

2. Noise from fixed noise sources
  - (a) Railway Depot
  - (b) Sewage Pumping Station (SPS)
  - (c) Electric Substation (ESS)
  - (d) Gas Pigging/Offtake Station (GPS)
  - (e) PTW Expansion Area
  - (f) Trolley Bus/LRT Depot
  - (g) Public Transport Interchange (PTI)
  - (h) Highways Department Depot
  - (i) DSD Maintenance Depot (D)
  - (j) Quarantine and Dog Kennel (Q)
  - (k) Ventilation Shaft
  - (l) Stadium
  - (m) Warm-up Track
  - (n) Swimming Pool Complex
  - (o) Fire Station and Ambulance Depot
  - (p) Refuse Transfer Station (RTS)
  - (q) Public Filling Barging Point (PFBP)
  - (r) Centralised Cooling System (CSCP) & Central Cooling System Pumping Station (CSPS)
  - (s) GLA for DSD & KPTW Extension
  - (t) Typhoon Shelter
  - (u) Vehicle Ferry Pier
  - (v) Cruise Terminal
  - (w) Cruise Terminal with Heliport
  - (x) Heliport
  - (y) Existing Industrial Building
  - (z) Upgrade of Existing Tai Wan Salt Water Pumping Station
  - (aa) Existing HyD Kai Tak Tunnel Admin/Ventilation Building
  - (bb) Automatic Refuse Collection System

3.3.1.3 Fixed noise sources are shown in **Drawing Nos. 22936/TP/101 to 22936/TP/129**. Details of the noise sources are discussed in the following sections.

### **3.4 Planning Against Noise**

In developing the layout plan for SEKD, the following concepts have been incorporated to provide better noise environment:

#### **3.4.1 Environmentally Friendly Public Transportation**

3.4.1.1 Considering the SEKD would have a population of over 240,000, there are massive demands for transportation to-and-from SEKD and within SEKD. Environmentally friendly and efficient transportation system is to be adopted. The railway network comprising the existing MTR Kwun Tong Line and the proposed Shatin to Central Link (SCL) forms the backbone of the public transportation services for the future development. As the SCL is proposed to be underground, noise impact to sensitive receivers is virtually minimal. This would also reduce the amount of surface road traffic noise as well.

- 3.4.1.2 The future Kai Tak (KTA) and To Kwa Wan Stations of SCL would be at locations easily accessible from the Kai Tak North Apron and town centre areas. Shuttle service would be provided to feed passengers to the rail system. Modal split for trips to/from SEKD is estimated to be:

Modes	Percentage of Total Trips (%)		
	SEKD Year 2016 (Estimated in this study)	HK Typical Year 2016 (Estimated in this study)	HK Typical Year 2016 (CTS III estimate)
Rail (Initial + Transfer)	62	34	37
Shuttle (internal to internal)	2	N/A	N/A
Road-based (bus/PLB)	11	45	41
Road-based (Taxi)	11	7	5
Road-based (Private Car)	14	14	17

- 3.4.1.3 The amount of road-based traffic noise would be reduced considerably and so would the traffic noise impact.

### **3.4.2 Environmentally Friendly Shuttle Service**

- 3.4.2.1 Shuttle service would be provided to feed passengers to the rail system. It would be an environmentally friendly and efficient feeder system for the railway network. The routing of the shuttle system would be able to serve all the major residential precincts and other attraction nodes such as the cruise terminal/leisure/entertainment centre at the southern end of the Kai Tak Airport runway, the stadium, school villages and commercial centres.

- 3.4.2.2 The possible shuttle system proposed would consist of low noise emission types: LRT, electric bus or trolley bus system. The system would carry most of the passenger flow which conventionally use vehicular road-base transport systems. The amount of traffic noise emission would be lowered and can be better controlled through designated routing compared to road-based transport.

### **3.4.3 Discourage Through Traffic Movements**

- 3.4.3.1 With the help of an efficient shuttle system, the road network would be designed to avoid “through traffic” and through traffic internal to SEKD would be restricted to the distributor roads where mitigation measures could be provided effectively in most cases. There are no primary distributors with large traffic volume provided.

### **3.4.4 Reducing Noise at Local Levels**

- 3.4.4.1 Traffic calming measures and special paving would be implemented wherever practical to reduce traffic speed hence enhance pedestrian safety; to reduce traffic induced environmental impact to the adjacent developments; as well as to provide a distinct neighborhood environment for the SEKD area. The design concept is to make most of these local distributors non-through roads to discourage “rat-run” of through traffic movements. This is to preserve the environment within all the residential precincts.

### **3.4.5 Reducing Demand for Through Traffic**

- 3.4.5.1 The demand for through road traffic is reduced for which external through traffic is diverted to trunk roads only and the external connections serve only the SEKD related traffic. The

reduction in demand for external road connections would reduce the impact to existing NSRs near the connections considerably.

### 3.4.6 **Underground Road Design**

3.4.6.1 In line with the theme of environmentally friendly transport mode of the district, the profile of the roads has been investigated with a view to placing the roads below ground where practicable to minimise the land-use constraints, reduce severance and minimise the environmental impacts. The roads that would be underground include the following:

- Central Kowloon Route;
- Trunk Road T2;
- District Distributor Road D4 (across the Metropolitan Park and Kai Tak Runway section); and
- District Distributor Road D5 (joining NAKTA and Kai Tak Runway section).

### 3.4.7 **Planning Design**

3.4.7.1 One of the main constraints for SEKD is that most of the landuses are residential in nature. Noise tolerant landuses such as industrial area and commercial area are relatively few proportionally. The chance of using these landuses as buffer or for noise screening is rather limited. Potential noise generating activities/facilities are sited as far away as possible from NSRs.

## 3.5 **Description of the Environment and Baseline Conditions**

3.5.1.1 The SEKD site was the former Kai Tak Airport for which aircraft noise from airport operation dominated the area. The SEKD site is shared by a number of temporary uses including government uses and private tenants. Traffic noise from existing roads like Prince Edward Road East and Kwun Tong Bypass dominates the baseline noise environment particularly along the boundaries of SEKD site. This would be a potential constraint for future noise sensitive developments. Existing NSRs are relieved from aircraft noise after the closure of Kai Tak Airport.

3.5.1.2 An Outline Master Development Plan was developed for SEKD and served as a basis for noise assessments. This development layout plan outlined different planning areas allocated for specific land use. Noise Sensitive Receivers (NSRs) in the plan within SEKD study area were identified. They are shown in **Table 3.9** below:

**Table 3.9 Potential Noise Sensitive Receivers in SEKD**

Site	Type	Plot Ratio	No. of Flats	Description
1A	Residential R1(RS)	7.5	~4874	Public housing, PRH/HOS/PSPS, height restriction of 120-165m, around 36-40 storeys
1B	Residential R1(RS)	7.5	~7710	Public housing, PRH/HOS/PSPS, height restriction of 120-165m, around 37-50 storeys
1C	ResidentialR1(HOS)	7.5	~5138	Public housing, PRH/HOS/PSPS, height restriction of 120-165m, around 34-50 storeys
1D	ResidentialR1(HOS)	7.5	~4656	Public housing, PRH/HOS/PSPS, height restriction of 140-165m, around 40-41 storeys
1E	Residential R1	7.5	~3320	Private housing height restriction of 130-140m, around 35-48 storeys
1K	Residential OU (R1)	5.0	~1612	Private Housing height restriction of 120m, around 30-36 storeys
2A	Residential OU (R1)	5.0	~6459	Private Housing with schools, above railway depot, height restriction of 120-165m, around 27-41 storeys
2B	Residential R1	5.0	~1201	Private housing with schools, height restriction of 110m, around 30-35 storeys
2C	Residential R1	5.0	~1839	Private housing, height restriction of 110-135m, around 30-35 storeys
2D	Residential R1	5.0	~2154	Private housing, height restriction of 110-130m, around 30-33 storeys
2E	Residential R1	5.0	~1085	Private housing, height restriction of 140m, around 32 storeys
2F	Residential R1	5.0	~1292	Private housing, height restriction of 140m, around 29-31 storeys
1F	Clinic*	N/A	N/A	Government clinic