

(4) Earthwork

Topography of the site ranges from 134.0-168.0m in elevation. There are two hilly areas in east and west sides of the site and a valley extends between them. The hilly areas are down to the north with a gentle slope of 2 ~5 %.

The land for manufacturing use is planned in the eastern part of the valley, and the amenity land is in the western part. The valley separates them as a green belt. The land for amenity use follows the existing topography to minimize the earthwork volume. Land elevation for manufacturing use is designed to balance cutting volume of hills to filling in the valley.

The earthwork also takes the following conditions into account:

- i) Maximum gradient of the road is less than 3.0%.
- ii) Slope of manufacturing lots is more than 0.5 % for rainfall drainage.
- iii) Ground level for building and other facilities should be more than 140 m in elevation.

Consequently, it is planned that cutting volume at the 1st stage is 1,260,000 m³, while filling volume is 980,000m³.

Table 6.7 Earthwork Volume at Site A

	1 st stage	Ultimate stage	Total
Cutting	1,260,000 m ³	2,570,000 m ³	3,830,000 m ³
Filling	980,000 m ³	2,850,000 m ³	3,830,000 m ³
Balance	280,000 m ³	-280,000 m ³	0 m ³

(5) Road System

The road system consists of three road types. Total length is 13,640m. At the 1st stage, the entrance to SEZ is at the junction with the access road to the New Mekong Bridge, and it is separated for commodity flow and passenger flow in the ultimate stage.

An east-west road in SEZ caters linkages between the manufacturing land and the other SEZ functions. It connects to the existing road along the Mekong river. A road cross-section is shown in Figure 6.10.

Table 6.8 Road Length (m)

Type of Roads	1 st Stage	Midterm Stage	Ultimate Stage	Total	Structure
Boulevard Road	2,870	480 (200)	2,900 (470)	6,250	30 m in width, 4 traffic lanes with median.
Main Road	850	-	2,600	3,450	20 m in width, 2 traffic lanes with parking lane.
Sub Road	300	190	3,450	3,940	15 m in width, 2 traffic lanes.
Total	4,020	670	8,950	13,640	

Note: Length in parenthesis is of an external road.

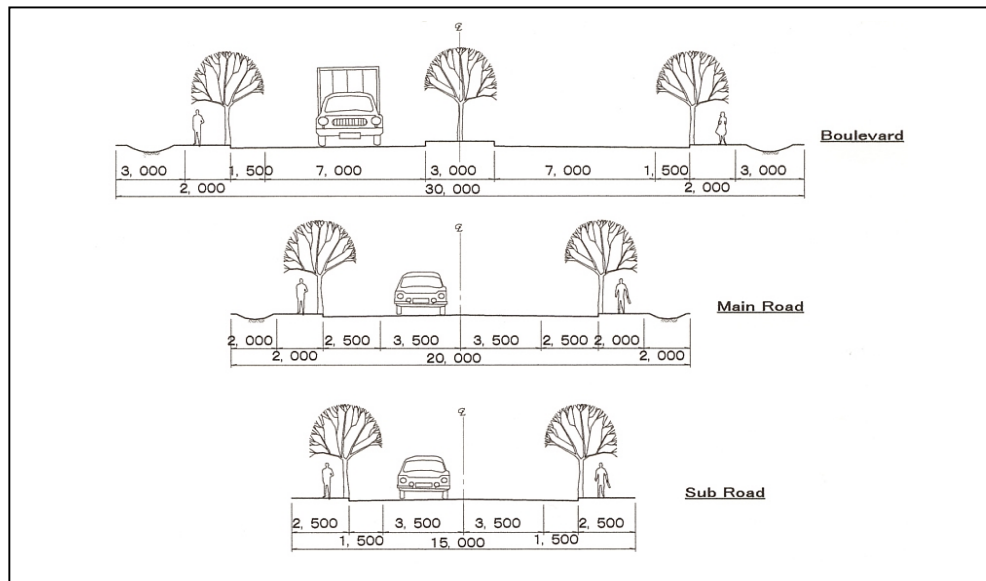


Figure 6.10 Road Cross-section

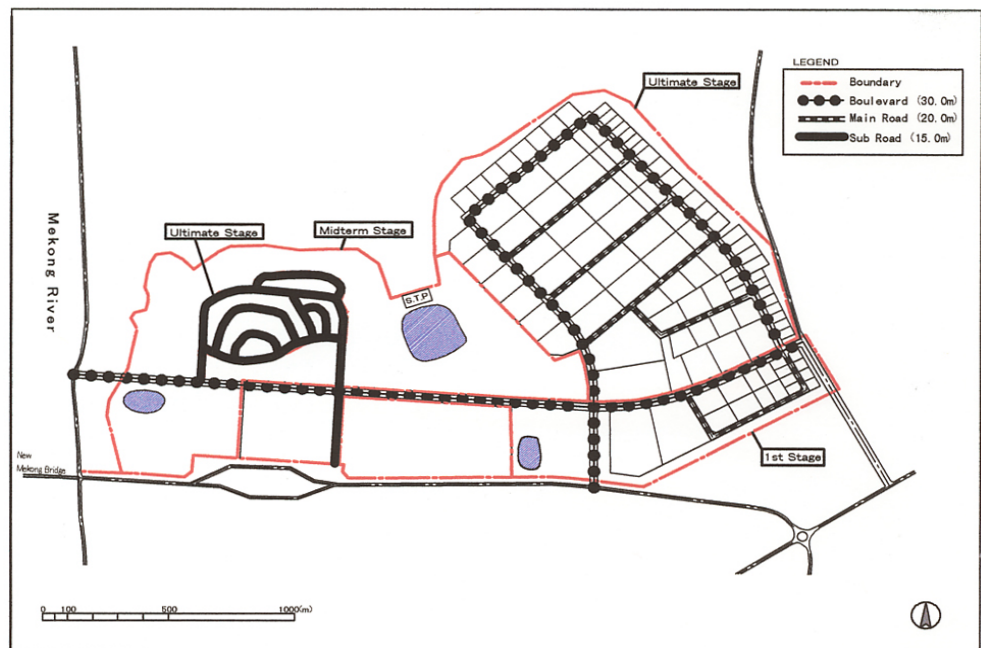


Figure 6.11 Road Layout at Site A

(6) Drainage System

Rainfall in the development area is collected to regulation ponds by U-ditch and culverts. It is drained to the existing river that flows into the Mekong river. The existing river is small and dried up in the dry season. The regulation ponds are necessary to limit rainfall discharge within the capacity of the existing river. The following rainfall intensity has been applied to the drainage design:

- i) 82.0 mm/hr in 25-year return period for regulation pond
- ii) 57.5 mm/hr in 5-year return period for U-ditch and culverts

The capacity of regulation pond is decided by the rainfall discharge of 1,000 m³/ha.

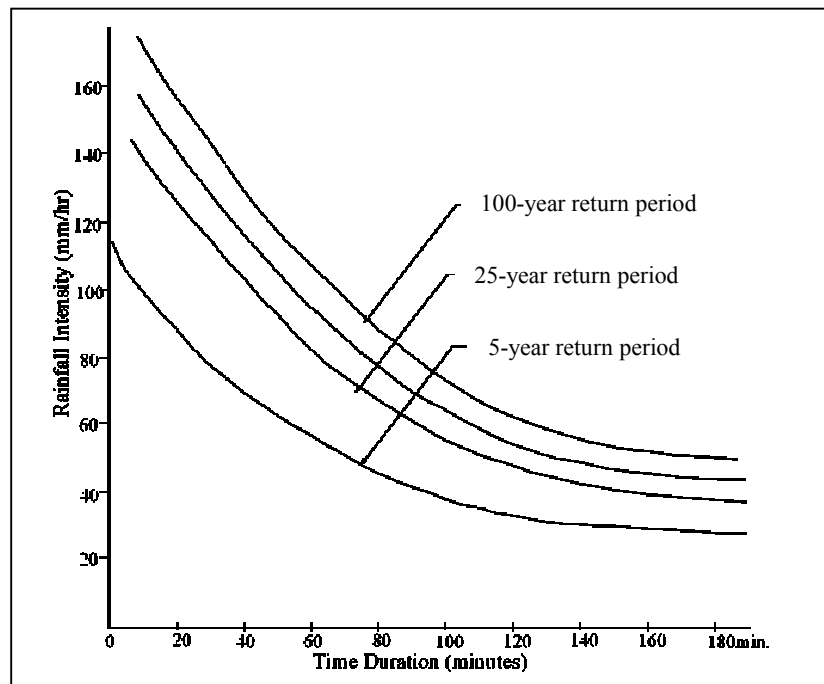


Figure 6.12 Rainfall Intensity (5, 25 and 100-year return-period)