

## **Environmental Improvement of Shing Mun River Main Channel and Associated Nullahs**

The Civil Engineering Department (CED), as the Works Department for the environmental improvement works of the Shing Mun River (SMR), started the Preliminary Project Feasibility Study (PPFS) in early June 1998. It is envisaged that the PPFS will be completed in Feb 1999. Funds for the improvement works will be bid under the 1999 Capital Works Reserve Fund - Resource Allocation Exercise (CWRF-RAE).

### **Environmental Improvement Strategy**

The recommended strategy involves a phased implementation of sediment bioremediation, with the option of switching to a dredging-based strategy.

#### **Phase 1 Improvement Works**

- Phase 1 bioremediation in the Shing Mun River (SMR) main channel (from Ch 800 to Ch 2000 and from Ch3500 to Ch4200) will start in 2000-2001. These areas are severely affected by the sediment (refer to Figure 1 for details).
- A pilot trial will be conducted in Fo Tan Nullah to determine whether bioremediation is an applicable method to treat the sediments with a relatively higher heavy metal contents.
- Environmental monitoring and auditing (EM&A) will also be conducted during and after Phase 1 bioremediation to monitor the condition of the SMR in accordance with the defined performance standards.
- It is expected that Phase 1 works will be completed by 2001-2002.

#### **Phase 2 Improvement Works**

- If the Phase 1 bioremediation programme is successful, Phase 2 bioremediation will be carried out for the remaining portion of the river main channel together with the Siu Lek Yuen Nullah.
- Bioremediation will be carried out in Fo Tan Nullah if the bioremediation pilot trial in the nullah is successful.
  - If after the completion of Phase 1, the EM&A shows that the stipulated environmental improvement is not achieved, environmental dredging will be carried out (as shown in Figure 2).

### **Remaining Improvement Works/Minor Engineering Works**

- After completion of Phase 1 and 2 improvement works in 2003, bioremediation and/or dredging will be maintained for a period of up to 3 years. The extent of bioremediation/dredging each year will be determined by the prevailing EM&A results.

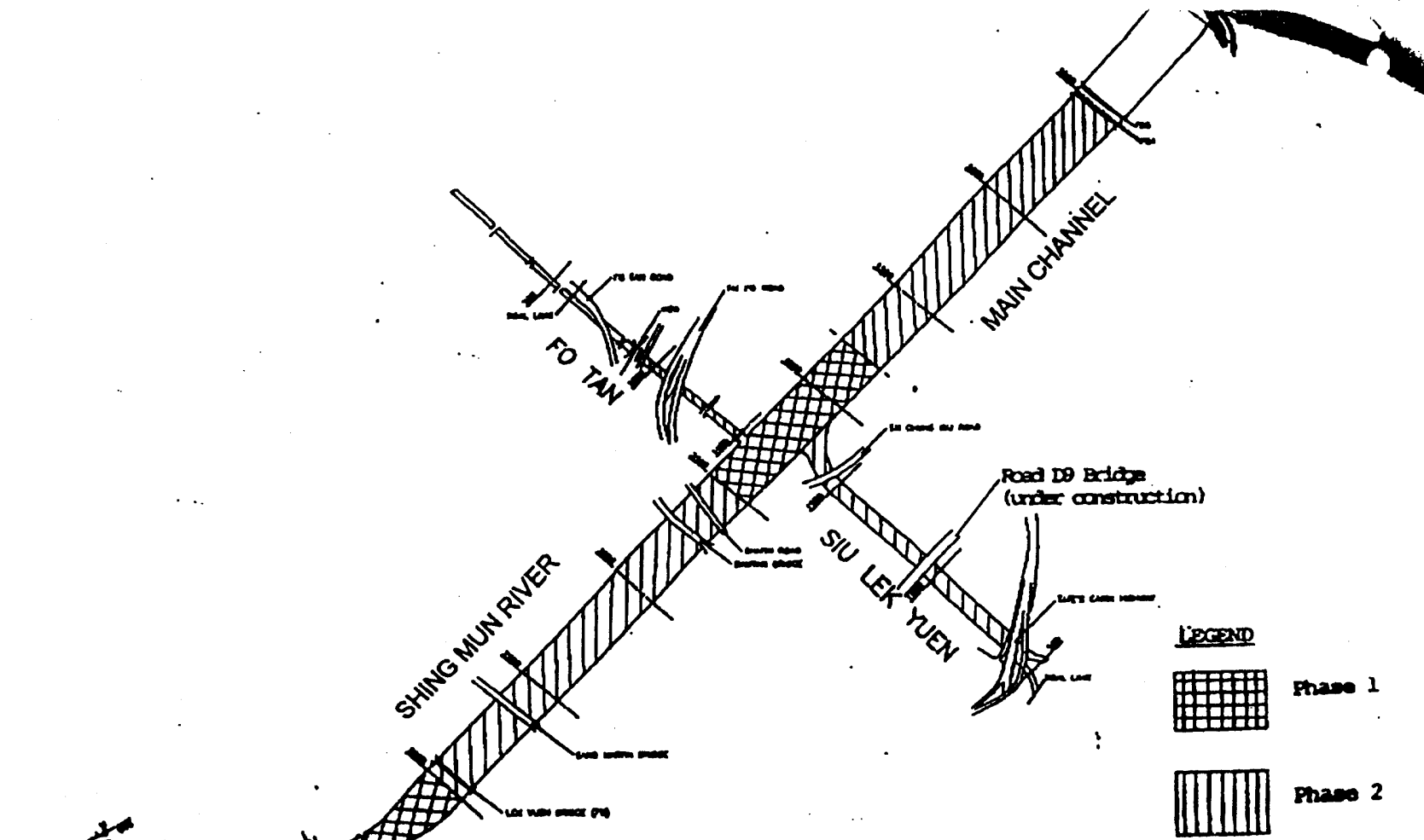
#### Timetable for the improvement works

The target dates for completion of the project are:

- |    |  |          |
|----|--|----------|
| a) | completion of the Preliminary Project Feasibility Study (PPFS) | Feb 1999 |
| b) | completion of Phase 1 & 2 improvement works                    | 2003     |
| c) | completion of all remaining improvement works                  | 2005     |

The detailed implementation programme of the SMR improvement strategy is shown in Figure 3.

Environmental Protection Department  
November 1998



**LEGEND**



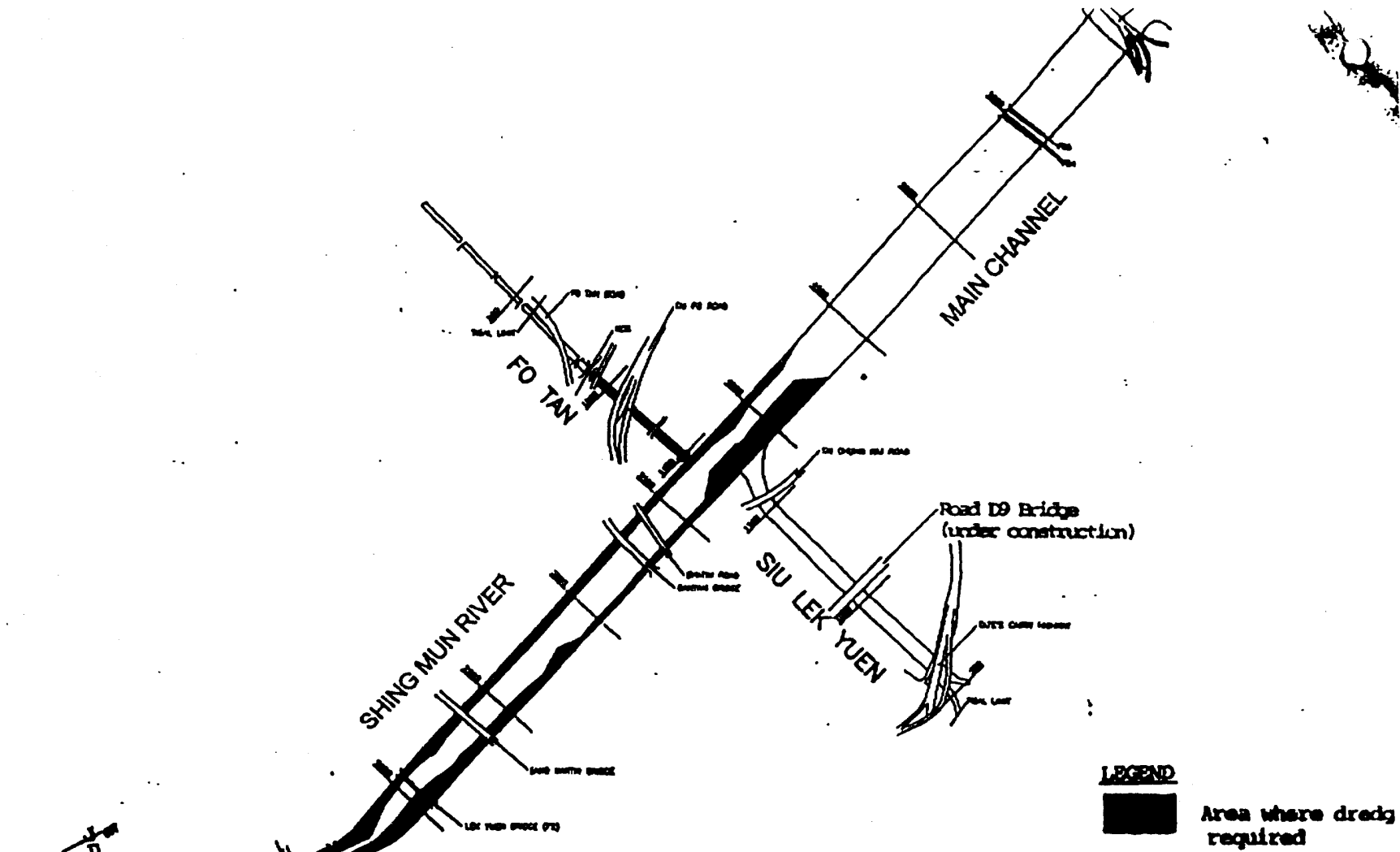
Phase 1



Phase 2

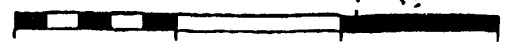
**FIGURE 1**  
**ENVIRONMENTAL IMPROVEMENT OF SHING MUN RIVER**  
**— PHASE IMPLEMENTATION PLAN**

**NOTES**  
1. FB - FOOTBRIDGE  
MR - DESIGNATED RIVER CHANNELS



**FIGURE 2**  
**ENVIRONMENTAL IMPROVEMENT OF SHING MUN RIVER**  
**— DREDGING REQUIREMENTS**

- NOTES**
- I. FB - FOOTBRIDGE
  - DESIGNATED RIVER CHANNELS



### EPD's Air Quality Monitoring Network

Location	Station Type (Height above Ground)	Address	Pollutant Measured				
			SO <sub>2</sub>	NO <sub>2</sub>	O <sub>3</sub>	CO	RSP
Central/Western	General (18m)	Upper Level Police Station, 1 High Street	Y	Y	Y		Y
Kwai Chung	General (25m)	Chen Zao Man College, 1-5 Kwai Hop Street	Y	Y	Y		Y
Kwun Tong	General (25m)	Kwun Tong District Office, 6 Tung Yuan Street	Y	Y	Y		Y
Sha Tin	General (21m)	Sha Tin Government Secondary School, 11- 17 Man Lai Road	Y	Y	Y		Y
Sham Shui Po	General (17m)	Sham Shui Po Police Station, 37A Yen Chow Street	Y	Y	Y		Y
Tai Po	General (25m)	Tai Po Government Office Building, 1 Ting Kok Road	Y	Y	Y		Y
Tap Mun	General (11m)	Tap Mun Police Station	Y	Y	Y	Y	Y
Tsuen Wan	General (17m)	Princess Alexandra Community Centre, 60 Tai Ho Road	Y	Y	Y	Y	Y
Yuen Long	General (25m)	Yuen Long District Office, 296 Castle Peak Road	Y	Y	Y		Y
Causeway Bay	Urban Roadside (2m)	1 Yee Wo Street	Y	Y		Y	Y
Central	Urban Roadside (4 m)	Junction of Chater Road & Des Voeux Road Central	Y	Y		Y	Y
Mong Kok	Urban Roadside (2 m)	Mong Kok Road Pumping Station, 4E Mongkok Road	Y	Y		Y	Y