcony. A plaque on the mid front roof was inscribed "Yu Tak Li Wai" after the original owner, as advised by the current owner. The inscription is now unreadable.

The condition of the building is fair to good with regard to stonework and mortar much of which has been rendered with concrete. There do not appear to be any large cracks within the exterior walls. The ground floor ceiling has been patched with concrete. The conditions of upper second floor particularly the central eaves are fair to poor and appear to have deteriorated since the 2003 survey as have some of the window glass and shutters.

Photo 3: No 3 - Large Central House of "Yu Tak Li Wai" – Front view

Photo 4: No 3 - Large Central House of "Yu Tak Li Wai" – Rear View (NE)

Photo 5: No 3 - Large Central House of "Yu Tak Li Wai" – Rear View

3.4.4 No 4 - Small Watchtower

The Small Watchtower is a small detached square shaped building of granite stone block construction with a high ground floor open to the north and a low second-floor/attic room. The entrance is via the southern side through a gate of iron bars. The only windows are two small openings to the front and rear in the upper floor. The roof is of pitched pan and roll tiles. The thickness of the stone walls with two stones brick courses with rubble fill suggests that this building was well fortified. According to the present owner, two guards occupied the upper floor to watch over agricultural fields to the south. There was an opening in the floor which was accessed only by a ladder.

The condition of the small watchtower is fair with cracks in the upper north-east corner of the masonry. The mortaring of the building has been extensively rendered which is likely to conceal further cracks in the stonework. The roof is in poor condition with loss of many tiles along the lower roof to the south.

Photo 6: No 4 - Small Watchtower

Photo 7: No 4 - Small Watchtower (NE corner)

Photo 8: No 4 - Small Watchtower (East wall)

3.4.5 No 5 - Large Watchtower

The Large Watchtower is a square three storey watchtower constructed of cut granite block. The roof is flat with a parapet some 5 courses high. The tower is joined to other buildings on all sides except the south-west. There are windows in the upper and middle floors in the south-east wall while the north-east and north-west wall have a single window in the top floor. There are also open slits in the walls on three sides.

The entrance to the watchtower is only via the house to the north-west. There is no stairway between the ground and first floor of the watchtower and access was presumably by ladder. The interior of the tower includes the ruins of a brick built oven on the ground floor, which is full of rubble, house debris and old furniture. The ceiling between the ground and first floor has collapsed.

The external condition of the watchtower is poor with prominent cracks in the stonework. The interior ground floor ceiling has collapsed.

Photo 9: No 5 - Large watchtower

Photo 10: No 5 - Large watchtower (Interior)

3.4.6 No 6 - Pond

The large pond lies within and south of the Yuen Compound. It is about 500m^2 large and is roughly triangular in shape. The pond is bounded by a low cut stone wall with some 3 course high to the north and an earthen wall to the east.

The concrete pavement is deteriorating due to seepage/flooding of the pond immediately (for a metre or so) north of the pond wall. Otherwise the pond wall is in fair to good condition.

Photo 11: No 6 - Pond

Photo 12: No 6 - Pond

3.4.7 No 7 - House - concrete rendered

The House is an irregular rectangular building of granite stone block construction completely covered with concrete render. The northern part of the building is two storeys with a molded concrete parapet while the southern part is one storey but with a flat roof and a green concrete balustrade. The house is currently occupied and was recently renovated and painted pink. The condition of this house is good.

Photo 13: No 7 - House

3.4.8 No 8 - Chicken Pens

The Chicken Pens is a long low rectangular shaped stone building of 9 stock pens with a flat concrete roof. The dividing walls between each pen are half height with iron bars reaching to the roof. Metal grills cover the windows and there are 3 iron gates in the front of the building which allow access to the pens.

The condition of this building is fair with no large or frequent cracks. The mortar has been mostly rendered with concrete. The building appears in similar condition to 2003.

Photo 14: No 8 - Chicken pens

3.4.9 No 9 - Latrine

Two adjoining small buildings constructed of cut granite blocks with flat reinforced concrete roves are used as a latrine by the former compound workers. There are small windows in the NE and NW walls of the larger structure and larger windows in the adjoining smaller structure in the NW and SW walls.

The condition of this building is fair with no large or frequent cracks on the SE side but quite poor and cracked on the river side (NW). The mortar has been mostly rendered with concrete. The interior has a concrete slab floor with common debris on the floor. The interior walls are in fair to poor condition and have been patched with concrete throughout. Some small saplings have grown through the walls in some places. The building appears in similar condition to 2003.

Photo 15: No 9 – Latrine

Photo 16: No 9 – Latrine (interior)

3.4.10 No 10 - Large house

The Large House is a large square shaped building of similar dimensions to the "Yu Tak Li Wai" building to its immediate north-west. This building also has two sections both of 2 storeys (i) a larger main part with a pitched tile roof and a large open room with 2 cut-stone columns and a wooden staircase to the first floor on the NE wall, and (ii) a smaller front section of an entrance hall and 2 side chambers. There are barred windows on either side of the entrance and 6 barred windows along the first floor. A window has been bricked-up on the NW side wall. The reinforced concrete ceiling has partly collapsed in this front section.

The building is derelict and external walls are in poor condition. Part of the roof is missing from the front left section and there are prominent cracks and loss of mortar particularly obvious in the lower left front wall and on the upper front wall and the NW wall. The rear wall appears to be in fair to good condition. Concrete render has been used throughout to improve the appearance of the building. The interior condition of the front section is poor with collapsed ceiling and large sections of patched concrete walls. The larger main room is in better condition and is currently used for storage. The building appears in similar condition to 2003.

Photo 17: No 10 - Large house

Photo 18: No 10 - Large house (Rear wall)

Photo 19: No 10 - Large house (Interior)

Photo 20: No 10 - Large house (larger main room)

3.4.11 No 11 - Small room

The Small Room is a small single room with flat concrete roof attached to the NW wall of the large watchtower near the main entrance to the compound. Access to the room is via a door from the watchtower. There is a large concrete framed window in the NE wall.

The condition of this building is poor with frequent cracks in the front and side exterior wall. The mortar has been mostly patched with concrete. The interior walls are in fair to poor condition and have been patched with concrete throughout. The building appears in similar condition to 2003.

Photo 21: No 11 - Small room

Photo 22: No 11 - Small room (Interior)

3.4.12 No 12 - Large room

The Large Room is a large square shaped single room of cut granite construction. The structure is set some 1m below the ground surface and pathway on the northern and eastern side. It would have had a low pitched roof, but now completely removed. A front entrance door on the NE side has an iron grill gate and windows lie on either side. There are 2 small slits in the SE wall. A large cut granite block support column remains in the centre of the room. This structure shares a common wall with the large watchtower (structure 5) and the smaller room (structure 11).

The condition of this building is fair with loose mortar but few large cracks. Much of the mortar work has been patched with concrete. The building appears in similar condition to 2003 although a sapling growing within the room has been removed.

Photo 23: No 12 - Large room

4 Action & Limit Levels and Event & Action Plan

The Action and Limit (A/L) Levels are defined levels of impact recorded by the environmental monitoring activities. They represent levels at which a prescribed response is required. These levels are quantitatively defined in the subsequent sections of this Report in accordance with the EM&A Manual as follows:

Action Level

- The levels beyond which there is an indication of a deteriorating ambient environmental quality. Appropriate remedial actions may be necessary to prevent the environmental quality from going beyond the limit levels, which would be unacceptable.

Limit Level

- Statutory and / or agreed contract limits stipulated in relevant pollution control ordinances, Hong Kong Planning Standards and Guidelines (HKPSG), or Environmental Quality Objectives established by EPD. If these are exceeded, works shall not proceed without appropriate remedial action, including a critical review of plant and work methods.

4.1 Noise

The Action Level for noise is based on documented complaints received and Limit Level is the level at a specified limit. The Action and Limit Levels for construction noise are defined in Table 4-1. If non-compliance of the criteria occurs, action should be taken immediately in accordance with the Event/Action Plan as shown in Table 4-2.

Table 4-1: Action and limit levels of construction noise

Time Period	Action Level	Limit Level
0700 – 1900 hours on any day not being a Sunday or public holiday	When one documented complaint is received	75dB(A) *

* reduce to 70dB(A) for schools and 65 dB(A) during school examination periods

Table 4-2: Event and action plan for airborne construction noise

Event	Action			
	ET Leader	IEC	ER	Contractor
Action Level	1. Notify IEC and the Contractor. 2. Carry out investigation. 3. Report the results of investigation to the IEC and the Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness.	1.Review with the analysed results submitted by ET. 2.Review the proposed remedial measures by the Contractor and advise ER accordingly. 3.Supervise the implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem. 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC. 2. Implement noise mitigation proposals.
Limit Level	1. Notify the IEC, the ER, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurement to confirm findings. 4. Increase monitoring frequency. 5. Carry out analysis of Contractor's working procedures to determine	1. Discuss amongst the ER, the ET Leader and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and	1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analysed noise problem.	1.Take immediate action to avoid further exceedance. 2.Submit proposals for remedial actions to IEC within 3 working days of notification. 3.Implement the

Event	Action			
	ET Leader	IEC	ER	Contractor
	possible mitigation to be implemented. 6. Inform the IEC, the ER, and the DEP the causes & actions taken for the exceedances. 7. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results. 8. If exceedance stops, cease additional monitoring	advise the ER accordingly. 3. Supervise the implementation of remedial measures.	4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	agreed proposals. 4.Resubmit proposals if problem still not under control. 5.Stop the relevant activity of works as determined by the ER until the exceedance is abated.

4.2 Water Quality

4.2.1 Event/Action Plan for Water Quality

The water quality criteria - the A/L Levels as shown in Table 4-3 have been provided in the EM&A Manual.

Table 4-3: Criteria of action and limit levels for water quality

Parameters	Action Level	Limit Level
DO in mg/l (mid-depth)	5%-ile of baseline data	4mg/l
SS in mg/l (mid-depth)	95%-ile of baseline data or 120% of control station's SS on the same day of measurement	99%-ile of baseline or 130% of control station's SS on the same day of measurement
Turbidity (Tby) in NTU (mid-depth)	95%-ile of baseline data or 120% of control station's turbidity on the same day of measurement	99%-ile of baseline or 130% of control station's turbidity on the same day of measurement

Remarks:
For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.
For SS and turbidity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

Based on the baseline water quality monitoring data obtained, the A/L levels are shown in **Table 4-4**. If the water quality monitoring results at any impact stations exceeded the criteria, the actions in accordance with the Event and Action Plan in **Table 4-5** should be taken.

Table 4-4: Action and limit levels of water quality

Parameters	Monitoring locations							
	M1		M2		M3		M4	
	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level
DO (mg/L)	5.7	4	6.2	4	5.9	4	5.9	4

Parameters	Monitoring locations							
	M1		M2		M3		M4	
	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level	Action Level	Limit Level
SS (mg/L) [1, 2]	12.2	12.8	3.1	4.2	12.4	17.7	13.9	15.2
Tby (NTU) [1, 2]	15.2	16.9	5.3	6.5	16.8	26.0	16.2	18.0

Note:

1. The Action Levels can be 95%-ile of baseline data as mentioned above or 120% of upstream control station at the same tide of the same day according to the EM&A Manual

2. The Limit Levels can be 99%-ile of baseline data as mentioned above or 130% of upstream control station at the same tide of the same day according to the EM&A Manual

Table 4-5: Event/Action plan for water quality

Event	Action			
	ET Leader	IEC	ER	Contractor
Action Level				
Action level being exceeded by one sampling day	1. Repeat in-situ measurement to confirm findings. 2. Identify source(s) of impact. 3. Inform the IEC and the Contractor. 4. Check monitoring data, all plant, equipment and the Contractor's working methods. 5. Discuss mitigation measures with the IEC and the Contractor. 6. Repeat measurement on next day of exceedance.	1. Discuss with the ET Leader and the Contractor on the mitigation measures. 2. Review proposals on mitigation measures submitted by the Contractor and advised the ER accordingly. 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with the IEC on the proposed mitigation measures. 2. Make agreement on the mitigation measures to be implemented. 3. Assess the effectiveness of the implemented mitigation measures.	1. Inform the ER and confirm notification of the non-compliance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader and the IEC and propose mitigation measures to the IEC and the ER. 6. Implement the agreed mitigation measures.
Action level being exceeded by more than one consecutive days	1. Repeat in-situ measurement to confirm findings. 2. Identify source(s) of impact. 3. Inform the IEC and the Contractor. 4. Check monitoring data, all plant, equipment and the Contractor's working methods. 5. Discuss mitigation measures with the IEC and the Contractor. 6. Ensure mitigation measures are implemented. 7. Prepare to increase the monitoring frequency to daily. 8. Repeat measurement on next day of exceedance.	1. Discuss with the ET Leader and the Contractor on the mitigation measures. 2. Review proposals on mitigation measures submitted by the Contractor and advised the ER accordingly. 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IEC on the proposed mitigation measures. 2. Make agreement on the mitigation measures to be implemented. 3. Assess the effectiveness of the implemented mitigation measures.	1. Inform the ER and confirm notification of the non-compliance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader and the IEC and propose mitigation measures to the IEC and the ER within 3 working days. 6. Implement the agreed mitigation measures.
Limit Level				
Limit level being exceeded by one sampling day	1. Repeat in-situ measurement to confirm findings. 2. Identify source(s) of impact. 3. Inform the IEC, the Contractor and the DEP. 4. Check monitoring data, all plant, equipment and the Contractor's working methods. 5. Discuss mitigation measures with the IEC, the ER and the Contractor. 6. Ensure mitigation measures are implemented. 7. Increase the monitoring frequency to daily until no exceedance of the Limit Level.	1. Discuss with the ET Leader and the Contractor on the mitigation measures. 2. Review proposals on mitigation measures submitted by the Contractor and advised the ER accordingly. 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IEC, the ET Leader and the Contractor on the proposed mitigation measures. 2. Request the Contractor to critically review the working methods. 3. Make agreement on the mitigation measures to be implemented. 4. Assess the effectiveness of the implemented mitigation measures.	1. Inform the ER and confirm notification of the non-compliance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader, the IEC and the ER, and propose mitigation measures to the IEC and the ER within 3 working days. 6. Implement the agreed mitigation measures.
Limit level being exceeded by more than one consecutive days	1. Repeat in-situ measurement to confirm findings. 2. Identify source(s) of impact. 3. Inform the IEC, the Contractor and the DEP. 4. Check monitoring data, all plant, equipment and the Contractor's working methods. 5. Discuss mitigation measures with the IEC, the ER and the Contractor. 6. Ensure mitigation measures are implemented. 7. Increase the monitoring frequency to daily until no exceedance of the Limit Level for two consecutive days.	1. Discuss with the ET Leader and the Contractor on the mitigation measures. 2. Review proposals on mitigation measures submitted by the Contractor and advised the ER accordingly. 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IEC, the ET Leader and the Contractor on the proposed mitigation measures. 2. Request the Contractor to critically review the working methods. 3. Make agreement on the mitigation measures to be implemented. 4. Assess the effectiveness of the implemented mitigation measures. 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit Level.	1. Inform the ER and confirm notification of the non-compliance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader, the IEC and the ER, and propose mitigation measures to the IEC and the ER within 3 working days. 6. Implement the agreed mitigation measures. 7. As directed by the ER, slow down or stop all or part of the construction activities.

4.3 Ecology

4.3.1 Event/Action Plan for Ecology

If disturbance to the breeding White-shouldered Starlings is identified during construction phase, action should be taken immediately in accordance with the Event/Action Plan as recommended in the EM&A manual (Table 4-6)

Table 4-6 Monitoring of White-shouldered Starlings: Event and Action Plan

Event	Action	
	ET Leader	**Contractor**
Identification of disturbance to breeding White-shouldered Starlings	1. Increase frequency of monitoring to twice weekly	1. Check all construction actions and working methods
	2. Notify ER	2. Submit proposals for remedial action to prevent abandonment of the breeding site
	3.Review construction activities of previous week	3. Implement remedial action
	4. Identify any changes in construction activities in previous week	4. Liaise with ET and IEC regarding effectiveness of remedial actions.
	5. Discuss remedial actions with ER	

4.4 Cultural Heritage

In the event of any observed construction phase impacts or damage on the heritage resources within the Yuen Compound, construction shall cease and owner of the compound and the AMO should be notified immediately. Remedial actions should be proposed by ET and the contractor for agreement with the owner, the ER and IEC, and comment from AMO should also be sought.

5 Conclusions

Baseline monitoring was carried out within the period 20 August 2007 to 19 October 2007, which included noise monitoring, water quality monitoring, ecological baseline survey and cultural heritage baseline survey. Action and Limit Levels for each location were derived based on the baseline monitoring results.

It can be concluded that the baseline monitoring results are representative of the pre-construction period.

6 References

Chan, K.F., Cheung, K.S., Ho, C.Y., Lam F.N. and Tang, W.S. 2005. *A Field Guide to the Amphibians of Hong Kong*. Agriculture, Fisheries & Conservation Department, Government of Hong Kong Special Administrative Region.

Karsen, S.J., Lau, M.W.N. and Bogadek, A. 1998. *Hong Kong Amphibians and Reptiles*. Second Edition. Provisional Urban Council, Hong Kong.

Lee, V.L.F., S.K.S. Lam, F.K.Y. Ng, T.K.T. Chan, and M. L.C. Young. 2004. *Field Guide to the Freshwater Fish of Hong Kong.* AFCD.

Metcalf & Eddy Ltd. 2005. *Agreement No. CE 49/2002(DS) Drainage Improvement in Southern Lantau Investigation – Final Environmental Monitoring and Audit Manual*. Drainage Services Department, Hong Kong Special Administrative Region.

New, T.R. 1998. *Invertebrate Surveys for Conservation*. Oxford University Press, Oxford.

Sharrock, J.T.R. 1976. *The Atlas of Breeding Birds in Britain and Ireland*. Poyser, Berkhamstead.

Wilson, K.D.P. 2004. *Field Guide to the Dragonflies of Hong Kong*. Agriculture, Fisheries and Conservation Department, Hong Kong.

Viney, C., Phillipps, K. and Lam, C.Y. 2005. *Birds of Hong Kong and South China*. Government Printer, Hong Kong.

Appendix 1

Calibration certificates for the noise monitoring equipment

ArupAcoustics

ARUP

Level 5 Festival Walk
80 Tat Chee Avenue
Kowloon Tong, Kowloon
HONG KONG

Tel: +852 2268 3216

Fax: +852 2268 3950

AAc Certificate No. 2007005

CERTIFICATE OF CONFORMITY

Description of Test Instrument	Type No	Serial No
Brüel & Kjær Sound Level Meter Kit	2238	2320696
Brüel & Kjær ½ " Microphone Kit	4188	2274286

Date of Test: 01 September 2007

Carried out by: Raymond Liu

Signature: Raymond

Approved by: William Ng

Signature: William Ng

Ambient Conditions During Test	
Atmospheric Pressure:	1KPa
Air Temperature:	21°C
Relative Humidity:	58%

This document is to certify that the above Test Instrumentation did conform to the manufacturer's original specification on the date of the test. Any adjustments that were required to bring the instrumentation back into specification are duly noted in this document. The tests were carried out using the reference calibrator described below.

Description of Reference Calibrator	Type No	Serial No
Brüel & Kjær Multi Frequency Calibrator	4226	1531372
Brüel & Kjær Coupler	UA0915	1531372

Certificate of Calibration Serial No.	15784
By Brüel & Kjær (UK) Ltd Calibration Date:	01 February 2007
NAMAS Accredited Calibration Laboratory No.	0174

The reference calibrator, Type 4226, has traceable calibration back to National Measurement Standards. As such it is used as Arup Acoustics own 'Primary Standard' and is used only for controlled laboratory calibration tests on all sound measuring equipment owned by Arup Acoustics.

Footnote:

Arup Acoustics is not a registered NAMAS accredited calibration laboratory. This certificate is for internal use only (unless otherwise authorised) and is part of Arup Acoustics development and commitment to QC and QA procedures.

ArupAcoustics

ARUP

Level 5 Festival Walk
80 Tat Chee Avenue
Kowloon Tong, Kowloon
HONG KONG

Tel: +852 2268 3216

Fax: +852 2268 3950

AAc Certificate No. 2007006

CERTIFICATE OF CONFORMITY

Description of Test Instrument	Type No	Serial No
Brüel & Kjær Sound Level Meter Kit	2238	2320707
Brüel & Kjær ½ " Microphone Kit	4188	2179479

Date of Test: 01 September 2007

Carried out by: Raymond Liu

Signature: Raymond

Approved by: William Ng

Signature: William Ng

Ambient Conditions During Test	
Atmospheric Pressure:	1KPa
Air Temperature:	21°C
Relative Humidity:	58%

This document is to certify that the above Test Instrumentation did conform to the manufacturer's original specification on the date of the test. Any adjustments that were required to bring the instrumentation back into specification are duly noted in this document. The tests were carried out using the reference calibrator described below.

Description of Reference Calibrator	Type No	Serial No
Brüel & Kjær Multi Frequency Calibrator	4226	1531372
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Certificate of Calibration Serial No.	15784
By Brüel & Kjær (UK) Ltd Calibration Date:	01 February 2007
NAMAS Accredited Calibration Laboratory No.	0174

The reference calibrator, Type 4226, has traceable calibration back to National Measurement Standards. As such it is used as Arup Acoustics own 'Primary Standard' and is used only for controlled laboratory calibration tests on all sound measuring equipment owned by Arup Acoustics.

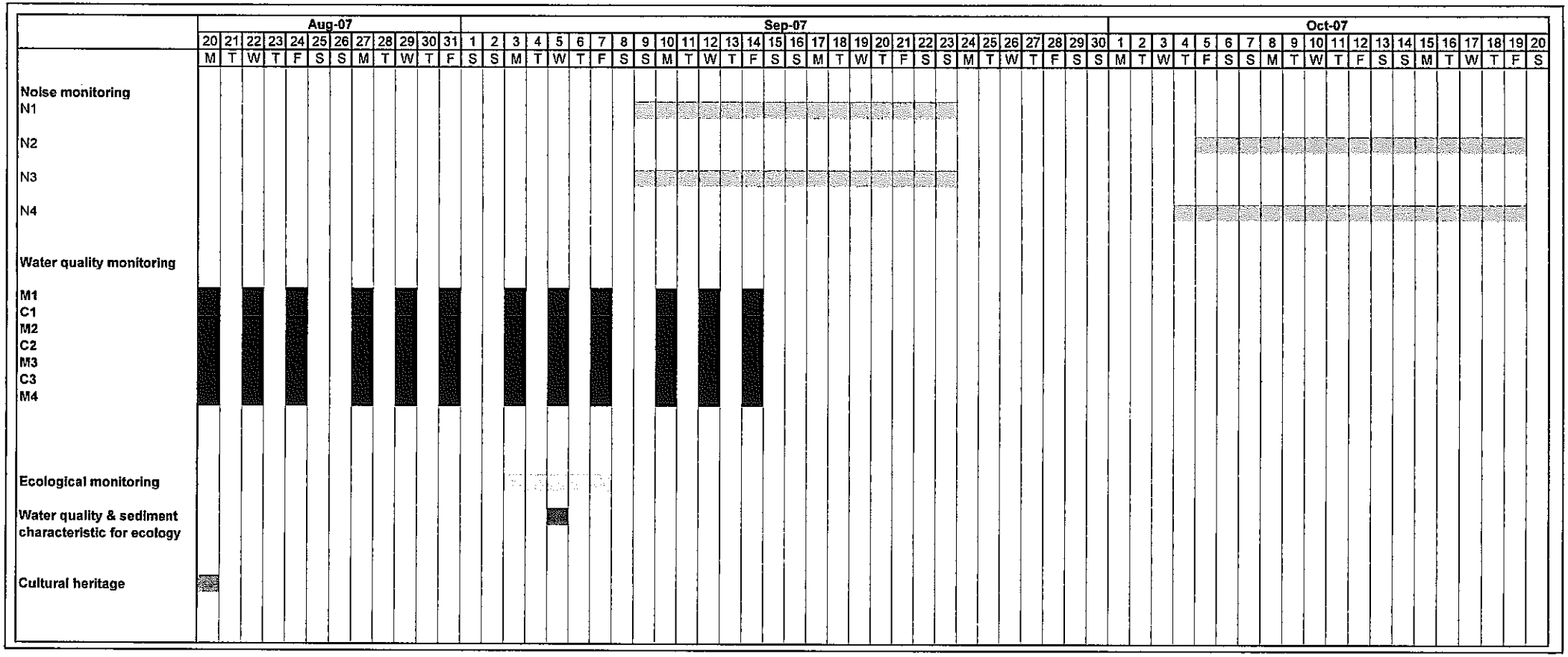
Footnote:

Arup Acoustics is not a registered NAMAS accredited calibration laboratory. This certificate is for internal use only (unless otherwise authorised) and is part of Arup Acoustics development and commitment to QC and QA procedures.

Appendix 2

Baseline environmental monitoring schedule

Drainage Improvement in Southern Lantau
Baseline Monitoring Schedule



Appendix 3

Calibration certificates for the water quality monitoring equipment

CERTIFICATE OF ANALYSIS

Batch: HK0712311
Date of Issue: 03/09/2007
Client: OVE ARUP & PARTNERS HONG KONG LTD
Client Reference: DRAINAGE IMPROVEMENT IN SOUTHERN LANTAU

Calibration of pH System

Item : pH Meter

Model No. : Mettler - Toledo SG2

Serial No. : 1227175012

Equipment No. : N/A

Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 4500-H^+B

Date of Calibration : 27 August, 2007

Testing Results :

Expected Reading	Recording Reading
4.00	3.98
7.00	7.04
10.0	10.0
Allowing Deviation	± 0.2

Ms Wong, Wai Man, Alice
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0712312
Date of Issue: 03/09/2007
Client: OVE ARUP & PARTNERS HONG KONG LTD
Client Reference:

Calibration of Tubidimeter

Item : HACH Turbidimeter

Model No. : HACH 2100P

Serial No. : 011100024331

Equipment No. : HK144

Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2130B

Date of Calibration : 14 August, 2007

Testing Results :

Expected Reading	Recording Reading
0.0 NTU	0.0 NTU
4.0 NTU	4.4 NTU
16.0 NTU	16.3 NTU
40.0 NTU	40.4 NTU
80.0 NTU	79.5 NTU
Allowing Deviation	±10%

Ms Wong Wai Man, Alice
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0712313
Date of Issue: 03/09/2007
Client: OVE ARUP & PARTNERS HONG KONG LTD
Client Reference: DRAINAGE IMPROVEMENT IN SOUTHERN LANTAU

Calibration of DO System

Item : YSI Multimeter

Model No. : YSI 85

Serial No. : 98A0725AB

Equipment No. : HK603217

Calibration Method : This meter was calibrated in accordance with standard method APHA (18th Ed.) 4500-0C & G

Date of Calibration : 28 August, 2007

Testing Results :

Expected Reading	Recording Reading
4.66 mg/L 7.66 mg/L	4.78 mg/L 7.84 mg/L
Allowing Deviation	±0.2 mg/L

Ms Wong Wai Man, Alice
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0712313
Date of Issue: 03/09/2007
Client: OVE ARUP & PARTNERS HONG KONG LTD
Client Reference: DRAINAGE IMPROVEMENT IN SOUTHERN LANTAU

Calibration of Salinity System

Item : YSI Multimeter

Model No. : YSI 85

Serial No. : 98A0725AB

Equipment No. : HK603217

Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 2520 A and B

Date of Calibration : 28 August, 2007

Testing Results :

Expected Reading	Recording Reading
10.0 g/L	10.9 g/L
20.0 g/L	21.3 g/L
30.0 g/L	32.4 g/L
40.0 g/L	43.8 g/L
Allowing Deviation	±10%

Ms Wong Wai Man, Alice
Laboratory Manager - Hong Kong

CERTIFICATE OF ANALYSIS

Batch: HK0712313
Date of Issue: 03/09/2007
Client: OVE ARUP & PARTNERS HONG KONG LTD
Client Reference: DRAINAGE IMPROVEMENT IN SOUTHERN LANTAU

Calibration of Thermometer

Item : YSI Multimeter

Model No. : YSI 85

Serial No. : 98A0725AB

Equipment No. : HK603217

Calibration Method : In-house Method

Date of Calibration : 28 August, 2007

Testing Results :

Reference Temperature (^{0}C)	Recorded Temperature (^{0}C)
24.5 °C 33.8 °C	24.2 °C 34.1 °C
Allowing Deviation	±2.0^{0}C

Ms Wong Wai Man, Alice
Laboratory Manager - Hong Kong

Appendix 4

Detailed baseline noise monitoring results

Location: N1 - No. 73, Village House, Ling Tsui Tau Tsuen
Daytime (0700-1900) for normal day Baseline Noise Monitoring Results

	Leq, (30min)											
Time	10-Sep-07	11-Sep-07	12-Sep-07	13-Sep-07	14-Sep-07	15-Sep-07	17-Sep-07	18-Sep-07	19-Sep-07	20-Sep-07	21-Sep-07	22-Sep-07
7:00	46.9	44.9	48.7	47.0	40.0	41.2	47.1	46.7	39.3	42.5	40.8	45.7
7:30	45.8	44.6	48.3	47.0	43.6	44.7	47.5	45.8	42.4	45.4	41.3	47.7
8:00	47.7	47.9	45.4	46.5	40.3	43.6	51.4	46.2	41.6	41.6	41.3	46.3
8:30	47.1	54.3	44.9	47.3	40.5	41.3	52.2	45.7	44.2	43.7	42.8	47.2
9:00	47.5	48.8	47.9	46.9	41.3	47.5	51.9	44.2	45.6	48.7	44.4	46.9
9:30	51.4	45.9	48.8	47.1	41.5	[1]	55.2	47.1	48.4	40.4	49.4	47.3
10:00	52.2	45.8	50.3	47.6	41.7	46.7	49.8	46.0	40.7	38.1	45.9	47.2
10:30	51.9	45.3	49.8	45.6	41.0	47.2	45.3	47.0	44.0	42.4	45.2	45.6
11:00	55.2	44.9	52.4	47.7	39.2	44.1	48.7	47.4	43.2	48.9	45.4	47.5
11:30	49.8	46.5	52.3	49.1	42.5	43.2	48.9	48.5	41.3	53.7	43.4	49.2
12:00	45.3	44.5	44.7	45.8	40.6	40.0	46.0	49.6	45.1	53.1	43.0	44.9
12:30	48.7	44.6	45.2	46.2	45.8	42.6	45.7	53.1	41.8	51.8	40.3	46.5
13:00	48.9	43.7	44.8	45.9	53.9	45.4	45.4	46.4	44.3	55.2	42.2	45.5
13:30	46.0	45.0	45.2	44.9	53.2	44.8	45.8	45.1	47.5	53.5	44.2	44.8
14:00	45.7	44.4	49.7	44.8	42.4	45.9	46.4	[2]	43.5	52.9	50.4	44.7
14:30	45.4	44.2	44.6	44.0	43.2	45.6	[1]	[2]	[1]	54.7	48.7	43.6
15:00	45.8	44.3	46.7	43.6	41.3	44.7	45.2	[2]	42.0	[1]	44.9	[1]
15:30	46.4	[1]	[1]	49.2	41.8	41.2	44.8	[2]	39.9	[1]	[1]	[1]
16:00	46.1	45.4	44.3	44.0	39.3	43.5	37.9	45.0	44.2	42.2	43.6	41.1
16:30	47.5	46.5	45.5	42.4	[1]	40.0	38.8	42.3	40.5	41.7	45.8	39.7
17:00	44.8	47.7	44.9	39.7	43.6	41.5	40.1	44.6	42.1	39.6	44.3	41.7
17:30	45.3	47.2	43.2	39.2	42.1	42.2	40.5	41.1	45.2	39.0	43.9	42.8
18:00	45.8	47.0	44.4	39.6	40.5	42.7	40.5	42.0	38.8	41.0	44.6	44.4
18:30	46.9	46.9	48.0	47.1	47.7	47.1	47.5	40.7	44.9	40.3	47.4	41.8
Average	47.7	46.1	46.9	45.3	42.9	43.8	46.2	45.7	43.1	46.0	44.5	45.1
Max	55.2	54.3	52.4	49.2	53.9	47.5	55.2	53.1	48.4	55.2	50.4	49.2
Min	44.8	43.7	43.2	39.2	39.2	40.0	37.9	40.7	38.8	38.1	40.3	39.7

Note:
[1] Noise measurements were paused for data downloading and replacement of batteries. The noise levels were not reported
[2] Data were lost due to equipment failure

Location: N1 - No. 73, Village House, Ling Tsui Tau Tsuen
Evening time (1900-2300) for normal day Baseline Noise Monitoring Results

	Leq, (5min)											
Time	10-Sep-07	11-Sep-07	12-Sep-07	13-Sep-07	14-Sep-07	15-Sep-07	17-Sep-07	18-Sep-07	19-Sep-07	20-Sep-07	21-Sep-07	22-Sep-07
19:00	50.9	52.5	52.1	49.7	54.7	51.6	52.5	43.5	48.4	41.6	51.8	46.2
19:05	51.4	44.7	51.2	56.8	55.5	52.7	53.5	45.8	48.1	42.0	51.6	43.7
19:10	54.3	43.5	51.8	53.0	55.8	54.0	54.6	45.3	48.0	41.4	52.3	42.8
19:15	51.0	44.6	52.6	49.6	55.8	53.9	54.4	45.5	46.8	41.4	51.1	42.2
19:20	55.5	45.6	53.3	54.9	59.5	53.5	53.3	45.9	47.5	49.6	53.2	41.5
19:25	53.3	48.2	53.1	52.0	60.1	52.8	53.4	44.4	47.0	41.9	54.1	47.1
19:30	49.7	48.8	53.2	54.4	60.0	51.9	53.6	42.7	46.2	41.2	53.9	41.2
19:35	55.5	47.6	55.1	53.1	59.9	52.2	53.1	46.0	45.4	42.6	52.6	41.9
19:40	55.9	48.6	54.9	50.4	59.5	51.5	53.0	42.3	48.5	50.0	51.1	41.7
19:45	54.8	48.4	54.4	48.7	58.9	50.5	52.8	42.5	48.6	42.6	53.4	45.2
19:50	45.1	50.0	52.2	50.1	58.7	50.4	53.1	43.3	46.6	43.3	51.2	41.6
19:55	49.2	49.6	53.8	52.5	54.7	49.9	51.9	43.4	48.1	46.7	53.2	41.6
20:00	52.4	45.3	52.1	52.5	57.3	50.0	49.1	46.1	49.2	45.4	52.2	42.0
20:05	57.0	49.6	51.5	52.5	54.2	49.9	47.6	43.8	48.6	44.0	51.3	42.4
20:10	55.7	51.3	53.4	52.9	55.5	51.6	51.7	41.0	48.3	44.8	53.5	42.0
20:15	55.8	48.2	54.5	53.1	55.8	51.3	47.7	41.2	49.0	43.2	53.5	43.6
20:20	56.0	47.9	55.4	56.0	56.4	51.9	46.5	42.5	46.4	43.4	55.2	42.4
20:25	57.1	47.8	54.8	62.3	56.8	52.3	46.2	46.2	41.3	53.8	54.7	50.1
20:30	57.5	49.0	55.2	62.5	56.4	52.0	45.9	41.3	38.7	43.1	55.3	42.0
20:35	57.7	51.5	54.9	63.4	51.9	52.0	42.6	41.7	45.6	42.4	54.1	42.9
20:40	56.6	50.2	55.4	63.6	49.9	52.2	46.4	41.1	39.7	43.3	53.7	42.6
20:45	56.8	51.1	55.4	62.6	46.3	52.8	45.2	44.7	43.9	43.4	52.1	42.2
20:50	50.9	51.7	55.2	62.8	48.9	51.6	44.0	45.2	42.6	42.3	52.2	42.7
20:55	48.0	48.1	54.7	62.7	49.3	50.8	45.2	44.4	43.1	45.2	53.2	41.7
21:00	45.5	47.5	53.1	62.4	50.3	50.8	43.5	45.7	43.8	45.8	53.2	42.6
21:05	45.3	51.9	52.2	55.4	51.7	50.6	43.3	41.8	41.2	44.0	55.3	42.6
21:10	44.7	52.8	53.2	54.4	51.0	49.4	41.5	41.5	39.9	44.6	55.2	42.1
21:15	46.1	49.5	53.2	55.7	51.3	49.3	41.1	45.6	39.5	44.1	55.1	41.4
21:20	45.3	48.6	55.0	56.9	51.8	48.6	42.3	42.3	41.3	41.1	54.4	41.0
21:25	45.9	50.3	55.1	56.9	51.6	48.6	42.1	42.7	43.1	43.8	55.4	41.2
21:30	46.2	50.3	55.1	54.9	51.8	47.2	42.7	44.0	43.6	41.7	54.2	53.4
21:35	46.4	49.8	54.1	54.8	52.5	49.1	43.2	51.9	43.4	40.0	54.1	41.0
21:40	47.2	49.3	49.5	54.7	52.6	49.3	41.9	42.4	44.0	41.7	49.5	41.4
21:45	47.7	48.6	48.2	54.4	53.2	49.3	41.9	42.5	43.1	39.4	47.2	41.1
21:50	45.9	46.3	51.7	55.4	53.4	49.2	41.8	42.6	43.0	41.7	51.7	41.4
21:55	45.3	48.1	52.9	54.4	54.1	49.2	42.1	41.2	41.1	41.2	51.9	41.6
22:00	45.3	47.7	51.4	54.5	53.6	49.5	44.5	41.6	41.5	41.6	50.4	40.9
22:05	44.4	51.0	51.3	55.0	53.7	49.8	43.1	41.8	40.4	41.0	50.3	41.1
22:10	45.8	52.4	51.5	54.9	53.2	49.5	42.2	43.4	41.1	40.5	51.1	41.0
22:15	45.0	49.5	50.8	55.0	54.0	45.7	42.6	44.8	41.2	42.2	51.1	41.4
22:20	46.2	49.8	50.1	54.5	53.0	46.2	43.2	44.7	42.0	41.0	51.3	40.6
22:25	46.4	50.1	51.5	54.6	52.3	47.2	42.8	43.0	41.1	40.5	50.2	40.1
22:30	46.7	49.3	51.8	53.9	40.5	46.2	42.1	42.5	42.1	40.6	49.1	40.1
22:35	46.3	48.8	48.7	55.1	45.3	45.8	41.1	43.5	40	38.3	48.7	40.5
22:40	46.7	46.8	48.3	55.1	45.9	45.4	42.1	42.8	39.4	39	48.3	39.9
22:45	46.2	45.8	47.7	54.7	42.5	45.5	42.2	42.7	39.9	38.6	48.7	40.8
22:50	45.8	48.6	47.2	54.5	56.7	45.6	40.7	41.5	38.6	39.3	45.6	38.3
22:55	45.3	47.7	47.2	52.6	56.2	46.4	42	38.6	38.6	42.5	46.5	37.7
Average	49.8	48.8	52.5	55.4	53.4	49.9	46.1	43.4	43.8	42.8	52.1	42.2
Max	57.7	52.8	55.4	63.6	60.1	54.0	54.6	51.9	49.2	53.8	55.4	53.4
Min	44.4	43.5	47.2	48.7	40.5	45.4	40.7	38.6	38.6	38.3	45.6	37.7

Location: N1 - No. 73, Village House, Ling Tsui Tau Tsuen
Night time (2300-0700) for normal day Baseline Noise Monitoring Results

	Leq, (5min)											
Time	10-Sep-07	11-Sep-07	12-Sep-07	13-Sep-07	14-Sep-07	15-Sep-07	17-Sep-07	18-Sep-07	19-Sep-07	20-Sep-07	21-Sep-07	22-Sep-07
0:00	47.0	48.0	56.9	48.8	49.1	42.8	51.8	42.1	40.8	38.4	41.6	49.3
0:05	51.1	46.3	54.8	49.3	49.6	41.9	51.5	41.5	40.4	41.7	41.9	50.0
0:10	51.4	45.7	52.1	50.0	49.2	42.6	51.6	42.7	44.1	39.2	38.6	49.4
0:15	54.3	46.3	49.3	49.8	50.5	43.5	46.7	40.8	43.6	42.3	38.4	48.7
0:20	52.8	46.6	51.4	48.3	47.5	41.7	43.8	41.6	43.0	41.7	39.1	49.6
0:25	50.3	45.1	53.4	50.6	41.4	42.1	42.1	41.6	43.0	43.3	42.4	48.1
0:30	47.7	46.4	44.9	49.1	40.1	42.4	50.0	40.2	43.7	37.8	39.4	49.4
0:35	47.7	48.5	43.9	48.4	42.8	41.9	43.8	41.6	42.8	42.3	38.6	47.5
0:40	49.4	46.6	41.8	47.7	49.3	45.4	43.3	42.0	39.2	42.0	38.3	47.7
0:45	49.7	47.7	41.9	50.2	51.7	47.4	41.5	42.4	48.3	40.4	37.9	49.2
0:50	45.7	46.5	44.0	50.3	54.2	48.0	41.5	42.0	40.4	40.9	39.2	50.3
0:55	45.0	47.2	51.5	51.0	54.5	44.9	46.9	41.6	42.4	41.0	38.0	51.0
1:00	49.8	44.0	55.4	50.1	55.1	48.7	47.6	43.2	42.6	38.3	39.6	50.1
1:05	51.6	44.1	55.8	47.9	55.0	50.3	47.7	43.2	43.5	38.4	38.8	47.9
1:10	52.1	46.1	53.5	48.8	50.7	50.1	47.9	43.4	44.1	40.4	40.7	47.8
1:15	52.2	44.7	49.7	48.3	54.2	49.1	47.7	[1]	42.2	38.6	40.7	51.6
1:20	51.9	45.8	46.3	49.0	57.5	50.0	46.2	47.2	43.0	39.5	41.0	49.1
1:25	52.2	45.1	42.3	50.6	56.0	51.5	45.1	46.5	45.5	39.4	40.8	49.1
1:30	51.8	45.3	42.7	50.1	56.9	49.4	46.9	45.7	44.6	38.6	40.2	49.6
1:35	51.5	46.8	46.4	49.1	52.5	50.3	46.0	44.4	45.5	38.4	40.4	48.5
1:40	51.6	48.1	49.7	49.6	53.0	50.4	46.0	44.0	44.0	38.8	40.7	49.0
1:45	46.7	49.2	51.8	49.5	58.1	44.9	45.7	48.5	41.6	36.7	40.7	49.5
1:50	43.8	45.9	52.6	50.0	62.3	46.5	50.7	50.2	43.5	36.3	42.5	47.9
1:55	42.1	43.2	52.8	49.5	62.5	47.2	52.1	46.5	44.1	36.9	40.5	52.5
2:00	50.0	47.4	52.9	47.6	62.3	44.6	52.1	47.7	43.2	39.7	41.9	48.2
2:05	43.8	50.8	53.1	52.0	62.5	43.0	52.8	44.2	43.5	37.6	41.6	49.1
2:10	43.3	50.9	51.1	50.2	56.3	41.0	53.4	43.0	43.4	39.8	41.0	50.1
2:15	41.5	50.9	51.4	49.4	38.4	38.6	53.5	46.8	43.0	39.5	40.1	48.4
2:20	41.5	50.4	51.0	50.4	42.2	43.0	53.1	54.2	41.7	40.8	39.6	51.4
2:25	46.9	50.6	51.2	50.2	44.1	44.7	53.7	50.7	40.1	40.7	40.7	50.2
2:30	47.6	51.0	49.3	47.4	47.0	43.4	53.8	47.0	40.8	40.7	42.1	48.4
2:35	47.7	50.8	52.8	49.8	51.8	40.8	54.0	49.4	41.3	39.7	38.8	54.6
2:40	47.9	51.9	54.1	54.1	52.9	40.4	53.7	53.4	42.6	38.4	39.9	54.2
2:45	47.7	52.4	54.6	54.6	53.0	38.6	55.3	50.0	41.7	37.0	39.4	52.5
2:50	46.2	51.8	56.5	55.2	53.0	37.0	55.2	51.5	42.4	38.8	38.0	51.6
2:55	45.1	47.8	57.1	52.5	52.2	38.4	55.3	53.5	40.4	37.0	39.0	48.8
3:00	46.9	53.1	57.4	51.6	53.3	41.2	55.4	53.8	40.8	39.4	40.6	53.1
3:05	46.0	53.0	56.4	50.8	53.6	38.1	55.2	53.1	41.3	38.6	45.2	50.8
3:10	46.0	52.8	55.6	45.1	54.2	39.4	55.0	54.1	40.8	36.3	48.2	46.1
3:15	45.7	53.4	53.5	50.7	53.4	38.7	55.2	56.4	41.6	37.5	44.7	50.1
3:20	50.7	53.7	55.2	53.5	44.8	37.0	55.0	54.4	40.6	36.6	39.8	53.2
3:25	52.1	53.1	58.0	53.9	54.1	47.2	55.3	54.6	43.2	37.2	40.5	53.2
3:30	52.1	52.7	58	53.9	54.5	50.9	55	53.5	43.1	38.8	41.4	52.1
3:35	52.8	52.5	57.6	52.6	55.4	52.8	48	55.6	43.6	37.4	40.8	55.3
3:40	53.4	53.8	58.4	55.3	50.2	56.9	48.4	55.2	42.4	38.8	43.8	55.5
3:45	53.5	54.1	48.2	56.5	51.9	55.7	49.8	54.2	41	40.2	49.2	55
3:50	53.1	54.4	49.5	56	51.3	56.1	49.6	52.5	41.1	41.8	42.3	55.1
3:55	53.7	54.8	51.4	56.1	52.3	59.1	49.3	48.8	41.4	54.2	41.3	53.3
4:00	53.8	55	51.4	55.8	54	54.5	49.7	48.6	43	44.4	42.2	55.8
4:05	54	54.9	52.5	56.8	53.7	55.2	49.2	53.4	43	40	41.3	54.8
4:10	53.7	53.4	53.6	57	52.7	59.2	49.9	48.7	48.5	40.2	43.4	54.6
4:15	55.3	45.7	54	56.6	53.6	55.9	50.7	49.2	42.3	41.7	41.4	54.4
4:20	55.2	47	54.3	56.4	56.5	57.3	50.3	46.9	43.5	45.5	41.7	54.7
4:25	55.3	47.1	54.4	55.7	50.9	59.6	47.4	49.2	44.6	41	41.1	56.2
4:30	55.4	48.9	54.9	56.7	51.9	58	46.4	47.1	45.7	41.5	41.3	56.2
4:35	55.2	50.5	58.7	56	50.6	56	46.9	47.7	46.6	41.5	45.1	55.9
4:40	55	49.5	58.3	55.9	50.8	56.5	47.9	47.9	46.2	42.4	48.7	55.7
4:45	55.2	47.4	54.6	55.8	51.3	57.4	47.7	55.3	46.8	50.7	47.2	57
4:50	55	47.9	56.5	52.2	52.3	58.9	47.1	42.4	47.5	43.2	41.6	56.5
4:55	55.3	47.8	56.8	51.5	51.6	58.6	42.4	55.2	47.6	43.4	43	52.1
5:00	55	54.2	56.8	51.7	50.6	59.2	42.9	55.4	47.8	43.5	45	51.5
5:05	48	56.2	56.7	51.6	53	59.8	44.9	54.8	47.9	43.9	40.8	51.7
5:10	48.4	54.1	57.1	50.9	53.8	59.2	45.3	55.2	47.8	46.1	42.2	51.8
5:15	49.8	48.1	57.6	50.8	52.8	57.8	42.6	55	47.1	43.7	43.9	50.2
5:20	49.6	49.5	57.6	50.7	39.9	56.8	42.8	54.9	46.5	43.5	41.6	50.9
5:25	49.3	48.8	57.4	50.9	39.6	59.1	44.4	55	46	43.1	41.6	51.9
5:30	49.7	48.5	57.2	50.9	42.2	59.3	45.7	51.4	47.1	43.2	42.2	52
5:35	49.2	48	57.3	52	44.5	59.3	46.9	50.7	47	43	41.9	50.8
5:40	49.9	47.9	57.2	52.1	48.9	57.6	47	50.8	46.9	43.9	42	51.7
5:45	50.7	49.4	58	51.8	46.6	57.7	46.4	47.7	46.7	43.1	42.6	52.1
5:50	50.3	47.2	56.4	50.1	44.2	59.8	47.2	42.2	46.1	62.3	44.6	51.6
5:55	47.4	47.2	53.3	49.3	45.3	58.6	47.7	52	46.4	47	51.5	50.1
6:00	46.4	46.6	52.2	47.7	45	56.1	44.6	50.9	45.3	44.8	42.4	49.3
6:05	46.9	46.4	51.8	47.7	45.4	53.6	45.3	50.9	44.8	42	40.2	47.7
6:10	47.9	45.3	49.8	45.9	42.3	44.5	45.7	48.6	43.9	44.3	38.1	42.7
6:15	47.7	43.2	47.9	42.6	43.1	44.1	44.6	48.9	43.3	38.8	44.6	43.6
6:20	47.1	41.7	63.3	42.6	42.1	45	47.7	46.6	41.6	42.4	40.8	42.5
6:25	42.4	40.9	43	42.5	62	43.5	45.9	44.5	39.8	41.4	40.3	42.3
6:30	42.9	42.9	45.8	41.3	44.4	40.7	45.4	44.5	38.7	36.2	42	47.7
6:35	44.9	44.8	47.7	44.9	40.6	40	46.4	45.7	39.6	38.6	43.5	45.9
6:40	45.3	44.8	55	42.5	39.4	38.2	50.3	43.5	39.2	40.5	37.8	45.9
6:45	42.6	41.3	47.3	44.1	40.7	39.4	47.4	44.1	39.8	38.3	36.6	42.5
6:50	42.8	41.2	46.6	42.1	42.7	40.6	47.6	45	38.2	38.6	36.5	44.1
6:55	44.4	41.3	48.9	42.4	37	39.7	47.6	45.3	38	40	38.3	42.1
23:00	46	47.5	45.7	45.6	47.5	49.1	43.2	37	39.1	38.4	50.9	39
23:05	45.2	47.5	46.6	43	50.6	50.8	42.5	35.6	39.4	40.4	46.6	37.4
23:10	46.6	47.2	50.9	42.9	51.2	53.2	41.8	38.1	40.4	39.8	47.9	41.4
23:15	48.4	50.2	49.6	44.6	50.5	53.4	42.8	38.6	42.1	39.4	48	39
23:20	46.1	49.2	47.9	47.8	46	53	42.2	42.6	41.1	38.7	47.2	37.8
23:25	47.3	46.7	47	48.9	47.8	53	41.8	43	40.7	38	47.1	38.5
23:30	49.7	43.9	47.9	50.6	44.1	52.5	42.5	41.8	40	37.8	47.9	38.5
23:35	48.8	46.6	48	48.1	45.5	52.4	42.4	44.3	40.1	37.5	48.1	39.8
23:40	48.2	59.3	47.2	48.4	42.4	51.3	41.8	42.4	40.8	38.3	47.2	38.3
23:45	50.4	66	46.2	48.7	41.5	52.6	41.9	41.6	40.1	41	46.3	39.2
23:50	47.7	63.7	46.5	49	43.8	53.8	41.4	42	40	44.1	47.2	39.5
23:55	46.8	61.1	47	48	42.4	53.7	41.6	41.7	38.8	42.6	48.8	41.6
Average	49.1	49.0	52.0	50.1	49.7	49.2	47.8	47.4	43.0	40.8	42.2	49.1
Max	55.4	66.0	63.3	57.0	62.5	59.8	55.4	56.4	48.5	62.3	51.5	57.0
Min	41.5	40.9	41.8	41.3	37.0	37.0	41.4	35.6	38.0	36.2	36.5	37.4

Note:
[1] Data were lost

Location: N1 - No. 73, Village House, Ling Tsui Tau Tsuen
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
Time	09-Sep-07	16-Sep-07	23-Sep-07
0:00	-	53.7	40.4
0:05	-	53.0	39.7
0:10	-	53.9	39.5
0:15	-	53.7	39.3
0:20	-	53.6	39.7
0:25	-	54.6	38.9
0:30	-	54.1	38.1
0:35	-	54.1	37.4
0:40	-	51.6	36.8
0:45	-	51.9	39.3
0:50	-	52.4	36.9
0:55	-	47.2	40.2
1:00	-	48.5	38.9
1:05	-	47.4	42.5
1:10	-	46.9	39.6
1:15	-	46.7	39.2
1:20	-	46.2	40.6
1:25	-	47.5	37.5
1:30	-	48.3	38.1
1:35	-	44.9	38.2
1:40	-	45.0	38.4
1:45	-	46.0	38.6
1:50	-	47.1	38.7
1:55	-	46.8	40.0
2:00	-	47.4	42.8
2:05	-	47.5	38.3
2:10	-	48.0	38.4
2:15	-	47.9	39.2
2:20	-	46.3	41.1
2:25	-	45.3	41.3
2:30	-	45.1	40.7
2:35	-	45.1	43.2
2:40	-	46.8	44.8
2:45	-	46.7	41.9
2:50	-	47.0	42.7
2:55	-	45.9	45.2
3:00	-	46.3	40.6
3:05	-	48.1	41.0
3:10	-	51.5	40.7
3:15	-	52.6	40.3
3:20	-	45.4	41.3
3:25	-	45.2	41.4
3:30	-	44.8	40.6
3:35	-	46.6	38.4
3:40	-	45.8	39
3:45	-	45.8	40
3:50	-	45.7	40.3
3:55	-	45.8	41.1
4:00	-	46.9	39.9
4:05	-	47.4	40.5
4:10	-	48.2	39.9
4:15	-	48.5	42.2
4:20	-	48.5	41.8
4:25	-	48.6	42.7
4:30	-	48.8	42.1
4:35	-	48.7	41.5
4:40	-	49.2	42.8
4:45	-	49.2	42.5
4:50	-	49.7	41.4
4:55	-	49.6	41.6
5:00	-	48.9	41.3
5:05	-	49.4	40.9
5:10	-	48.5	41.7
5:15	-	48.2	41.6
5:20	-	49.1	43.4
5:25	-	49.7	41.2
5:30	-	48.9	41
5:35	-	48.5	42.1
5:40	-	47.7	40.4
5:45	-	48.4	40.6
5:50	-	53	42.9
5:55	-	48.5	58.2
6:00	-	47.1	41.8
6:05	-	47.8	40.7

Location: N1 - No. 73, Village House, Ling Tsui Tau Tsuen
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
6:10	-	59.6	40.2
6:15	-	63.3	39.7
6:20	-	46.9	39.7
6:25	-	45.2	39.4
6:30	-	46.7	40.8
6:35	-	53	39.8
6:40	-	54.1	39.9
6:45	-	64.7	38.8
6:50	-	61.4	39.5
6:55	-	62.5	41.6
7:00	-	64.9	38.6
7:05	-	55.2	41
7:10	-	56.8	40.5
7:15	-	39.5	43.6
7:20	-	39.6	41.2
7:25	-	36.6	41
7:30	-	37.5	40.5
7:35	-	37.5	40.3
7:40	-	41.7	41.2
7:45	-	37.7	40.6
7:50	-	37.1	41.4
7:55	-	36.9	41.9
8:00	-	37.5	45
8:05	-	38	48.1
8:10	-	40.1	41
8:15	-	41.7	42.3
8:20	-	44.3	50.4
8:25	-	38.3	48.9
8:30	-	44.3	45.5
8:35	-	37.2	45.6
8:40	-	40.3	46
8:45	-	38.9	50.7
8:50	-	38.4	50.3
8:55	-	41.2	50.9
9:00	-	39	50.4
9:05	-	38.5	52.4
9:10	-	40	50.1
9:15	-	39.9	49
9:20	-	38.7	47.6
9:25	-	39.8	47.7
9:30	-	39.4	45.9
9:35	-	40.1	46.1
9:40	-	38	43.2
9:45	-	37.8	44.1
9:50	-	37.9	44.9
9:55	-	38	48.5
10:00	-	41.7	52.2
10:05	-	37.4	47.7
10:10	-	38.2	46.1
10:15	-	39.6	49.7
10:20	-	44.3	44.8
10:25	-	37.2	45.8
10:30	-	39.1	48.2
10:35	-	40.1	49.4
10:40	-	39.5	51.7
10:45	-	40.9	45.4
10:50	-	40.1	46.2
10:55	-	40.4	48.8
11:00	-	42.1	43.9
11:05	-	45.6	46.2
11:10	-	44.8	43.7
11:15	-	39.7	48.9
11:20	-	49.3	47.7
11:25	-	45.8	50.6
11:30	-	50	48.5
11:35	-	44.9	44.6
11:40	-	45.3	50.4
11:45	-	48.2	43.3
11:50	-	45	48
11:55	-	45	46
12:00	-	48.1	50.6
12:05	-	45.2	49.1
12:10	-	45.6	45.2
12:15	-	45.2	43.9
12:20	-	45.1	44.5

Location: N1 - No. 73, Village House, Ling Tsui Tau Tsuen
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
12:25	-	44.6	50.2
12:30	-	43.6	49.2
12:35	-	45.3	45.2
12:40	-	46.8	55.4
12:45	-	45.1	42.9
12:50	-	45.2	42
12:55	-	44.9	43.7
13:00	-	47.8	42.8
13:05	-	47.2	55.8
13:10	-	44.6	54
13:15	-	46.3	46.2
13:20	-	44.8	44.1
13:25	-	44.5	43.8
13:30	-	45	43
13:35	-	45	40.5
13:40	-	48.1	53.4
13:45	-	45	41
13:50	-	45.1	42.5
13:55	-	45.3	42
14:00	-	45.5	41.5
14:05	-	45.1	45.4
14:10	-	45.8	44
14:15	-	45.2	43.5
14:20	-	47.3	40.5
14:25	-	46.8	41.2
14:30	-	45	41.3
14:35	-	47.5	52.4
14:40	-	44.2	44.3
14:45	-	45.1	44.4
14:50	-	48.5	42.1
14:55	49.3	44.2	41.9
15:00	48.2	43.4	42
15:05	45.1	44.1	42.5
15:10	44.6	43.5	41.7
15:15	43.6	43.9	41.1
15:20	47.2	42.4	55.6
15:25	44.6	44.8	45.1
15:30	46.3	42.7	42.2
15:35	46.5	42.4	42.3
15:40	45	42.4	41.6
15:45	45.1	42.6	42.3
15:50	45.3	45.9	43
15:55	45.5	43.6	42.6
16:00	45.1	47.1	42.4
16:05	45.8	43.3	43.1
16:10	45.2	43.7	42.7
16:15	47.3	42.5	42.2
16:20	46.8	47.4	43.7
16:25	45	43.3	43.5
16:30	47.5	46.5	40.1
16:35	44.2	43.3	41.8
16:40	45.1	44.7	40.9
16:45	48.5	48.2	40.8
16:50	44.2	46.1	41.6
16:55	43.4	47.4	41.2
17:00	44.1	46.5	41
17:05	43.5	44.3	41.3
17:10	43.9	46	41.1
17:15	42.4	47	42.4
17:20	44.8	46.4	41.4
17:25	42.7	45.2	42.3
17:30	42.4	46.7	42
17:35	42.4	49.1	43.7
17:40	42.6	50.8	47.3
17:45	45.9	51.7	54.6
17:50	43.6	50.9	53.5
17:55	47.1	50.6	-
18:00	43.3	48.6	-
18:05	43.7	47.4	-
18:10	42.5	48.6	-
18:15	47.4	52.7	-
18:20	43.3	53.3	-
18:25	46.5	52	-
18:30	43.3	50.2	-
18:35	44.7	48.9	-

Location: N1 - No. 73, Village House, Ling Tsui Tau Tsuen
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
18:40	48.2	50.8	-
18:45	46.1	51.7	-
18:50	47.4	48.3	-
18:55	46.5	54.9	-
19:00	46.7	48.8	-
19:05	49.1	47.2	-
19:10	50.8	48.4	-
19:15	51.7	52.6	-
19:20	50.9	51.7	-
19:25	50.6	52	-
19:30	48.6	51.4	-
19:35	47.4	51.3	-
19:40	48.6	47.2	-
19:45	52.7	47.3	-
19:50	53.3	45	-
19:55	52	44.5	-
20:00	50.2	44.8	-
20:05	48.9	46.8	-
20:10	50.8	47.8	-
20:15	51.7	46.9	-
20:20	48.3	48	-
20:25	54.9	47.6	-
20:30	48.8	54.6	-
20:35	47.2	49.2	-
20:40	48.4	48.6	-
20:45	52.6	49.5	-
20:50	51.7	49.6	-
20:55	52	49.7	-
21:00	51.4	50.1	-
21:05	51.3	48.6	-
21:10	47.2	49.5	-
21:15	47.3	51.7	-
21:20	45	51.7	-
21:25	44.5	51.5	-
21:30	44.8	52.9	-
21:35	46.8	53.2	-
21:40	47.8	53	-
21:45	46.9	53	-
21:50	48	51.7	-
21:55	47.6	51.9	-
22:00	54.6	52.3	-
22:05	49.2	51.8	-
22:10	48.6	51.4	-
22:15	49.5	47.7	-
22:20	49.6	46.3	-
22:25	49.7	45.9	-
22:30	50.1	47	-
22:35	48.6	51.1	-
22:40	49.5	51.4	-
22:45	51.7	54.3	-
22:50	51.7	52.8	-
22:55	51.5	50.3	-
23:00	52.9	47.7	-
23:05	53.2	47.7	-
23:10	53	49.4	-
23:15	53	49.7	-
23:20	51.7	45.7	-
23:25	51.9	45	-
23:30	52.3	49.8	-
23:35	51.8	51.6	-
23:40	51.4	52.1	-
23:45	47.7	52.2	-
23:50	46.3	51.9	-
23:55	45.9	52.2	-
Average	47.7	46.9	43.4
Max	54.9	64.9	58.2
Min	42.4	36.6	36.8

Note:
[1] Baseline monitoring at N1 started at 14:55 on 9 Sept 2007 to 17:55 on 23 Sep 2007

Location: N2 - No. 31, Village House, Ling Tsui Tau Tsuen
Daytime (0700-1900) for normal day Baseline Noise Monitoring Results

	Leq, (30min)											
Time	05-Oct-07	06-Oct-07	08-Oct-07	09-Oct-07	10-Oct-07	11-Oct-07	12-Oct-07	13-Oct-07	15-Oct-07	16-Oct-07	17-Oct-07	18-Oct-07
7:00	-	49.7	48.8	51.7	46.2	49.1	50.3	47.5	49.1	57.7	55.8	51.2
7:30	-	50.6	50.8	52.6	53.4	49.9	54.8	48.6	49.1	58.9	56.0	54.2
8:00	-	50.5	51.5	53.6	50.0	52.0	57.6	50.0	47.9	56.0	53.5	55.8
8:30	-	51.4	51.3	52.5	50.9	58.2	53.9	52.6	47.9	59.0	53.2	56.0
9:00	-	52.1	52.9	53.0	51.5	58.5	52.5	52.5	51.6	58.3	52.9	53.5
9:30	-	51.4	52.1	53.8	50.9	56.9	55.6	51.6	50.7	57.0	52.2	53.2
10:00	-	[1]	51.7	55.3	62.7	56.5	54.7	51.2	49.7	54.7	52.0	52.9
10:30	-	50.4	51.6	58.9	64.8	56.9	52.0	53.3	50.6	55.2	53.7	52.2
11:00	-	50.3	54.8	52.9	60.6	58.9	56.1	51.9	49.6	54.2	55.0	52.0
11:30	-	50.5	51.8	52.6	63.7	57.0	52.5	53.2	52.4	55.6	55.0	53.7
12:00	-	50.3	51.1	51.7	63.1	56.8	51.8	52.8	51.9	52.2	52.2	55.0
12:30	-	49.5	[1]	49.6	[1]	58.1	[1]	52.1	51.9	51.0	57.3	55.0
13:00	-	52.2	54.3	44.9	48.9	59.0	50.0	53.3	54.4	51.0	53.7	52.2
13:30	-	50.7	51.7	48.5	48.0	57.2	48.9	[1]	50.3	53.7	50.3	57.3
14:00	-	50.5	50.3	49.0	49.8	54.6	51.7	51.3	55.8	[1]	54.9	53.7
14:30	52.2	48.3	46.9	50.7	48.5	54.5	53.4	49.9	[1]	54.0	55.2	50.3
15:00	51.0	52.5	50.2	50.0	61.6	[1]	53.5	50.6	51.9	48.7	[1]	53.7
15:30	49.7	46.0	54.2	51.3	63.5	[1]	52.6	49.6	52.9	49.6	54.0	53.0
16:00	49.7	47.7	47.0	53.0	62.8	59.4	49.0	51.3	51.3	47.9	48.7	51.4
16:30	48.6	50.2	46.1	54.1	49.5	48.2	52.6	49.7	50.5	52.0	49.6	53.4
17:00	48.9	50.5	54.9	53.3	54.0	49.6	52.2	53.8	52.9	52.3	47.9	53.4
17:30	50.8	50.7	50.6	53.4	48.5	48.7	49.7	52.2	50.5	53.6	52.0	50.7
18:00	58.4	50.2	50.9	49.8	48.1	58.2	49.3	52.4	51.0	54.4	52.3	54.1
18:30	50.0	52.6	53.3	52.6	52.9	51.8	52.2	52.3	53.3	53.0	53.6	49.8
Average	51.0	50.4	51.3	52.0	54.5	55.0	52.5	51.5	51.2	53.9	53.1	53.2
Max	58.4	52.6	54.9	58.9	64.8	59.4	57.6	53.8	55.8	59.0	57.3	57.3
Min	48.6	46.0	46.1	44.9	46.2	48.2	48.9	47.5	47.9	47.9	47.9	49.8

Note:
[1] Noise measurements were paused for data downloading and replacement of batteries. The noise levels were not reported
[2] Baseline monitoring at N2 started at 14:30 on 5 Oct 2007 to 17:00 on 19 Oct 2007

Location: N2 - No. 31, Village House, Ling Tsui Tau Tsuen
Evening time (1900-2300) for normal day Baseline Noise Monitoring Results

	Leq, (5min)											
Time	05-Oct-07	06-Oct-07	08-Oct-07	09-Oct-07	10-Oct-07	11-Oct-07	12-Oct-07	13-Oct-07	15-Oct-07	16-Oct-07	17-Oct-07	18-Oct-07
19:00	52.6	50.5	51.4	52.4	53.2	51.3	52.6	59.4	52.3	53.7	51.9	48.8
19:05	53	52	51.2	52.5	53.6	51.9	53.5	56.4	52.1	54	53	51.9
19:10	53.3	54	51	55.9	53.5	53.4	51.3	53	53.1	51.4	53	54.9
19:15	52.8	54.3	52.8	53.4	53.4	51	51.5	54.3	50.3	52.2	57.1	52.7
19:20	50.7	53.8	52.6	52.7	53.2	51.5	51	56.1	50.1	54.2	55.8	53.5
19:25	52.7	51.7	53.3	52.5	54.2	52.2	49.5	59.5	50.1	50.8	53.4	50.7
19:30	53.5	52.9	53.6	53	54.7	52.6	50.2	54.5	49.9	50.1	53.5	54.6
19:35	51.9	53.4	53.5	52.7	51	53.2	50.7	58.4	50.3	50.5	52.9	52.1
19:40	52.4	55.4	52.6	60.2	50.2	52.5	50.2	57.9	50.3	50.1	53.4	56.6
19:45	54.4	54.2	51.8	53.9	51.7	52.9	49.6	52.6	50.6	50.3	53.2	48.9
19:50	53.2	54.7	50.9	53.9	50.1	55	49.1	52.4	50.5	50.1	52.5	44.8
19:55	52.7	54.7	51.6	52.9	51.6	52.4	55.1	51.6	50.9	49.6	52.4	46.8
20:00	52.9	53.7	52.4	57.9	50.4	53.2	50.1	52.1	51.7	50.5	53.7	43.8
20:05	53.7	53.9	53.3	58.9	51.2	53.9	55.4	52.3	50	51.2	54	47.9
20:10	53.7	55.8	54	53.8	49.6	52.3	52.8	59.7	52.6	50	51.4	51.3
20:15	54.8	52.5	54	58.7	50	53	55.5	60.8	55.1	50.1	52.2	50.6
20:20	53.5	52.5	53.6	56.8	50.2	52.9	51.7	51.6	55.3	49	54.2	50.3
20:25	53.5	52.7	51.5	53.8	54.7	52.9	50	52.6	57.1	50.6	50.8	50.5
20:30	51.7	46.6	50.6	52.1	50.1	53.2	53.5	50.5	56.3	48.8	50.1	54.4
20:35	50.9	50	51.3	51.6	50	52.8	50.1	51.1	54.8	55.6	50.5	50
20:40	50.3	50.9	53	51.4	49.9	51	50	50	54	49.1	50.1	45.7
20:45	47.8	50.3	50.5	50.9	54.6	50.3	52.7	51.3	55.6	50.7	50.3	51
20:50	50.6	46.8	52	50.7	52.8	50.2	51.7	51.7	56.1	50.7	50.1	50.7
20:55	50	49.9	51.4	52.4	50.2	50.1	49.9	51.2	55.8	49.7	49.6	49.9
21:00	49.9	50.3	53.6	50.9	49.8	52.1	48.8	49.8	56.9	50.5	50.5	44.7
21:05	49.3	49.9	53	51.1	50.5	52.3	48.6	49.8	57	54	51.2	46.5
21:10	48.9	49.9	51.5	51.3	50.3	50.7	50.3	48.9	56.2	63.7	50	44.4
21:15	54.4	58.4	50.9	52.9	50.6	54.6	47.6	49.1	55.7	49.9	50.1	43.3
21:20	49.7	54.4	49	51.3	50	54.7	47.8	49.3	56.7	49.2	49	43.3
21:25	51.5	49.7	47.7	50.9	49.5	51	47.5	50.4	55.6	51	50.6	43.5
21:30	53.2	51.5	48.9	51.3	53.4	53.8	47.9	53.1	54.5	50.7	48.8	44.4
21:35	49.9	54.2	52.7	52.1	63.4	50	48	49.4	52.6	49.4	55.6	45.4
21:40	52.4	58.3	46.7	51.7	50.7	50.8	48.5	49.1	54	48.5	49.1	53.1
21:45	58.3	52	47.4	51.9	50.1	54.4	48.7	54.3	54.8	48	50.7	48
21:50	52	56.9	48.2	52.6	50.3	50.6	49.2	49.1	53.6	48.7	50.7	43.5
21:55	52.9	57.3	47.3	52.7	49.7	51.2	50	49.4	55.7	47.4	49.7	51.5
22:00	50.3	52.3	46.8	54	49.7	51.4	48.8	49.6	56.2	48.3	50.5	48.5
22:05	51.2	50.3	47.8	53.1	50	50.9	47.6	50.7	55.8	56.5	54	47.7
22:10	46.2	51.2	46	53.5	50.1	49.5	48.2	49.5	54.9	49.6	63.7	43.4
22:15	56.3	46.2	46.9	49.6	49.9	51.4	49.2	49.2	54.3	50.1	49.9	45.5
22:20	52.3	45.2	48.4	46.5	49.7	52	49.2	49	53.8	49.7	49.2	45.8
22:25	47.2	48.1	46.2	53.4	50.1	51.9	49	53.4	53.7	50.2	51	44.2
22:30	48.1	49.4	46.8	50.4	49.4	49.6	56.4	50.5	53.3	50.8	50.7	44.3
22:35	49.4	50.5	48.4	49.5	45	49.7	48.4	51.1	52.9	49.4	49.4	44.1
22:40	46.1	49.5	45.7	49.3	43.4	49	48.1	51	53.3	52.3	48.5	43.4
22:45	51	45.1	48	49.1	49.4	45	48.1	49.6	52.4	47.1	48	44.9
22:50	50.8	51	48.5	49.5	50	46.3	49.8	48.7	53.4	50.1	48.7	45
22:55	50.5	50.8	63.5	49.3	48.9	45.8	49.1	48.4	53.6	50.3	47.4	44.2
Average	51.6	51.9	50.7	52.6	51.0	51.6	50.3	52.2	53.7	50.8	51.6	48.0
Max	58.3	58.4	63.5	60.2	63.4	55.0	56.4	60.8	57.1	63.7	63.7	56.6
Min	46.1	45.1	45.7	46.5	43.4	45.0	47.5	48.4	49.9	47.1	47.4	43.3

Location: N2 - No. 31, Village House, Ling Tsui Tau Tsuen
Night time (2300-0700) for normal day Baseline Noise Monitoring Results

	Leq, (5min)											
Time	05-Oct-07	06-Oct-07	08-Oct-07	09-Oct-07	10-Oct-07	11-Oct-07	12-Oct-07	13-Oct-07	15-Oct-07	16-Oct-07	17-Oct-07	18-Oct-07
0:00	-	46.4	47.8	52.8	45	48.6	45.2	48.4	47.7	53.6	46.6	49.6
0:05	-	46.5	54.8	50	52	47.8	44.6	48.2	47.2	46.8	49.7	47.2
0:10	-	46.7	45.6	49.2	45.1	47	44.7	48.8	47.5	49.2	51.9	48.8
0:15	-	47.6	56.8	53.1	44.4	48.5	44.7	50.1	47.6	47.7	50.6	50.1
0:20	-	46.2	44.4	50.3	46.8	49.6	45.1	50.3	47	47.8	47.7	51.6
0:25	-	47.3	45.1	51.3	50.6	46.8	44	49.8	47.8	47.4	53.6	55.5
0:30	-	46.8	44.6	49.9	52.3	45.4	43.7	45.9	47.7	48.2	51.9	50.3
0:35	-	46.7	45.4	50	52.2	44.8	45.9	49.3	47.4	48.5	50.1	52.1
0:40	-	49.2	49.9	48.7	50.6	43.6	42.5	49.7	48.3	48.2	51.3	49.5
0:45	-	45	47.2	48	50.1	43.4	42.8	49.6	47	62.5	57.6	49.4
0:50	-	45.5	45	48.4	49.6	47.9	43.1	48.7	46	58.9	53.2	47.8
0:55	-	45.5	43.9	51.1	50.3	46.5	42.7	49	51.1	60.3	49.2	50.3
1:00	-	45.2	43.7	49.6	50.9	43.9	43.9	48.9	47.5	59.5	51.4	46.6
1:05	-	44.5	45.2	50.3	49.9	42.8	43.9	48.6	45.9	55.7	50.8	49.7
1:10	-	45.9	43.6	48.5	49.1	44.1	42.7	48.1	51.6	54.1	49.1	51.9
1:15	-	46.6	44.3	64.5	48	48.4	43.9	47.6	48.8	52.9	48	50.6
1:20	-	44.4	43.7	46.5	49	44.9	44.6	47.5	46.5	52.4	49.2	47.7
1:25	-	45.1	49.1	47.5	46.9	44.3	44	46.8	51.3	52.4	52.7	53.6
1:30	-	45.5	49.7	44.9	45.9	43	43.1	44.4	50.2	51	48.6	51.9
1:35	-	44.6	48.4	45.6	44.9	43	44.3	43	48.2	51	47.1	50.1
1:40	-	45.3	49.3	45.5	45.6	44	43.2	42.8	46.7	50.1	52.9	51.3
1:45	-	45.8	49.3	45.7	44.1	43.8	43.3	43.5	45.9	49.2	54.7	57.6
1:50	-	44.6	48.5	45.4	44.1	43.3	43.3	43.2	47.2	54	60	53.2
1:55	-	45.2	49	44.9	44.6	43.8	43.6	43.7	45.1	48.7	61.6	49.2
2:00	-	44.9	47.8	44.8	43.9	44.7	44.5	45.4	45.9	48.9	62.5	51.4
2:05	-	45.7	48.6	44.5	43.7	44.2	44.4	45.5	47.9	47.7	62.4	50.8
2:10	-	45.9	48.2	43.9	42.3	44.9	45.1	45.9	48.2	48	61.3	49.1
2:15	-	51.1	48.6	43.9	40.8	44.1	43.7	43.9	52.6	48.5	57.4	48
2:20	-	45.7	48.4	43.9	44.1	43.5	44.3	44.9	45.2	50.7	56.5	49.2
2:25	-	45.4	48.1	43.8	41.4	45.4	43.7	46.1	46.4	48.3	54.6	52.7
2:30	-	45.9	47.7	43.3	40.5	43.4	43.2	44.2	46.2	47.8	55.6	48.6
2:35	-	46.4	50.5	43.6	45.8	43.4	43.4	44.2	45.2	47.4	53.6	47.1
2:40	-	44.6	48.4	42.8	44.6	43.9	44.1	45	46.6	47.5	51.8	52.9
2:45	-	44.5	49.4	43.6	42.3	43.6	44	44.2	45.4	47.6	50.4	54.7
2:50	-	44.9	49.7	43.4	40.8	43.8	43.7	43.3	45.8	47.3	50.7	60
2:55	-	44.7	48.2	43.7	41.1	44.5	44.1	43.9	45.7	47.7	49.9	61.6
3:00	-	45.9	48.5	44.3	41	43.3	43.1	42.6	47.1	49	49.5	62.5
3:05	-	45.7	50.4	43.5	40.9	42.9	43	43.7	45.8	50.8	49.3	62.4
3:10	-	45	49.7	42.4	40.8	44.4	43.5	43.3	46.6	50	48.8	61.3
3:15	-	47.9	49.7	42	40.8	45.8	43.5	43.9	46.1	48	46.9	57.4
3:20	-	48.6	49.3	42.2	40.8	44.3	44.6	44.7	46.5	48.7	47.4	56.5
3:25	-	48.6	49.4	42.1	43.3	43.7	44.9	44.2	46.2	49.3	47.3	54.6
3:30	-	48.3	50.2	43.4	42	43.1	43.4	43.5	46	48.5	48.2	55.6
3:35	-	48.5	48.7	42.8	44.1	43.4	44.1	44	47.2	49.3	49	53.6
3:40	-	48.8	48.5	43.6	44.3	44.2	44.2	44.1	48.5	49.5	49.5	51.8
3:45	-	48.9	48	46.3	46.9	44	45	43.2	48.9	47.7	47.7	50.4
3:50	-	48.2	49.7	42.8	43.4	43.9	44.9	42.7	49.8	47.3	48.1	50.7
3:55	-	46.1	48.4	42.4	45.2	43.3	44.8	43.5	48.7	46.8	50.7	49.9
4:00	-	46.9	50	41.7	44	43.1	44.2	45.1	49.3	47.3	52.1	49.5
4:05	-	47.7	48.5	40.2	45.9	42.6	44.4	51.5	49.5	48.6	61.8	49.3
4:10	-	46	49.1	40.5	44.2	42.3	44.4	44.6	48.3	49	59.4	48.8
4:15	-	46.9	49.4	40.5	44.6	43	44.4	42.5	49.2	64.2	58.3	46.9
4:20	-	46.1	48.5	40.4	42.8	43.5	44.7	43.2	50.2	60	61	47.4
4:25	-	44.9	46.6	39.6	42.2	42.1	45.2	42	49.1	61.5	61.8	47.3
4:30	-	43.9	50.2	39.4	42.1	42.2	44.8	46.1	47.1	69.2	60.5	48.2
4:35	-	41.3	51.4	39.1	41.8	42.9	42.8	43.3	46.7	69.4	58.3	49
4:40	-	41.9	46.4	39.4	46.6	42.8	42.3	40.6	46.2	67.9	56.9	49.5
4:45	-	42.3	49.4	40.7	40.3	41.6	42.7	40.3	46.8	66.2	55.7	47.7
4:50	-	43.9	49.8	38.8	39.5	42.1	42.4	39.3	45.6	64.9	54.8	48.1
4:55	-	41.5	46.6	39.1	39.5	39.7	40.4	41	46.6	61.4	53.4	50.7
5:00	-	46.2	48.4	37	38.8	39.4	38.8	38.1	47.1	58.9	52.6	52.1
5:05	-	42.9	45.6	40.8	39.1	38.9	38.6	41	46.3	58.2	51.9	61.8
5:10	-	41.4	46.9	45	38.7	42.4	37.7	41.2	45	56.5	51.6	59.4
5:15	-	42.1	46.1	42.1	40.7	42.4	39.2	39	47.8	57.8	50.9	58.3
5:20	-	42.6	46.4	36.3	36.7	41	37.7	38.3	43.8	58.4	51.1	61
5:25	-	41.8	46	38.1	38.9	41	38.7	38.9	43.5	58.9	54.6	61.8
5:30	-	41.9	45.7	37.7	40.3	45.1	40.4	37.4	44.2	59	51.5	60.5
5:35	-	40.6	48.4	42.8	38.3	47.2	37	38	44.9	58	53.2	58.3
5:40	-	41.8	46.7	55	43.5	49	39.3	37.1	44	58.1	54.1	56.9
5:45	-	42.2	45.3	41.5	43.8	47.7	36.5	44.7	43.5	57.9	52.4	55.7
5:50	-	42.9	46.3	41.3	42.2	48	43.1	49.3	43.1	57.3	52.4	54.8
5:55	-	46.6	45.3	44.9	40.6	48.5	49.2	50.3	41.8	57	52.1	53.4
6:00	-	40.9	45.8	40.3	44.2	50.7	43.6	50.9	41.6	57.1	50.2	52.6
6:05	-	41.4	46.4	41.7	42.8	48.7	41.2	48.2	41.2	56.9	49.1	51.9
6:10	-	40.3	47.6	40.8	39	48.9	43.4	46.4	43.2	56	50.1	51.6
6:15	-	41.6	46.3	40.5	40	48.3	43.2	44.8	42.5	55.8	52.4	50.9
6:20	-	41.4	49.2	42.2	40.1	47.8	41.8	43.8	47.4	55.5	51.7	51.1
6:25	-	42.8	46.9	44.4	42	47.6	51.7	39.6	47.4	55.7	52.4	54.6
6:30	-	41.1	46.4	48.7	39.6	47.3	46	40.6	42.9	56.2	53.3	51.5
6:35	-	41.1	46	50.5	43.6	47.7	41.7	40.6	41.8	56.2	54	53.2
6:40	-	45.5	47.6	51.3	43.9	47.4	48.7	43	50.5	57.2	53.3	54.1
6:45	-	47.4	51.9	50.8	45.9	47.5	49	48.2	47	56.3	52.4	52.4
6:50	-	40.2	49.4	46.4	46.9	49	51.6	49	47.7	56.4	52	52.4
6:55	-	41.1	48	49.9	44.2	50.8	51.5	48.2	45.1	56.9	57.4	52.1
23:00	49.5	49.4	48.6	47.3	49.9	45.5	70.4	46.6	51.7	49.6	48.3	51.3
23:05	49.4	51.8	45	46.6	49.7	45.2	49.4	49.2	51	47.2	56.5	44.9
23:10	51.8	51.3	47.8	44.9	49.8	45.1	46.4	49.3	54.8	48.8	49.6	46.4
23:15	51.3	49.4	51.9	45.2	51.1	45	54.8	48.5	53.5	50.1	50.1	45.7
23:20	49.4	46.8	50.4	48.4	49.1	61.4	49.4	48.2	51.6	51.6	49.7	45.7
23:25	45.3	46.7	55.4	46.2	48.5	52.6	48.4	48.4	52.1	55.5	50.2	52.1
23:30	47	45.3	50.7	46.4	48.1	57.1	45.1	47.7	50.4	50.3	50.8	45.9
23:35	49.4	47	50.6	45.4	47.4	53.8	48.3	48.4	50	52.1	49.4	51.3
23:40	49.8	48.4	49.1	45	48.1	54	45.2	48.4	49.6	49.5	52.3	48.2
23:45	46.7	46.2	48.5	44.2	50	49.3	44.6	48.4	49.6	49.4	47.1	46.2
23:50	46.2	48.4	53.2	43.9	48.7	49.7	46.6	53.1	49.2	47.8	50.1	51.5
23:55	46.4	46.4	49.7	44.1	48.8	48.3	50.5	49.1	48.5	50.3	50.3	44.4
Average	48.5	45.3	48.2	44.8	44.5	45.5	44.4	45.2	47.3	53.3	52.5	51.9
Max	51.8	51.8	56.8	64.5	52.3	61.4	70.4	53.1	54.8	69.4	62.5	62.5
Min	45.3	40.2	43.6	36.3	38.3	38.9	36.5	37.1	41.2	46.8	46.6	44.4

Note:
[1] Baseline monitoring at N2 started at 14:30 on 5 Oct 2007 to 17:00 on 19 Oct 2007

Location: N2 - No. 31, Village House, Ling Tsui Tau Tsuen
Holiday : Baseline Noise Monitoring Results

	Leq, (5min)		
Time	07-Oct-07	14-Oct-07	19-Oct-07
0:00	46.8	49.4	42.2
0:05	46.7	49.8	43.1
0:10	60.2	49.3	42.8
0:15	46.5	53.1	42.4
0:20	46.7	49	67.4
0:25	47.6	52.7	61.9
0:30	47.2	50.6	42.1
0:35	46.3	49.1	41.9
0:40	45	52.9	41.3
0:45	45.5	50.3	42.4
0:50	45.5	50.9	41.5
0:55	46.2	49.4	41.7
1:00	45.5	47.8	41.9
1:05	45.5	50.6	42.2
1:10	44.9	50.6	61.5
1:15	45.9	50.3	65
1:20	46.2	51.7	61.8
1:25	44.4	51.8	55.9
1:30	44.9	48.6	49.7
1:35	45.3	46.6	43.3
1:40	45.1	47.2	44
1:45	44.5	50.9	45
1:50	45.2	48.4	43
1:55	45.9	49	42.4
2:00	45.4	47.9	47
2:05	44.6	47	41.7
2:10	45.7	46.4	42
2:15	45.6	46.4	40.5
2:20	51.1	46.2	40.6
2:25	45.5	45.9	40.1
2:30	46.4	47	47.4
2:35	44.6	45.8	48.1
2:40	44.8	46.2	43
2:45	44.9	47.2	40.3
2:50	44.7	46.1	40.3
2:55	45.1	48.4	40.4
3:00	45.7	46.3	40.4
3:05	45	46	40.1
3:10	47	45.7	40.5
3:15	48.8	45.9	41.2
3:20	48.4	46.4	40.3
3:25	48.6	46.5	40.3
3:30	48.5	46.5	41.1
3:35	48.3	46.7	40.6
3:40	48.1	46.1	41.1
3:45	48.2	46.4	44.7
3:50	46.1	46.5	40.5
3:55	46.7	47.9	40.8
4:00	47.7	47.1	43.8
4:05	46	47.6	42.4
4:10	46.7	48.6	39.3
4:15	46.1	47.9	39.1
4:20	46.2	48.4	39.5
4:25	42.9	47.8	39.9
4:30	44.4	48.3	39.1
4:35	43.9	47.6	39.6
4:40	41.3	46.7	39.5
4:45	41.5	47.2	38.8
4:50	42.3	44.7	39
4:55	43.9	44.1	39
5:00	41.9	45.5	40.1
5:05	41.4	44.3	39.5
5:10	42.1	47.4	39.4
5:15	42	45.2	39.8
5:20	41.5	45	39
5:25	41.9	46.8	41.3
5:30	40.3	47.9	40.6
5:35	40.3	46.5	39.5
5:40	41.2	42.8	39.8
5:45	41.9	42	39.7
5:50	42.2	45.8	40.9
5:55	42	49.4	49.5
6:00	56.6	49.7	41.6
6:05	40.9	47.9	43.8

Location: N2 - No. 31, Village House, Ling Tsui Tau Tsuen
Holiday : Baseline Noise Monitoring Results

	Leq, (5min)		
6:10	41.4	46.4	41.9
6:15	41.4	44.4	40.6
6:20	42.8	44.8	45.7
6:25	41.1	47.8	45.8
6:30	40.2	49.5	44.6
6:35	41.1	49.2	41.9
6:40	41.1	49.7	43.1
6:45	45.5	48.8	48
6:50	47.4	48.9	48.9
6:55	50.5	46.7	45.7
7:00	49.5	48.4	46.3
7:05	50.4	50.7	54.6
7:10	44	49	58.6
7:15	42.6	46.8	43.7
7:20	56.4	49.7	43.9
7:25	49.6	51.1	48.2
7:30	54.8	53.5	57.4
7:35	51.2	54.7	56.9
7:40	47.7	54.9	46.9
7:45	42.8	55.6	59.2
7:50	43.1	51.9	53.8
7:55	43	58	44.5
8:00	50.5	54.3	46.5
8:05	51.9	48.9	45.6
8:10	50.3	52.2	44.7
8:15	53.3	48.8	51.4
8:20	53.4	50.5	50.6
8:25	51.2	51.6	51.8
8:30	50.3	51.7	51.5
8:35	50.8	51.8	51.9
8:40	50.9	51.9	54.2
8:45	48.5	51.2	51.8
8:50	48.3	52.6	51.5
8:55	50.6	51.8	52
9:00	50.9	53.5	51.1
9:05	54.4	52.5	49.9
9:10	54.2	53.2	50.1
9:15	50.6	51.8	50.4
9:20	50.7	51.7	49.3
9:25	54.2	51.9	49.4
9:30	50.4	52.5	47.2
9:35	49.3	52.5	52.1
9:40	51.1	51.8	52
9:45	47.6	51.2	50.7
9:50	51.7	51.2	51.9
9:55	48.7	53.9	48.2
10:00	50.1	50.9	52.1
10:05	50.9	51.2	52.7
10:10	[1]	51.5	49.1
10:15	49.6	[1]	51.9
10:20	47	51	53.2
10:25	48.7	56.1	53.5
10:30	50.1	57.1	56.5
10:35	52.6	49.3	57.3
10:40	55	50.5	51.8
10:45	51.1	50	50.5
10:50	49.4	49.8	51.9
10:55	52.5	49.9	52.8
11:00	48	51.4	52
11:05	54	52.4	51.5
11:10	49.9	51.8	52
11:15	52.8	53.2	51
11:20	49.7	51.1	51.8
11:25	50.8	51.5	53.3
11:30	48.8	53.7	52.7
11:35	48.2	51.9	47.4
11:40	49.6	56.4	51.3
11:45	53.8	54.8	50.9
11:50	54.3	52.5	50.2
11:55	52.1	52.3	48.2
12:00	50.9	51.3	51.8
12:05	50.5	51.8	51.4
12:10	48.5	51.1	51
12:15	52.1	55.9	50
12:20	54.8	52.2	51

Location: N2 - No. 31, Village House, Ling Tsui Tau Tsuen
Holiday : Baseline Noise Monitoring Results

	Leq, (5min)		
12:25	47.5	55.5	49.8
12:30	48.1	51.4	50.4
12:35	47.5	51.4	47
12:40	49	52	61.3
12:45	48.6	50.5	62.9
12:50	51.9	52.5	63.5
12:55	50.3	51.6	62.7
13:00	50.2	50.3	55.6
13:05	50.2	48.8	48.5
13:10	48.7	44.8	51.8
13:15	48.6	52.8	50.7
13:20	52.7	50.1	46.8
13:25	60.1	52.1	44.6
13:30	47	49.7	47.2
13:35	50	52	44.1
13:40	47.3	51.2	50.4
13:45	51.1	49.2	48.3
13:50	52.8	50.5	50
13:55	46.1	49.9	55.9
14:00	44.1	48.3	47.9
14:05	45.6	50.1	49
14:10	47.9	51.3	46.8
14:15	49.8	54.4	51.4
14:20	47.3	53.6	59.8
14:25	47	50.9	49.6
14:30	46.8	50.8	53.3
14:35	47.3	51.3	51.5
14:40	47.5	47.4	52.1
14:45	48.2	50.6	49.7
14:50	54	50.4	44.4
14:55	47.7	47.4	47.8
15:00	50.8	46	48.5
15:05	48.1	40.6	47
15:10	47.5	45	48.7
15:15	48.4	47.7	47.5
15:20	54.4	46.3	47
15:25	56.9	41.6	47
15:30	50.8	47.7	48.7
15:35	48.2	46.3	46.8
15:40	51.1	50.2	47.2
15:45	48.6	40.4	43.9
15:50	46.6	44.3	45.8
15:55	51.5	45	46.3
16:00	46.6	46.5	49
16:05	47.7	49.3	46
16:10	48.1	48.3	46.2
16:15	46.1	47.1	45.5
16:20	44.7	43.5	48.8
16:25	44.2	51	49.7
16:30	46.9	48.2	52.9
16:35	50.7	44.8	48
16:40	48.2	46.3	48.9
16:45	50.8	43.8	45.6
16:50	50.4	45.6	48.8
16:55	49.5	48.1	51
17:00	50.1	52	-
17:05	49.8	51.4	-
17:10	47.6	49.1	-
17:15	50.9	54.9	-
17:20	48.6	51.6	-
17:25	47.8	43.8	-
17:30	50.3	43.5	-
17:35	54.6	45.8	-
17:40	50.2	47.7	-
17:45	49.6	45.1	-
17:50	49.6	51.3	-
17:55	51.9	43.4	-
18:00	52.9	44.7	-
18:05	52.2	44.6	-
18:10	51.9	49.6	-
18:15	52	49.6	-
18:20	51.9	52.4	-
18:25	51.8	52.6	-
18:30	50.8	52.9	-
18:35	50.6	52.9	-

Location: N2 - No. 31, Village House, Ling Tsui Tau Tsuen
Holiday : Baseline Noise Monitoring Results

	Leq, (5min)		
18:40	50.2	53.2	-
18:45	51.8	53.1	-
18:50	51.8	53.6	-
18:55	50.9	52.7	-
19:00	49.2	52.8	-
19:05	47.8	50.9	-
19:10	52.2	51.4	-
19:15	51.3	55.8	-
19:20	53.1	51.8	-
19:25	51	50.7	-
19:30	49.7	62.2	-
19:35	52.2	51	-
19:40	50.7	51.7	-
19:45	52.1	52.3	-
19:50	50.6	50.8	-
19:55	51.1	49.2	-
20:00	54.7	48.5	-
20:05	51.2	45.2	-
20:10	56.9	45.9	-
20:15	53.7	48.6	-
20:20	58.4	53.1	-
20:25	56.7	54.1	-
20:30	54	51.8	-
20:35	53.9	50.8	-
20:40	52.5	49.5	-
20:45	50.7	48.7	-
20:50	53.3	48.7	-
20:55	50.7	55.8	-
21:00	50.6	50.5	-
21:05	50.9	50.5	-
21:10	48.4	49.3	-
21:15	51.3	49.6	-
21:20	51.6	49.6	-
21:25	51	50.3	-
21:30	50.9	49.9	-
21:35	51.7	50.3	-
21:40	52.3	54.5	-
21:45	52.4	53.7	-
21:50	51.3	48.5	-
21:55	51.6	48.2	-
22:00	52.1	49.9	-
22:05	52	53.3	-
22:10	51.1	48.9	-
22:15	50.4	48.1	-
22:20	48.5	54.7	-
22:25	47.3	52	-
22:30	46.5	51.8	-
22:35	48.7	50.4	-
22:40	44.1	48.2	-
22:45	43.5	47.5	-
22:50	44	46.7	-
22:55	51	59.5	-
23:00	48.3	46.2	-
23:05	47.6	48.1	-
23:10	48.3	48.5	-
23:15	54.6	47.6	-
23:20	50.2	53	-
23:25	51.5	48.3	-
23:30	48.5	49.5	-
23:35	47.7	47.8	-
23:40	51.3	47.2	-
23:45	47.6	50.8	-
23:50	46.2	47.9	-
23:55	46.1	48.8	-
Average	48.7	49.6	47.6
Max	60.2	62.2	67.4
Min	40.2	40.4	38.8

Note:
[1] Noise measurements were paused for data downloading and replacement of batteries. The noise levels were not reported
[2] Baseline monitoring at N2 started at 14:30 on 5 Oct 2007 to 17:00 on 19 Oct 2007

Location: N3 - Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet
Daytime (0700-1900) for normal day Baseline Noise Monitoring Results

	Leq, (30min)											
Time	10-Sep-07	11-Sep-07	12-Sep-07	13-Sep-07	14-Sep-07	15-Sep-07	17-Sep-07	18-Sep-07	19-Sep-07	20-Sep-07	21-Sep-07	22-Sep-07
7:00	59.4	47.1	49.2	50.9	52.9	50.2	50.8	50.1	67.6	48.3	50.0	49.2
7:30	64.8	48.8	51.1	55.0	50.6	52.6	50.5	63.8	53.7	48.2	48.1	55.7
8:00	51.0	53.7	57.5	51.5	51.6	51.8	54.7	56.8	53.4	52.4	51.7	55.3
8:30	52.7	49.4	62.4	54.2	51.5	63.4	55.1	54.5	54.9	49.8	52.1	51.4
9:00	52.5	47.4	60.5	51.2	48.2	58.6	54.9	60.5	53.3	48.7	48.8	51.9
9:30	52.0	48.7	50.9	49.0	46.8	63.0	58.2	54.5	55.2	47.9	50.7	50.9
10:00	53.8	47.7	48.4	48.2	48.2	[1]	52.3	51.1	53.2	47.6	50.3	49.9
10:30	64.2	47.1	48.8	49.8	45.9	48.6	48.6	53.3	53.3	48.0	50.0	51.1
11:00	52.3	47.3	49.6	48.4	48.6	48.6	49.6	55.7	53.6	62.6	49.8	49.9
11:30	50.9	52.5	52.6	55.5	48.0	51.8	51.9	47.8	58.6	69.1	50.0	49.2
12:00	50.4	53.0	47.9	48.8	46.8	44.4	49.0	47.2	50.2	66.6	48.4	50.1
12:30	51.3	59.5	46.0	50.2	50.2	45.5	48.9	49.2	49.0	67.5	47.1	50.3
13:00	51.1	57.1	47.7	48.1	66.8	48.3	48.4	56.4	54.2	69.5	45.7	50.7
13:30	49.8	59.3	53.2	46.7	65.2	57.5	48.8	52.0	50.1	67.7	48.3	51.5
14:00	49.5	46.2	55.1	45.5	59.3	62.7	49.5	59.0	46.2	65.5	54.0	48.5
14:30	54.3	47.5	48.8	52.8	54.3	63.9	[1]	51.0	49.4	69.0	60.7	49.9
15:00	50.6	50.9	50.1	58.1	48.6	64.6	[1]	54.4	46.9	69.0	47.7	50.8
15:30	51.2	56.2	47.0	[1]	48.7	54.3	50.2	50.4	48.1	[1]	[1]	[1]
16:00	50.2	[1]	50.2	55.6	46.7	51.8	48.6	56.0	49.5	57.7	52.1	52.4
16:30	[1]	52.4	50.6	51.5	50.4	48.7	52.9	50.2	52.5	50.3	51.5	53.1
17:00	55.8	53.7	52.3	49.1	53.7	51.9	49.5	51.9	51.0	51.7	50.8	51.4
17:30	60.2	49.9	54.4	49.4	52.5	49.3	49.5	55.9	53.6	50.3	50.8	53.4
18:00	48.9	51.3	49.6	48.8	50.5	48.8	48.8	53.9	53.0	55.2	46.4	52.0
18:30	48.0	50.0	51.3	51.6	51.2	48.3	50.9	52.6	53.5	48.7	48.4	52.7
Average	53.3	51.2	51.5	50.9	51.6	53.4	51.0	53.7	52.7	57.0	50.1	51.4
Max	64.8	59.5	62.4	58.1	66.8	64.6	58.2	63.8	67.6	69.5	60.7	55.7
Min	48.0	46.2	46.0	45.5	45.9	44.4	48.4	47.2	46.9	47.6	45.7	48.5

Note:
[1] Noise measurements were paused for data downloading and replacement of batteries. The noise levels were not reported

Location: N3 - Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet
Evening time (1900-2300) for normal day Baseline Noise Monitoring Results

	Leq, (5min)											
Time	10-Sep-07	11-Sep-07	12-Sep-07	13-Sep-07	14-Sep-07	15-Sep-07	17-Sep-07	18-Sep-07	19-Sep-07	20-Sep-07	21-Sep-07	22-Sep-07
19:00	51.2	49.9	54.3	53.3	56.1	55.2	51.6	55.2	53.0	50.3	51.0	52.0
19:05	57.7	51.4	61.7	51.7	59.6	55.2	49.8	60.3	51.6	51.0	51.4	54.1
19:10	60.9	53.6	58.4	55.4	60.2	59.8	49.9	57.9	54.9	52.0	51.6	53.0
19:15	57.8	55.5	59.4	63.5	58.3	57.9	50.7	60.7	51.7	51.7	51.9	62.2
19:20	60.1	58.6	60.8	57.4	61.4	55.7	51.4	55.4	55.0	56.5	51.0	57.0
19:25	53.5	57.2	54.7	56.8	65.0	56.2	50.7	53.4	52.5	51.4	50.8	54.9
19:30	55.0	53.6	54.4	55.5	63.8	54.9	53.7	52.8	54.1	52.5	51.4	59.8
19:35	55.4	60.5	53.8	54.8	58.9	52.6	52.4	53.8	50.5	51.8	56.8	62.5
19:40	52.2	67.4	52.3	52.9	54.9	52.2	52.4	54.3	53.3	54.4	53.4	56.7
19:45	52.1	56.0	51.8	55.4	52.7	55.5	51.7	53.7	54.1	52.3	51.0	54.6
19:50	51.7	57.0	51.7	56.7	53.9	63.2	54.0	53.8	52.6	52.0	50.7	53.9
19:55	50.5	55.9	51.9	52.2	54.6	61.6	51.4	53.2	54.1	51.6	50.7	51.5
20:00	54.2	57.0	51.9	51.6	54.1	58.7	53.3	53.8	54.8	52.8	51.3	51.5
20:05	56.7	57.4	54.0	54.9	53.4	52.6	51.5	52.1	55.9	53.5	51.2	53.1
20:10	63.2	58.3	50.9	54.4	52.8	51.5	51.1	50.3	52.0	52.4	49.9	57.3
20:15	56.5	62.4	51.8	51.6	53.1	50.6	50.5	51.8	51.5	52.1	49.8	64.4
20:20	56.2	60.0	51.1	55.2	52.5	51.9	52.8	51.4	50.7	52.0	51.2	56.7
20:25	57.1	57.1	52.8	52.4	52.9	52.5	53.7	52.8	53.4	56.0	52.2	58.8
20:30	60.9	55.8	51.0	52.7	52.1	51.4	53.6	52.6	55.8	52.8	50.0	52.0
20:35	60.6	55.6	50.2	51.9	51.5	52.4	54.3	52.0	50.8	52.8	53.9	50.2
20:40	59.1	55.2	51.8	50.6	51.3	55.7	52.2	51.3	55.6	55.3	47.7	56.9
20:45	60.0	49.1	52.3	50.5	49.7	54.9	51.3	51.4	51.2	53.9	50.4	59.2
20:50	59.6	49.9	50.5	51.4	49.9	54.8	51.5	50.2	52.3	52.5	48.8	49.8
20:55	59.7	56.7	53.9	52.2	50.4	52.4	52.9	50.9	51.6	51.5	49.2	51.5
21:00	59.8	49.9	50.2	49.9	50.0	52.3	51.7	50.5	51.1	51.4	48.3	58.1
21:05	59.2	52.2	50.5	51.1	49.4	52.9	50.4	52.0	52.1	48.8	53.3	58.8
21:10	57.6	51.9	51.1	51.2	50.3	53.1	51.7	49.6	50.5	48.7	48.7	58.6
21:15	56.9	49.0	51.5	52.4	52.2	53.0	51.3	49.7	50.0	48.8	47.9	55.9
21:20	55.9	59.2	50.8	54.9	55.7	52.1	49.9	49.5	56.0	49.9	48.6	53.2
21:25	54.1	52.5	50.8	54.4	52.0	53.2	48.7	50.3	56.7	50.2	49.8	58.4
21:30	55.2	57.1	50.5	53.4	51.6	52.7	50.1	51.6	52.3	50.5	48.9	55.9
21:35	56.1	57.5	49.2	51.7	58.3	51.4	51.5	53.8	51.4	51.8	48.3	51.5
21:40	56.9	57.4	50.7	52.0	50.1	51.3	49.5	53.7	50.8	50.1	47.9	51.2
21:45	56.4	51.7	52.7	53.6	49.5	58.4	47.8	50.1	51.5	48.9	48.7	51.7
21:50	52.9	51.0	54.6	52.9	56.5	51.2	50.7	51.6	49.7	48.7	49.0	51.2
21:55	50.8	51.0	51.8	51.8	50.7	49.9	47.5	49.8	49.1	51.0	47.3	50.5
22:00	50.6	49.5	49.4	51.7	52.5	50.2	49.3	48.2	48.5	47.9	47.3	52.5
22:05	50.3	51.0	49.3	49.3	49.7	60.0	47.5	50.4	47.7	46.4	47.6	50.5
22:10	50.3	49.7	49.3	48.9	56.1	57.7	49.8	49.3	48.5	44.7	49.0	52.0
22:15	48.8	49.9	49.6	48.8	50.4	59.6	48.5	47.7	49.5	47.4	48.5	49.9
22:20	49.5	54.8	49.4	47.7	50.6	50.9	48.1	50.8	48.8	48.0	48.0	50.4
22:25	49.5	50.4	50.4	48.3	50.0	52.3	47.9	50.0	49.3	47.2	49.8	53.3
22:30	50	49.8	50.8	48.7	50.9	50.5	47.1	48.9	57.4	48.1	47.7	50.5
22:35	51.1	51.3	50.2	52.5	49.7	49.7	47.2	48.6	49	54.5	49.8	48.6
22:40	51	51	49.5	48.1	50	49.2	47.1	49.4	48.4	46.8	48.2	50.5
22:45	51.1	50.5	49.2	47.6	50.4	49.4	46.8	48.3	49.7	48.6	48.1	52.2
22:50	50.7	50.8	50	47.2	55.3	50	48.1	49.9	50.4	56.1	47	47.7
22:55	50.2	49.6	50.4	48	51.1	57.2	45.8	51	56.1	45.4	56.7	48.7
Average	54.9	54.2	52.1	52.3	53.5	53.9	50.5	51.9	52.0	50.9	50.0	54.1
Max	63.2	67.4	61.7	63.5	65.0	63.2	54.3	60.7	57.4	56.5	56.8	64.4
Min	48.8	49.0	49.2	47.2	49.4	49.2	45.8	47.7	47.7	44.7	47.0	47.7

Location: N3 - Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet
Night time (2300-0700) for normal day Baseline Noise Monitoring Results

	Leq, (5min)											
Time	10-Sep-07	11-Sep-07	12-Sep-07	13-Sep-07	14-Sep-07	15-Sep-07	17-Sep-07	18-Sep-07	19-Sep-07	20-Sep-07	21-Sep-07	22-Sep-07
0:00	55.9	49.5	56.9	49.3	49.9	54.0	54.8	47.2	52.4	49.8	46.8	49.6
0:05	50.9	49.7	54.9	49.7	47.4	49.3	50.7	47.1	48.7	52.5	48.9	49.1
0:10	56.4	49.7	53.1	49.1	47.0	49.7	50.9	47.6	48.8	49.0	49.7	48.1
0:15	50.7	50.8	52.2	49.2	50.6	50.5	49.7	46.3	47.9	49.5	57.8	48.2
0:20	50.3	50.7	55.3	50.3	49.9	49.9	47.6	49.9	48.5	51.9	48.3	52.4
0:25	50.7	51.8	50.1	51.8	47.7	52.0	47.1	47.0	47.4	51.8	46.7	49.6
0:30	51.8	52.6	47.2	52.8	46.2	51.7	53.0	47.9	47.3	50.1	50.5	50.7
0:35	57.5	50.6	46.7	57.0	47.1	50.2	46.8	47.4	47.3	52.3	52.1	50.9
0:40	52.1	49.8	48.0	50.3	51.9	49.3	46.3	47.9	47.4	50.5	48.1	48.9
0:45	54.8	48.2	48.3	51.0	47.6	49.3	44.5	55.2	47.1	51.6	49.3	52.1
0:50	51.1	49.2	48.1	52.9	49.6	47.5	44.5	48.4	49.8	50.9	48.0	49.4
0:55	56.2	48.8	56.4	51.4	47.8	49.7	49.9	48.9	55.0	49.6	47.2	51.2
1:00	56.5	57.2	58.5	50.3	46.8	50.2	50.6	47.1	47.1	48.8	47.9	49.5
1:05	53.4	55.8	56.5	52.2	47.1	51.3	55.1	48.1	48.5	49.4	48.8	47.7
1:10	53.7	55.7	52.7	50.8	52.7	51.0	52.1	48.1	48.8	48.1	52.0	46.5
1:15	52.9	55.9	48.9	51.8	49.2	52.8	50.7	48.7	55.3	48.1	48.6	51.3
1:20	52.1	55.6	46.8	50.6	48.6	51.5	49.2	45.6	55.3	48.3	49.3	49.6
1:25	53.0	58.0	48.2	50.6	48.3	49.3	48.1	45.5	61.9	48.9	49.0	51.3
1:30	52.1	58.5	48.9	50.5	48.4	49.1	49.9	47.3	57.4	50.8	48.3	49.2
1:35	51.9	58.5	47.9	50.9	55.2	50.1	47.5	46.9	49.8	51.7	47.9	47.0
1:40	54.3	57.9	49.9	50.9	53.6	53.0	49.0	45.3	48.3	52.9	57.7	47.8
1:45	52.0	58.2	50.1	53.3	50.8	48.2	48.7	45.2	47.9	48.3	55.2	46.6
1:50	51.1	53.9	49.0	50.9	49.0	45.7	53.7	45.7	48.9	47.4	51.5	45.4
1:55	52.0	53.5	52.1	50.9	49.5	49.8	56.3	46.3	49.1	49.5	53.8	46.8
2:00	48.8	51.6	48.6	49.9	47.9	55.9	54.5	46.2	49.3	47.7	51.6	46.4
2:05	53.2	51.0	48.4	51.1	47.4	52.5	55.8	47.3	47.5	47.4	48.5	49.9
2:10	50.9	51.4	49.4	49.5	47.3	51.1	56.4	47.6	55.9	48.0	48.8	46.8
2:15	51.3	53.0	54.8	50.3	48.4	50.7	56.5	51.4	46.9	48.0	47.5	46.0
2:20	51.1	52.7	54.5	50.3	49.2	50.1	56.1	56.1	46.6	48.0	47.6	45.5
2:25	52.0	51.4	54.6	51.8	50.8	49.8	56.7	56.7	47.2	47.9	47.4	46.8
2:30	52.6	52.2	54.0	50.0	47.4	50.8	56.8	49.6	47.5	47.0	50.6	46.4
2:35	56.7	53.0	54.2	52.3	51.4	49.9	57.0	47.5	52.4	47.7	46.9	45.9
2:40	51.5	52.3	54.3	55.6	52.7	50.9	56.7	49.3	51.0	48.2	48.6	45.1
2:45	52.0	53.7	54.3	50.8	53.2	51.1	55.2	54.2	58.5	48.3	52.1	45.6
2:50	52.0	52.1	53.8	50.1	48.9	50.8	54.5	56.0	48.0	49.4	50.8	46.3
2:55	52.6	51.3	54.2	51.7	51.7	50.3	58.3	52.9	46.7	53.5	47.9	50.1
3:00	53.6	52.0	53.4	61.6	51.6	51.0	58.0	45.8	47.4	51.8	47.8	51.6
3:05	53.8	58.1	53.9	53.2	49.8	50.4	58.2	46.4	44.9	52.9	49.4	47.2
3:10	54.7	55.8	54.0	51.9	54.7	50.7	58.0	47.9	51.2	48.5	50.7	48.3
3:15	53.7	54.3	53.7	51.5	55.5	50.7	58.2	47.1	46.0	48.8	48.6	52.6
3:20	58.5	55.2	53.0	51.0	50.3	54.5	56.5	52.6	48.3	49.0	47.4	49.1
3:25	53.6	52.2	48.4	52.0	49.9	54.0	53.7	56.4	48.2	48.9	46.7	50.9
3:30	54.2	53.7	48.9	56.5	49.7	50.7	52.9	60.1	48.6	49	48.3	51.4
3:35	57.2	54.8	48	53.2	50.8	51.5	51	57.8	49.5	53.9	47.6	48.8
3:40	56.1	51.9	49.1	52.4	50.4	51.7	51.4	54.7	48.7	48.6	50.5	47.3
3:45	54	52.6	49.5	52.9	50.3	51	52.8	54.7	49.8	49	55.5	51.1
3:50	52.7	60.4	49.1	52.1	50.8	52.5	51.6	56.3	58.8	49.7	54.8	52.2
3:55	51.4	53.6	50.3	55.1	53.1	53.3	52.3	60.6	54.4	55.3	47.7	60.1
4:00	51.7	48.1	51.4	55.3	53.6	51.5	52.7	54.6	55.3	47.2	50.6	53.8
4:05	54.4	49.1	51.7	51	52	54.7	52.2	57.6	55.9	47.5	47.9	50.6
4:10	58.2	57	52.3	51	52.7	52.9	51.8	51.7	51.4	47.4	49.2	49.3
4:15	55.6	51.8	54.1	52.4	51.9	54.8	49.4	49.2	50.2	50.1	47.5	50.4
4:20	54.9	56.5	56.7	54.7	51.2	61.1	50.2	49.1	51.8	49.2	49.7	55.6
4:25	53.4	49.5	53	49.8	50	59.1	50.4	52	51.7	54.8	50.7	53.3
4:30	52.9	47.5	49.7	50.3	49.8	55	49.4	49.7	53.4	46.1	52.6	50.9
4:35	53.1	53	49.5	49.9	49.6	58.2	49.9	52.1	53.3	46.6	47.9	55
4:40	54.9	51.1	56.6	50.3	49.5	52.5	50.9	53.5	51.4	52.4	49.5	49.9
4:45	52.9	48.6	49.1	50.4	50.3	52.1	50.7	51.2	55.6	55.3	49.7	50.5
4:50	55.5	49.4	48.9	50.1	51.3	52.1	50.1	52.9	56.9	47.7	55.5	49.7
4:55	52.5	48.2	48.2	50.5	50.2	55.7	47.3	50.6	50.4	46.5	53.7	49.4
5:00	53.2	45.8	46.6	51	49.6	54.3	45.9	51.5	57.3	47.4	48.4	48.1
5:05	50.6	46.4	47.2	50.3	49.7	52.4	47.9	50.3	52.2	47.6	47.7	50.5
5:10	51.9	46.2	48.7	50.1	49.9	50.7	47.1	55	52.1	50.8	47.8	50.9
5:15	51.9	45.9	48.6	49.6	49.3	51.7	45.6	54.2	51.1	54.7	47.3	51.6
5:20	53	47.2	50.7	48.2	49.2	51.1	45.8	69.7	52.2	54.4	47.3	47.1
5:25	52.5	46.1	51.1	49.3	50.4	51.3	47.4	65.2	51.7	53.9	47.5	46.5
5:30	50.2	46.6	50	50.2	50.5	51.1	48.7	49.9	50.4	48.5	47.3	45.9
5:35	50.7	50.1	53.5	52.5	50.7	51.1	49.9	49.6	50.6	48.4	47.1	46.2
5:40	51.5	48	52.4	52.2	50.9	52.6	50	46.4	51.2	47.6	46.1	46
5:45	51.8	55.4	52.7	51.6	50.5	51.4	51	48.4	50	47.6	47.3	47.3
5:50	50.8	52.6	50.4	50.2	50.3	51.3	49.4	47.5	50.4	48.6	52.5	49.3
5:55	52.5	48.5	51.6	51.4	49.9	51.5	50.7	49	49.4	51.3	47.7	48.4
6:00	52.5	51.2	51.6	51	49.8	52.1	47.6	49.2	48.6	47.4	50.4	48.5
6:05	54.9	49.7	51.6	56.6	48.4	52.5	47.1	46.9	48.3	51.7	49.9	48.2
6:10	50.1	46.4	49.7	52.6	48.5	49.1	48.7	48	49.7	51.5	47.1	49.3
6:15	53.1	50.6	49.3	52.2	49.8	49.9	47.6	48.1	49	51.1	52.1	51.7
6:20	49.8	47.2	51.5	51.1	50	51.4	50.7	49.8	52.7	51	48.4	48.1
6:25	50	45.2	56.6	51.7	50.5	50.2	48.9	47	49.2	49.3	49.8	49.6
6:30	49.5	49.5	54	52.5	51.5	50.7	48.4	48.8	49.8	48.7	45	48.4
6:35	51	71.7	49.4	55	52.5	51.6	49.4	47.4	53.5	50.3	46.5	50.4
6:40	49	46.9	51.2	52.8	50.9	51.2	53.3	48.5	50.8	47.7	43.8	47.2
6:45	47.8	49.3	53.5	49.8	50	50.8	50.4	47.2	51.5	47.5	43.3	47.7
6:50	47.8	52	55	50.3	50.4	51.3	50.6	49.5	50.1	49.3	46	48.6
6:55	51.9	49.9	50.7	51.4	49.5	49.4	50.6	51.1	54.1	48.5	47.8	53.3
23:00	50	51.1	50.8	50.1	50.6	49.6	48.4	49	50.8	47.5	55.9	49.7
23:05	50.5	56.9	51.2	51.8	51.3	51.2	53.9	49.9	48.8	46.6	51.6	52
23:10	54.3	48.8	52	47.8	49.9	50.9	46.8	50.4	51.9	47.9	50.8	47.9
23:15	50.3	48.5	50.9	53.5	49.7	50.9	57.6	53	50.1	46.8	53	63.6
23:20	50.4	48.6	50.4	52.8	50	50.6	48.2	54.3	49.2	46.8	52.7	56.3
23:25	49.6	49.2	50.8	52.5	56.8	49.8	47.4	49.5	49.9	47.2	54.5	48.4
23:30	53.6	46.9	50.2	50.7	50.9	49.5	48	50.1	55.3	47.7	53.4	49.1
23:35	51.4	57	51.2	46.6	52.5	53.4	54.4	49.7	51.9	47	54.1	46.9
23:40	59.4	62.8	50.8	47.3	49.5	52.4	47.4	49.7	55.1	47.1	52.4	47.7
23:45	53.3	66.9	52.3	51.2	56.1	51.9	47.1	48.4	53.3	48	50.5	49.8
23:50	51.5	61.4	51.7	49.3	48.5	51.3	47.1	51.6	49.3	50.5	52	50.9
23:55	49.9	60.4	48.8	54.5	47.5	50.8	48.5	53	48.4	49.6	52	48.9
Average	52.6	52.3	51.4	51.5	50.2	51.5	51.0	50.4	50.8	49.4	49.7	49.5
Max	59.4	71.7	58.5	61.6	56.8	61.1	58.3	65.2	61.9	55.3	57.8	63.6
Min	47.8	45.2	46.6	46.6	46.2	45.7	44.5	45.2	44.9	46.1	43.3	45.1

Location: N3 - Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
Time	09-Sep-07	16-Sep-07	23-Sep-07
0:00	-	53.4	49.0
0:05	-	53.2	48.7
0:10	-	53.3	48.9
0:15	-	52.8	49.3
0:20	-	51.0	48.3
0:25	-	51.2	46.5
0:30	-	51.4	47.1
0:35	-	51.0	47.7
0:40	-	50.8	48.0
0:45	-	49.3	45.7
0:50	-	50.7	47.6
0:55	-	52.3	47.7
1:00	-	52.1	47.2
1:05	-	55.8	49.5
1:10	-	51.0	49.5
1:15	-	48.5	55.5
1:20	-	49.0	53.8
1:25	-	48.7	48.9
1:30	-	50.9	52.8
1:35	-	57.7	49.2
1:40	-	48.0	52.4
1:45	-	47.9	51.7
1:50	-	48.4	52.3
1:55	-	53.3	49.8
2:00	-	49.3	47.6
2:05	-	49.5	45.8
2:10	-	49.9	45.9
2:15	-	50.6	47.1
2:20	-	48.7	47.8
2:25	-	47.7	46.8
2:30	-	47.1	49.7
2:35	-	50.7	49.2
2:40	-	48.3	47.6
2:45	-	52.4	50.9
2:50	-	54.6	51.1
2:55	-	52.5	48.2
3:00	-	47.1	47.6
3:05	-	48.2	49.9
3:10	-	49.6	48.8
3:15	-	48.4	50.2
3:20	-	50.8	48.6
3:25	-	56.0	49.8
3:30	-	58.4	50
3:35	-	58.5	53.9
3:40	-	62.2	52.5
3:45	-	53.3	55.1
3:50	-	51.9	51.2
3:55	-	50.3	52.8
4:00	-	51	53.5
4:05	-	54.1	53
4:10	-	54.6	53.4
4:15	-	48.7	56
4:20	-	48	52.7
4:25	-	48.5	52
4:30	-	48.9	55.2
4:35	-	49.8	53.8
4:40	-	50	55.2
4:45	-	50.4	54.6
4:50	-	51.2	51
4:55	-	52.8	54.7
5:00	-	55.6	59.1
5:05	-	48	57.4
5:10	-	49.7	50.7
5:15	-	46.3	50.5
5:20	-	46.5	53.3
5:25	-	47.1	51.7
5:30	-	46.8	56
5:35	-	46.9	53.2
5:40	-	46.8	49.9
5:45	-	48.4	51.5
5:50	-	47.4	50.8
5:55	-	49.2	51.6
6:00	-	47.4	50.3
6:05	-	46.8	50.3

Location: N3 - Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
6:10	-	47.9	49.5
6:15	-	49.9	49.5
6:20	-	49.6	50.1
6:25	-	49	50.5
6:30	-	50.1	46.9
6:35	-	48.8	47
6:40	-	46.5	46.4
6:45	-	46.2	47.5
6:50	-	48.9	48.8
6:55	-	49.8	50.4
7:00	-	49.6	48.6
7:05	-	45.4	53.2
7:10	-	47.1	48.2
7:15	-	46.3	47.8
7:20	-	47.3	50.7
7:25	-	44.9	49.2
7:30	-	51.5	44.8
7:35	-	46.4	46.4
7:40	-	49.6	48.1
7:45	-	46.5	51.4
7:50	-	51.5	46.6
7:55	-	43.9	51.7
8:00	-	45.3	52.2
8:05	-	43.6	50.6
8:10	-	46.6	46.7
8:15	-	48.9	51.6
8:20	-	48.8	48.2
8:25	-	49.6	50.5
8:30	-	52.1	48.1
8:35	-	53.9	49
8:40	-	54.9	54
8:45	-	50.1	53
8:50	-	47.2	54.5
8:55	-	42.5	53.4
9:00	-	43.5	53.5
9:05	-	50.8	53.1
9:10	-	54.9	51.4
9:15	-	55.2	49.4
9:20	-	49.8	49.8
9:25	-	45.6	48.8
9:30	-	50.6	51.1
9:35	-	48.1	49.6
9:40	-	44.8	50.8
9:45	-	46.9	52.2
9:50	-	45.7	57.5
9:55	-	43.6	58.8
10:00	-	46	54.7
10:05	-	45.4	54.4
10:10	-	43.5	53.5
10:15	-	44.7	53.1
10:20	-	52.7	53.7
10:25	-	43.9	53
10:30	-	45.5	54.8
10:35	-	47.6	52.7
10:40	-	46.2	51.4
10:45	-	48.6	52.2
10:50	-	45.1	53.1
10:55	-	49.4	51.6
11:00	-	48.5	51.4
11:05	-	51.6	53.9
11:10	-	51.8	52.2
11:15	-	51.3	50.4
11:20	-	51.1	50.6
11:25	-	48.2	51
11:30	-	53	55.4
11:35	-	52.3	56
11:40	-	48.8	54.8
11:45	-	51.2	48.3
11:50	-	48	51.2
11:55	-	48	51.9
12:00	-	48.3	65.9
12:05	-	49.8	52.1
12:10	-	48.6	52.6
12:15	-	48.2	48.5
12:20	-	48.1	51.5

Location: N3 - Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
12:25	-	47.6	49.9
12:30	-	46.6	49.7
12:35	-	50.8	52.2
12:40	-	50.2	52.4
12:45	-	48.1	51.8
12:50	-	48.2	48.9
12:55	-	47.9	50.2
13:00	-	47.5	57
13:05	-	48	56.6
13:10	-	47.6	54.7
13:15	-	49.3	49.7
13:20	-	47.8	50.2
13:25	-	48.1	47.1
13:30	-	48.8	47.6
13:35	-	48	45.8
13:40	-	51.1	48.6
13:45	-	48	48.2
13:50	-	48.1	52.5
13:55	-	48.3	58.6
14:00	-	48.5	55.3
14:05	-	47.2	64.2
14:10	-	48.1	65.6
14:15	-	48.2	70.1
14:20	-	50.3	55.5
14:25	-	49.8	52.5
14:30	-	48	51.6
14:35	-	50.5	47.6
14:40	-	46.9	48.1
14:45	-	45.4	50.6
14:50	-	51.5	50.3
14:55	-	47.2	49.8
15:00	-	46.4	50.3
15:05	-	47.1	52.8
15:10	-	46.5	55.9
15:15	-	48.9	50.7
15:20	-	46.6	46.3
15:25	-	47.8	47.2
15:30	60.5	45.7	45.3
15:35	57.5	45.4	46.2
15:40	56.2	45.4	46.6
15:45	56.6	45.6	47.2
15:50	56.9	45.5	48.3
15:55	56.1	50.4	49.1
16:00	50.1	50.1	48.7
16:05	53.5	46.3	49.2
16:10	48.8	46.7	48.9
16:15	46.6	50.4	51.2
16:20	47.7	49.5	-
16:25	50	46.3	-
16:30	50.5	49.5	-
16:35	51	46.3	-
16:40	52.7	47.7	-
16:45	45	51.2	-
16:50	49	49.1	-
16:55	48.1	52.1	-
17:00	51	53.8	-
17:05	50.4	47.3	-
17:10	51.8	49	-
17:15	66.2	50	-
17:20	50.2	49.4	-
17:25	48.9	48.2	-
17:30	49.5	49.7	-
17:35	48.8	51.6	-
17:40	48.6	50.4	-
17:45	63.5	54.7	-
17:50	55.1	53.9	-
17:55	55.1	53.6	-
18:00	53.2	51.9	-
18:05	48.7	53.8	-
18:10	46.4	51.6	-
18:15	52.7	54.7	-
18:20	47.6	55	-
18:25	50.4	55	-
18:30	49.7	53.2	-
18:35	48.3	51.4	-

Location: N3 - Fence wall outside No. 5 village house adjacent to Luk Tei Tong River Outlet
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
18:40	47.7	53.5	-
18:45	47.5	54.7	-
18:50	48.8	51.3	-
18:55	52.5	51.8	-
19:00	64.8	51.8	-
19:05	61.1	50.2	-
19:10	63	50.3	-
19:15	61.2	48	-
19:20	59.7	54.7	-
19:25	55.3	55	-
19:30	60.2	54.4	-
19:35	55.6	53.2	-
19:40	58.4	50.2	-
19:45	60	50.6	-
19:50	56.1	52.5	-
19:55	59.1	47.5	-
20:00	60.9	47.8	-
20:05	62.9	49.8	-
20:10	53.6	49.5	-
20:15	53.9	49.9	-
20:20	52.9	51	-
20:25	52.6	52.5	-
20:30	52.6	54.7	-
20:35	53.6	52.2	-
20:40	51.3	51.6	-
20:45	52.2	52.5	-
20:50	53.5	52.6	-
20:55	52.2	52.7	-
21:00	52.3	53.1	-
21:05	52.8	51.6	-
21:10	50.8	53.8	-
21:15	51.7	54.7	-
21:20	51.4	53.4	-
21:25	51	54.5	-
21:30	51.1	55.9	-
21:35	50.6	54.2	-
21:40	51.2	56	-
21:45	51	54.1	-
21:50	50.4	54.4	-
21:55	51.1	54.9	-
22:00	56.6	55.3	-
22:05	50.9	54.8	-
22:10	51.8	52.9	-
22:15	51.2	50.7	-
22:20	51.5	49.3	-
22:25	54.1	48.9	-
22:30	52.8	50	-
22:35	50.9	54.6	-
22:40	51.3	55.1	-
22:45	51.3	57.3	-
22:50	51.8	54.2	-
22:55	51.9	53.3	-
23:00	51.1	50.7	-
23:05	51.7	50.7	-
23:10	52.8	52.4	-
23:15	53.1	52.7	-
23:20	52	48.7	-
23:25	53.3	48	-
23:30	54.6	52.8	-
23:35	51.4	54.5	-
23:40	51.2	53.1	-
23:45	51.1	55.2	-
23:50	58.1	54.9	-
23:55	52.9	54.1	-
Average	53.0	50.1	51.1
Max	66.2	62.2	70.1
Min	45.0	42.5	44.8

Note:
[1] Baseline monitoring at N3 started at 15:30 on 9 Sept 2007 to 16:20 on 23 Sep 2007

Location: N4 - No. 23, Village House, Tai Tei Tong River
Daytime (0700-1900) for normal day Baseline Noise Monitoring Results

		Leq, (30min)											
Time	4-Oct-07	05-Oct-07	06-Oct-07	08-Oct-07	09-Oct-07	10-Oct-07	11-Oct-07	12-Oct-07	13-Oct-07	15-Oct-07	16-Oct-07	17-Oct-07	18-Oct-07
7:00	-	55.2	52.8	54.9	54.0	53.9	52.1	51.8	51.8	52.0	50.8	50.9	51.2
7:30	-	55.5	55.7	52.8	53.1	53.8	51.2	50.7	50.1	51.3	49.6	50.6	51.2
8:00	-	54.1	53.8	52.3	52.3	53.8	51.2	50.1	52.5	51.0	50.3	50.2	51.5
8:30	-	54.1	53.3	52.9	51.8	53.7	54.4	49.7	54.6	50.3	50.5	50.4	51.8
9:00	-	54.3	53.6	52.1	52.0	53.3	53.4	51.4	51.9	51.4	50.9	50.3	51.2
9:30	-	54.1	52.9	52.1	52.3	53.5	52.8	50.8	50.8	50.1	50.0	51.0	50.9
10:00	-	54.4	[1]	52.4	53.4	53.3	52.0	51.1	51.1	50.5	50.5	49.7	51.1
10:30	-	55.8	52.1	52.0	52.8	52.9	54.3	52.5	50.6	50.3	52.2	54.3	51.2
11:00	-	55.4	53.9	51.5	53.0	53.2	53.8	51.1	57.0	51.5	51.5	54.2	51.9
11:30	-	54.8	53.9	52.8	54.0	53.7	51.0	50.9	58.3	56.0	52.6	60.0	57.2
12:00	-	53.8	55.5	52.6	53.6	53.0	54.3	57.7	58.1	54.5	51.6	60.1	56.7
12:30	-	54.9	55.3	[1]	50.8	[1]	53.1	54.1	56.4	49.7	51.7	51.0	55.8
13:00	-	57.8	53.6	52.3	50.0	53.0	51.5	52.5	54.5	52.8	48.9	49.6	49.7
13:30	-	[1]	53.0	50.9	49.9	51.8	51.8	56.6	52.6	52.0	50.0	52.2	51.1
14:00	-	[1]	52.7	52.6	50.7	51.5	48.9	58.6	51.1	50.8	[1]	56.5	53.8
14:30	-	52.6	53.8	51.4	49.9	53.4	50.9	56.6	51.2	49.7	49.0	55.2	50.2
15:00	-	52.7	52.7	51.1	50.6	64.2	51.3	55.9	52.7	50.6	50.0	[1]	51.1
15:30	-	52.5	52.9	51.3	[1]	65.1	51.0	[1]	52.0	49.8	54.4	55.2	55.6
16:00	55.8	52.5	61.9	53.8	50.8	64.5	48.7	50.0	55.7	50.3	51.8	53.4	55.9
16:30	55.6	54.9	54.4	52.5	52.5	55.1	49.7	50.6	55.5	50.5	52.9	52.6	56.4
17:00	55.5	55.8	54.5	50.8	51.0	57.7	49.5	55.7	57.1	51.7	51.8	51.4	55.0
17:30	57.9	54.3	53.7	52.1	51.9	52.6	55.7	57.1	55.0	51.3	53.2	54.5	53.7
18:00	56.7	54.9	54.1	53.0	54.4	50.3	50.2	55.8	56.8	51.3	54.3	58.0	52.4
18:30	56.5	55.1	55.1	50.1	51.1	52.4	51.7	54.8	57.0	49.9	52.8	52.1	52.8
Average	56.3	54.5	54.1	52.2	52.0	54.8	51.9	53.3	53.9	51.2	51.3	53.2	52.9
Max	57.9	57.8	61.9	54.9	54.4	65.1	55.7	58.6	58.3	56.0	54.4	60.1	57.2
Min	55.5	52.5	52.1	50.1	49.9	50.3	48.7	49.7	50.1	49.7	48.9	49.6	49.7

Note:
[1] Noise measurements were paused for data downloading and replacement of batteries. The noise levels were not reported
[2] Baseline monitoring at N4 started at 16:00 on 4 Oct 2007 to 16:40 on 19 Oct 2007

Location: N4 - No. 23, Village House, Tai Tei Tong River
Evening time (1900-2300) for normal day Baseline Noise Monitoring Results

		Leq, (5min)											
Time	4-Oct-07	05-Oct-07	06-Oct-07	08-Oct-07	09-Oct-07	10-Oct-07	11-Oct-07	12-Oct-07	13-Oct-07	15-Oct-07	16-Oct-07	17-Oct-07	18-Oct-07
19:00	56.7	52.4	53.2	51.5	53.7	54.9	49.2	55	58.6	50.2	50.7	54.3	52.3
19:05	57.4	58.1	54.1	50.7	52.5	54.6	50.7	55.7	57.1	52.7	51.4	53.2	52.1
19:10	57.4	54.9	54.4	51.9	52.7	54.9	50.9	55.1	57.7	51.2	51.5	52.8	53.8
19:15	57.4	56.9	53.5	51.4	52.9	54.9	49.6	55.5	57.3	51.7	52.6	52.6	53.4
19:20	57.2	60.1	51.8	50.6	52.5	51.3	49.7	54.9	58.1	51.8	52.5	53.2	53
19:25	56.8	52.7	51.9	50.9	52.3	51.7	49.5	55.2	56.2	52.6	54	54	53.6
19:30	57.3	52.1	53	50.9	53	50.9	52.5	55.5	56.7	51.9	63.7	54.5	53.8
19:35	56.8	52.9	54.7	51.2	54.1	49.7	49.8	55.5	58.1	52.6	54.1	54.6	53.4
19:40	55.6	52.3	54.3	51	52.6	49.8	50.8	55.1	58.9	52.4	53.6	55.3	53.4
19:45	54.9	56.5	54.8	51	52.2	49.9	50	54.9	59.3	51.2	49.8	56.1	53.6
19:50	54.8	52.8	56.9	53.5	51	52.3	54.6	54.9	59.5	49.2	49	55.5	53.2
19:55	54.4	53.4	53	65.8	49.9	49.4	48.9	55.1	58.9	49.5	49.5	54.6	53.1
20:00	54.5	52.9	51.5	54.6	49.5	48.4	49.7	54.6	61.9	49.2	49.6	54	52.7
20:05	54.8	53.7	52.7	52.7	51.9	49	49.6	57.8	60.9	48.8	49.9	53.2	48
20:10	54.6	55.7	51.4	51.1	49.9	49	50	56	60.2	48.7	48.5	53.2	47.4
20:15	56.4	53	52	50.9	52	49	49.9	58.7	61.2	48.4	49.4	53.3	47.4
20:20	54.3	53.5	53.7	50.3	50	49.5	49.9	55.9	60.5	48.6	49.1	53.4	47.9
20:25	54.4	52.7	51.3	51.3	52	49.2	50	57.1	58.6	49	51.1	54.2	48.1
20:30	54.3	51.6	51.4	53.8	52	49.8	52.3	54.5	56.9	48.6	49.8	51.8	49.1
20:35	54.2	51.8	51.3	52.9	51.8	50.2	49.4	56.5	59.7	48.3	48.7	52.2	49.2
20:40	54.4	52.1	51.5	51.5	54.5	48.9	48.4	50.9	60	48.5	49.2	50.9	49.4
20:45	54.9	51.9	51.1	50.7	52.7	49.4	49	51.3	58.9	48.4	50.6	49.7	49.5
20:50	56.1	52.1	51.6	51.1	53.7	50.9	49	50	59.8	49.4	49.1	48.7	48.6
20:55	57.4	52.6	53	55.2	49.8	49.2	49.2	53.4	60.1	48.9	49.8	48.7	50.9
21:00	57.4	53.1	52.3	52.8	50.4	49.5	49.8	52.6	59.7	49.1	49.3	48.8	50.6
21:05	58.4	52.2	51.5	50.5	50.7	50.7	50.2	51.7	59.8	49.3	49.1	54.5	49.2
21:10	60.2	52	51.6	50.6	49.6	51	49	53.2	59.9	49.4	49.4	48.4	50.9
21:15	57.9	51.4	51.3	52.2	49.3	49.3	49.5	53.8	59.7	48.5	48.8	48.9	48.7
21:20	55.3	52.6	53.3	51	49.3	55.1	48.9	53.6	58.1	54.7	47.7	48.8	48.4
21:25	54	51.9	51.9	50.4	50	48.4	49.4	53.8	59.3	49.9	47.9	47.9	48.4
21:30	54.3	52	51.4	50.8	52.9	50.6	50.9	54.3	59	48.9	48.2	48.1	48.4
21:35	59.6	58.5	54.6	50.1	49.3	49.2	49.2	55.1	57.7	48.8	48.7	48.4	48.9
21:40	54	55.9	56	50.2	48.7	50.2	49.8	55.6	57	48.9	49.3	47.9	48.3
21:45	54.7	56.3	56.8	50.6	48.6	49.2	49.9	53.9	57.5	50.1	49.3	47.6	48.5
21:50	54.4	51.7	61.2	51	49	49.3	51	52.9	55.6	48.3	49.1	49	49.3
21:55	57	52.2	56.5	50.1	48.5	49	49.3	56.1	57	48.6	49.7	48.6	51.1
22:00	57.2	52.3	55.6	50.3	51.3	49.6	55.1	52.8	54.8	48.5	48.1	55.4	53.6
22:05	56.5	52	51.2	50.1	52.3	48.3	48.4	52.2	54.5	48.8	49	49.9	50.9
22:10	56.7	52.3	51.3	50.3	53.5	52.2	49.5	52.5	54.7	50.5	51.6	47.8	49.9
22:15	56.8	52.5	51.6	50.7	53.5	53	50.7	52.5	59	48.4	52.5	47.9	49.8
22:20	56.8	52.5	51.4	50.1	51.6	51.1	50.6	52.7	59.1	49.1	49	50	50.2
22:25	56.9	53.9	52	51.3	55.7	49.8	49.2	53.1	61.4	48.4	48.4	48.3	51.6
22:30	56.7	54.6	51.9	50.2	53.9	49.3	50.2	52.4	54.7	49	47.9	48.9	50.7
22:35	57	51.5	51.6	50	53.1	49.5	49.2	52.4	54.7	48.4	49.8	49.1	49.7
22:40	56.8	51.8	51.8	49.9	54.3	49.5	48.3	52.4	54.2	48.7	47.8	47.6	49.4
22:45	54.4	52.1	52.5	50.5	55.5	48.9	49.2	51.4	54.3	48.1	50.3	47.5	49.4
22:50	53.9	52	52.6	49.3	54.2	52.9	49.2	50.8	54.5	49.9	48.9	47.4	49.7
22:55	54.1	51.6	51.6	50.7	53.1	54.1	49.9	49.3	54.3	48.5	48	48.6	50.7
Average	56.0	53.3	53.0	51.5	51.8	50.6	50.0	54.0	58.0	49.6	50.1	51.0	50.5
Max	60.2	60.1	61.2	65.8	55.7	55.1	55.1	58.7	61.9	54.7	63.7	56.1	53.8
Min	53.9	51.4	51.1	49.3	48.5	48.3	48.4	49.3	54.2	48.1	47.7	47.4	47.4

Location: N4 - No. 23, Village House, Tai Tei Tong River
Night time (2300-0700) for normal day Baseline Noise Monitoring Results

		Leq, (5min)											
Time	4-Oct-07	05-Oct-07	06-Oct-07	08-Oct-07	09-Oct-07	10-Oct-07	11-Oct-07	12-Oct-07	13-Oct-07	15-Oct-07	16-Oct-07	17-Oct-07	18-Oct-07
0:00	-	53.7	52.3	50.9	53.8	54.8	49.3	52	51.8	48.5	49.5	48.7	47.9
0:05	-	53.8	52.3	52.3	49.6	54.2	49.8	50.8	53.3	48.7	50.2	51.7	47.9
0:10	-	53.7	51.6	51.7	49.2	51.4	51	51.7	52.8	48.7	47.8	49.3	48.7
0:15	-	53.8	51.7	53	49.6	53.2	51.4	53.1	53.6	50.2	49	48.5	48.4
0:20	-	54.4	52.3	50.7	49.3	53.2	50.2	53.4	52.5	48.4	48.4	49.6	48.8
0:25	-	53.7	52.4	50.5	49.7	52.4	50.3	49.9	54	48.7	48.5	49.9	48.1
0:30	-	53.9	52.4	50.6	55.2	51.5	51	52.3	54.4	48.5	48.1	50.9	47.9
0:35	-	53.8	51.9	50.9	53.6	52.2	51.5	49.4	56.4	48.6	48.8	48.5	47.5
0:40	-	53.8	51.9	51.3	52.6	57.3	50.3	48.4	54.5	49	47.7	49.4	47.5
0:45	-	53.8	52.1	50.6	51.1	53.2	50.8	49	53.6	48.7	48.6	52.3	48
0:50	-	53.8	54.3	50.4	50.4	52.2	51.8	49.5	52.3	48.6	48.7	48.2	47.3
0:55	-	53.7	52	50.4	53.2	54.9	54.1	49	51.7	48.9	48.7	49	47.3
1:00	-	53.8	52.2	50.6	50.7	54.4	53.6	49	51.4	48.7	48.3	48.8	47.2
1:05	-	53.8	51.9	50.7	52.4	54.7	57.6	49.2	55	49.9	48.4	48.5	47.5
1:10	-	53.8	51.3	50.3	49.5	60	49.9	49.8	53.4	51	48.4	47.9	47.6
1:15	-	53.7	52.4	50.4	52.6	56.3	50.7	50.2	52.7	50.3	48.1	47.4	48.7
1:20	-	53.5	52.3	50.3	51.3	53.7	50	48.9	54.4	49.2	48.1	47.8	48.7
1:25	-	53.5	51.5	50.2	50.1	58	49.7	49.4	52.3	49.6	47.8	47.8	48.6
1:30	-	53.5	51.4	50.4	49.7	56.9	49.6	49.5	50.8	51.8	47.8	54	47.9
1:35	-	53.5	52	50.3	49.7	56.2	51.1	50.7	51.4	51.8	48.9	48.8	49.1
1:40	-	53.6	52	50	49.5	55.5	49.9	51	51.7	52.1	48.5	47.6	48.2
1:45	-	54.1	51.7	49.8	50.1	58.5	49.9	49.3	51.3	50.9	49.1	47.6	47.9
1:50	-	53.5	51.3	50.3	50.4	59.2	49.6	50.9	52.1	51.4	48.4	48.8	49.7
1:55	-	53.5	51.3	50.5	49.6	55.8	50.1	49.2	50.2	52.7	48.2	49.4	49.7
2:00	-	53.6	51.9	51	49.2	58.6	49.7	55.1	50.3	52.8	48.6	48.4	50
2:05	-	53.6	51.7	50.4	53.2	62.2	50.1	48.4	52.6	50.4	53	48.4	49.8
2:10	-	53.5	51.8	50.7	52.3	63.9	50.8	50.6	54.2	51.6	48	46	48.7
2:15	-	53.5	55.7	51.1	49.3	65	49.7	49.2	51.1	52.9	48.6	47.5	48.1
2:20	-	53.6	51.9	51.1	49.7	64.6	49.9	50.2	53.2	53	48.4	48.5	48.5
2:25	-	53.5	51.6	50.6	53	62.9	50.3	49.2	52.3	54.6	48.4	50.4	47.5
2:30	-	53.5	51.4	50.4	51.5	54.9	50.2	51.8	53.3	54.2	47.7	47.8	48.9
2:35	-	53.6	51.4	50.6	49.5	56.6	49.4	53.1	53.3	54.3	47.5	49.1	50
2:40	-	53.7	52.4	50.7	52.9	55.3	49.5	49.9	54.5	54.1	47.8	47.9	48.4
2:45	-	53.6	51.5	50.3	50.8	53.9	49.8	49.9	50.4	54.5	48	48.3	48.2
2:50	-	53.4	51.3	50.6	50.1	52.7	50.1	49.6	51.9	52.3	47.9	50.3	49
2:55	-	53.4	51.5	50.4	48.9	51.8	50.6	49.3	51	53.7	47.9	50.4	48.6
3:00	-	53.4	51.8	50.3	49.1	53.1	49.7	49.7	51.7	51.4	48	49	48.5
3:05	-	53.4	51.5	50.2	49.6	53.4	50.1	49.2	51.1	52.7	47.9	50.4	49.2
3:10	-	53.4	51.2	50.1	48.9	54.2	49.7	49.3	49.6	52.9	47.8	50.3	50.5
3:15	-	53.6	52	50.2	48.7	54.7	49.8	49.8	52.3	54.3	47.9	49.7	50.2
3:20	-	53.5	52.5	50.1	50.1	51.9	49.8	49.2	49.4	51.4	48.3	50.4	53.4
3:25	-	53.4	51.8	50.5	49	51.2	50	50	53.3	49.1	52.6	50.9	53.2
3:30	-	53.5	52	50.7	49.3	51.8	49.9	50.5	49.8	49	52.5	50.1	52.7
3:35	-	53.6	51.7	50.3	49.6	51.4	50	50.5	52.2	49.1	48.9	48.2	52
3:40	-	53.7	52	51	51.5	51.3	50.5	49.7	51.8	49.6	50.5	48.4	53.1
3:45	-	53.5	52.6	50.6	51.2	51.9	49.9	50.1	55.5	49.4	52.1	48.3	54.4
3:50	-	53.5	51.9	50.9	50.1	52.6	50.2	53.8	52.3	49.2	49.8	48.2	52.6
3:55	-	53.8	51.6	50.5	49.5	51.8	50.8	49.2	51.1	49	49.2	48.5	52.6
4:00	-	53.6	51.9	50.8	49.5	52	50	52	51.5	50.1	49.1	48.4	49.4
4:05	-	53.7	52	51.1	49	53	49.6	50.8	52.8	50.2	48.1	48	48.4
4:10	-	53.9	51.6	50.7	49.1	51.9	50.7	51.7	51.3	50.7	50.2	47.7	48.8
4:15	-	54.4	51.7	50.5	49.4	51.6	49.2	53.1	53	49.4	48.7	48.3	48.9
4:20	-	53.6	51.7	51	49.8	51.6	49.3	53.4	50.1	48.2	48.7	48.3	49.4
4:25	-	53.3	54.5	51.7	49.5	52.3	49.8	51.9	50.2	48.8	50.3	47.6	48.9
4:30	-	53.3	51.2	51.4	49.1	66.1	49.9	49.9	56.6	49	49.3	47.5	47.9
4:35	-	54.0	51.7	51.5	49.3	64.7	49.9	49.3	56.7	48.5	47.8	48.1	47.4
4:40	-	53.6	51.8	50.7	49.3	64.1	49.6	49.8	50.7	48.4	47.5	47.8	47.4
4:45	-	53.3	51.6	50.8	49.5	56.7	49.3	49.9	50.5	48.5	48	47.7	47.3
4:50	-	53.3	51.1	50.4	49.3	54.4	49.7	49.6	50.3	48.6	47.7	48.2	48.1
4:55	-	53.2	51.1	50.7	49.1	54.1	49.2	49.3	51.6	48.2	49.1	48	47.2
5:00	-	53.3	51.3	50.7	49.2	54.3	49.2	51.3	49.2	48.3	48.5	52	47.4
5:05	-	53.3	51.3	50.3	49.3	54.6	50	52.3	49.3	49	50.6	48.9	48.7
5:10	-	53.4	51.1	50.6	50.8	52.8	50.5	50.7	48.5	48.4	50.1	51	49.2
5:15	-	53.2	52	51.3	50.5	53	50.5	55.3	48.7	49.2	49.2	51.5	50.6
5:20	-	54.9	51.5	51.1	50.8	52.1	49.7	51.9	48.6	49.5	49.1	50.5	51.5
5:25	-	53.7	52.8	51.2	50.4	52.6	50.1	51.2	48.7	49.6	49.2	50.3	51.5
5:30	-	54.6	51.8	51.5	50.9	52.5	51.8	51.5	48.7	49	49.1	50.8	51.3
5:35	-	53.8	51.1	51.2	51	51.9	53.1	51.2	48.7	49	48.5	50.2	50.3
5:40	-	53.8	51.7	51.3	51.9	54.2	52	51.8	49	49	48.6	50.6	49.7
5:45	-	55.5	51.4	51.1	50.7	52.2	50.8	51.5	48.9	49.2	48.6	50.1	49.7
5:50	-	55.1	51.5	50.8	50.4	54.8	51.7	51.2	49.4	50.7	48.6	49.9	50.6
5:55	-	54.4	51.9	54	51	52.6	53.1	51.8	51.1	49.1	48.8	49.9	49.6
6:00	-	54.8	52	54.1	52.9	54.5	53.4	51.3	49	50.1	50.3	50.7	48.9
6:05	-	57.0	52.6	52.9	52.3	54.5	51.9	51.7	49.3	51.1	55.6	49.9	52.5
6:10	-	55.0	51.3	52	52.2	52.7	53.8	51.2	50.2	49.7	51	50.4	50.4
6:15	-	55.1	52.9	54.5	52.2	56.3	57.5	49.7	50	49.5	52.1	50.6	56.7
6:20	-	56.1	51.4	54.7	54.1	57.6	54.5	49.2	53.9	54.1	51.6	50.4	53.7
6:25	-	55.9	51.8	53.7	52.8	55.1	56.6	49.2	50.3	55	50.4	51	55.7
6:30	-	56.2	51.6	54.7	52.9	52.8	53.3	50	50.4	53.7	49.8	51.5	53
6:35	-	55.3	51.7	51.7	51.6	54.6	51.8	49.7	49.9	55.8	53.7	49.7	56.1
6:40	-	55.1	52.1	52.7	52.4	53.1	51	50.1	49.2	56.8	50.6	52.6	52.6
6:45	-	58.3	52.7	51.9	51.8	52.5	51.4	51.8	51.1	53.3	49.3	52.4	58
6:50	-	55.7	56.2	51.8	51.9	53.1	53.1	53.1	51.7	49.6	49.4	51.2	55.1
6:55	-	54.9	51	52.2	52.8	54.7	55.1	52	50.7	49.7	49.1	49.5	51.7
23:00	54.2	52.2	51.4	49.4	52.6	50.7	49.6	49.4	54.3	47.9	48.4	47.4	49.1
23:05	53.9	52.1	51	49.8	51.6	50.5	49.3	49.2	54.3	47.7	54.4	49.5	49.3
23:10	54.1	52.3	52.1	49.7	51.1	50.7	49.7	49.8	54.3	47.9	48.3	48.1	50.3
23:15	54.2	51.8	52	49.5	54.1	50.9	50	49.3	54.4	49	48.5	47.8	49.2
23:20	54	51.6	52.5	49.7	55.3	49	50.5	49.7	54.8	48.6	48.7	50.7	48.9
23:25	53.8	56.5	52.1	49.8	54.7	52.7	50.5	50	54.4	47.9	48.6	48.9	48.5
23:30	53.9	51.7	52.4	49.8	52.4	50.6	51.9	49.3	54.3	48.1	49.4	48.5	49.6
23:35	53.9	51.5	52.7	49.5	53	53.6	53.8	50.6	54.3	49.3	51.8	49.3	48.9
23:40	53.8	52.8	52.1	49.5	52.4	49.8	49.7	50.4	54.2	48.7	52.6	48	47.6
23:45	55.4	53.1	52.3	49.4	53.5	50	50.1	50.4	54.3	48.2	48.8	48.2	48
23:50	53.8	52.5	51.5	49.9	56.2	50.1	51.8	50.2	54.2	48.2	50.1	47.6	48.2
23:55	54.8	51.7	51.8	52.4	56.3	49.4	53.1	50.8	54.5	49.9	48.6	47.4	48.1
Average	54.2	53.8	52.0	51.0	51.1	54.4	50.9	50.6	52.0	50.3	49.2	49.3	49.7
Max	55.4	58.3	56.2	54.7	56.3	66.1	57.6	55.3	56.7	56.8	55.6	54.0	58.0
Min	53.8	51.5	51.0	49.4	48.7	49.0	49.2	48.4	48.5	47.7	47.5	47.4	47.2

Note:
(1) Baseline monitoring at N4 started at 16:00 on 4 Oct 2007 to 16:40 on 19 Oct 2007

Location: N4 - No. 23, Village House, Tai Tei Tong River
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
Time	07-Oct-07	14-Oct-07	19-Oct-07
0:00	51.3	54.3	48.2
0:05	51.3	54.4	51.8
0:10	52.1	54.5	53.3
0:15	51.9	54.2	58
0:20	52	54.2	48.7
0:25	51.7	54.4	48.2
0:30	52.1	54	48.2
0:35	52	54.1	47.9
0:40	52.1	53.9	50.6
0:45	51	54	48.5
0:50	51.2	54	48.5
0:55	53	54.3	48.2
1:00	51.7	54.4	48.8
1:05	51	54.4	48.7
1:10	51	54.6	47.9
1:15	51.2	54.7	51.3
1:20	51.1	54.4	48.3
1:25	51.1	54.1	48.7
1:30	51.3	54.3	48.7
1:35	51.8	54.3	48.2
1:40	51.8	54.5	48.4
1:45	51.9	54.5	48.8
1:50	51.6	54.6	48.2
1:55	51.7	54.6	49.9
2:00	52	54.5	48.4
2:05	52.3	54	47.8
2:10	51.9	54	47.9
2:15	52.1	55.1	47.8
2:20	51.9	54.3	47.7
2:25	52.2	54.3	47.8
2:30	51.8	54.7	47.9
2:35	52.2	54	47.9
2:40	52.1	53.8	48.3
2:45	51.7	54	53.6
2:50	51.8	53.9	55
2:55	52	54.2	48.2
3:00	52.1	54	48.1
3:05	52.1	54	48.3
3:10	52.4	53.8	48.5
3:15	52.1	53.8	48
3:20	51.9	54.2	47.8
3:25	51.9	54.5	47.8
3:30	52.3	56.4	48.1
3:35	52.1	55.8	47.9
3:40	51.6	54.6	47.9
3:45	51.5	54.4	50.4
3:50	51.5	54.5	47.6
3:55	51.2	55.5	47.9
4:00	51.6	55.1	50.8
4:05	51.4	54.4	47.5
4:10	51.6	54.2	47.6
4:15	51.6	54.3	47.6
4:20	52	54.2	48
4:25	51.8	54.5	47.9
4:30	51.1	54.2	47.7
4:35	51.1	54.3	48
4:40	51	54.5	47.7
4:45	51.1	54.4	47.6
4:50	50.8	53.9	47.5
4:55	51	53.9	47.8
5:00	51.1	54	47.9
5:05	51.1	54.5	47.3
5:10	51.1	54.3	47.4
5:15	51.2	54.7	47.2
5:20	51	55.7	47.3
5:25	51	55.3	48.1
5:30	50.9	54.8	47.5
5:35	50.9	57	47.6
5:40	50.6	55.3	47.6
5:45	54.9	55.4	47.6
5:50	56.4	55.1	47.6
5:55	51.7	57.2	47.6
6:00	50.8	58.6	48
6:05	51.1	60.2	52.4
6:10	56.7	61.3	50.1
6:15	52.1	55.8	57.5

Location: N4 - No. 23, Village House, Tai Tei Tong River
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
Time	07-Oct-07	14-Oct-07	19-Oct-07
6:20	55.5	54.4	53.3
6:25	57	54.3	50.3
6:30	51.8	54.6	52
6:35	59.5	54.8	53.6
6:40	61.4	54.9	50
6:45	56.3	54.7	52.1
6:50	53.6	54.8	54.7
6:55	52.3	55.7	49.6
7:00	57.4	55.5	49.6
7:05	56	55.9	48.4
7:10	53.1	54.8	48.8
7:15	53.3	54.4	53.1
7:20	52	54.9	49.8
7:25	52.1	54.4	48.1
7:30	53.8	54.8	49.1
7:35	55.7	55	48.1
7:40	53.7	54.9	50.3
7:45	52.9	54.9	51.6
7:50	52.8	55	51.1
7:55	51.8	54.9	50.2
8:00	52.2	54.7	50.7
8:05	53.1	54.2	49.6
8:10	55	54.6	50.8
8:15	53.3	55.6	50
8:20	54.6	56.2	50.4
8:25	54.5	55.2	50
8:30	51.7	54.8	49.8
8:35	54.5	55	51.6
8:40	52.6	54.2	51.9
8:45	53.8	53.9	51.7
8:50	53.4	54.1	51.5
8:55	52.7	54.7	51.4
9:00	51.9	56	51.3
9:05	52.6	56.1	50.7
9:10	51.7	55.6	51
9:15	51.7	54	50.1
9:20	54.7	54.1	49.3
9:25	53.4	54.1	49.4
9:30	54.3	55.5	50.4
9:35	59.2	54.3	50.5
9:40	57.1	54.1	50.8
9:45	54.4	54.2	53.2
9:50	53.3	54.2	52
9:55	53.1	54.7	51.8
10:00	53.2	54.6	54.1
10:05	57	54.7	54.7
10:10	56.3	54.3	54.9
10:15	54.1	54.4	56.8
10:20	54.5	54.2	54.5
10:25	[1]	[1]	56.1
10:30	55.2	56.3	53.4
10:35	54	55.1	56.6
10:40	54.8	55.1	53.3
10:45	54.2	52.1	61.2
10:50	54.3	55.6	52.8
10:55	54.6	53.8	52.5
11:00	55.3	53.5	53.5
11:05	54.2	53.3	53.5
11:10	53.5	50.8	56.3
11:15	53.9	51.1	52.9
11:20	55.2	52.1	53
11:25	57.2	51.2	53.5
11:30	54.9	50.8	56.7
11:35	53.2	51.1	53.1
11:40	53.6	50.7	54.6
11:45	54	51	54.1
11:50	54.4	52.6	62.1
11:55	54.3	51.2	56.4
12:00	57.1	50.8	58.1
12:05	55.4	50.4	59.2
12:10	54.8	52.3	61.6
12:15	55	51.8	61.1
12:20	53.8	52.3	56.4
12:25	53.2	51.1	56.8
12:30	53.4	51	60.3
12:35	53.4	50.8	58.3

Location: N4 - No. 23, Village House, Tai Tei Tong River
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
Time	07-Oct-07	14-Oct-07	19-Oct-07
12:40	53.8	52.9	59.4
12:45	53.4	54.6	59
12:50	53.7	50.7	56.8
12:55	53.3	50.9	57.7
13:00	54	53.6	57.2
13:05	55.7	60.4	54
13:10	55.9	57.2	56.1
13:15	55.1	56.9	54.7
13:20	55.1	58.2	52.5
13:25	53.7	58.2	52.2
13:30	53.5	55.3	58
13:35	54.3	55.9	55.5
13:40	52.4	55.3	59
13:45	53.2	56.6	53
13:50	55.7	52.9	54.8
13:55	53.7	54.2	54
14:00	52.3	53.4	53.7
14:05	53	55.1	55.9
14:10	52.3	53.4	55.4
14:15	52.8	53.9	55.2
14:20	53.4	52.7	54.8
14:25	52.2	52.5	52.7
14:30	52.2	50.7	52
14:35	52.3	52.1	51.3
14:40	53.4	52.5	51.5
14:45	52	52.2	51.1
14:50	55.6	52.4	50.2
14:55	52.9	52.4	51.2
15:00	54.1	54.3	53.1
15:05	52.5	52.8	51.9
15:10	53	52.4	53.3
15:15	51.4	55.4	53.6
15:20	54.9	53.6	50.7
15:25	52.2	53.7	50.4
15:30	53.2	56.5	51.3
15:35	52.7	55.9	50.9
15:40	53.8	54.6	49.7
15:45	52.7	52.8	49.4
15:50	53.8	52.3	51.1
15:55	56	52.1	63.6
16:00	56	55.5	56.5
16:05	55.5	55.6	51.4
16:10	56.1	54.9	51.3
16:15	54.8	55.3	52.7
16:20	53	55.6	52.3
16:25	52.3	54.6	50.4
16:30	52.9	53.8	50.1
16:35	52.8	54.9	49.9
16:40	52.7	55	-
16:45	55	55.7	-
16:50	55.6	56.6	-
16:55	54.3	53.7	-
17:00	54.7	53.8	-
17:05	56.3	53.7	-
17:10	53.7	51	-
17:15	54.2	51.4	-
17:20	52.3	51.7	-
17:25	50.7	52	-
17:30	51.4	54.3	-
17:35	53.9	55.5	-
17:40	50.8	55.5	-
17:45	50.4	52.7	-
17:50	51.4	53.4	-
17:55	51.3	52.8	-
18:00	55.8	52.6	-
18:05	52	56.2	-
18:10	51.2	51.1	-
18:15	52.1	49.6	-
18:20	51.5	48.5	-
18:25	51.3	48.7	-
18:30	52	48.6	-
18:35	56.2	49.2	-
18:40	53.2	54	-
18:45	53	50	-
18:50	54.4	49.2	-
18:55	53.5	49.1	-

Location: N4 - No. 23, Village House, Tai Tei Tong River
Holiday: Baseline Noise Monitoring Results

	Leq, (5min)		
Time	07-Oct-07	14-Oct-07	19-Oct-07
19:00	53.5	48.7	-
19:05	53.1	50.7	-
19:10	52.8	49.6	-
19:15	52.8	51	-
19:20	52.9	51.4	-
19:25	53.2	49.6	-
19:30	53.1	49.7	-
19:35	52.9	49.2	-
19:40	52.4	50.1	-
19:45	52.2	50.4	-
19:50	52.4	49.8	-
19:55	52.5	49.9	-
20:00	55.3	49.6	-
20:05	55.9	49.8	-
20:10	55.6	49.8	-
20:15	55.3	51	-
20:20	55.2	49.6	-
20:25	57.5	51.6	-
20:30	55.2	50	-
20:35	55.4	50.3	-
20:40	55	50.1	-
20:45	54.9	50.6	-
20:50	52.1	51.8	-
20:55	53.4	49.7	-
21:00	53.2	51.2	-
21:05	53.2	49.7	-
21:10	53.6	50.1	-
21:15	56.5	50.1	-
21:20	54.5	49.6	-
21:25	53.1	49.4	-
21:30	52.9	49.6	-
21:35	52.9	49.4	-
21:40	54.5	50.1	-
21:45	54.4	49.5	-
21:50	53.5	49.1	-
21:55	53.2	49.5	-
22:00	53	49.7	-
22:05	51.5	52.8	-
22:10	51	52.6	-
22:15	54.2	50.2	-
22:20	51.4	49.5	-
22:25	51.7	49.7	-
22:30	51.9	52.6	-
22:35	51.6	52.3	-
22:40	59.9	49.4	-
22:45	50.8	53.5	-
22:50	51	59.3	-
22:55	51.5	49.2	-
23:00	51.6	49	-
23:05	51.7	49.4	-
23:10	53.3	49.8	-
23:15	51.4	50.3	-
23:20	51.1	48.9	-
23:25	54	50.4	-
23:30	51.3	48.6	-
23:35	51.2	49	-
23:40	57.9	49	-
23:45	52.6	48.8	-
23:50	50.8	48.8	-
23:55	52.5	48.9	-
Average	53.2	53.3	51.5
Max	61.4	61.3	63.6
Min	50.4	48.5	47.2

Note:
[1] Noise measurements were paused for data downloading and replacement of batteries. The noise levels were not reported
[2] Baseline monitoring at N4 started at 16:00 on 4 Oct 2007 to 16:40 on 19 Oct 2007

Appendix 5

Detailed water quality monitoring and QA/QC results

Project: Drainage Improvement in Southern Lantau
Water Quality Baseline Monitoring - August to September

Lab ID	Location	Position	Tide	Sampling Date	Weather	Time	Water depth, m	Temp. °C		Average value	DO, mg/L		Average value	pH, Unit		Average value	Salinity, ppt		Average value	Turbidity, NTU		Averaged Value	Suspended Solid, mg/L		Averaged Value
								M1	M1a		M1	M1a		M1	M1a		M1	M1a		M1	M1a		M1	M1a	
1	M1	mid	EBB	20-Aug-07	Cloudy	15:30	<1	28.6	28.6	28.6	7.02	6.95	6.99	7.6	7.6	7.6	0.1	0.1	0.1	3.74	3.80	3.8	1.0	2.0	1.5
2	M2	mid	EBB	20-Aug-07	Cloudy	15:40	<1	28.4	28.4	28.4	7.33	7.24	7.29	6.7	6.7	6.7	0.1	0.1	0.1	4.25	4.08	4.2	2.0	1.0	1.5
3	M3	mid	EBB	20-Aug-07	Cloudy	15:50	<1	29.8	29.8	29.8	7.15	7.04	7.10	7.7	7.7	7.7	0.5	0.5	0.5	7.30	7.15	7.2	4.0	3.0	3.5
4	M4	mid	EBB	20-Aug-07	Cloudy	15:10	<1	28.9	28.9	28.9	5.41	5.29	5.35	7.7	7.7	7.7	21.6	21.6	21.6	5.37	5.52	5.4	3.0	3.0	3.0
5	C1	mid	EBB	20-Aug-07	Cloudy	16:50	<1	28.5	28.5	28.5	6.52	6.45	6.49	7.7	7.7	7.7	0.1	0.1	0.1	2.91	2.85	2.9	2.0	1.0	1.5
6	C2	mid	EBB	20-Aug-07	Cloudy	16:40	<1	27.6	27.6	27.6	6.70	6.64	6.67	8.0	8.0	8.0	0.1	0.1	0.1	2.75	2.69	2.7	1.0	1.0	1.0
7	C3	mid	EBB	20-Aug-07	Cloudy	16:15	<1	28.6	28.6	28.6	5.47	5.58	5.53	7.8	7.8	7.8	0.2	0.2	0.2	8.33	8.36	8.35	4.0	4.0	4.0
8	M1	mid	EBB	22-Aug-07	Cloudy	11:55	<1	27.1	27.1	27.1	6.87	6.90	6.89	7.7	7.6	7.7	0.1	0.1	0.1	17.50	17.20	17.4	11.0	12.0	11.5
9	M2	mid	EBB	22-Aug-07	Cloudy	11:45	<1	27.0	27.0	27.0	6.71	6.83	6.77	7.5	7.5	7.5	0.1	0.1	0.1	6.90	6.64	6.8	5.0	4.0	4.5
10	M3	mid	EBB	22-Aug-07	Cloudy	11:35	<1	27.4	27.4	27.4	5.78	5.86	5.82	7.6	7.7	7.7	0.3	0.3	0.3	29.30	27.30	28.3	20.0	18.0	19.0
11	M4	mid	EBB	22-Aug-07	Cloudy	12:04	<1	27.3	27.3	27.3	6.42	6.52	6.47	7.8	7.8	7.8	0.4	0.4	0.4	17.50	19.50	18.5	16.0	15.0	15.5
12	C1	mid	EBB	22-Aug-07	Cloudy	10:30	<1	27.1	27.1	27.1	6.34	6.38	6.36	7.4	7.4	7.4	0.1	0.1	0.1	6.09	5.75	5.9	5.0	4.0	4.5
13	C2	mid	EBB	22-Aug-07	Cloudy	10:45	<1	26.8	26.8	26.8	6.72	6.70	6.71	7.3	7.3	7.3	0.1	0.1	0.1	4.49	4.32	4.4	2.0	3.0	2.5
14	C3	mid	EBB	22-Aug-07	Cloudy	11:10	<1	26.9	26.9	26.9	6.26	6.15	6.21	7.3	7.4	7.4	0.1	0.1	0.1	6.85	6.53	6.7	3.0	3.0	3.0
15	M1	mid	EBB	24-Aug-07	Sunny	12:35	<1	28.5	28.5	28.5	6.86	6.91	6.89	7.8	7.7	7.8	0.1	0.1	0.1	4.55	4.60	4.6	3.0	2.0	2.5
16	M2	mid	EBB	24-Aug-07	Sunny	12:30	<1	28.6	28.7	28.7	6.85	6.87	6.86	7.6	7.7	7.7	0.1	0.1	0.1	2.96	2.35	2.7	1.0	1.0	1.0
17	M3	mid	EBB	24-Aug-07	Sunny	12:20	<1	31.0	31.0	31.0	6.71	6.76	6.74	7.8	7.9	7.9	3.3	3.3	3.3	6.79	7.28	7.0	6.0	5.0	5.5
18	M4	mid	EBB	24-Aug-07	Sunny	12:45	<1	30.7	30.7	30.7	6.74	6.76	6.75	7.9	8.1	8.0	2.1	2.1	2.1	8.78	8.55	8.7	8.0	7.0	7.5
19	C1	mid	EBB	24-Aug-07	Sunny	11:35	<1	27.7	27.6	27.7	6.34	6.34	6.34	7.1	7.2	7.2	0.1	0.1	0.1	3.38	3.62	3.5	2.0	2.0	2.0
20	C2	mid	EBB	24-Aug-07	Sunny	11:50	<1	27.6	27.6	27.6	6.71	6.84	6.78	7.2	7.1	7.2	0.1	0.1	0.1	2.52	2.04	2.3	1.0	1.0	1.0
21	C3	mid	EBB	24-Aug-07	Sunny	12:10	<1	28.4	28.4	28.4	6.52	6.56	6.54	7.4	7.4	7.4	0.1	0.1	0.1	2.14	2.18	2.2	1.0	1.0	1.0
22	M1	mid	EBB	27-Aug-07	Cloudy	15:25	<1	32.9	33.0	33.0	7.06	7.16	7.11	8.3	8.5	8.4	13.1	13.0	13.1	5.72	5.70	5.7	5.0	5.0	5.0
23	M2	mid	EBB	27-Aug-07	Cloudy	15:30	<1	29.7	30.0	29.9	6.36	6.50	6.43	8.1	8.2	8.2	0.2	0.2	0.2	2.39	2.06	2.2	1.0	1.0	1.0
24	M3	mid	EBB	27-Aug-07	Cloudy	15:40	<1	29.3	29.0	29.2	6.70	6.75	6.73	8.0	8.0	8.0	0.6	0.6	0.6	5.85	5.80	5.8	3.0	4.0	3.5
25	M4	mid	EBB	27-Aug-07	Cloudy	15:50	<1	31.6	31.7	31.7	6.45	6.53	6.49	8.2	8.2	8.2	6.9	6.8	6.9	7.11	7.23	7.2	8.0	6.0	7.0
26	C1	mid	EBB	27-Aug-07	Cloudy	14:30	<1	28.8	28.8	28.8	6.19	6.21	6.20	7.3	7.4	7.4	0.1	0.1	0.1	6.89	7.90	7.4	7.0	6.0	6.5
27	C2	mid	EBB	27-Aug-07	Cloudy	14:50	<1	28.2	28.6	28.4	6.25	6.30	6.28	7.3	7.3	7.3	0.1	0.1	0.1	1.87	1.95	1.9	1.0	1.0	1.0
28	C3	mid	EBB	27-Aug-07	Cloudy	15:15	<1	29.4	30.0	29.7	6.41	6.50	6.46	7.3	7.3	7.3	0.2	0.2	0.2	2.58	2.60	2.6	1.0	1.0	1.0
29	M1	mid	EBB	29-Aug-07	Sunny	14:35	<1	29.6	29.6	29.6	6.78	6.78	6.78	7.6	7.6	7.6	2.3	2.4	2.4	8.52	8.60	8.6	7.0	8.0	7.5
30	M2	mid	EBB	29-Aug-07	Sunny	14:40	<1	30.2	30.5	30.4	6.36	6.41	6.39	7.8	7.8	7.8	0.4	0.6	0.5	2.07	2.05	2.1	2.0	2.0	2.0
31	M3	mid	EBB	29-Aug-07	Sunny	14:45	<1	32.8	33.0	32.9	6.42	6.48	6.45	8.6	8.7	8.7	18.8	20.0	19.4	6.23	6.28	6.3	7.0	7.0	7.0
32	M4	mid	EBB	29-Aug-07	Sunny	15:50	<1	32.3	33.0	32.7	6.32	6.34	6.33	7.3	7.2	7.3	10.8	10.6	10.7	11.80	11.50	11.7	12.0	13.0	12.5
33	C1	mid	EBB	29-Aug-07	Sunny	15:35	<1	29.0	30.5	29.8	6.09	6.25	6.17	6.2	6.2	6.2	0.1	0.1	0.1	4.64	4.66	4.7	5.0	4.0	4.5
34	C2	mid	EBB	29-Aug-07	Sunny	15:20	<1	28.8	30.0	29.4	6.16	6.18	6.17	6.4	6.4	6.4	0.1	0.1	0.1	2.34	2.34	2.3	4.0	4.0	4.0
35	C3	mid	EBB	29-Aug-07	Sunny	15:00	<1	29.8	29.7	29.8	5.09	5.10	5.10	6.6	6.6	6.6	0.5	0.7	0.6	2.13	2.13	2.1	4.0	5.0	4.5
36	M1	mid	EBB	31-Aug-07	Sunny	16:55	<1	29.7	29.7	29.7	5.66	5.77	5.72	7.2	7.2	7.2	1.6	1.8	1.7	13.10	13.90	13.5	11.0	11.0	11.0
37	M2	mid	EBB	31-Aug-07	Sunny	16:45	<1	30.6	30.0	30.3	6.21	6.23	6.22	7.2	7.3	7.3	0.4	0.4	0.4	2.10	2.17	2.1	1.0	1.0	1.0

Lab ID	Location	Position	Tide	Sampling Date	Weather	Time	Water depth, m	Temp. °C		Average	DO, mg/L		Average	pH, Unit		Average	Salinity, ppt		Average	Turbidity, NTU		Averaged	Suspended Solid, mg/L		Averaged
38	M3	mid	EBB	31-Aug-07	Sunny	16:30	<1	32.3	32.0	32.2	6.33	6.33	6.33	7.5	7.8	7.7	14.7	14.6	14.7	5.15	5.20	5.2	4.0	6.0	5.0
39	M4	mid	EBB	31-Aug-07	Sunny	15:50	<1	33.0	33.5	33.3	6.85	6.91	6.88	7.9	7.8	7.9	13.1	13.1	13.1	4.83	4.88	4.9	3.0	5.0	4.0
40	C1	mid	EBB	31-Aug-07	Sunny	17:10	<1	30.2	30.5	30.4	6.21	6.22	6.22	7.8	8.0	7.9	0.1	0.1	0.1	3.08	3.17	3.1	1.0	1.0	1.0
41	C2	mid	EBB	31-Aug-07	Sunny	17:30	<1	30.0	30.0	30.0	5.47	5.50	5.49	7.1	7.3	7.2	0.1	0.1	0.1	1.37	1.40	1.4	1.0	1.0	1.0
42	C3	mid	EBB	31-Aug-07	Sunny	16:15	<1	29.7	29.5	29.6	5.50	5.40	5.45	7.2	7.4	7.3	0.2	0.2	0.2	2.52	2.57	2.5	2.0	1.0	1.5
43	M1	mid	EBB	3-Sep-07	Sunny	16:30	<1	29.2	29.0	29.1	6.06	6.13	6.10	7.2	7.2	7.2	2.0	1.6	1.8	8.17	8.03	8.1	11.0	9.0	10.0
44	M2	mid	EBB	3-Sep-07	Sunny	16:20	<1	30.1	29.8	30.0	6.70	6.58	6.64	7.2	7.2	7.2	0.5	0.5	0.5	1.83	1.92	1.9	2.0	1.0	1.5
45	M3	mid	EBB	3-Sep-07	Sunny	16:10	<1	31.8	31.6	31.7	6.45	6.52	6.49	7.4	7.4	7.4	12.8	12.7	12.8	4.30	4.30	4.3	5.0	7.0	6.0
46	M4	mid	EBB	3-Sep-07	Sunny	15:40	<1	32.0	32.4	32.2	6.93	6.91	6.92	7.8	7.9	7.9	12.8	12.1	12.5	4.52	4.40	4.5	6.0	4.0	5.0
47	C1	mid	EBB	3-Sep-07	Sunny	17:00	<1	31.8	31.1	31.5	6.72	6.48	6.60	7.8	7.7	7.8	0.1	0.1	0.1	1.83	1.69	1.8	1.0	1.0	1.0
48	C2	mid	EBB	3-Sep-07	Sunny	16:50	<1	32.0	31.5	31.8	5.39	5.51	5.45	7.2	7.2	7.2	0.1	0.1	0.1	2.60	2.71	2.7	1.0	1.0	1.0
49	C3	mid	EBB	3-Sep-07	Sunny	15:55	<1	30.0	29.7	29.9	6.02	6.13	6.08	7.4	7.2	7.3	0.1	0.1	0.1	1.72	1.73	1.7	2.0	2.0	2.0
50	M1	mid	EBB	5-Sep-07	Sunny	12:35	<1	27.6	27.7	27.7	7.23	7.22	7.23	7.2	7.1	7.2	0.3	0.3	0.3	10.20	10.20	10.2	5.0	5.0	5.0
51	M2	mid	EBB	5-Sep-07	Sunny	12:30	<1	27.7	27.8	27.8	7.21	7.18	7.20	7.1	7.1	7.1	0.2	0.2	0.2	4.20	3.72	4.0	1.0	1.0	1.0
52	M3	mid	EBB	5-Sep-07	Sunny	11:55	<1	29.8	29.6	29.7	7.74	7.69	7.72	6.5	6.7	6.6	8.0	8.0	8.0	7.45	7.34	7.4	4.0	4.0	4.0
53	M4	mid	EBB	5-Sep-07	Sunny	12:20	<1	29.3	29.3	29.3	7.03	7.04	7.04	7.3	7.4	7.4	4.4	4.4	4.4	13.70	14.30	14.0	11.0	12.0	11.5
54	C1	mid	EBB	5-Sep-07	Sunny	9:50	<1	25.6	25.5	25.6	6.34	6.36	6.35	6.2	6.2	6.2	0.1	0.1	0.1	4.72	4.74	4.7	2.0	3.0	2.5
55	C2	mid	EBB	5-Sep-07	Sunny	9:30	<1	25.8	25.8	25.8	6.80	6.77	6.79	6.1	6.0	6.1	0.1	0.1	0.1	2.36	2.37	2.4	1.0	1.0	1.0
56	C3	mid	EBB	5-Sep-07	Sunny	11:00	<1	27.1	27.2	27.2	6.82	6.83	6.83	6.5	6.4	6.5	0.1	0.1	0.1	2.39	2.13	2.3	1.0	1.0	1.0
57	M1	mid	EBB	7-Sep-07	Cloudy	12:25	<1	26.8	26.8	26.8	6.95	7.03	6.99	7.0	7.0	7.0	2.0	2.0	2.0	6.17	6.38	6.3	4.0	5.0	4.5
58	M2	mid	EBB	7-Sep-07	Cloudy	12:15	<1	27.5	27.5	27.5	7.14	7.00	7.07	7.2	7.2	7.2	0.7	0.7	0.7	2.25	2.33	2.3	1.0	1.0	1.0
59	M3	mid	EBB	7-Sep-07	Cloudy	12:05	<1	29.2	29.2	29.2	6.00	5.86	5.93	6.6	6.6	6.6	16.7	16.7	16.7	4.10	4.25	4.2	3.0	5.0	4.0
60	M4	mid	EBB	7-Sep-07	Cloudy	11:45	<1	28.8	28.8	28.8	6.36	6.27	6.32	6.9	6.9	6.9	13.6	13.6	13.6	5.27	5.34	5.3	5.0	4.0	4.5
61	C1	mid	EBB	7-Sep-07	Cloudy	12:40	<1	26.6	26.6	26.6	6.38	6.20	6.29	7.3	7.2	7.3	0.1	0.1	0.1	4.18	4.07	4.1	1.0	1.0	1.0
62	C2	mid	EBB	7-Sep-07	Cloudy	12:55	<1	27.6	27.6	27.6	7.01	7.20	7.11	7.2	7.3	7.3	0.1	0.1	0.1	2.53	2.49	2.5	1.0	1.0	1.0
63	C3	mid	EBB	7-Sep-07	Cloudy	11:55	<1	27.6	27.6	27.6	6.17	6.25	6.21	7.0	7.1	7.1	0.4	0.4	0.4	4.71	4.83	4.8	2.0	1.0	1.5
64	M1	mid	EBB	10-Sep-07	Sunny	14:30	<1	29.8	30.1	30.0	5.73	5.82	5.78	7.2	7.2	7.2	1.4	1.4	1.4	11.70	12.00	11.9	14.0	12.0	13.0
65	M2	mid	EBB	10-Sep-07	Sunny	14:40	<1	29.9	29.9	29.9	6.33	6.17	6.25	7.1	7.1	7.1	0.4	0.4	0.4	1.85	1.79	1.8	2.0	2.0	2.0
66	M3	mid	EBB	10-Sep-07	Sunny	14:55	<1	30.2	30.4	30.3	6.29	6.54	6.42	7.4	7.4	7.4	8.5	8.6	8.6	2.41	2.33	2.4	4.0	4.0	4.0
67	M4	mid	EBB	10-Sep-07	Sunny	13:00	<1	32.1	32.1	32.1	6.70	6.83	6.77	7.8	7.9	7.9	12.6	13.0	12.8	5.21	5.17	5.2	3.0	2.0	2.5
68	C1	mid	EBB	10-Sep-07	Sunny	13:20	<1	30.0	29.7	29.9	6.30	6.26	6.28	7.8	7.9	7.9	0.1	0.1	0.1	1.16	1.25	1.2	1.0	1.0	1.0
69	C2	mid	EBB	10-Sep-07	Sunny	13:40	<1	29.8	30.2	30.0	6.04	5.59	5.82	7.2	7.3	7.3	0.1	0.1	0.1	1.12	1.10	1.1	1.0	1.0	1.0
70	C3	mid	EBB	10-Sep-07	Sunny	14:10	<1	29.6	29.6	29.6	6.07	6.02	6.05	7.2	7.1	7.2	0.3	0.3	0.3	2.83	2.79	2.8	2.0	1.0	1.5
71	M1	mid	EBB	12-Sep-07	Sunny	15:40	<1	29.3	29.4	29.4	6.03	6.17	6.10	7.2	7.2	7.2	1.4	1.3	1.4	11.80	11.70	11.8	7.0	8.0	7.5
72	M2	mid	EBB	12-Sep-07	Sunny	15:50	<1	30.8	31.0	30.9	6.58	6.47	6.53	7.1	7.2	7.2	0.3	0.3	0.3	1.18	1.20	1.2	1.0	2.0	1.5
73	M3	mid	EBB	12-Sep-07	Sunny	16:00	<1	31.6	31.3	31.5	6.39	6.40	6.40	7.5	7.5	7.5	12.4	12.3	12.4	3.16	3.14	3.2	4.0	5.0	4.5
74	M4	mid	EBB	12-Sep-07	Sunny	14:20	<1	32.0	32.6	32.3	6.93	6.82	6.88	7.8	7.8	7.8	12.8	12.6	12.7	4.16	4.18	4.2	2.0	2.0	2.0
75	C1	mid	EBB	12-Sep-07	Sunny	14:40	<1	30.1	29.5	29.8	6.71	6.75	6.73	7.7	7.8	7.8	0.1	0.1	0.1	2.18	2.20	2.2	1.0	1.0	1.0
76	C2	mid	EBB	12-Sep-07	Sunny	15:00	<1	29.7	30.2	30.0	6.01	6.10	6.06	7.2	7.2	7.2	0.1	0.1	0.1	1.29	1.37	1.3	1.0	1.0	1.0
77	C3	mid	EBB	12-Sep-07	Sunny	15:30	<1	29.0	29.3	29.2	5.59	5.52	5.56	7.1	7.1	7.1	0.1	0.1	0.1	1.51	1.56	1.5	1.0	1.0	1.0
78	M1	mid	EBB	14-Sep-07	Sunny	15:55	<1	29.7	29.6	29.7	6.03	6.14	6.09	7.3	7.3	7.3	1.5	1.1	1.3	11.70	11.70	11.7	3.0	4.0	3.5
79	M2	mid	EBB	14-Sep-07	Sunny	16:00	<1	30.2	30.0	30.1	6.21	6.18	6.20	7.3	7.3	7.3	0.3	0.3	0.3	1.86	1.85	1.9	1.0	2.0	1.5

Lab ID	Location	Position	Tide	Sampling Date	Weather	Time	Water depth, m	Temp. °C		Average	DO, mg/L		Average	pH, Unit		Average	Salinity, ppt		Average	Turbidity, NTU		Averaged	Suspended Solid, mg/L		Averaged
80	M3	mid	EBB	14-Sep-07	Sunny	16:10	<1	31.4	31.7	31.6	6.33	6.29	6.31	7.6	7.6	7.6	4.5	4.2	4.4	4.50	4.51	4.5	2.0	3.0	2.5
81	M4	mid	EBB	14-Sep-07	Sunny	15:30	<1	32.3	32.2	32.3	7.18	7.23	7.21	7.8	7.8	7.8	12.9	12.9	12.9	14.70	13.80	14.3	3.0	2.0	2.5
82	C1	mid	EBB	14-Sep-07	Sunny	16:30	<1	29.7	29.6	29.7	6.35	6.27	6.31	8.0	7.8	7.9	0.1	0.1	0.1	2.86	2.84	2.9	1.0	1.0	1.0
83	C2	mid	EBB	14-Sep-07	Sunny	16:20	<1	29.5	29.2	29.4	6.03	6.10	6.07	7.2	7.2	7.2	0.1	0.1	0.1	1.27	1.27	1.3	1.0	1.0	1.0
84	C3	mid	EBB	14-Sep-07	Sunny	15:45	<1	29.7	29.7	29.7	6.16	6.20	6.18	7.2	7.2	7.2	0.2	0.3	0.3	2.18	2.16	2.2	1.0	1.0	1.0

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 / Laboratory Sample ID: HK0711768-001 / Sample Date / Time: 20 Aug 2007	Client Sample ID: M1 (DUPLICATE) / Laboratory Sample ID: HK0711768-002 / Sample Date / Time: 20 Aug 2007	Client Sample ID: M2 / Laboratory Sample ID: HK0711768-003 / Sample Date / Time: 20 Aug 2007	Client Sample ID: M2 (DUPLICATE) / Laboratory Sample ID: HK0711768-004 / Sample Date / Time: 20 Aug 2007	Client Sample ID: M3 / Laboratory Sample ID: HK0711768-005 / Sample Date / Time: 20 Aug 2007
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	<1	2	2	1	4

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0711768-006 / Sample Date / Time: 20 Aug 2007	M4 / HK0711768-007 / 20 Aug 2007	M4 (DUPLICATE) / HK0711768-008 / 20 Aug 2007	C1 / HK0711768-009 / 20 Aug 2007	C1 (DUPLICATE) / HK0711768-010 / 20 Aug 2007
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	3	3	3	2	<1

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0711768-011 / Sample Date / Time: 20 Aug 2007	Client Sample ID: C2 (DUPLICATE) / Laboratory Sample ID: HK0711768-012 / Sample Date / Time: 20 Aug 2007	Client Sample ID: C3 / Laboratory Sample ID: HK0711768-013 / Sample Date / Time: 20 Aug 2007	Client Sample ID: C3 (DUPLICATE) / Laboratory Sample ID: HK0711768-014 / Sample Date / Time: 20 Aug 2007	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	<1	<1	4	4	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER

Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Duplicate (DUP) Results				
				LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 478687)								
HK0711768-001	M1	EA025: Suspended Solids (SS)	---	1	mg/L	<1	2	69.6
HK0711768-011	C2	EA025: Suspended Solids (SS)	---	1	mg/L	<1	<1	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER

Method: Analysis Description	CAS number	Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
		LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 478687)											
EA025: Suspended Solids (SS)	---	2	mg/L	<2	20 mg/L	93.0	---	85	115	---	---

nalytical Results

bmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0711882-001 Sample Date / Time: 22 Aug 2007 11:55	Client Sample ID: M1 (DUPLICATE) Laboratory Sample ID: HK0711882-002 Sample Date / Time: 22 Aug 2007 11:55	Client Sample ID: M2 Laboratory Sample ID: HK0711882-003 Sample Date / Time: 22 Aug 2007 11:45	Client Sample ID: M2 (DUPLICATE) Laboratory Sample ID: HK0711882-004 Sample Date / Time: 22 Aug 2007 11:45	Client Sample ID: M3 Laboratory Sample ID: HK0711882-005 Sample Date / Time: 22 Aug 2007 11:35
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	11	12	5	4	20

nalytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0711882-006 / Sample Date / Time: 22 Aug 2007 11:35	Client Sample ID: M4 / Laboratory Sample ID: HK0711882-007 / Sample Date / Time: 22 Aug 2007 12:05	Client Sample ID: M4 (DUPLICATE) / Laboratory Sample ID: HK0711882-008 / Sample Date / Time: 22 Aug 2007 12:05	Client Sample ID: C1 / Laboratory Sample ID: HK0711882-009 / Sample Date / Time: 22 Aug 2007 10:30	Client Sample ID: C1 (DUPLICATE) / Laboratory Sample ID: HK0711882-010 / Sample Date / Time: 22 Aug 2007 10:30
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	18	16	15	5	4

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0711882-011 / Sample Date / Time: 22 Aug 2007 10:45	Client Sample ID: C2 (DUPLICATE) / Laboratory Sample ID: HK0711882-012 / Sample Date / Time: 22 Aug 2007 10:45	Client Sample ID: C3 / Laboratory Sample ID: HK0711882-013 / Sample Date / Time: 22 Aug 2007 11:10	Client Sample ID: C3 (DUPLICATE) / Laboratory Sample ID: HK0711882-014 / Sample Date / Time: 22 Aug 2007 11:10	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	2	3	3	3	

?uality Control - Laboratory Duplicate (DUP) Results

atrix Type: WATER				Duplicate (DUP) Results				
aboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
:A/ED: Physical and Aggregate Properties (QC Lot: 479018)								
HK0711877-002	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	14	13	9.5
HK0711880-002	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	<3	<3	0.0
:A/ED: Physical and Aggregate Properties (QC Lot: 479019)								
HK0711882-010	C1 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	4	5	0.0

?uality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

latrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
:A/ED: Physical and Aggregate Properties (QCLot: 479018)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	89.0	----	85	115	----	----
:A/ED: Physical and Aggregate Properties (QCLot: 479019)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	89.5	----	85	115	----	----

nalytical Results

ıbmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0712022-001 Sample Date / Time: 24 Aug 2007 12:35	Client Sample ID: M1 (DUPLICATE) Laboratory Sample ID: HK0712022-002 Sample Date / Time: 24 Aug 2007 12:35	Client Sample ID: M2 Laboratory Sample ID: HK0712022-003 Sample Date / Time: 24 Aug 2007 12:30	Client Sample ID: M2 (DUPLICATE) Laboratory Sample ID: HK0712022-004 Sample Date / Time: 24 Aug 2007 12:30	Client Sample ID: M3 Laboratory Sample ID: HK0712022-005 Sample Date / Time: 24 Aug 2007 12:20
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	3	2	<1	<1	6

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0712022-006 / Sample Date / Time: 24 Aug 2007 12:20	Client Sample ID: M4 / Laboratory Sample ID: HK0712022-007 / Sample Date / Time: 24 Aug 2007 12:45	Client Sample ID: M4 (DUPLICATE) / Laboratory Sample ID: HK0712022-008 / Sample Date / Time: 24 Aug 2007 12:45	Client Sample ID: C1 / Laboratory Sample ID: HK0712022-009 / Sample Date / Time: 24 Aug 2007 11:35	Client Sample ID: C1 (DUPLICATE) / Laboratory Sample ID: HK0712022-010 / Sample Date / Time: 24 Aug 2007 11:35
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	5	8	7	2	2

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0712022-011 / Sample Date / Time: 24 Aug 2007 11:50	Client Sample ID: C2 (DUPLICATE) / Laboratory Sample ID: HK0712022-012 / Sample Date / Time: 24 Aug 2007 11:50	Client Sample ID: C3 / Laboratory Sample ID: HK0712022-013 / Sample Date / Time: 24 Aug 2007 12:10	Client Sample ID: C3 (DUPLICATE) / Laboratory Sample ID: HK0712022-014 / Sample Date / Time: 24 Aug 2007 12:10	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	<1	1	

uality Control - Laboratory Duplicate (DUP) Results

atrix Type: WATER				Duplicate (DUP) Results				
aboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
A/ED: Physical and Aggregate Properties (QC Lot: 480366)								
HK0711708-001	Anonymous	EA025: Suspended Solids (SS)	----	0.1	mg/L	10	10	0.0
HK0712022-006	M3 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	5	5	0.0

uality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

atrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
ethod: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
A/ED: Physical and Aggregate Properties (QCLot: 480366)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	101	----	85	115	----	----

nalytical Results

bmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0712108-001 Sample Date / Time: 27 Aug 2007 15:25	Client Sample ID: M1 (DUPLICATE) Laboratory Sample ID: HK0712108-002 Sample Date / Time: 27 Aug 2007 15:25	Client Sample ID: M2 Laboratory Sample ID: HK0712108-003 Sample Date / Time: 27 Aug 2007 15:30	Client Sample ID: M2 (DUPLICATE) Laboratory Sample ID: HK0712108-004 Sample Date / Time: 27 Aug 2007 15:30	Client Sample ID: M3 Laboratory Sample ID: HK0712108-005 Sample Date / Time: 27 Aug 2007 15:40
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	5	5	<1	<1	3

inalytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0712108-006 / Sample Date / Time: 27 Aug 2007 15:40	Client Sample ID: M4 / Laboratory Sample ID: HK0712108-007 / Sample Date / Time: 27 Aug 2007 15:50	Client Sample ID: M4 (DUPLICATE) / Laboratory Sample ID: HK0712108-008 / Sample Date / Time: 27 Aug 2007 15:50	Client Sample ID: C1 / Laboratory Sample ID: HK0712108-009 / Sample Date / Time: 27 Aug 2007 14:30	Client Sample ID: C1 (DUPLICATE) / Laboratory Sample ID: HK0712108-010 / Sample Date / Time: 27 Aug 2007 14:30
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	4	8	6	7	6

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 Laboratory Sample ID: HK0712108-011 Sample Date / Time: 27 Aug 2007 14:50	C2 (DUPLICATE) HK0712108-012 27 Aug 2007 14:50	C3 HK0712108-013 27 Aug 2007 15:15	C3 (DUPLICATE) HK0712108-014 27 Aug 2007 15:15	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	1	<1	

uality Control - Laboratory Duplicate (DUP) Results

atrix Type: WATER				Duplicate (DUP) Results				
aboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 481308)								
HK0712007-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	140	148	5.2
HK0712108-005	M3	EA025: Suspended Solids (SS)	----	1	mg/L	3	3	0.0

uality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

latrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 481308)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	90.5	----	85	115	----	----

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0712314-001 Sample Date / Time: 29 Aug 2007 14:35	Client Sample ID: M1 (DUPLICATE) Laboratory Sample ID: HK0712314-002 Sample Date / Time: 29 Aug 2007 14:35	Client Sample ID: M2 Laboratory Sample ID: HK0712314-003 Sample Date / Time: 29 Aug 2007 14:40	Client Sample ID: M2 (DUPLICATE) Laboratory Sample ID: HK0712314-004 Sample Date / Time: 29 Aug 2007 14:40	Client Sample ID: M3 Laboratory Sample ID: HK0712314-005 Sample Date / Time: 29 Aug 2007 14:45
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	7	8	2	2	7

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0712314-006 / Sample Date / Time: 29 Aug 2007 14:45	M4 / HK0712314-007 / 29 Aug 2007 15:50	M4 (DUPLICATE) / HK0712314-008 / 29 Aug 2007 15:50	C1 / HK0712314-009 / 29 Aug 2007 15:35	C1 (DUPLICATE) / HK0712314-010 / 29 Aug 2007 15:35
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	7	12	13	5	4

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0712314-011 / Sample Date / Time: 29 Aug 2007 15:20	C2 (DUPLICATE) HK0712314-012 29 Aug 2007 15:20	C3 HK0712314-013 29 Aug 2007 15:00	C3 (DUPLICATE) HK0712314-014 29 Aug 2007 15:00	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	4	4	4	5	

Quality Control - Laboratory Duplicate (DUP) Results

atrix Type: WATER				Duplicate (DUP) Results				
aboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 483226)								
HK0712093-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	<2	<2	0.0
HK0712314-004	M2 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	2	2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 483227)								
HK0712314-014	C3 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	5	5	0.0
HK0712319-001	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	83	81	2.8

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 483226)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	88.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 483227)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.0	----	85	115	----	----

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0712460-001 Sample Date / Time: 31 Aug 2007 16:55	M1 (DUPLICATE) HK0712460-002 31 Aug 2007 16:55	M2 HK0712460-003 31 Aug 2007 16:45	M2 (DUPLICATE) HK0712460-004 31 Aug 2007 16:45	M3 HK0712460-005 31 Aug 2007 16:30
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	11	11	<1	<1	4

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Analytical Results

ubmatrix: WATER

	Client Sample ID :	M3 (DUPLICATE)	M4	M4 (DUPLICATE)	C1	C1 (DUPLICATE)
	Laboratory Sample ID :	HK0712460-006	HK0712460-007	HK0712460-008	HK0712460-009	HK0712460-010
	Sample Date / Time :	31 Aug 2007 16:30	31 Aug 2007 15:50	31 Aug 2007 15:50	31 Aug 2007 17:10	31 Aug 2007 17:10
Method: Analysis Description	*CAS number*	*LOR*	*Units*			
EA/ED: Physical and Aggregate Properties						
EA025: Suspended Solids (SS)	----	1	mg/L	6	3	5	<1	<1

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0712460-011 / Sample Date / Time: 31 Aug 2007 17:30	Client Sample ID: C2 (DUPLICATE) / Laboratory Sample ID: HK0712460-012 / Sample Date / Time: 31 Aug 2007 17:30	Client Sample ID: C3 / Laboratory Sample ID: HK0712460-013 / Sample Date / Time: 31 Aug 2007 16:15	Client Sample ID: C3 (DUPLICATE) / Laboratory Sample ID: HK0712460-014 / Sample Date / Time: 31 Aug 2007 16:15	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	2	<1	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 485047)								
HK0712460-001	M1	EA025: Suspended Solids (SS)	----	1	mg/L	11	11	0.0
HK0712460-011	C2	EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 485047)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	96.5	----	85	115	----	----

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0712572-001 Sample Date / Time: 3 Sep 2007 16:30	M1 (DUPLICATE) HK0712572-002 3 Sep 2007 16:30	M2 HK0712572-003 3 Sep 2007 16:20	M2 (DUPLICATE) HK0712572-004 3 Sep 2007 16:20	M3 HK0712572-005 3 Sep 2007 16:10
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	11	9	2	<1	5

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0712572-006 / Sample Date / Time: 3 Sep 2007 16:10	M4 / HK0712572-007 / 3 Sep 2007 15:40	M4 (DUPLICATE) / HK0712572-008 / 3 Sep 2007 15:40	C1 / HK0712572-009 / 3 Sep 2007 17:00	C1 (DUPLICATE) / HK0712572-010 / 3 Sep 2007 17:00
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	7	6	4	<1	<1

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0712572-011 / Sample Date / Time: 3 Sep 2007 16:50	Client Sample ID: C2 (DUPLICATE) / Laboratory Sample ID: HK0712572-012 / Sample Date / Time: 3 Sep 2007 16:50	Client Sample ID: C3 / Laboratory Sample ID: HK0712572-013 / Sample Date / Time: 3 Sep 2007 15:55	Client Sample ID: C3 (DUPLICATE) / Laboratory Sample ID: HK0712572-014 / Sample Date / Time: 3 Sep 2007 15:55	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	2	2	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 485756)								
HK0712553-002	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	14	14	0.0
HK0712564-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	<2	<2	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 485757)								
HK0712572-002	M1 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	9	10	0.0
HK0712572-012	C2 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 485756)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 485757)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	102	----	85	115	----	----

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0712662-001 Sample Date / Time: [5 Sep 2007]	Client Sample ID: M1 (DULPICATE) Laboratory Sample ID: HK0712662-002 Sample Date / Time: [5 Sep 2007]	Client Sample ID: M2 Laboratory Sample ID: HK0712662-003 Sample Date / Time: [5 Sep 2007]	Client Sample ID: M2 (DULPICATE) Laboratory Sample ID: HK0712662-004 Sample Date / Time: [5 Sep 2007]	Client Sample ID: M3 Laboratory Sample ID: HK0712662-005 Sample Date / Time: [5 Sep 2007]
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	5	5	1	<1	4

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DULPICATE) / Laboratory Sample ID: HK0712662-006 / Sample Date / Time: [5 Sep 2007]	M4 / HK0712662-007 / [5 Sep 2007]	M4 (DULPICATE) / HK0712662-008 / [5 Sep 2007]	C1 / HK0712662-009 / [5 Sep 2007]	C1 (DULPICATE) / HK0712662-010 / [5 Sep 2007]
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	4	11	12	2	3

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0712662-011 / Sample Date / Time: [5 Sep 2007]	Client Sample ID: C2 (DULPICATE) / Laboratory Sample ID: HK0712662-012 / Sample Date / Time: [5 Sep 2007]	Client Sample ID: C3 / Laboratory Sample ID: HK0712662-013 / Sample Date / Time: [5 Sep 2007]	Client Sample ID: C3 (DULPICATE) / Laboratory Sample ID: HK0712662-014 / Sample Date / Time: [5 Sep 2007]	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	<1	<1	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 486571)								
HK0712612-001	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	27	24	11.6
HK0712662-009	C1	EA025: Suspended Solids (SS)	----	1	mg/L	2	3	56.5

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 486571)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.5	----	85	115	----	----

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 / Laboratory Sample ID: HK0712788-001 / Sample Date / Time: 7 Sep 2007 12:25	Client Sample ID: M1 (DUPLICATE) / Laboratory Sample ID: HK0712788-002 / Sample Date / Time: 7 Sep 2007 12:25	Client Sample ID: M2 / Laboratory Sample ID: HK0712788-003 / Sample Date / Time: 7 Sep 2007 12:15	Client Sample ID: M2 (DUPLICATE) / Laboratory Sample ID: HK0712788-004 / Sample Date / Time: 7 Sep 2007 12:15	Client Sample ID: M3 / Laboratory Sample ID: HK0712788-005 / Sample Date / Time: 7 Sep 2007 12:05
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	4	5	<1	1	3

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0712788-006 / Sample Date / Time: 7 Sep 2007 12:05	M4 / HK0712788-007 / 7 Sep 2007 11:45	M4 (DUPLICATE) / HK0712788-008 / 7 Sep 2007 11:45	C1 / HK0712788-009 / 7 Sep 2007 12:40	C1 (DUPLICATE) / HK0712788-010 / 7 Sep 2007 12:40
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	5	5	4	<1	<1

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 / Laboratory Sample ID: HK0712788-011 / Sample Date / Time: 7 Sep 2007 12:55	Client Sample ID: C2 (DUPLICATE) / Laboratory Sample ID: HK0712788-012 / Sample Date / Time: 7 Sep 2007 12:55	Client Sample ID: C3 / Laboratory Sample ID: HK0712788-013 / Sample Date / Time: 7 Sep 2007 11:55	Client Sample ID: C3 (DUPLICATE) / Laboratory Sample ID: HK0712788-014 / Sample Date / Time: 7 Sep 2007 11:55	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	2	1	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 487905)								
HK0712745-005	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	22	25	12.6
HK0712787-002	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	17	19	9.8
EA/ED: Physical and Aggregate Properties (QC Lot: 487907)								
HK0712788-008	M4 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	4	6	54.5
HK0712789-004	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	29	29	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 487905)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	87.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 487907)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	93.0	----	85	115	----	----

Analytical Results

ubmatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0712917-001 Sample Date / Time: 10 Sep 2007 14:30	Client Sample ID: M1 (DUPLICATE) Laboratory Sample ID: HK0712917-002 Sample Date / Time: 10 Sep 2007 14:30	Client Sample ID: M2 Laboratory Sample ID: HK0712917-003 Sample Date / Time: 10 Sep 2007 14:40	Client Sample ID: M2 (DUPLICATE) Laboratory Sample ID: HK0712917-004 Sample Date / Time: 10 Sep 2007 14:40	Client Sample ID: M3 Laboratory Sample ID: HK0712917-005 Sample Date / Time: 10 Sep 2007 14:55
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	14	12	2	2	4

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0712917-006 / Sample Date / Time: 10 Sep 2007 14:55	Client Sample ID: M4 / Laboratory Sample ID: HK0712917-007 / Sample Date / Time: 10 Sep 2007 13:00	Client Sample ID: M4 (DUPLICATE) / Laboratory Sample ID: HK0712917-008 / Sample Date / Time: 10 Sep 2007 13:00	Client Sample ID: C1 / Laboratory Sample ID: HK0712917-009 / Sample Date / Time: 10 Sep 2007 13:20	Client Sample ID: C1 (DUPLICATE) / Laboratory Sample ID: HK0712917-010 / Sample Date / Time: 10 Sep 2007 13:20
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	4	3	2	<1	1

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 Laboratory Sample ID: HK0712917-011 Sample Date / Time: 10 Sep 2007 13:40	C2 (DUPLICATE) HK0712917-012 10 Sep 2007 13:40	C3 HK0712917-013 10 Sep 2007 14:10	C3 (DUPLICATE) HK0712917-014 10 Sep 2007 14:10	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	2	1	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 491370)								
HK0712917-001	M1	EA025: Suspended Solids (SS)	----	1	mg/L	14	13	0.0
HK0712917-011	C2	EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 491370)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	101	----	85	115	----	----

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0713005-001 Sample Date / Time: 12 Sep 2007 15:40	Client Sample ID: M1 (DUPLICATE) Laboratory Sample ID: HK0713005-002 Sample Date / Time: 12 Sep 2007 15:40	Client Sample ID: M2 Laboratory Sample ID: HK0713005-003 Sample Date / Time: 12 Sep 2007 15:50	Client Sample ID: M2 (DUPLICATE) Laboratory Sample ID: HK0713005-004 Sample Date / Time: 12 Sep 2007 15:50	Client Sample ID: M3 Laboratory Sample ID: HK0713005-005 Sample Date / Time: 12 Sep 2007 16:00
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	7	8	1	2	4

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0713005-006 / Sample Date / Time: 12 Sep 2007 16:00	Client Sample ID: M4 / Laboratory Sample ID: HK0713005-007 / Sample Date / Time: 12 Sep 2007 14:20	Client Sample ID: M4 (DUPLICATE) / Laboratory Sample ID: HK0713005-008 / Sample Date / Time: 12 Sep 2007 14:20	Client Sample ID: C1 / Laboratory Sample ID: HK0713005-009 / Sample Date / Time: 12 Sep 2007 14:40	Client Sample ID: C1 (DUPLICATE) / Laboratory Sample ID: HK0713005-010 / Sample Date / Time: 12 Sep 2007 14:40
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	5	2	2	<1	<1

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 Laboratory Sample ID: HK0713005-011 Sample Date / Time: 12 Sep 2007 15:00	C2 (DUPLICATE) HK0713005-012 12 Sep 2007 15:00	C3 HK0713005-013 12 Sep 2007 15:30	C3 (DUPLICATE) HK0713005-014 12 Sep 2007 15:30	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	<1	<1	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 492272)								
HK0712939-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	57	58	1.7
HK0712980-003	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	16	15	9.5
EA/ED: Physical and Aggregate Properties (QC Lot: 492274)								
HK0713005-004	M2 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	2	1	0.0
HK0713005-014	C3 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 492272)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	89.0	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 492274)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M1 Laboratory Sample ID: HK0713201-001 Sample Date / Time: 14 Sep 2007 15:55	Client Sample ID: M1 (DUPLICATE) Laboratory Sample ID: HK0713201-002 Sample Date / Time: 14 Sep 2007 15:55	Client Sample ID: M2 Laboratory Sample ID: HK0713201-003 Sample Date / Time: 14 Sep 2007 16:00	Client Sample ID: M2 (DUPLICATE) Laboratory Sample ID: HK0713201-004 Sample Date / Time: 14 Sep 2007 16:00	Client Sample ID: M3 Laboratory Sample ID: HK0713201-005 Sample Date / Time: 14 Sep 2007 16:10
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	3	4	1	2	2

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: M3 (DUPLICATE) / Laboratory Sample ID: HK0713201-006 / Sample Date / Time: 14 Sep 2007 16:10	M4 / HK0713201-007 / 14 Sep 2007 15:30	M4 (DUPLICATE) / HK0713201-008 / 14 Sep 2007 15:30	C1 / HK0713201-009 / 14 Sep 2007 16:30	C1 (DUPLICATE) / HK0713201-010 / 14 Sep 2007 16:30
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	3	3	2	1	<1

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: C2 Laboratory Sample ID: HK0713201-011 Sample Date / Time: 14 Sep 2007 16:20	Client Sample ID: C2 (DUPLICATE) Laboratory Sample ID: HK0713201-012 Sample Date / Time: 14 Sep 2007 16:20	Client Sample ID: C3 Laboratory Sample ID: HK0713201-013 Sample Date / Time: 14 Sep 2007 15:45	Client Sample ID: C3 (DUPLICATE) Laboratory Sample ID: HK0713201-014 Sample Date / Time: 14 Sep 2007 15:45	
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	---	1	mg/L	<1	<1	<1	<1	

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 494280)								
HK0713139-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	25	23	7.4
HK0713198-001	Anonymous	EA025: Suspended Solids (SS)	----	3	mg/L	131	131	0.0
EA/ED: Physical and Aggregate Properties (QC Lot: 494281)								
HK0713201-010	C1 (DUPLICATE)	EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 494280)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	86.5	----	85	115	----	----
EA/ED: Physical and Aggregate Properties (QCLot: 494281)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	100	----	85	115	----	----

Appendix 6

Plant species recorded during baseline survey

Plant species recorded at Pak Ngan Heung Stream (N) Section

Species	Habit	Native	Relative abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Achyranthes aspera	herb	yes	occasional	common; pantropical weed	wasteland
Acorus gramineus	herb	yes	scarce	very common	streamsides
Alangium chinense	tree	yes	scarce	common	lowland forest;
Alocasia macrorrhiza	herb	yes	occasional	very common	lowland forest, streamsides and near villages
Bamboo	herb	-	scarce	-	-
Bidens pilosa	herb	yes	occasional	very common; pantropical weed of American origin	wasteland
Bridelia tomentosa	tree	yes	occasional	very common	shrubland and forest;
Calamus tetradactylus	herb	yes	scarce	common	climber; lowland forest and shrubland;
Celtis sinensis	tree	yes	occasional	common; also planted	forest and near villages
Centotheca lappacea	grass	yes	scarce	common	roadsides and forest margins;
Christella parasitica	fern	yes	occasional	very common	forest and streamsides;
Cleistocalyx operculatus	tree	yes	occasional	common	fung shui woods and along streams;
Coix lacryma-jobi	grass	no	scarce	common; pantropical weed of Asian origin	stream sides and cultivated areas
Commelina paludosa	herb	yes	scarce	rare	streamsides;
Ficus hispida	tree	yes	common	very common	forest and streamsides;
Ficus superba	tree	yes	occasional	(common, also planted)	streamside
Glochidion zeylanicum	tree	yes	occasional	common	wetlands and streamsides;
Hedychium coronarium	herb	no	scarce	(cultivated)	-
Ipomoea cairica	climber	yes	occasional	very common; pantropical weed	wasteland;
Ligustrum sinense	shrub	yes	occasional	common; also widely cultivated	lowland forest margins;
Litsea glutinosa	tree	yes	occasional	very common	shrubland and forest, particularly near the coast;
Litsea rotundifolia	shrub	yes	scarce	very common	shrubland and forest;
Lygodium japonicum	fern	yes	scarce	very common	shrubland;
Macaranga tanarius	tree	yes	occasional	common; also widely planted	wasteland and coastal areas;
Mallotus paniculatus	tree	yes	scarce	very common	lowland forest;
Microcos paniculata	tree	yes	scarce	common	lowland forest;
Microstegium ciliatum	grass	yes	common	very common	wasteland and streamsides;

Species	Habit	Native	Relative abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Mikania micrantha	climber	no	common	very common; pantropical weed of tropical American origin	wasteland
Mimosa pudica	shrub	no	occasional	very common; pantropical weed of tropical American origin	wasteland;
Musa paradisiaca	tree	no	scarce	(planted, crops)	-
Panicum maximum	grass	no	common	very common; pantropical forage crop and weed of African origin	wasteland
Paspalum paspaloides	grass	yes	occasional	common; weed of tropical American origin	wasteland and roadsides
Phyllanthus urinaria	herb	yes	scarce	common	wasteland;
Plantago major	herb	yes	scarce	very common; cosmopolitan weed	wasteland;
Pogonatherum crinitum	grass	yes	occasional	common	stream sides and near villages;
Polygonum chinense	herb	yes	occasional	very common	cultivated areas and lowland forest margins;
Pteris biaurita	fern	yes	scarce	common	forest;
Pueraria sp.	climber	yes	occasional	-	-
Sida rhombifolia	shrub	yes	scarce	pantropical weed	wasteland; common;
Sterculia lanceolata	tree	yes	occasional	very common	lowland forest, particularly near streams;

Plant species recorded at Luk Tei Tong Stream Section

Species	Habit	Native	Relative abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Acanthus ilicifolius	shrub	yes	common	common	mangrove
Acrostichum aureum	fern	yes	occasional	restricted	mangroves
Celtis sinensis	tree	yes	scarce	common; also planted	forest and near villages
Clerodendrum inerme	shrub	yes	abundant	common	shrub; coastal habitats
Cyperus imbricatus	sedge	yes	occasional	common; pantropical weed	wetlands, wasteland and cultivation
Cyperus malaccensis	sedge	yes	occasional	common	coastal mud-flats
Derris trifoliata	climber	yes	occasional	common	woody climber; mangrove
Eupatorium catarium	herb	no	scarce	very common; a recent introduction from tropical America	wasteland
Excoecaria agallocha	shrub	yes	common	common	mangrove
Ficus superba	tree	yes	occasional	(common, also planted)	streamside
Fimbristylis ferruginea	sedge	yes	occasional	common	coastal wetlands
Fimbristylis sp.	sedge	yes	common	-	-
Hibiscus tiliaceus	tree	yes	abundant	very common; also planted	coastal areas
Ipomoea cairica	climber	yes	occasional	very common; pantropical weed	wasteland
Kandelia obovata	shrub	yes	common	very common	mangrove forest
Lantana camara	shrub	no	scarce	very common; pantropical weed of American origin, two cultivars widely naturalized in Hong Kong	wasteland
Leucaena leucocephala	tree	no	occasional	common; planted and locally naturalized, of tropical American origin	wasteland
Litsea glutinosa	tree	yes	scarce	very common	shrubland and forest, particularly near the coast;
Macaranga tanarius	tree	yes	occasional	common	wasteland and coastal areas
Neyraudia reynaudiana	grass	yes	occasional	very common	wasteland and grassland
Paederia scandens	climber	yes	scarce	very common	shrubland, forest and wasteland
Panicum maximum	grass	no	common	very common; pantropical forage crop and weed of African origin	wasteland
Paspalum paspaloides	grass	yes	occasional	common; weed of tropical American origin	wasteland and roadsides
Premna serratifolia	tree	yes	scarce	common	coastal areas
Rhynchelytrum repens	grass	no	scarce	very common	wastelands, road sides
Sapium sebiferum	tree	yes	scarce	common; also widely planted	coastal areas and abandoned cultivation;
Scirpus sp.	sedge	yes	occasional	-	-

Species	Habit	Native	Relative abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Terminalia catappa	tree	no	scarce	widely cultivated	
Toxocarpus wightianus	climber	yes	scarce	very common	slender woody climber; shrubland and lowland forest
Wollastonia biflora	climber	yes	occasional	common	sandy beaches

Plant species recorded at Pak Ngan Heung Stream (S) Section

Species	Habit	Native	Relative abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Acacia auriculiformis	tree	no	scarce	(widely planted)	(plantation, roadside, mixed woodland)
Acacia confusa	tree	no	occasional	(widely planted)	(plantation, roadside, mixed woodland)
Achyranthes aspera	shrub	yes	occasional	common; pantropical weed	wasteland
Bougainvillea spectabilis	climber	no	scarce	(planted, landscape species)	-
Celtis sinensis	tree	yes	occasional	common; also planted	forest and near villages; common; also planted
Clerodendrum inerme	shrub	yes	occasional	common	coastal habitats
Cocculus orbiculatus	climber	yes	scarce	common	lowland forest and fung shui woods
Ficus superba	tree	yes	occasional	(common, also planted)	streamside
Ipomoea cairica	climber	yes	occasional	very common; pantropical weed	wasteland
Kandelia obovata	shrub	yes	scarce	very common	mangrove forest
Melaleuca quinquenervia	tree	no	common	(widely planted)	(plantation, roadside, mixed woodland)
Mikania micrantha	climber	no	common	very common; pantropical weed of tropical American origin	wasteland
Morus alba	tree	no	scarce	common; apparently semi-naturalized in Hong Kong	wasteland and near villages
Panicum maximum	grass	no	common	very common; pantropical forage crop and weed of African origin	wasteland
Sapium sebiferum	tree	yes	scarce	common; also widely planted	coastal areas and abandoned cultivation
Wedelia triloba	climber	no	occasional	common; also widely cultivated; of tropical American origin	wasteland and coastal areas
Wollastonia biflora	climber	yes	occasional	common	sandy beaches

Species	Habit	Native	Relative Abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Pycreus flavidus	sedge	yes	occasional	common	wetlands and grassland
Rhynchospora rubra	sedge	yes	occasional	very common	grassland
Salix babylonica	tree	no	scarce	(planted, landscape species)	-
Sapium sebiferum	tree	yes	occasional	common; also widely planted	coastal areas and abandoned cultivation
Sesbania cannabina	shrub	no	common	common	wasteland and cultivated areas
Sida rhombifolia	shrub	yes	occasional	common; pantropical weed	wasteland
Tadehagi triquetrum	shrub	yes	scarce	very common	grassland and shrubland
Urena lobata	herb	yes	occasional	common; pantropical weed	wasteland and fung shui woods
Wedelia triloba	climber	no	common	common; also widely cultivated; of tropical American origin	wasteland and coastal areas

* status follows Xing et al. (2000), status in brackets = personal comments (species not described by Xing et al. 2000)

Species	Habit	Native	Relative Abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Imperata cylindrica	grass	yes	occasional	very common	grassland
Ipomoea cairica	climber	yes	common	very common; pantropical weed	wasteland
Isachne globosa	grass	yes	abundant	very common	streamsides and wetlands
Kyllinga brevifolia	sedge	yes	scarce	common; pantropical weed.	grassland and cultivated areas
Lantana camera	shrub	no	occasional	very common; pantropical weed of American origin; two cultivars widely naturalized in Hong Kong.	wasteland
Lindernia anagallis	herb	yes	occasional	common	grassland and cultivated areas
Litsea glutinosa	tree	yes	scarce	very common	shrubland and forest, particularly near the coast;
Livistona chinensis	tree	no	scarce	(landscape species, planted)	-
Ludwigia octovalvis	herb	yes	abundant	common; pantropical weed	wetlands
Ludwigia perennis	herb	yes	occasional	restricted	wetlands and wasteland
Macaranga tanarius	tree	yes	scarce	common	wasteland and coastal areas
Mallotus paniculatum	tree	yes	scarce	very common	lowland forest
Microcos paniculata	tree	yes	scarce	common.	lowland forest
Microstegium ciliatum	grass	yes	abundant	very common	wasteland and streamsides
Mikania micrantha	climber	no	abundant	very common; pantropical weed of tropical American origin	wasteland
Mimosa pudica	shrub	no	occasional	very common; pantropical weed of tropical American origin	wasteland
Musa paradisiaca	tree	no	occasional	(planted, crops)	-
Panicum maximum	grass	no	common	very common; pantropical forage crop and weed of African origin	wasteland
Panicum repens	grass	yes	occasional	very common; pantropical weed	coastal and cultivated areas
Paspalum conjugatum	grass	yes	abundant	common; weed of tropical American origin	wasteland
Paspalum orbiculare	grass	yes	occasional	very common	grassland
Paspalum paspaloides	grass	yes	common	common; weed of tropical American origin	wasteland and roadsides
Phyllodium pulchellum	shrub	yes	occasional	very common	grassland and shrubland
Pistia stratiotes	herb	yes	occasional	common; a pantropical weed	cultivated areas
Polygonum hydropiper	herb	yes	occasional	common	wetlands
Polygonum perfoliatum	herb	yes	abundant	common	wasteland and cultivated areas
Polygonum sp.	herb	yes	occasional	-	-
Pueraria phaseoloides	climber	no	common	very common	grassland, shrubland and forest margins

Plant species recorded at Luk Tei Tong Marsh site

Species	Habit	Native	Relative Abundance at site	Conservation Status in Hong Kong*	Habitat in Hong Kong*
Ageratum conyzoides	herb	yes	occasional	common; pantropical herb of tropical American origin	wasteland
Alocasia macrorrhiza	herb	yes	scarce	very common	lowland forest, streamsides and near villages
Apluda mutica	grass	yes	occasional	very common	stream sides, along rivers and in wasteland
Aporosa dioica	tree	yes	scarce	very common	shrubland and forest
Bauhinia sp.	tree	yes	scarce	-	-
Canna indica	herb	no	scarce	(landscape species)	-
Cassia alata	shrub	no	scarce	(planted, occasional)	(wasteland)
Celtis sinensis	tree	yes	scarce	common; also planted	forest and near villages
Cocculus orbiculatus	climber	yes	scarce	common	lowland forest and fung shui woods
Coix lacryma-jobi	grass	no	occasional	common; pantropical weed of Asian origin	stream sides and cultivated areas
Colocasia esculenta	herb	no	abundant	(planted, crop)	-
Commelina diffusa	herb	yes	abundant	common	streamsides and open places
Conyza canadensis	herb	no	occasional	very common	wasteland
Cyclosorus interruptus	fern	yes	occasional	common	wetlands
Cynodon dactylon	grass	yes	scarce	very common; pantropical weed of possibly African origin	wasteland and grassland
Cyperus imbricatus	sedge	yes	common	common; pantropical weed	wetlands, wasteland and cultivation
Cyperus iria	sedge	yes	scarce	common	wasteland and cultivation
Cyperus spp.	sedge	yes	common	-	-
Echinochloa crusgalli	grass	yes	scarce	common; pantropical weed	wasteland
Eupatorium catarium	herb	no	common	very common; a recent introduction from tropical America	wasteland
Euphorbia hirta	herb	yes	scarce	very common; pantropical weed of tropical American origin	wasteland
Ficus hispida	tree	yes	occasional	very common	forest and streamsides
Fimbristylis sp.	sedge	yes	common	-	-
Glochidion zeylanicum	tree	yes	occasional	common	wetlands and streamsides
Hedychium coronarium	herb	no	abundant	(cultivated)	-
Hedyotis diffusa	herb	yes	scarce	very common	wasteland and cultivated areas
Hydrocotyle sibthorpioides	herb	yes	occasional	common	grassland and streamsides

Appendix 7

Detailed water quality monitoring, sediment characteristics analysis and QA/QC results for ecological monitoring

Project: Drainage Improvement in Southern Lantau
Water Quality Baseline Monitoring

Lab ID	Location	Position	Tide	Sampling Date	Weather	Time	Water depth, m	Temp, °C	DO, mg/L	pH, Unit	Salinity, ppt	Turbidity, NTU	Suspended Solid, mg/L
								M1	M1	M1	M1	M1	M1
1	WE1	mid	EBB	5-Sep-07	Sunny	10:30	<1	25.5	6.58	6.4	<0.1	4.44	1.0
2	WE2	mid	EBB	5-Sep-07	Sunny	13:15	<1	27.6	6.82	7.1	0.1	5.12	2.0
3	WE3	mid	EBB	5-Sep-07	Sunny	13:00	<1	27.9	6.37	7.0	0.3	5.93	3.0
4	WE4	mid	EBB	5-Sep-07	Sunny	12:10	<1	29.3	7.61	6.8	7.6	6.96	3.0
5	WE5	mid	EBB	5-Sep-07	Sunny	11:15	<1	27.2	6.87	6.6	0.1	4.65	<1
6	WE6	mid	EBB	5-Sep-07	Sunny	11:40	<1	26.0	5.70	6.1	<0.1	2.73	<1

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: WE1 / Laboratory Sample ID: HK0712695-001 / Sample Date / Time: 5 Sep 2007 10:30	WE2 / HK0712695-002 / 5 Sep 2007 13:15	WE3 / HK0712695-003 / 5 Sep 2007 13:00	WE4 / HK0712695-004 / 5 Sep 2007 12:10	WE5 / HK0712695-005 / 5 Sep 2007 11:15
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	1	2	3	3	<1
ED/EK: Inorganic Nonmetallic Parameters								
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.07	0.12	0.11	0.23	0.03
EK058A: Nitrate as N	14797-55-8	0.01	mg/L	0.12	0.13	0.13	0.31	0.04
EK071A: Reactive Phosphorus as P	----	0.01	mg/L	0.04	0.06	0.06	0.09	0.06
EP: Aggregate Organics								
EP030: Biochemical Oxygen Demand	----	2	mg/L	<2	<2	<2	<2	<2

Analytical Results

Submatrix: WATER

Method: Analysis Description	CAS number	LOR	Units	Client Sample ID: WE6				
				Laboratory Sample ID: HK0712695-006				
				Sample Date / Time: 5 Sep 2007 11:40				
EA/ED: Physical and Aggregate Properties								
EA025: Suspended Solids (SS)	----	1	mg/L	<1				
ED/EK: Inorganic Nonmetallic Parameters								
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	**0.02**				
EK058A: Nitrate as N	14797-55-8	0.01	mg/L	**0.05**				
EK071A: Reactive Phosphorus as P	----	0.01	mg/L	**0.05**				
EP: Aggregate Organics								
EP030: Biochemical Oxygen Demand	----	2	mg/L	<2				

Quality Control - Laboratory Duplicate (DUP) Results

Matrix Type: WATER				Duplicate (DUP) Results				
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Aggregate Properties (QC Lot: 487902)								
HK0712625-001	Anonymous	EA025: Suspended Solids (SS)	----	2	mg/L	4	6	37.1
HK0712695-005	WE5	EA025: Suspended Solids (SS)	----	1	mg/L	<1	<1	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 488433)								
HK0712219-010	Anonymous	EK071A: Reactive Phosphorus as P	----	0.1	mg/L	1.3	1.3	0.0
HK0712219-016	Anonymous	EK071A: Reactive Phosphorus as P	----	0.1	mg/L	1.4	1.4	0.0
ED/EK: Inorganic Nonmetallic Parameters (QC Lot: 490542)								
HK0712768-010	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	<0.1	<0.1	0.0
HK0712768-018	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	<0.1	<0.1	0.0

Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properties (QCLot: 487902)											
EA025: Suspended Solids (SS)	----	2	mg/L	<2	20 mg/L	97.0	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 488433)											
EK071A: Reactive Phosphorus as P	----	0.01	mg/L	<0.01	0.5 mg/L	94.5	----	85	115	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 490542)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	96.0	----	85	115	----	----
EP: Aggregate Organics (QCLot: 488960)											
EP030: Biochemical Oxygen Demand	----	2	mg/L	----	198 mg/L	100	----	85	115	----	----

Quality Control - Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 488433)										
HK0712219-001	Anonymous	EK071A: Reactive Phosphorus as P	----	5 mg/L	120	----	75	125	----	----
ED/EK: Inorganic Nonmetallic Parameters (QCLot: 490542)										
HK0712768-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	101	----	75	125	----	----

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HOKLAS 024

REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEOSPEC 3 : 2001 TEST(S) 8.1

REPORT NO. : PSD07090038
DATE RECEIVED : 07/09/2007

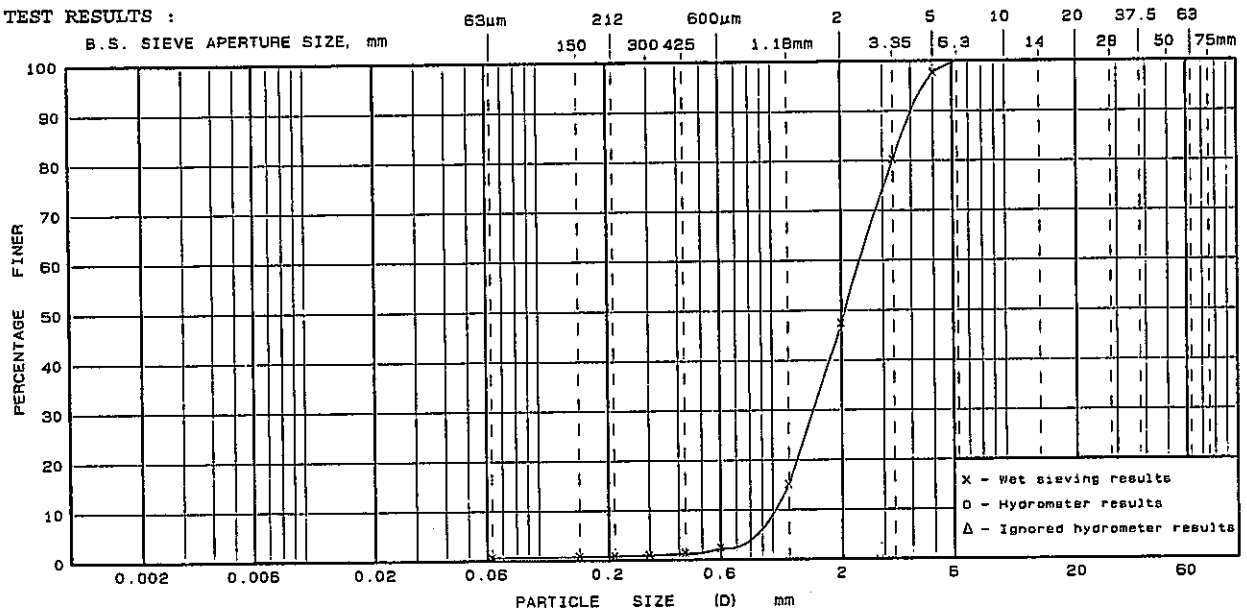
CLIENT* : ALS Technichem (HK) Pty Ltd
SITE* : --
TEST LOCATION : GROUND FLOOR, 20 PAK KUNG STREET, HUNG HOM, KOWLOON
W.O. NO.* : -- CONTRACT NO.* : --
JOB NO. : GCE/PS/070597 TEST UNIT NO. : STP 070433
HOLE NO.* : HK0712696- 1 SAMPLE NO.* : WE 1
DESCRIPTION : Wet dark brown sandy GRAVEL

DATE STARTED : 08/09/2007
DATE COMPLETED: 11/09/2007
SAMPLE TYPE* : BULK
SAMPLE DEPTH* : -- m
SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB-BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

Effective Diameter	(D_{10})	=	1.1 mm
Median Diameter	(D_{50})	=	2.1 mm
Uniformity Coefficient	($U = D_{60}/D_{10}$)	=	2.3

(Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

FINAL SUMMARY

CLAY	=	1 %
SILT	=	
SAND	=	46 %
GRAVEL	=	53 %

Note : *Information provided by client
Remarks:

TESTED BY : K.K. LAU
POST : Lab. Technician
DATE : 11/09/2007

CHECKED BY : W.K. Chan
POST : Reporting Officer
DATE : 14/09/2007

CERTIFIED BY : CHEUNG WING TAI
POST : Dept. Manager
DATE : 14/09/2007

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

HOKLAS 024

REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEOSPEC 3 : 2001 TEST(S) 8.1

REPORT NO. : PSD07090039
DATE RECEIVED : 07/09/2007

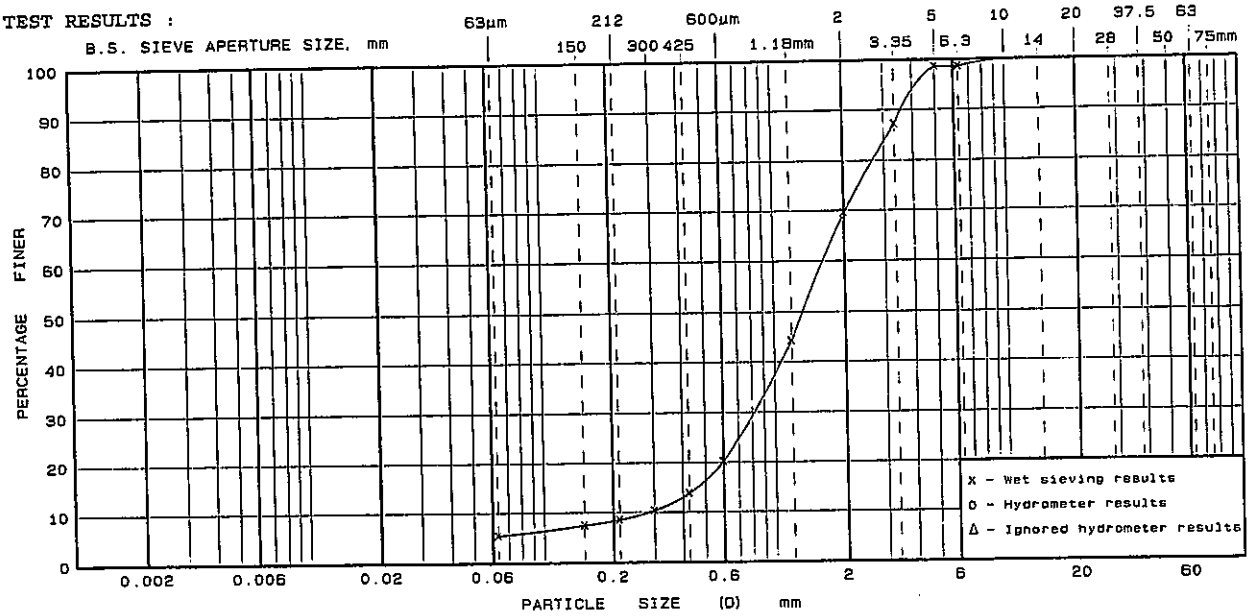
CLIENT* : ALS Technichem (HK) Pty Ltd
SITE* : --
TEST LOCATION : GROUND FLOOR, 20 PAK KUNG STREET, HUNG HOM, KOWLOON
W.O. NO.* : -- CONTRACT NO.* : --
JOB NO. : GCE/PS/070597 TEST UNIT NO. : STP 070433
HOLE NO.* : HK0712696- 2 SAMPLE NO.* : WE 2
DESCRIPTION : Wet dark brown gravelly SAND

DATE STARTED : 08/09/2007
DATE COMPLETED: 11/09/2007
SAMPLE TYPE* : BULK
SAMPLE DEPTH* : -- m
SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB-BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

Effective Diameter	(D_{10})	=	0.29 mm
Median Diameter	(D_{50})	=	1.3 mm
Uniformity Coefficient	($U = D_{60}/D_{10}$)	=	5.7

(Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

FINAL SUMMARY

CLAY	=	5 %
SILT	=	
SAND	=	65 %
GRAVEL	=	30 %

Note : *Information provided by client
Remarks:

TESTED BY : K.K. LAU
POST : Lab. Technician
DATE : 11/09/2007

CHECKED BY : W.K. Chan
POST : Reporting Officer
DATE : 14/09/2007

CERTIFIED BY : CHEUNG WING TAI
POST : Dept. Manager
DATE : 14/09/2007

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REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEOSPEC 3 : 2001 TEST(S) 8.1

REPORT NO. : PSD07090040
DATE RECEIVED : 07/09/2007

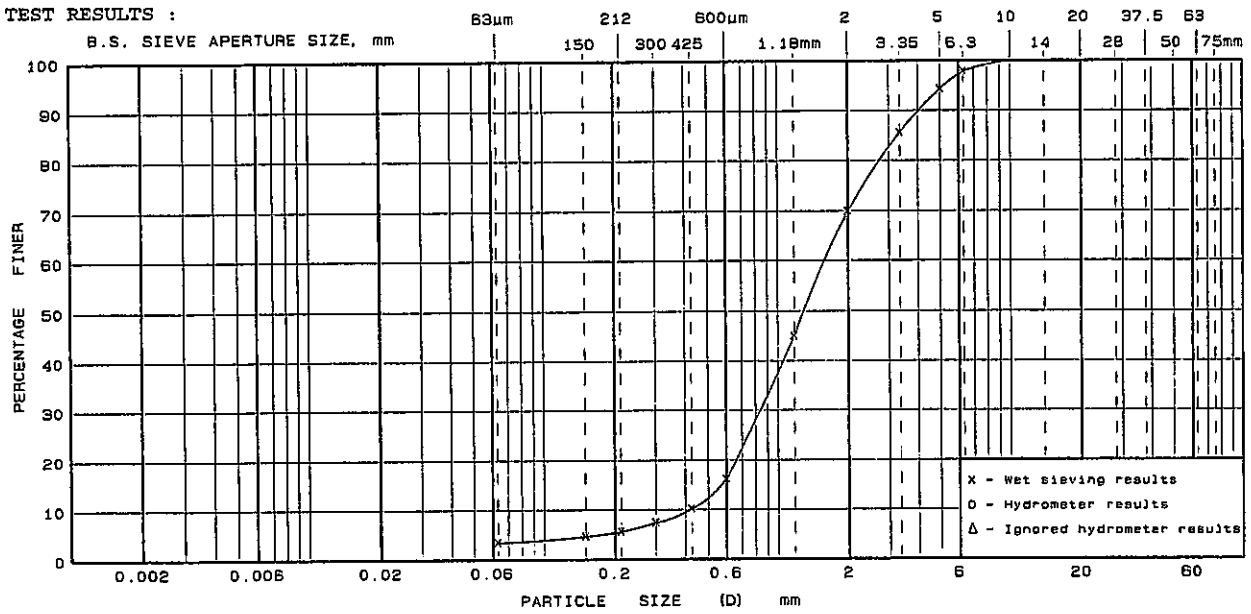
CLIENT* : ALS Technichem (HK) Pty Ltd
SITE* : --
TEST LOCATION : GROUND FLOOR, 20 PAK KUNG STREET, HUNG HOM, KOWLOON
W.O. NO.* : -- CONTRACT NO.* : --
JOB NO. : GCE/PS/070597 TEST UNIT NO. : STP 070433
HOLE NO.* : HK0712696- 3 SAMPLE NO.* : WE 3
DESCRIPTION : Wet dark brown gravelly SAND

DATE STARTED : 08/09/2007
DATE COMPLETED: 11/09/2007
SAMPLE TYPE* : BULK
SAMPLE DEPTH* : -- m
SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB-BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

Effective Diameter	(D_{10})	=	0.43 mm
Median Diameter	(D_{50})	=	1.3 mm
Uniformity Coefficient	($U = D_{60}/D_{10}$)	=	3.7

(Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

FINAL SUMMARY

CLAY	=	3 %
SILT	=	
SAND	=	67 %
GRAVEL	=	30 %

Note : *Information provided by client
Remarks:

TESTED BY : K.K. LAU
POST : Lab. Technician
DATE : 11/09/2007

CHECKED BY : W.K. Chan
POST : Reporting Officer
DATE : 14/09/2007

CERTIFIED BY : CHEUNG WING TAI
POST : Dept. Manager
DATE : 14/09/2007

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TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

HOKLAS 024

REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEOSPEC 3 : 2001 TEST(S) 8.1

REPORT NO. : PSD07090041
DATE RECEIVED : 07/09/2007

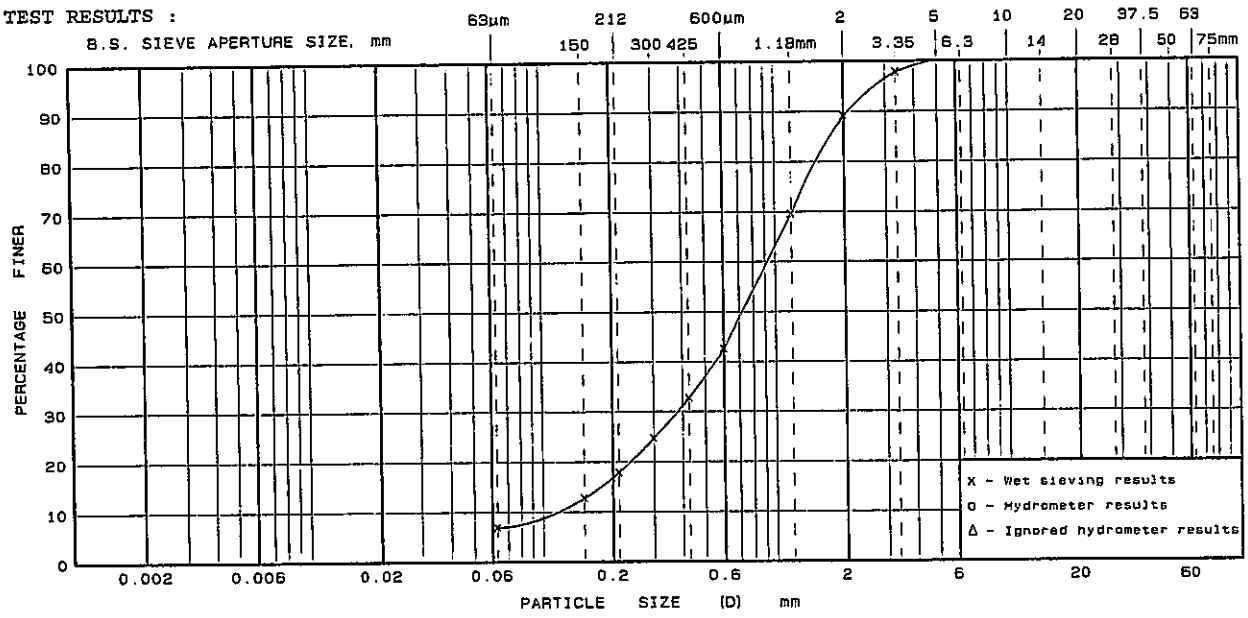
CLIENT* : ALS Technichem (HK) Pty Ltd
SITE* : --
TEST LOCATION : GROUND FLOOR, 20 PAK KUNG STREET, HUNG HOM, KOWLOON
W.O. NO.* : -- CONTRACT NO.* : --
JOB NO. : GCE/PS/070597 TEST UNIT NO. : STP 070433
HOLE NO.* : HK0712696- 4 SAMPLE NO.* : WE 4
DESCRIPTION : Wet dark brown gravelly SAND

DATE STARTED : 08/09/2007
DATE COMPLETED: 11/09/2007
SAMPLE TYPE* : BULK
SAMPLE DEPTH* : -- m
SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB-BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

Effective Diameter	(D_{10})	=	0.12 mm
Median Diameter	(D_{50})	=	0.73 mm
Uniformity Coefficient	($U = D_{60}/D_{10}$)	=	7.9

(Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

FINAL SUMMARY

CLAY	=	7 %
SILT	=	
SAND	=	82 %
GRAVEL	=	11 %

Note : *Information provided by client
Remarks:

TESTED BY : K.K. LAU
POST : Lab. Technician
DATE : 11/09/2007

CHECKED BY : W.K. Chan
POST : Reporting Officer
DATE : 14/09/2007

CERTIFIED BY : CHEUNG WING TAI
POST : Dept. Manager
DATE : 14/09/2007

GEOTECHNICS & CONCRETE ENGINEERING (H.K.) LTD.
6 KO SHAN RD., GROUND FL., HUNG HOM, KOWLOON, HONG KONG.
TEL.: 852-2365 9123 FAX NO.: 852-2765 8034

HOKLAS 024

REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEOSPEC 3 : 2001 TEST(S) 8.1

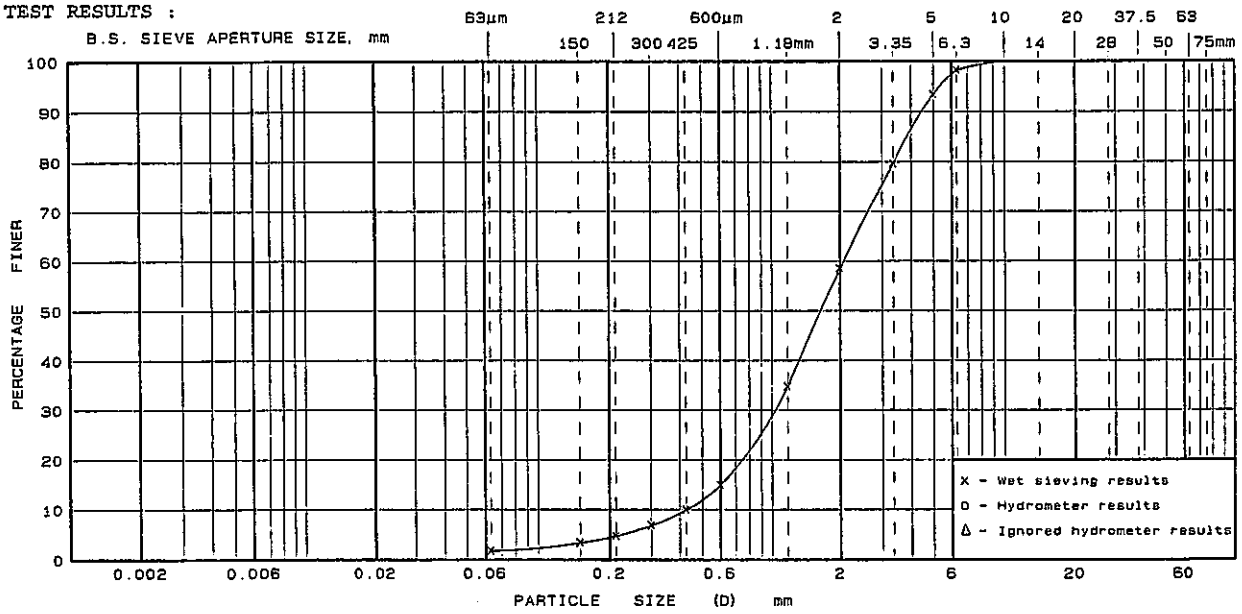
REPORT NO. : PSD07090042

CLIENT*	: ALS Technichem (HK) Pty Ltd	DATE RECEIVED	: 07/09/2007
SITE*	: --		
TEST LOCATION	: GROUND FLOOR, 20 PAK KUNG STREET, HUNG HOM, KOWLOON	DATE STARTED	: 08/09/2007
W.O. NO.*	: -- CONTRACT NO.* : --	DATE COMPLETED	: 11/09/2007
JOB NO.	: GCE/PS/070597 TEST UNIT NO. : STP 070433	SAMPLE TYPE*	: BULK
HOLE NO.*	: HK0712696- 5 SAMPLE NO.* : WE 5	SAMPLE DEPTH*	: -- m
DESCRIPTION	: Wet brown gravelly SAND	SPEC. DEPTH*	: -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB-BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

Effective Diameter	(D_{10})	=	0.44 mm
Median Diameter	(D_{50})	=	1.7 mm
Uniformity Coefficient	($U = D_{60}/D_{10}$)	=	4.8

(Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

FINAL SUMMARY

CLAY	=	2 %
SILT	=	
SAND	=	56 %
GRAVEL	=	42 %

Note : *Information provided by client
Remarks:

TESTED BY : K.K. LAU	CHECKED BY : W.K. Chan	CERTIFIED BY : CHEUNG WING TAI
POST : Lab. Technician	POST : Reporting Officer	POST : Dept. Manager
DATE : 11/09/2007	DATE : 14/09/2007	DATE : 14/09/2007

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HOKLAS 024

REPORT ON DETERMINATION OF PARTICLE SIZE DISTRIBUTION OF SOIL

IN ACCORDANCE WITH GEOSPEC 3 : 2001 TEST(S) 8.1

REPORT NO. : PSD07090043
DATE RECEIVED : 07/09/2007

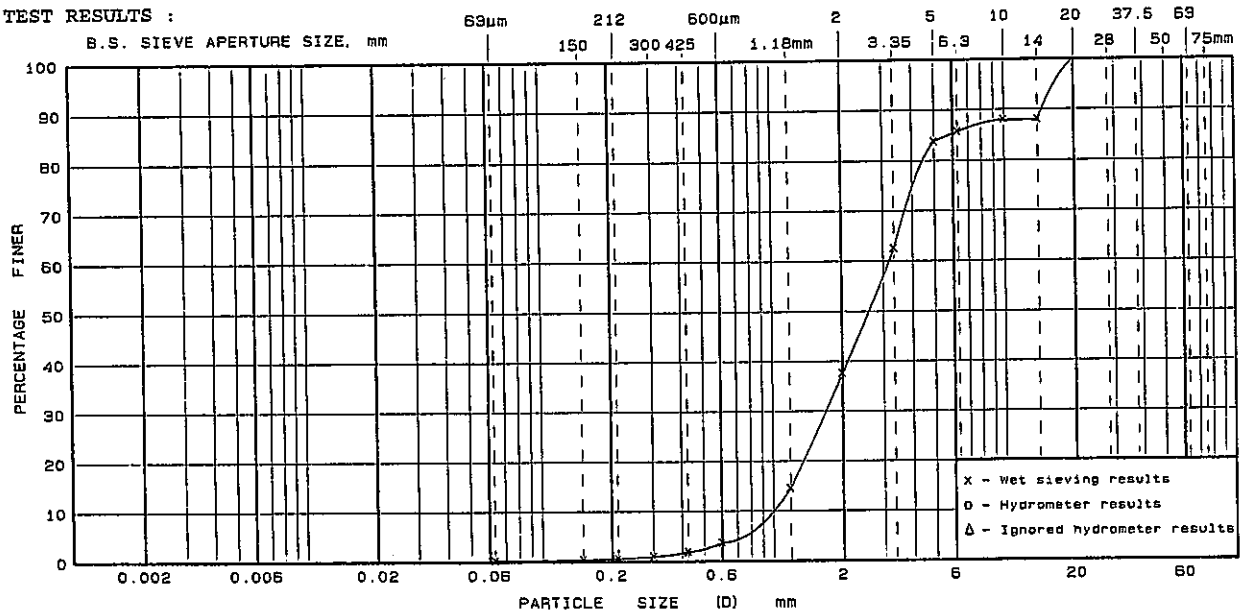
CLIENT* : ALS Technichem (HK) Pty Ltd
SITE* : --
TEST LOCATION : GROUND FLOOR, 20 PAK KUNG STREET, HUNG HOM, KOWLOON
W.O. NO.* : -- CONTRACT NO.* : --
JOB NO. : GCE/PS/070597 TEST UNIT NO. : STP 070433
HOLE NO.* : HK0712696- 6 SAMPLE NO.* : WE 6
DESCRIPTION : Wet reddish brown sandy GRAVEL

DATE STARTED : 08/09/2007
DATE COMPLETED: 11/09/2007
SAMPLE TYPE* : BULK
SAMPLE DEPTH* : -- m
SPEC. DEPTH* : -- m

SAMPLE PREPARATION:

Procedure for sieving test : Method A

TEST RESULTS :



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COB-BLES
	SILT			SAND			GRAVEL			

The following information are only based on the opinion of the laboratory and are not under the scope of accreditation by HOKLAS :

ANALYSIS OF PARTICLE SIZE CURVE

Effective Diameter	(D_{10})	=	1.0 mm
Median Diameter	(D_{50})	=	2.7 mm
Uniformity Coefficient	($U = D_{60}/D_{10}$)	=	3.2

(Ref. : Clause 6.59(4) of General Specification for Civil Engineering Works (1992))

FINAL SUMMARY

CLAY	=	0 %
SILT	=	
SAND	=	38 %
GRAVEL	=	62 %

Note : *Information provided by client
Remarks:

TESTED BY : K.K. LAU
POST : Lab. Technician
DATE : 11/09/2007

CHECKED BY : W.K. Chan
POST : Reporting Officer
DATE : 14/09/2007

CERTIFIED BY : CHEUNG WING TAI
POST : Dept. Manager
DATE : 14/09/2007