

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

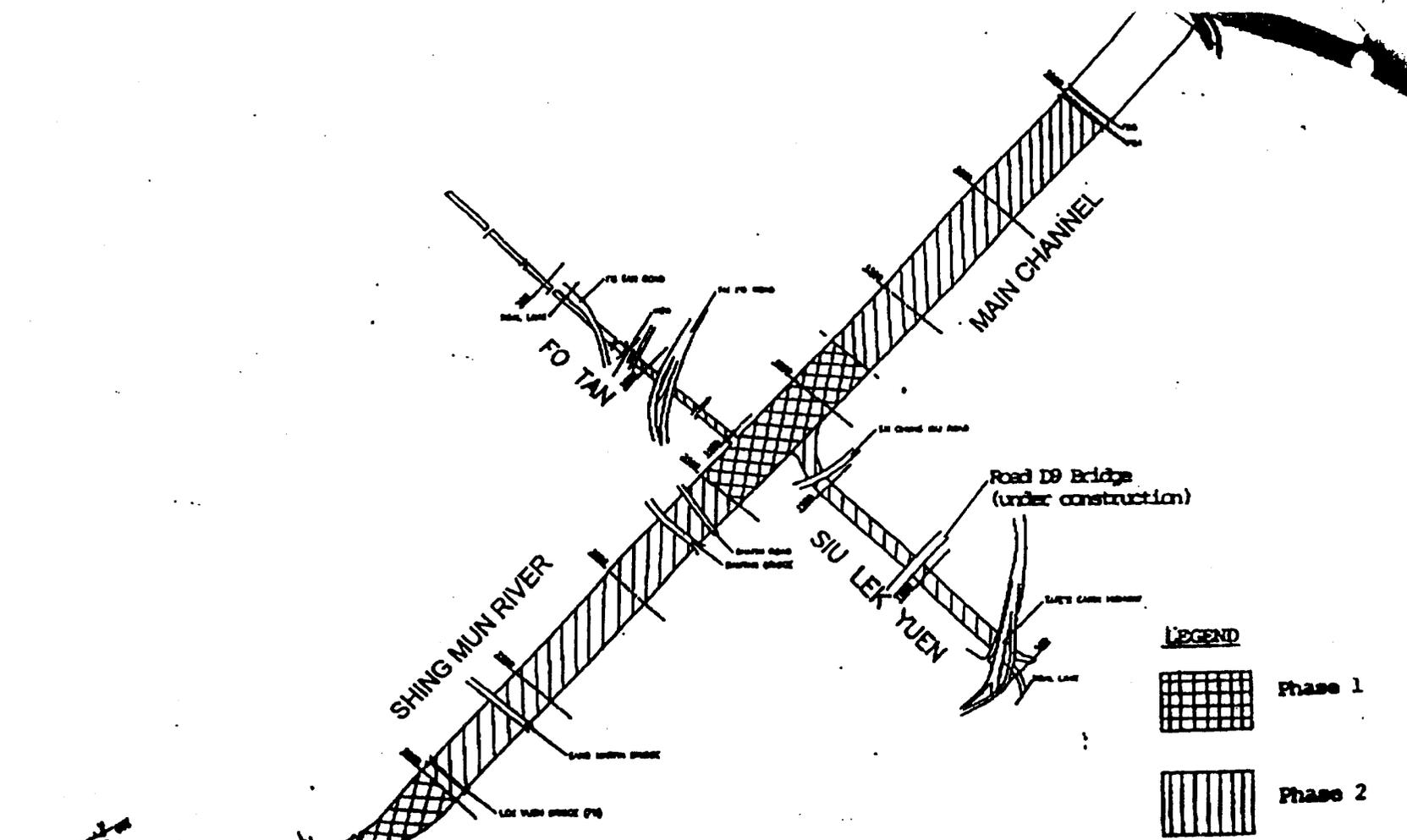


FIGURE 1
ENVIRONMENTAL IMPROVEMENT OF SHING MUN RIVER
— PHASE IMPLEMENTATION PLAN

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

0 500 1000 METERS

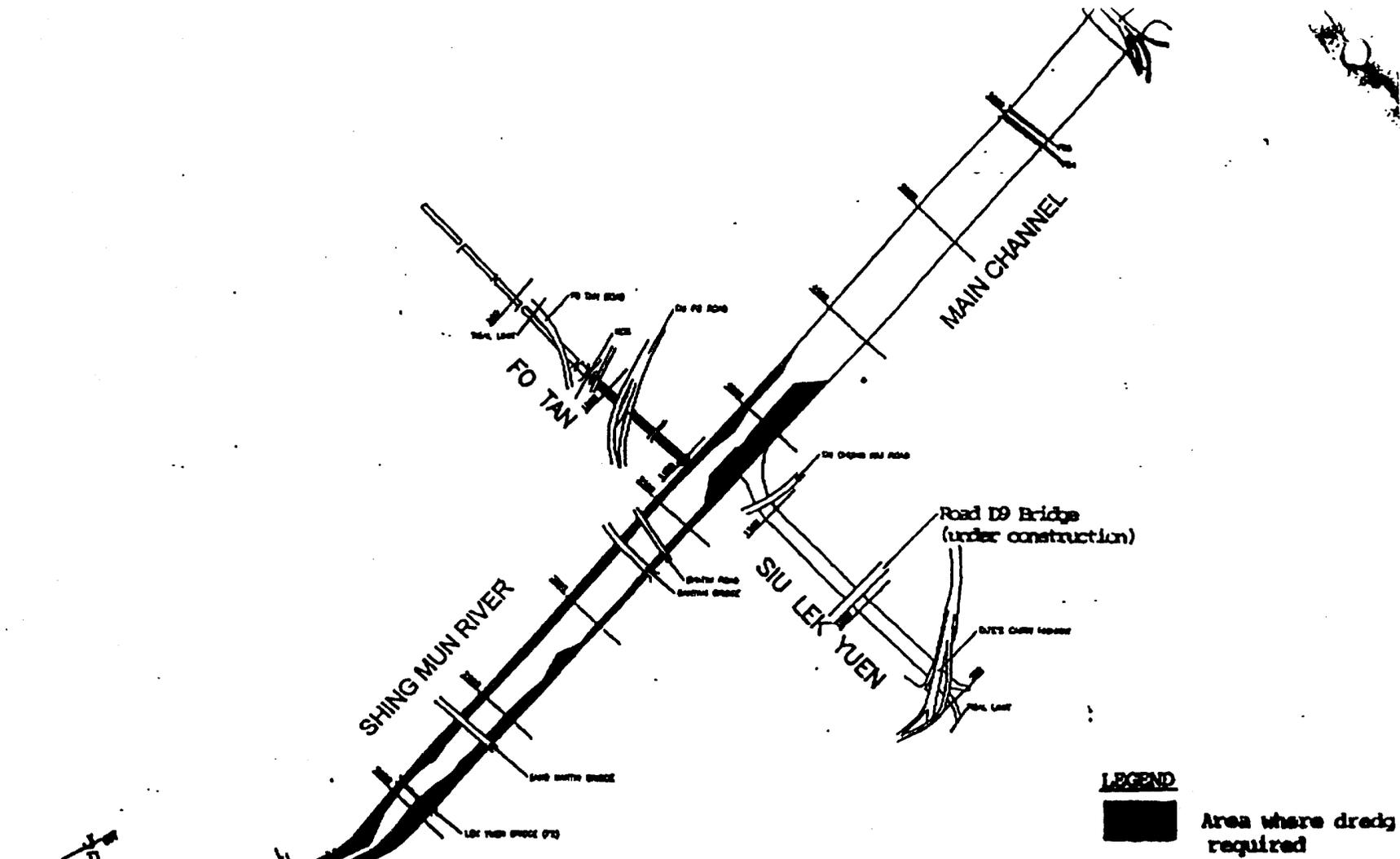


FIGURE 2
ENVIRONMENTAL IMPROVEMENT OF SHING MUN RIVER
— DREDGING REQUIREMENTS

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

