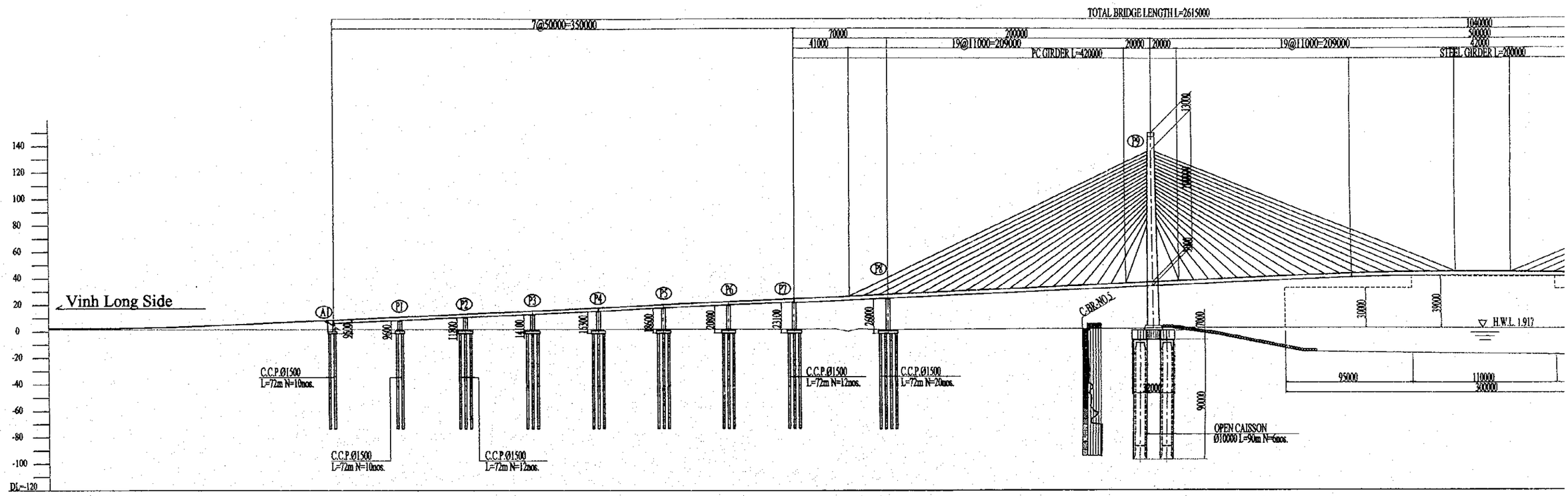
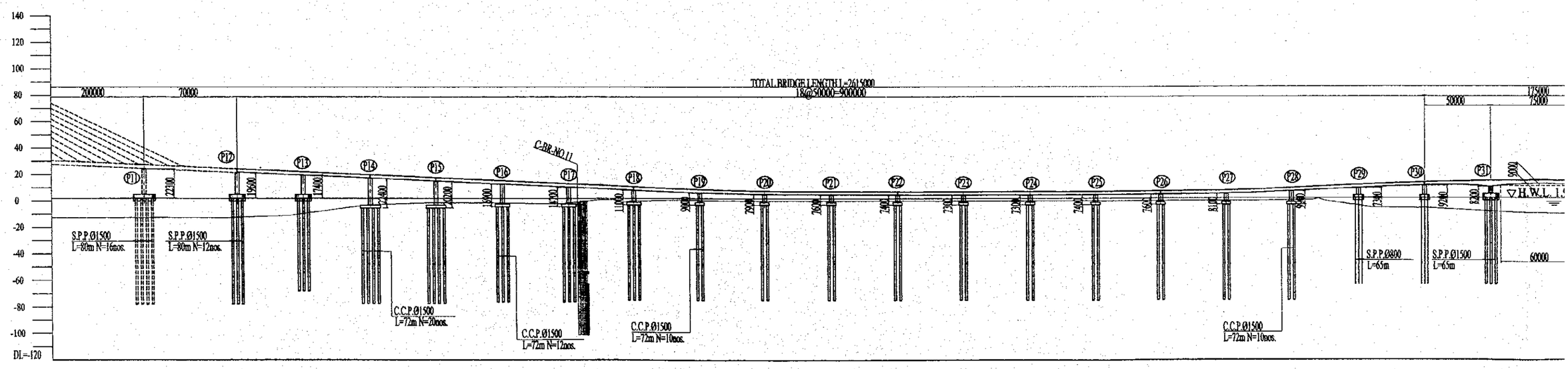
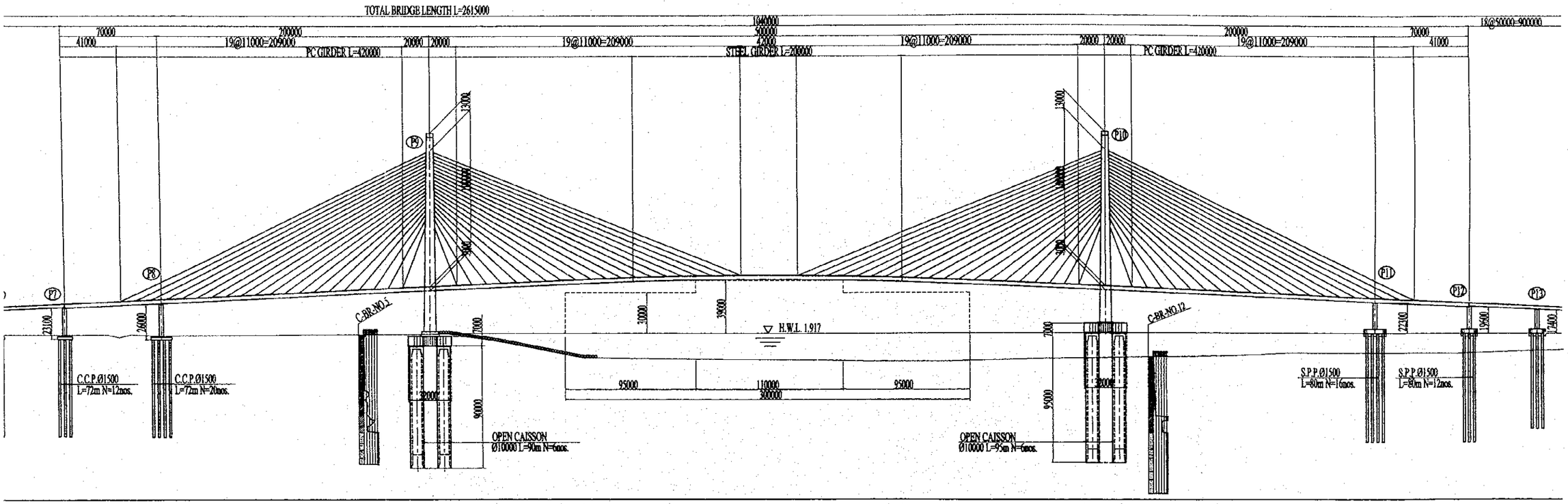
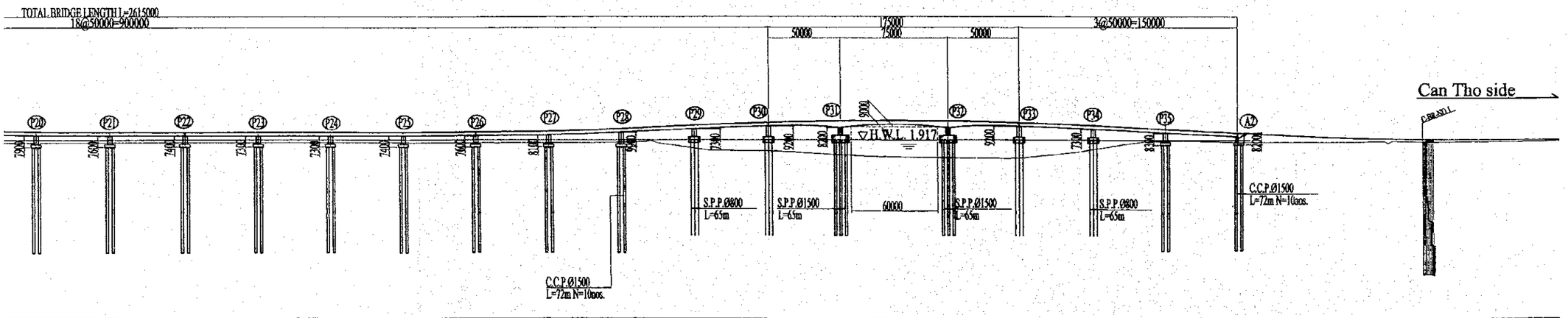
SIDE ELEVATION SCALE 1:3000





SIDE ELEVATION SCALE 1:3000





TEH FEASIBILITY STUDY ON THE CAN THO BRIDGE CONSTRUCTION IN SOCIALIST REPUBLIC OF VIET NAM	Fig. 10.3 Bridge Configuration
	JAPAN INTERNATIONAL COOPERATION AGENCY

In addition to the Initial Environmental Examination (IEE) which was done in the early stage of the Feasibility Study lasting from September to November 1997, the Environmental Impact Assessment (EIA) study was conducted since February 1998.

In terms of the natural environment, the construction of the proposed Can Tho Bridge and its approach roads would result in various impacts, especially on: (1) air, (2) water, (3) land and soil. There are no areas set aside for nature conservation purposes, nor natural wetlands existing within the study area.

In terms of the socio-economic environment, the most significant adverse impact is likely to be land acquisition and consequent resettlement. About 200 dwellings and an area of about 3,600m-long of perennial crop land along the approach roads would be relocated. A number of local people who are running business shops at Can Tho Ferry terminals, the peddlers who are selling goods on the ferries or at the terminals, the local mini-transporters at the terminals, etc. would also be affected by the removal of the Can Tho Ferry after the completion of the proposed bridge.

However, these adverse impacts on the natural and socio-economic environment of the study area are relatively minor and can be easily mitigated by appropriate measures. The adverse impacts caused by the construction of the proposed bridge are indeed very small compared to the benefits that the whole Mekong Delta region would receive from implementation of the project.

To mitigate the adverse impacts on the socio-economic environment of the local communities, the construction of two resettlement zones and two service areas somewhere close to the bridge sides, is recommended (Table 11.1 and 11.2). These plans should be examined in detail and prepared at the early stage of the detailed design study after approval of the project.

The issue of compensation for loss of dwellings and lands should be discussed carefully, soon after the approval of the project to avoid construction delays.

In addition, a monitoring program should be carefully prepared and implemented from the early stage of construction to ensure that all sources of contaminants generated from the construction sites can be appropriately controlled and managed, to minimize all adverse impacts on the existing ecosystem of the study area. The estimated total cost for implementation of the environmental monitoring program is described in Table 11.3.

Table 11.1 Outlines and Cost for Construction of Infrastructure of the Resettlement Zones

Number of resettlement zone (to allow the relocation of 100 dwellings, or about a half number of total affected dwellings).		2 zones (1 in Binh Minh District, and 1 in Can Tho City)
Land area required at least for one resettlement zone		8,800 m^2
- House lots: 100 m^2 /lot×50 house =	5,000 m^2	
- Roads:	2,200 m^2	
- Open area for open drainage ditches:	450 m^2	
- Green zone and public facilities:	1,150 m^2	
Total cost for construction of infrastructure of two resettlement zones		3,058,000,000 VND (236,139 US$)

Note: 1 US$ = 12,950 VND

Table 11.2 Outlines and Cost for Construction of Infrastructure of the Service Areas

Number of service area	2 areas (1 in Binh Minh District, and 1 in Can Tho City)	
Land area required for one service area	150,000 m^2 (300m × 500m)	
Total cost for construction of infrastructure of two service areas	9,000,000,000VND	(694,981 US$)

Note: 1 US$ = 12,950 VND

Table 11.3 Cost for Implementation of Environmental Monitoring Program

Phase	Cost	
During construction phase	1,624,862,000VND	(125,472 US$)
During operation phase soon after the construction	1,090,649,000VND	(84,220 US$)
Total cost for environmental monitoring program	2,715,511,000VND	(209,692 US$)

Note: 1 US$ = 12,950 VND

CHAPTER 12 ECONOMIC EVALUATION

12.1 Estimate of Benefit

The main quantifiable direct benefits of the project would be savings in waiting time related to freight and passenger traffic with a new bridge. Since it is planned that the existing ferry boats upon completion of the bridge is to be removed to the places where require crossing the river by ferry boats, savings in ferry operating costs for bridge cases and additional ferry improvement costs for the without bridge cases are considered as the benefits of the project.

It is commonly recognized that all direct and indirect benefits attributable to a large infrastructure project eventually converge into land potential measured by market land price. Therefore the increase in land price was estimated and included in the overall benefits of the Project.

However, although the Can Tho Bridge is deemed to influence the activities in the whole area of the Mekong Delta region, especially the right bank area of the Hau River, only a limited area of the right bank of the Can Tho River was considered to experience a change in land price and estimated with due consideration to avoid double counting of economic benefits.

The direct benefits in intermediate years were estimated by interpolation between the years 2006, 2010, and 2020. The direct benefits after 2020 were estimated by extrapolation between the years 2010 and 2020.

12.2 Economic Costs

Table 12.1 shows the estimated economic costs for options of Route C.

Table 12.1 Summary of Economic Cost

Estimated Case (Route)	Economic Cost (thousand US dollar)		
	Portion	Construction (Total)	Maintenance (Total for 20years)
Route C-2/3	Foreign Exchange	134,778.64	1,354.20
	Local Currency	56,714.98	315.60
	Total	191,493.62	1,669.80
Route C-1 (Shortest Route)	Foreign Exchange	130,002.09	1,354.20
	Local Currency	47,755.42	315.60
	Total	177,757.51	1,669.80
Route C-3 (Longest Route)	Foreign Exchange	135,397.86	1,354.20
	Local Currency	58,370.90	315.60
	Total	193,768.76	1,669.80

Source: JICA Study Team

12.3 Economic Evaluation

The economic internal rates of return (EIRRs) of the options show values between 13.4 - 14.0% for base cases of each route variation of Route C. Compared with the results of the preliminary economic evaluation, the EIRRs are higher due to the estimate of the benefit escalation of land prices. The major reason for these relatively small variations of EIRRs is attributable to the relatively small differences among estimated costs of construction options. (Table 12.2)

Table 12.2 EIRRs of Route Variations

		C-2/3 Case (recommended route)	C-1 Case (shortest route)	C-3 Case (longest route)
Base	EIRR	13.5%	14.0%	13.4%
	NPV (mil.USD)	143	153	141
	B/C Ratio	2.00	2.15	1.98

Source: JICA Study Team

The sensitivity analysis showed that the economic internal rates of return (EIRRs) of the study cases fell into the values between 9.8 - 13.5% (Table 12.3).

Though the GDP growth rates are expected higher in Viet Nam than those in other southeast Asian countries, expectation of past high EIRR standard should be reconsidered because the economy in Viet Nam exists more or less in interdependency with other countries.

The total amount of benefits brought by the Project are probably underestimated. As stated, the influenced areas of the Project are expected diverse and large due to the characteristics of the Project. The benefits of the Project is no doubt vast especially in developing the Mekong Delta, however only small portion of such vast benefits was estimated in terms of increase in land price in this study.

If considered above, the values of EIRRs are well persuasive for implementation. Therefore, it can be concluded that the Project is feasible from an economic viewpoint.

Table 12.3 Changes of EIRRs in Sensitivity Test (C-2/3 Case)

		Benefit			
		Base	-10%	-20%	-30%
Cost	Base	13.5%	12.7%	11.9%	10.9%
	+10%	12.8%	12.0%	11.2%	10.3%
	+20%	12.2%	11.4%	10.6%	9.8%

Source: JICA Study Team

It was assumed that the Can Tho Bridge will be operated as a toll bridge like the My Thuan Bridge. Specifically, it was supposed that charges are to be collected from users of the bridge and that these revenues will be allocated to repay the loan and pay back to capital for project investment and to meet the costs for operation and maintenance of the bridge.

13.1 Revenue

The total revenue was estimated by traffic volumes by vehicle type multiplied by charges for each vehicle type.

(1) Price elasticity

Following conservative Figures were adopted as price elasticities through simulation analysis.

Normal traffic	-0.1
Diverted traffic	-0.3
Induced traffic	-0.5

(2) Forecast revenue

Forecast revenues are shown in Table 13.1. The revenue would increase by 70% when the charge is doubled.

Table 13.1 Revenue from Bridge Changes

			2006	2010	2015	2020
Case R1	Fares at existing ferry fare level (m=1.0)	(1,000US$/year)	5,371	9,571	17,412	25,253
Case R2	Fares at 1.5 times higher than existing fare level (m=1.5)	(1,000US$/year)	7,465	13,309	24,228	35,147
Case R3	Fares at the double of existing ferry fare level (m=2.0)	(1,000US$/year)	9,166	16,347	29,782	43,217
Case R4	Fares at 2.5 times higher than existing fare level (m=2.5)	(1,000US$/year)	10,473	18,687	34,076	49,466

Source: JICA Study Team

13.2 Financial Costs

In addition to the construction costs and maintenance costs, costs related to

the charge collection system were estimated for the financial cost estimate in the case of a toll bridge.

13.3 Financial Analysis Results

The following two kinds of loans were assumed available.

a) long-term loan

- interest rate 1.8% a year
- grace period 10 years
- repayment period 30 years

b) short term loan

- interest rate 8% a year
- repayment period 1 year

A long-term loan is assumed to cover up to 85% of the Project costs in combination with government subsidy to meet the remaining Project costs. A short term loan would be introduced only if a deficit for cash outflow emerged.

Table 13.2 Funding Cases

	FC-0 Case (Full Cost Recovery)	FC-1 Case (Recovery for Loan Portion)	FC-2 Case (Recovery for Loan Portion)
a) Construction Cost for Main Bridge	Long-term loan	Long-term loan	Long-term loan (foreign portion)
b) Construction Cost for Approach Road (including Small Bridges and Service Area)	Long-term loan	Long-term loan	Long-term loan (foreign portion)
c) Cost for Environmental Counter Measures and Monitoring	Long-term loan	Long-term loan	Long-term loan (foreign portion)
d) Supervision and Contingency	Long-term loan	Long-term loan	Long-term loan (foreign portion)
e) Administration	Subsidy	Subsidy	Subsidy
f) Land Acquisition Cost and Compensation	Subsidy	Subsidy	Subsidy

Source: JICA Study Team

In conclusion, the Project is viable and can resist considerably to a reduction in forecast revenue under favorable funding condition.

Results of the financial analysis revealed that the profitability of the Project highly depends on the project conditions and that future traffic demand would be a critical condition (see Table 13.3).

Table 13.3 Results of Financial Analysis

			C-2.3 Case (recommended route)	C-1 case (shortest route)	C-3 Case (longest route)
Project Cost		(mil. USD)	239.8	236.5	240.2
FC-0	Full Cost Recovery				
	Amount for Recovery	(mil. USD)	239.8	236.5	240.2
	FIRR		5.6%	5.6%	5.6%
	Investment Payback Period (DCF)	(years)	19	18	19
FC-1	Recovery of Long-term Loan				
	Amount for Recovery	(mil. USD)	203.8	201.0	204.2
	FIRR		6.6%	6.6%	6.6%
	Investment Payback Period (DCF)	(years)	17	17	17
FC-2	Recovery of Long-term Loan				
	Amount for Recovery	(mil. USD)	166.4	161.1	166.7
	FIRR		7.9%	8.1%	7.9%
	Investment Payback Period (DCF)	(years)	15	15	15

Based on the financial analysis, the following recommendations were made.

a) Scope of government subsidies

As an enterprise, the profitability of the Project will be questionable without favorable financing conditions and government subsidies. Therefore, it should be considered necessary to introduce some government subsidies. Work items to be subsidized by the government should be those for which no soft loan could be applied due to financing conditions.

b) Determination of charge level

The introduction of high charges is an easy way to secure sufficient revenue enabled by the estimated rigid values of price elasticity. However, the charge level should be prudently determined after examining the influences on prices or expenditure structure of households and business entities.

CHAPTER 14 IMPLEMENTATION PROGRAM

14.1 Project Outline

The Can Tho Bridge Construction Project can be characterized as a national project as well as the most important project for the sound regional development of the Mekong Delta. The bridge is planned to cross the Hau River between Vin Minh of Vin Long Province and T. P. Can Tho. The location of the bridge would be about 2.9 km downstream from the existing ferry line.

The features of the Project are summarized below:

Project Outline

1. Bridge Location : 2.9 km downstream from the existing ferry line
2. Bridges Feature
   1) Total Bridge Length: 2,615 m
      - Main span bridge: 1,040 m
      - Vinh Long side approach span bridge: 350 m
      - Can Tho side approach span bridge: 1,225 m*

      *: inclusive 175 m of the substream bridge
   2) Bridge Width : 22.1 m (4-lane carriageway)
   3) Main Span Bridge
      - Superstructure Type: Hybrid (Steel and Prestressed Concrete) Cable-Stayed Girder
        70 m+200 m+500 m+200 m+70 m = 1,040 m
      - Foundation Type: Reinforced Concrete Open Caisson
        Cast-in-place RC Pile, Steel Pipe Pile
   4) Approach Span Bridge
      a) Vinh Long Side
      - Superstructure Type: Prestressed Concrete Box Girder
        7 @ 50.0 m = 350 m
      - Foundation Type: Cast-in-place RC Pile

b) Can Tho Side

- Superstructure Type: Prestressed Concrete Box Girder
  18 @ 50 m = 900 m
  Prestressed Concrete Cantilever Box
  50 m + 75 m + 50 m = 175 m
  Prestressed Concrete Box Girder
  3 @ 50 = 150 m
  Total 1,225 m
- Foundation: Cast-in-place RC Pile, Steel Pipe Pile

3. Approach Roads
   - Total Length : 11,907 m
     Vinh Long Side 4,990 m
     Can Tho Side 6,917 m
4. Intersections
   1) Vinh Long Side : Double-Y-shaped type (Grade Separation)
   2) Can Tho Side : T-shaped type (At-grade)
   3) Roundabout : Rotary type
5. Service Area : Vinh Long Side: 15,000m^2
   Can Tho Side: 15,000m^2
6. Project Cost : 239,820.57 thousand USD

14.2 Project Packaging

The engineering services (E/S) for the Project can be split into 2 phases:
Phase 1: Detailed Design
Phase 2: Construction Supervision.

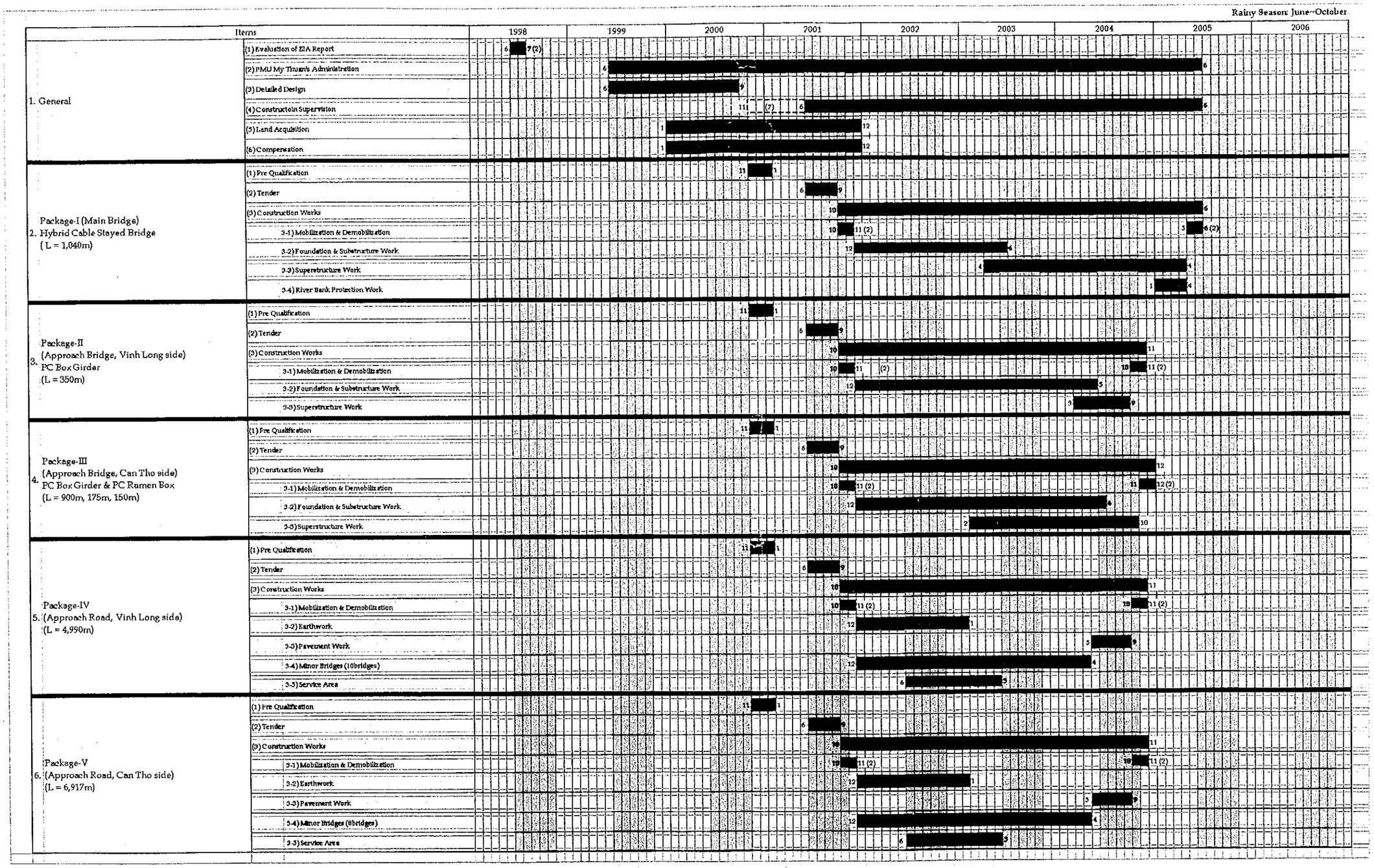
The construction for the Project has been divided into 5 packages: 1) Main Bridge, 2) Approach Bridge on Vinh Long side, 3) Approach Bridge on Can Tho side, 4) Approach Road on Vinh Long side, and 5) Approach Road on Can Tho side. The interfaces between the construction packages would have to be coordinated appropriately with the responsibility of the administration by the PMU My Thuan and the construction supervision by the international consultant.

14.3 Implementation Schedule

The implementation schedule of the Can Tho Bridge Construction Project was worked out taking into consideration the periods of detailed design, pre-qualification, tendering, and construction.

The Study Team has proposed a schedule consisting of end to end activities to complete the Project by June 2005 as shown in Fig. 14.1. In addition, an alternative implementation schedule was examined at the Vietnamese Government's preference that the overall time schedule be shortened by adopting some overlapped activities to complete the Project by December 2004 as shown in Fig. 14.2. However, the alternative implementation schedule requires that the pre-qualification proceedings should begin even before settling the financial arrangements of the project facilities. This will be difficult.

Fig 14.1 Recommended Implementation Schedule (End to End Activities)



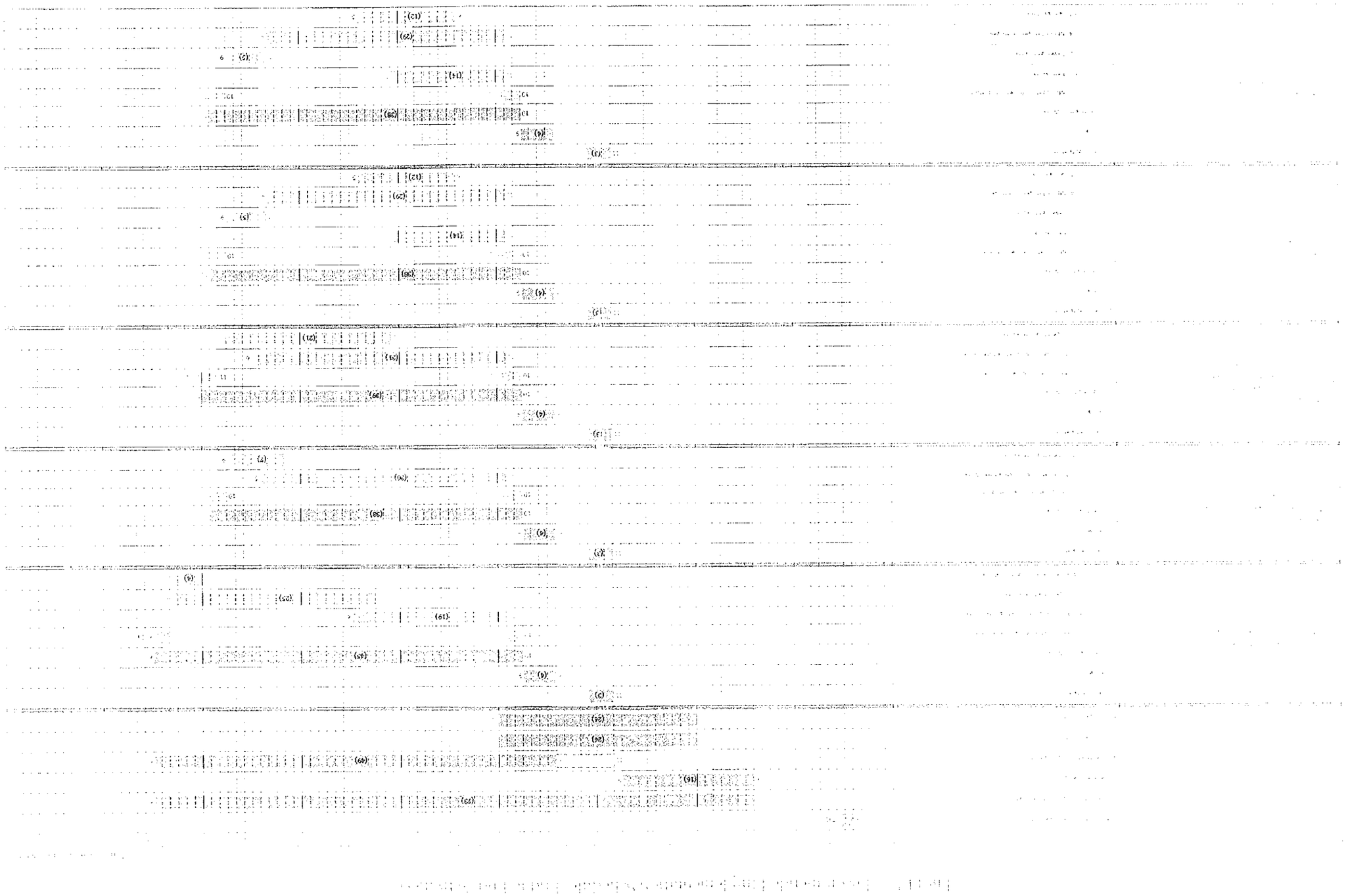
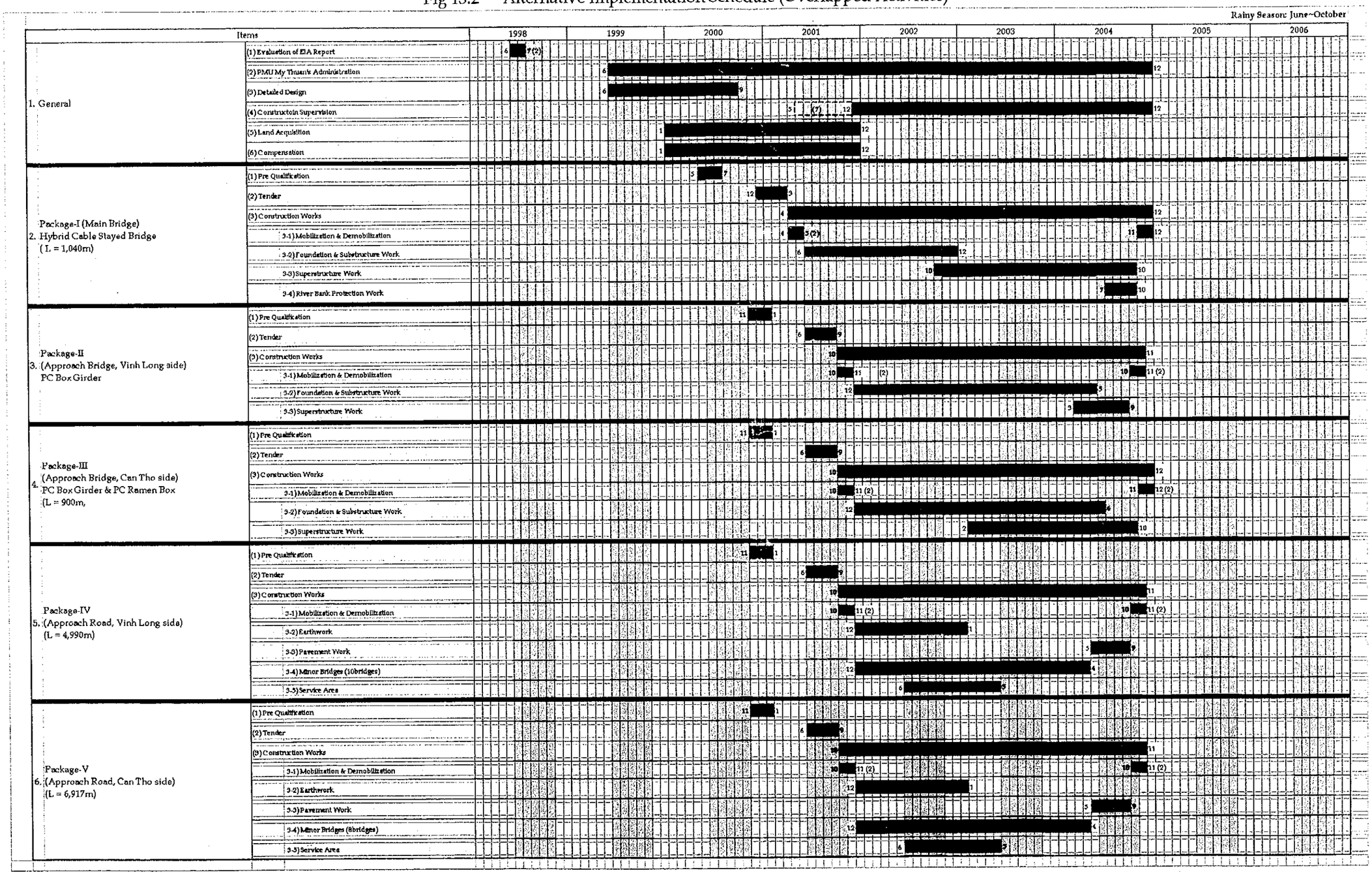
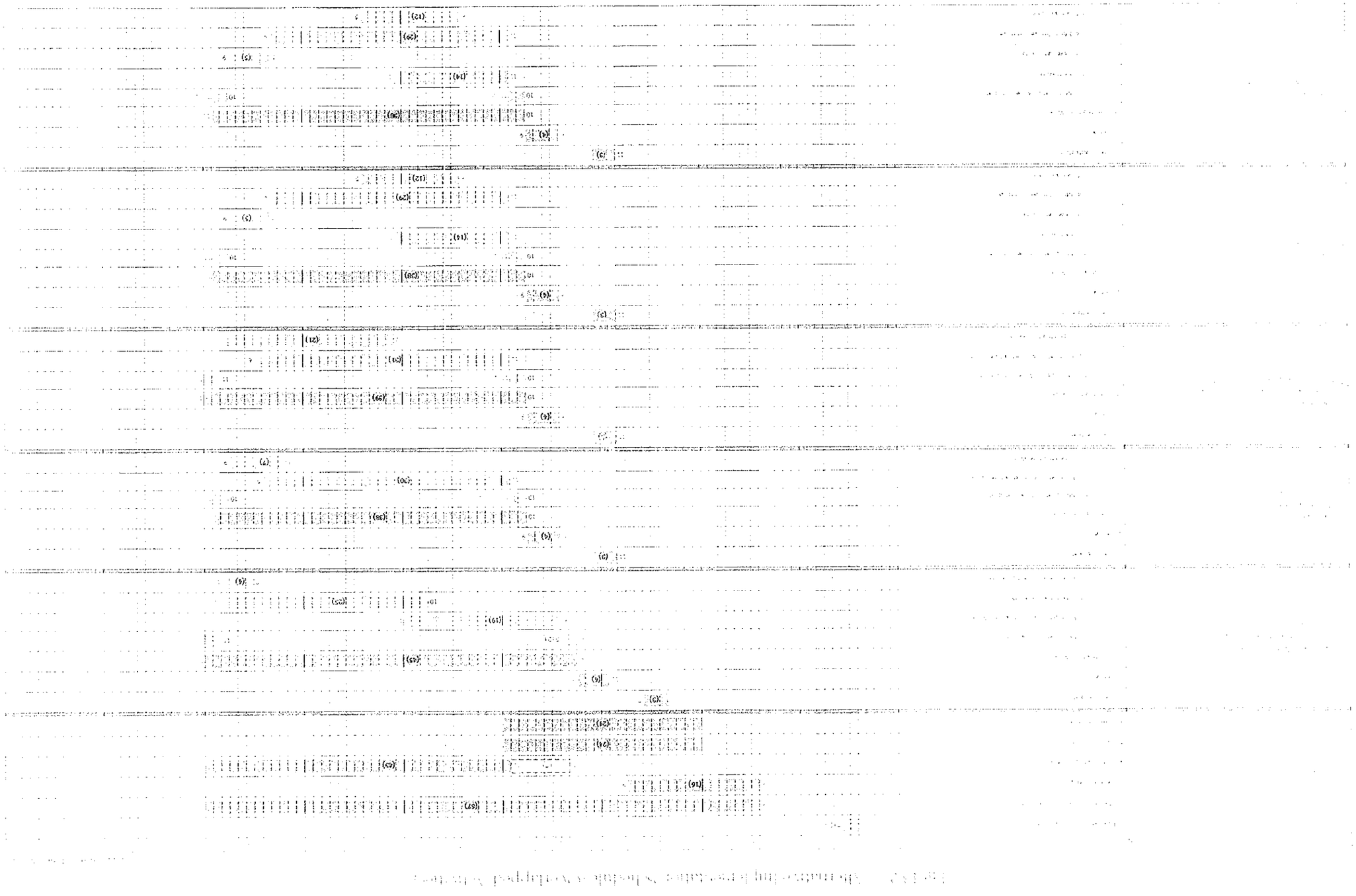


Fig 13.2 Alternative Implementation Schedule (Overlapped Activities)





14.4 Project Cost

Based on the preliminary design, construction cost and construction schedule, etc., the project cost is summarized as follows:

Table 14.1 Project Cost by Components

Unit: thousand US $

Component		Foreign Exchange Portion	Local Currency Portion	Total
1. Construction Cost	Mobilization & Demobilization	6,838.24	4,111.93	10,950.17
	Main Bridge	84,636.21	19,723.36	104,359.57
	Approach Bridge (Vinh Long)	8,734.35	3,428.45	12,162.80
	Approach Bridge (Can Tho)	33,763.77	10,071.57	43,835.34
	Approach Road (Vinh Long)	5,157.11	9,333.34	14,490.45
	Approach Road (Can Tho)	4,473.20	9,756.92	14,230.12
(Sub Total)		(143,602.88)	(56,425.57)	(200,028.45)
2. Engineering Cost	Detail Design & Tender Assistance	4,087.50	3,240.00	7,327.50
	Construction Supervision	3,506.25	2,384.20	5,890.45
(Sub Total)		(7,593.75)	(5,624.20)	(13,217.95)
3. Administration Cost		0.00	2,000.28	2,000.28
4. Environmental Monitoring & Countermeasures		0.00	235.90	235.90
5. Land Acquisition		0.00	1,944.45	1,944.45
6. Compensation		0.00	591.67	591.67
7. Sub Total of Project Cost without Contingency (1. + 2. + 3. + 4. + 5. + 6.)		(151,246.63)	(66,772.07)	(218,018.70)
8. Physical Contingency		15,124.66	6,677.21	21,801.87
9. Price Escalation (Base year, 1997)		17,647.76	10,747.22	28,394.98
Total	(7. + 8.)	166,371.29	73,449.28	239,820.57
	(7. + 8. + 9.)	184,019.05	84,196.50	268,215.55

* Price Escalation: 2% for Foreign Exchange Portion
3% for Local Currency Portion

*Yearly maintenance cost:

Foreign Exchange Portion:	89.09 thousand USD
Local Currency Portion:	20.92 thousand USD
Total:	110.01 thousand USD

14.5 Annual Budgetary Schedule

Based on the Project cost and implementation schedule, the annual funding requirement for 7 years is shown in Table 14.2.

Table 14.2 Annual Budgetary Schedule

Unit: thousand US$

	Investment Cost			Maintenance Cost			Total Financial Cost		
	F.E. Portion	L.C. Portion	Total	F.E. Portion	L.C. Portion	Total	F.E. Portion	L.C. Portion	Total
1997	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1998	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1999	1,770.40	1,614.32	3,384.72	0.00	0.00	0.00	1,770.40	1,614.32	3,384.72
2000	2,456.09	4,275.40	6,731.49	0.00	0.00	0.00	2,456.09	4,275.40	6,731.49
2001	7,048.87	6,540.83	13,589.70	0.00	0.00	0.00	7,048.87	6,540.83	13,589.70
2002	23,899.15	19,963.17	43,862.32	0.00	0.00	0.00	23,899.15	19,963.17	43,862.32
2003	69,864.14	20,799.70	90,663.84	0.00	0.00	0.00	69,864.14	20,799.70	90,663.84
2004	56,794.44	18,359.86	75,154.30	0.00	0.00	0.00	56,794.44	18,359.86	75,154.30
2005	4,538.22	1,760.25	6,298.47	0.00	0.00	0.00	4,538.22	1,760.25	6,298.47
2006	0.00	29.11	29.11	89.09	20.92	110.01	89.09	50.03	139.12
2007	0.00	29.11	29.11	89.09	20.92	110.01	89.09	50.03	139.12
2008	0.00	29.11	29.11	89.09	20.92	110.01	89.09	50.03	139.12
2009	0.00	29.11	29.11	89.09	20.92	110.01	89.09	50.03	139.12
2010	0.00	19.40	19.40	89.09	20.92	110.01	89.09	40.32	129.41
~	~								
2025	0.00	0.00	0.00	89.09	20.92	110.01	89.09	20.92	110.01
Total	166,371.27	73,449.30	239,820.57	1,781.80	418.40	2,200.20	168,153.07	73,867.70	242,020.77

CHAPTER 15 CONCLUSIONS AND RECOMMENDATIONS

Based on this Feasibility Study on the Can Tho Bridge Construction in Socialist Republic of Viet Nam, which presents the results of numerous engineering and economic studies, the following conclusions and recommendations can be offered:

1) The study area belongs to a part of the Mekong River, which originates in the Tibetan Plateau and drains into the South China Sea. The watershed of the Mekong River falls in most of the Indo-Chinese countries, namely, Viet Nam, Cambodia, Thailand, Myanmar, Laos, and China. This watershed area is about 795,000 sq. km., and the river measures 4,200 km long. During the wet season, the river water level increases and large scale inundation occurs in the north. Generally, flooding in this area starts in July or August and extends to November or December. The past flood incidents that occurred in the Can Tho Area must be considered in planning the bridge; the largest flood occurred on 25 October 1961 with a record water level of 2.09 m.

2) The daily tidal change in the vicinity of the estuary is considerably large, and the range of high tide is considerably high. The effects of tides are lessening towards the upper stream. Also, it is observed that the changes are high in the dry season (December to July), than the period where the water level of the river is high, and it should be considered in the design.

3) In the future, the N.H. No. 1 can be connected to other major international roads linking China, Cambodia, Laos, and Thailand. The Vietnamese Government has planned a general programme of road rehabilitation and maintenance to meet the demands of the South-East Asia region as well as the modern transport development.

4) Transport in the Mekong Delta depends on inland waterway, road, sea, and air. Since the economy in Viet Nam has been expanding rapidly, there has been a shift of freight transport from railway to roads. Can Tho City is the largest and most important city in the Mekong Delta as a key food producing area and a major city of an economic and scientific center of the Mekong Delta. The presence of a Can Tho Bridge, therefore, is a must so that transport and connection among

neighboring areas are facilitated and development in economy on both river banks is accelerated.

5) A two-lane bridge with motorcycles will reach its capacity in year 2011 (5 years after opening in 2006). The capacity for the two-lane facility can be approximated at 20,000 pcu./day. The capacity for a four-lane facility (two lanes in each direction) is approximated at 60,000 pcu./day. Thus, the four (4) lane carriageway is required for the bridge and the approach roads to meet future demand.

6) The option C-3 on the Vinh Long side and the option C-2 on the Can Tho side was selected as the most suitable alternative route for the Can Tho Bridge construction in consideration of engineering, economic, and environmental aspects, i.e. feasible economic indicator (EIRR = 13.5%), less problems on hydrological and hydraulic conditions, less compensation for resettlement of houses and land acquisition, and less influence to the environment.

7) A vertical navigational of 39.0 m (for vessel size 15,000 DWT) above the flood water level of 5% frequency (20-year return period) was agrees on 27 March 1998 at the Steering Committee Meeting.

8) The design criteria and standards shall be set up, referring to the detailed design of the My Thuan Bridge which is also located on N.H. No. 1 and 30 km from the Can Tho Bridge.

   Standards and Specifications for the design shall be based mainly on the Vietnamese Standards or Codes, otherwise AASHTO Specifications or Japanese Standards.

9) The span length of the main bridge depends not only on the required navigational (horizontal) clearance, but the required conditions that the bridge structure shall be free from hydrodynamic issues, due to the riverbed deepening at the river section of the bridge crossing point, which may be caused by the planform (riverbank) changes at the upstream of the bridge site. Thus, the required span length for the main bridge shall be greater than 500 m so that the main towers of the bridge can straddle the deepened channel.

10) An appropriate bridge type is not the monolithic bridge type, but a group of bridge types, i.e. for crossing the main stream, Hybrid Cable-

stayed and Prestressed Concrete (PC) Box Girder type for approach spans, are recommended. As for the substream, Balanced Cantilever PC Box Bridge type is recommended.

11) The maintenance organization should be simple and be met by the specific requirements and resources of Viet Nam, and be accommodated with the existing Vietnamese organizations and budgetary systems for the maintenance of highways.

12) The construction cost covers mobilization/demobilization, main & approach bridges, and approach roads and is estimated at 200.0 mil. USD, while the project cost including engineering cost, environmental cost, land acquisition, compensation, etc. is 239.8 mil. USD.

13) The tentative construction schedule is 45 months from 2001 to 2005.

14) The economic internal rates of return (EIRRs) of the options of the basic alternative case which was related to the selected route varies from 13.4 to 14.0%. This small variation in EIRR is attributable to the narrow differences among the estimated costs for each options. The basic alternative case, that is the route option C-3 on the Vinh Long side and the option C-2 on the Can Tho side has an EIRR of 13.5%, resulting in this option being recommended with due consideration of technical feasibility, including environmental aspects.

15) The profitability of the Project cannot be highly expected without favorable financing conditions and government subsidies. Under such favorable condition the Project is viable and resist considerable falling down of forecast revenue. Work items to be subsidized by the government shall be those for which no soft loan can be applied due to financing conditions. It is recommended to select the long-term loan with generous financing conditions of interest rate, grace period, repayment period, and applicable work items.

    The user toll charges for the Can Tho Bridge will be set higher than those of the nearby My Thuan Bridge. Providing that the future traffic volume on the Bridge expand as forecast, it is expected that the charges for the Can Tho Bridge would be below the users' affordable level.

16) The adverse impacts on the natural environment or socio-economic environment of the study area are small in scale and can be easily mitigated by appropriate measures. The adverse impacts caused by the construction of the proposed bridge will certainly not overweigh the benefits which the whole Mekong Delta region would achieve from implementation of the Project.

To mitigate the adverse impacts on the socio-economic environment of the local communities, the construction of two resettlement zones and two service areas somewhere close to the bridge is recommended. These plans should be examined in detail and prepared at early stage of the detailed study after approval of the Project.

The issue of compensation for loss of dwellings and lands should be discussed carefully to avoid the delay of the construction, soon after approval of the Project.

The Study Team concludes that construction of the Can Tho Bridge is technically and economically feasible under proper finance conditions. Thus, it is recommended that the implementation be in the immediate future.

JICA