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1.11 Comments of the Ministry of Transport on the Can Tho Bridge's total cost estimate (No. 2889/GTVT/CGD), 30 August 2000

MINISTRY OF TRANSPORT SOCIALIST REPUBLIC OF VIETNAM

80- Tran Hung Dao Hanoi - Vietnam Tel: 84-4 8252079 Fax: 84-4 8267291

No.2889/GTVT/CGD

Hanoi, 30 August, 2000

Subject: Comments of the Ministry of Transport on the Can Tho bridge's total cost estimate

To: The Japan International Cooperation Agency (JICA)

Pursuant to the Memorandum of Understanding concluded on 7 August 2000 between the Ministry of Transport and JICA Study Team, Nippon Koei Co., Ltd. (the Study Team);

Pursuant to the "Draft final report on the Technical Design of Can Tho bridge construction Project" prepared in May 2000 and documents on the cost estimates submitted to the Ministry of Transport;

The Ministry of Transport has made comments as follows

I/ General issues:

Comments are concluded based on the documents submitted to the Ministry of Transport.

- 1. JICA is requested to immediately send the final official total cost estimate, enclosed with unit price analysis for Vietnam side's checking. Under which, construction and installation cost has been adjusted according to the revised amount, which is based on the comments on the technical design.
- Vietnam side provided Other expenses (excluding from the construction and installation cost) based on the Vietnamese Government's regulations (appendix 1). The Study Team is requested to take the matter into account and to include in the total cost estimate.
- 3. Based on the agreement between the Vietnamese Government and the Overseas Economic Cooperation Fund, OECF, (now is Japan Bank for International Cooperation, JBIC), the Study Team exchanged to USD at the exchange rate as follows:
 - USD 1 = JPY 140
 - USD 1 = VND 13,900

The difference between the total cost estimate based on the exchange rate of USD 1 = JPY 140 and the current exchange rate shall be mentioned in a separate contingency item.

Besides, for the Ministry of Transport's checking, the final result should include the alternative under which the total cost estimate is calculated at the current exchange rate.

4. Based on the data of the accurate total cost estimate in accordance with the final revised technical design, the Study Team shall have to explain in details the reasons for the increase in the cost, in comparison with that prepared in the Feasibility Study Report.

TI/ Details:

After consideration of the main items, the Ministry of Transport has the following comments:

- 1. For the unit price which have been or have not been analyzed in details by the Study Team, based on the unit prices of the projects approved and constructed in Vietnam, the Study Team is suggested to use those for the items at approach bridge and bridge on the viaduct of the Can Tho bridge construction project (appendix 2).
- 2. For the unit price of the main bridge's items, the Study Team is suggested to consider for reference and to use international bidding unit price of similar projects in the region (appendix 2).

III/ Schedule:

- 1. IICA shall provide all testing results of technical standard, pending problems in term of design, which were requested at the MOU signed on 7 August 2000, and to continue to provide unit price on 5 September 2000.
- 2. ICA is requested to reply and to send the cost estimate based on comments on the total cost estimate prepared by Vietnam side on 10 September 2000.
- 3. The Ministry of Transport shall send to the IICA the official comments on the technical design and the total cost estimate of the "Draft Final Report on the Technical Design of the Can Tho bridge construction project" on 15 September 2000.
- 4. After receiving comments from the Ministry of Transport on the "Draft Final Report on the technical design of the Can Tho bridge construction project", ICA shall complete the dossiers for submission of Final Report in late of October 2000 to the Ministry of Transport.

The above mentioned points are the Ministry of Transport's comments on the cost estimate. Ministry of Transport would like to receive the early comments from the IICA.

Recepient:

- Ditto
- The minister (for report)
- The vice ministers
 - + Pham Quang Tuyen
 - + Nguyen Tan Man
 - + Nguyen Viet Tien
- The Planning and Investment Department
- The International relation Department
- The Science and Technology Department
- My Thuan PMU
- TEDI South
- Proof Checking consultants
- Nippon Koei Co., Ltd
- Kept in the office, TCQM (2)

FOR THE MINISTER VICE MINISTER

(Signed)

NGUYEN VIET TIEN

Appendix 1

Regarding other expenditures
(enclosed with the official letter No. 2889/GTVT/CGD dated August 30th, 2000)

No.	Expenditures	Unit	Amount	Remarks:
1	Other expenditures	Million USD	84,263	·
1	Consulting fee for review of design documents, preparation & evaluation on P/Q documents, construction supervision (6% of civil construction value)	-	12,012	According to official letter No.44 dated April 14th, 1999 of the Checking Council
2	Expenditures for Project management, construction of operation house, procurement of equipment, fee for checking Detailed Design and Total Cost Estimate, etc.	-	3,780	According to official letter No.44 dated April 14th, 1999 of the Checking Council
3	Expenditure on land acquisition (activities of LA committee, land measuring, compensation, etc.) and environmental monitoring.	-	10,720	Pursuant to Decision No.1042/GTVT dated April 29th, 2000 of Minister of MOT Data reported by the Consultant to TCQM on Aug 5th, 2000
4	Provision for escalation	•	22,797	According to official letter No.44 dated April 14th, 1999 of the Checking Council
5	Provision for increasing volume of work	•	22,058	According to official letter No.44 dated April 14th, 1999 of the Checking Council
6	Expenditure for demining (removal of mines and bombs) $0.1 \le 0$		0,800	According to provisional cost estimate prepared by Headquarters of Sapper
7	Loan interests during construction period	-	9,596	According to official letter No.44 dated April 14th, 1999 of the Checking Council
8	Furnishing of maintenance equipment	-	2,000	Provisional estimation
9	Bridge Memorial House (building, articles, equipment, film, etc.)	•	0,500	Provisional estimation
П	Expenditures for construction stage	Million USD	2,924	
10	Budget for translation work supporting for meetings held for the Project		0,5	Provisional estimation
11	Expenditure for ground-breaking ceremony	-	0,025	Twice larger than My Thuan Bridge Project
12	Expenditure for acceptance at various levels of authorities		0,03	Twice larger than My Thuan Bridge Project
13	Expenditure for quality checking at various levels of authorities	-	0,025	•
14	Expenditure for completion ceremony of the project	-	0,2	-
15	Expenditure for Insurance of the Works (0.02%)	_	0,059	Pursuant to Circular No. 137/1999.TT of Ministry of Finance dated November 19th, 1999
16	Expenditure for keeping as-built documents		0,025	Twice larger than My Thuan Bridge Project
17	Expenditure for training and technological transfer		2	Twice larger than My Thuan Bridge Project
18	Auditing fee (Vietnamese side)		0,03	Provisional estimation
19	Expenditure for booking finalization of the Works	•	0,03	Provisional estimation
	Total	Million USD	87,187	

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Appendix 2 - Construction Cost Estimate Checking Results of Construction Economics Institute - Ministry of Construction

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1 4 (1) Package 3 1 5 5 Offices for Engineers Construction and maintenance of offices for engineers, including furniture, equipment, and specialized tools 1 5 (1) specialized tools 1 6 Nehicles and canoes for engineers Provision and maintenance of vehicles for engineers, including drivers Provision and maintenance of canoes for engineers, including drivers Provision and maintenance of canoes for engineers, including drivers 1 7 7 Houses for engineers Construction and maintenance houses for engineers 1 7 (1) engineers Services provided by the Contractor during construction stage 2 Site Clearing and Demolition 2 1 8 Site Clearing and Demolition 2 1 (1) Site Clearing and Demolition (rice fields) 2 1 (2) Tree removal (more than 50 trees/100m2) Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mai (700mm thick)	[Maintenance of road traffic and navigation for				
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1 5 (1) specialized tools 6 6 Vehicles and cances for engineers Provision and maintenance of vehicles for 1 6 (1) engineers, including drivers Provision and maintenance of cances for Provision and maintenance of cances for Provision and maintenance of cances for Provision and maintenance houses for Provision and maintenance for Provisio			-		}		}	· }
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1 6 (2) engineers, including drivers 1 7 7 Houses for engineers Construction and maintenance houses for engineers 1 8 Services provided by the Contractor during 1 8 (1) construction stage 2 Site Clearing and Demolition 2 1 8 Site Clearing and Demolition 2 1 (1) Site Clearing and Demolition (rice fields) 2 1 (2) Tree removal (more than 50 trees/100m2) 3 Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)					 -			
1 7 7 Houses for engineers Construction and maintenance houses for engineers 1 8 Services provided by the Contractor during 1 8 (1) construction stage 2 Site Clearing and Demolition 2 1 8 Site Clearing and Demolition 2 1 (1) Site Clearing and Demolition (rice fields) 2 1 (2) Tree removal (more than 50 trees/100m2) Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)	1	6	(2)	engineers, including drivers	l	<u> </u>		
1 7 (1) Construction and maintenance houses for engineers Services provided by the Contractor during Services provided by the Contractor during Services provided by the Contractor during Site Clearing and Demolition Site Clearing and Demolition 1 8 Site Clearing and Demolition 2 1 8 Site Clearing and Demolition (rice fields) Tree removal (more than 50 trees/100m2) Earth Work Filling and removal of construction materials Sand mat (700mm thick)		<u></u>	L.		1	<u> </u>	* *************************************	
1 8 Services provided by the Contractor during 1 8 (1) construction stage 2 Site Clearing and Demolition 2 1 8 Site Clearing and Demolition 2 1 (1) Site Clearing and Demolition (rice fields) 2 1 (2) Tree removal (more than 50 trees/100m2) 3 Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)	1	ļ <u>7</u>	1.7	Houses for engineers				<u> </u>
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Services provided by the Contractor during (1) Site Clearing and Demolition 2					 .			
1 8 (1) construction stage 2 Site Clearing and Demolition 2 1 8 Site Clearing and Demolition 2 1 (1) Site Clearing and Demolition (rice fields) 2 1 (2) Tree removal (more than 50 trees/100m2) 3 Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)	!			Caprions provided by the O				
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2 1 8 Site Clearing and Demolition 2 1 (1) Site Clearing and Demolition (rice fields) 2 1 (2) Tree removal (more than 50 trees/100m2) 3 Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)		,	' ' '	construction stage				
2 1 8 Site Clearing and Demolition 2 1 (1) Site Clearing and Demolition (rice fields) 2 1 (2) Tree removal (more than 50 trees/100m2) 3 Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)			ļ .	Site Clearing and Damplities	 			
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3 Earth Work 3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)		1	(2)	Tree removal/more than 50 trans/100m2\	 			
3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)		:	\- /	(Strict and the trial of trees/ (Online)	 			
3 1 9 Filling and removal of construction materials 3 1 (1) Sand mat (700mm thick)	3			Earth Work	100			,
3 1 (1) Sand mat (700mm thick)	3	1	9		ļ		** ** * * * ****	
The second secon	3	1	(1)	Sand mat (700mm thick)	}			
		•••	et /	The second secon	l	L	I	

1	1		to the first of the commence o
			Providing, dumping, tamping, and levelling of
			sand at depth of more than 1.05m below the
3	1	(2)	pavement elevation
		2	Providing, dumping, tamping, and levelling of
	1		
1		1	sand at depth of less than 1.05m below the
3	1	/21	pavement elevation (subgrade)
	<u> </u>	757	
	i		Providing, dumping, tamping, and levelling of
1			
		1	sand prior to loading at depth of more than
3	1 1	(4)	2.0m above bottom layer of the subgrade
		۲۰۰۲	Providing, dumping, tamping, and levelling of
ĺ	1	ĺ :	
i	į		additional sand at depth of more than 2.0m
3	4	(5)	above bottom layer of the subgrade
3	1	(6)	Removal of surcharge
3	1	(7)	Removal of additional materials
	<u> </u>	14	Notification additional matching
 _			
3	2	10	Soft ground improvement
	d		
3	2	77	PVD
		Í	Sand pile (f=700mm) at selected locations
3	2	/21	
1 3	2	(4)	according to regulations (SCP)
	1		Design of soft ground improvement for
3	🤈	121	
1. 2	2	(3)	Package 1
	1	ł	Design of soft ground improvement for
, 3	2	(3)	Package 2
1-5	<u> </u>	13)	
1		· '	Design of soft ground improvement for
3	2	(3)	Package 3
	 ~	۲۲ <i>۲.</i>	- derage 0
	1		
3	1 3	11	Structural Excavation and Backfilling
	 	 	
	1	· .	[
3	3	(1)	Excavation of any material above water surface
		, ·	
١ ـ	_		
3	3	(2)	Excavation of any material below water surface
3	3	731	Structural excavation in river
3	3	(4)	Structural backfilling
		ļ	Excavation of any material above water surface
3	2	/EN	
- -	3	(5)	out of the structure
1	ŀ		Excavation of any material below water surface
3	3	(6)	out of the structure
[— - -	-		Set of the distriction of the set
l			
4	1	i	Slope Protection
4	1	12	Slope Protection
	1 - 1		
1	1 1	(1)	Slope levelling by bulldozer
1 1	1	r	Providing, dumping, tamping and levelling of
	,	///	less of the Art State of the St
4	\perp \perp	(2)	clay soil for the side slope (t=50cm)
4	1	(3)	Topsoil
4	1		
			Slope protection riprap
4	1	(5)	Berms riprap
4	1		Stone foundation for slope protection works
4	1 1	$\mathcal{L}(I)$	Lining work
]	i .	
5	 		
<u></u>	2	14	Side ditch
1 7			U-shaped side ditch with concrete cover
-		145	- in-per and direct that condities cover
5_	2	$\lfloor (7) \rfloor$	(400*400)
			U-shaped side ditch with concrete cover
_	_	/~:	Assess side direct with collecte cover
5	2		(400*250)
5	2	(3)	U-shaped side ditch (400*250)
5	2	<u>(4)</u>	U-shaped side ditch (400*400-750)
5	2	(5)	U-shaped side ditch (500*550)
5			
5	2	(6)	U-shaped side ditch (500*1000)
1.5	<u> </u>		
5	3		Catchpit
5	3		Catchpit type A
5			
<u> </u>	<u> </u>	(2)	Catchpit type B
			the second secon

	<i></i>	····			٠	r—	
5	3	(3)	Catchpit type C				
5	3	(4)	Catchpit type D				
5	3		Outlets for Package 1				
5	3		Outlets for Package 2			, 	
5	3	<u>(7)</u>	Outlets for Package 3				
l						<u> </u>	
6	1		Pavement		l		
6	1	16	Base and Subbase				i -
}- <u>-</u>			Providing, dumping, and tamping of subbase				
١,		743					
6	\ \	- \.!\	course (t=300)			<u> </u>	
	ł		Providing, dumping, and tamping of base			İ	
6	1	(2)	course (t=300)				
"	` `						
6	2	17	Tack Coat				
	~ .]	Tack coat by bituminous bedding layer (grade				
	٦	(4)	MC-70 or RC-250)		}		
6	- 2						
	2 2 2	(2)	Bituminous tack coat (grade RC-250)				
6			Prime coat t=5mm			<u></u>	
6	2	(4)	Surface layer for metal bridge				
6	3	18	Asphalt concrete				
;	3		Asphalt concrete binder course (t=100mm)				
1 -	<u> </u>	17.7	Asphalt concrete layer for steel bridge		1	· · · · · · · · · · · · · · · · · · ·	
6	3	(2)	(t=70mm)			1	[
		1 (2)	((-70mm)			 	
6	3	(3)	Surface asphalt concrete layer (t=50mm)	,		·	
1.		l	Surface asphalt concrete layer (t=70mm) for			ļ	
6	3	(4)	concrete bridge		ļ <u>.</u>		
	<u> </u>	<u>L</u>					
6	4	19	Gravelled road				
6	4	(1)	Gravelled road (t=150)				<u> </u>
	1	1					
7		<u> </u>	Concrete pile				
7	1	20	Concrete pile				
 -	1 <u> </u>	1=	Bored pile with diameter of 3000mm, type C		<u> </u>		
1 7	1	100	(fc=30Mpa), including casings				
 -	-	127	Bored pile with diameter of 2000mm, type C				
1		İ					
	1	1	(fc=30Mpa), including casings, fixed positioning				•
١_	.	1	pipe (temporarily calculated for budget				
7	1	(2)	estimation		<u> </u>		
	1		Bored pile with diameter of 1500mm, type C				
	1	(3)	(fc=30Mpa), including casings				
'	Τ.	"	Bored pile with diameter of 1500mm, type C				
		ı	(fc=30Mpa), including casings, fixed positioning				
7	1	(4)	pipe				
!	-	-1 -1 -1	Bored pile with diameter of 1200mm, type C	· • · · · ·			
7	1 4	/51	(fc=30Mpa), including casings			•	
7	 1 .	175)	Load testing for pile A (for bored pile with		-		
١.,	١.	1,5	, , ,		}		
7.	1	(6)	diameter of 3000mm)		 		
1		1	Load testing for pile B (excluding bored pile	ļ			
7	. [. 1	- 	with diameter of 3000mm)				
7	1	(8)	Concrete pile sonic load testing	İ		,	
8		十.一	General Concrete Work				
8	1	1 21	Concrete	1	 		
			Concrete, type A (fc=50Mpa)	ļ			
8	· []-						
8	<u> 1</u>	(2)	Concrete, type B-1 (fc=40Mpa)	ļ			
			Concrete B-2 (fc=40Mpa) (equivalent to tower				1
8	1	L	concrete MT)	_	_L	1	<u>l</u>
8	1	(4)	Concrete, type C (fc=35Mpa)				
8	1		Concrete, type D-1 (fc=30Mpa)	ļ	4		
8	<u> </u>	-1	Concrete, type D-2 (fc=30Mpa)	 -			
8			~	 -			
10	!	107	Concrete, type E (fc=24Mpa)	<u>L</u>	1		1

8	1	(8)	Concrete, type F (fc=15Mpa)				
8	2	22	Re-bar and Pre-stressing bar				
			Re-bar (for tower gate, pile tip, cast-in-situ				
			concrete box girders, hollow slabs, I frame				
			slabs and girders, piers, foundation, base,				
8	2	(1)	approach bridge deck, parapets)				
			Internal longitudinal pre-stressing bar during				
			construction (for bridges of hollow slabs and				
8	2	(2)	cast-in-situ concrete box girders)			Manager	
			External longitudinal pre-stressing bar, after			·	
			completion of construction (for bridges of cast-				
8	2	(3)	in-situ concrete box girders)				
			Dan stand to the control of the cont				1
			Pre-stressing bars, type A, crossing with each		;		
	1 1		other internally (for bridges of I girders and				
8	2	7.43	hollow deck slab, and bridges of cast-in-situ PC	ł	!	,	
}- ° -	 -	747	box girders and tower gate supporting bars)		- -		<u> </u>
8	3	23	Pre-cast I girder				
8	3		PC I girder, span 40.0m		·		
8	3		PC I girder, span 37.0m, height 1.85m				
8	3		PC I girder, span 31.0m, height 1.85m				
8	3		PC I girder, span 31.0m, height 1.65m				
8	3		PC I girder, span 28.0m, height 1.65m				
8	3		PC I girder, span 25.0m, height 1.45m		······································	* 11 - 111 - 11 1 1 1 1 1 1 1 1 1 1 1 1	·
8	3		PC I girder, span 25.0m, height 1.65m				
			Pre-cast concrete slab (type C) between				
8	3	(8)	girders t=80mm				
	.						
8	4	_24	Pre-cast PC box girder				
1 . 1			Production of PC box girder segments at				
8	4	(1)	casting yards			·	
8	4	(2)	Erection of PC box girder segments at tower gate			i	
	-	(4)	Erection of PC box girder segments at places				
8	4	(3)	other than tower gate			i	
<u> </u>			Installation of internal longitudinal pre-stressing				
8	4	(4)	bars for stays				
8	4	(5)	Installation of PC bars for stays				
8	4	(6)	Anchoring the below stays system				
8	5		Sewerage				
.8	5	<u>[(1)</u>	Sewerage, f=1,500mm	<u></u>			
	ا بير ا						, , ,,
8	6		Box culvert				
8	6		Box culvert, type A-s (2.50*1.50)	·	-	····	<u> </u>
8	6		Box culvert, type A-d (2.50*1.50*2)				
8	6		Box culvert, type B-d (2.50*2.00*2) Box culvert, type C-s (3.00*3.20)				<u></u>
8	6		Box culvert, type C-s (3.00*3.20)	·-· -·			
8	6		Box culvert, type D-s (3.00*3.50)		·· · ·		
8	6		Box culvert, type E-s (3.00 3.80)		*·		
8	6		Box culvert, type G-s (5.00*4.00)		·- · · · · ·		-··
8	6		Box culvert, type G-s (5.00*4.50)				
8	6		Box culvert, type H-s (5.00 4.50)				
8			Box culvert, type 1-8 (6.50*4.50)				
<u> </u>	- -	<u>\ ' ' '</u>					
9			Steel work				
9	1		Steel work				
9	1		Fabrication and erection of structural steel			:	
							L

<u></u>	٦.	Т	Fabrication and erection of structural steel and
9	۱ ۱		PC Composite
9	-		Erection of steel segments
9			Erection of Composite segments
	• '•	.3-7.	LIOUNION OUNIDOUS OU STATE OF THE PROPERTY OF
10			Stayed cable
10	1		Stayed cable
10		711	Installation of stays
10		12)	Stays securing
10		<u> (2)</u>	Otay's securing
11	······································		Bearing
11	1	29	Bearing
			Bearing with accessories, type 1 (600*300*57)
11	1	(1)	(I girders)
	<u>-</u> -	1	Bearing with accessories, type 2 (500*250*50)
11	1	(2)	(I girders)
	- ::	٠٠/.	Bearing with accessories, type 3 (700*350*50)
11	1	(3)	(hollow slab)
	<u> </u>		Bearing with accessories, type 4 (700*350*52)
11	1	(4)	(hollow siab)
		سة د در	Bearing with accessories, type 5 (800*600*52)
111	1	(5)	(hotlow slab)
			Bearing with accessories, type 6
11	1	(6)	(1500*1400*214) (PC box)
	[Bearing with accessories, type 7
11	1	(7)	(1410*1410*214) (PC box)
			Bearing with accessories, type 8 (660*560*125)
11	1	(8)	(side span of PC box)
	١.	۱,,	Bearing with accessories, type 9 (500*400) (M)
11	1	(9)	(I girder)
44	۱.	/40	Bearing with accessories, type 10 (600*500) (M) (I girder)
11	1	(10)	Bearing with accessories, type 11 (650*550)
11	1	/11	(M) (Rmax=210) (I girder)
	 '-	\`!.! <i>!</i>	Bearing with accessories, type 12 (650*550)
11	1	(12	(F) (Rmax=210) (I girder)
1	'-	` <u>:</u> =	Bearing with accessories, type 13 (650*550)
11	1	(13	(F) (Rmax=220) (I girder)
-		T` -	Bearing with accessories, type 14
11	1	(14	(720*720*130) (PC box)
	1		Bearing with accessories, type 15
. 1	1	(15	(1620*1620*265) (PC box)
ł		1	Bearing with accessories, type 16
11	1	(16	(1120*1120*437) (stayed cable)
1	_	1, -	Bearing with accessories, type 17
11	1	[(17)(1220*1220*459) (stayed cable)
1	١.	140	Bearing with accessories, type 18
11	. 1.	1719	(1120*1120*424) (stayed cable)
12	· -		Other bridge work
12	1	30	Bridge railing and joints
12		(1)	
12		(2)	
12		(3)	
12		(4)	
12		(5)	
- <u>-</u> -	╁	1	
12	2	32	Bridge Drainage
'		1	Drainage pipe, diameter 200mm, including
12	2	111	installation and support (PVC)
1	1	- ->.:.	Drainage pipe, diameter 165mm, including
12	2	(2	
			The state of the s

12	إتوا	(3)	Floor drain with accessories, type 1				l' ' · · · · · · · · · · · · · · · · · ·
12	2		Floor drain with accessories, type 2				
:-	-=-	1,12	They draw wat accepted type 2				
12	3	33	Protection lighting system				
12 12	3		Protection lighting system				
	3	7:17	Protection lighting system	· ·			
			<u> </u>			·	
12	4		Navigation aids				
12	4		Aviation light	. ,	·		
12	4		Navigation light				
12	4	(3)	Marking buoys for navigation				
13			Electrical services				
13	<u>``1</u>	35	Electrical services				
13	1	(1)	Electrical services for Package 1				
13	1		Electrical services for Package 2				
13	-		Electrical services for Package 3				
1-:-		٨٠٨	Liounday del vioco for F dottage o		ب		
14			Toll plaza system				·
14	1	35	Toll plaza system				ļ
14	1		Construction of toll plazas		·		
14					·		
14	1		Concrete pavement				
4	. 1	(3)	Construction of maintenance office				
1			<u> </u>				
15			Protection rail for passing vehicles				
							<u></u>
15	_ 1_		Protection rail for passing vehicles				
15	1		Protection rail for passing vehicles (type A)				
15	1	(2)	Protection rail for passing vehicles (type B)				
15	_ 1	(3)	Km marks made of pre-cast concrete			er in the stage of a second	
16			Traffic signs				
16	. 1		Traffic signs			tion with the Rouge Comment	
			Regulation signs and warning signs, pole type				
16	_1_	(1)					
1 1			Regulation signs and warning signs, pole type		Í		
16	_1_	(2)	2				
			Regulation signs and warning signs, pole type				
16	1	<u>(3)</u>	3				
1			Regulation signs and warning signs, pole type	ĺ			
16	1	(4)	4				
<u> 3</u>	1	(5)	Guide signs				
<u> </u>	ا ـ . ـ ا						
17			Traffic control devices				
17	1		Traffic control devices		···· · · · · ·	*	
17	1	(1)	Road markings, type A - generally used				
17	1		Delineator (for road section)				
17	1		Concrete curb, type A			<u> </u>	
17	1		Concrete curb, type B			··· · · · · · · · · ·	
17	1		Concrete barrier, type A (for road section)				
17	1		Concrete barrier, type B (for bridge section)				
17	1		Intersections	m. e			
				-· ·			
18			Sidewalk landscape				
18		40	Self-interlocked concrete brick sidewalk			****	
18		/11	Self-interlocked concrete brick sidewalk				
L-'-	1	$\Box U$	Toes-surespocked counties plack sloewsik				



Bộ giao thông vận tải Cộng hòa xã hội chủ nghĩa việt nam MINISTRY OF TRANSPORT SOCIALIST REPUBLIC OF VIETNAM

80 Trần Hưng Đạo Hà Nội - Việt Nam Tel: 84-4 8252079

Fax: 84-4 8267291

Số: AND....../GTVT/CGĐ V/v: Ý kiến của Bộ Giao thông vận tải về tổng dư toán cầu Cần Thơ Hà Nội, ngày 30 tháng 8 năm 2000

Kính gửi: Cơ quan Hợp tác Quốc tế Nhật bản (JICA)

Căn cứ vào Biên bản ghi nhớ ký ngày 7/8/2000 giữa Bộ Giao thông vận tải và Đoàn nghiên cứu của JICA – Công ty Nippon Koei Co., Ltd. (Đoàn nghiên cứu), trên cơ sở "Dự thảo báo cáo cuối cùng thiết kế kỹ thuật (TKKT) Dự án xây dựng cầu Cần Thơ" lập tháng 5/2000 và các bản tài liệu về dự toán đã gửi cho Bộ Giao thông vận tải,

Bộ Giao thông vận tải có các ý kiến như sau:

I/ Những vấn đề chung:

Ý kiến bình luận dựa trên cơ sở các tài liệu mà Bộ Giao thông vận tải đã nhân được.

- 1. Đề nghị JICA gửi ngay bản Tổng dự toán chính thức cuối cùng có kèm phân tích đơn giá chi tiết để phía Việt Nam xem xét, trong đó phần dự toán xây lấp đã được điều chính theo khối lượng đã được sửa đổi theo ý kiến bình luận về TKKT.
- 2. Phía Việt Nam đã cung cấp các Chi phí khác (ngoài phần Chi phí xây lắp) dựa trên các quy định của Chính phủ Việt Nam (Phụ lục 1), đề nghị Đoàn nghiên cứu xem xét và đưa vào tổng dự toán.
- 3. Đoàn nghiên cứu quy đổi ra đô-la Mỹ (USD) theo thống nhất giữa Chính phủ Việt Nam và Quỹ Hợp tác Kinh tế Hải ngoại OECF (nay là Ngân hàng Hợp tác Quốc tế Nhật bản JBIC) với tỷ giá quy đổi như sau:
 - 1 USD = 140¥
 - -1 USD = 13.900 dồng

Hiệu số chênh lệch tổng dự toán tính theo tỷ giá 1 USD = 140 ¥ so với thời điểm hiện tại sẽ được đưa vào một hạng mục dự phòng riêng.

Ngoài ra trong kết quả cuối cùng phải tính thêm phương án tổng dự toán tính theo tỷ giá hiện tại để Bộ Giao thông vận tải xem xét.

4. Trên cơ sở các số liệu tổng dự toán chính xác theo TKKT đã được sửa đổi lần cuối, Đoàn nghiên cứu phải giải trình chi tiết nguyên nhân làm tăng giá thành so với giai đoạn lập Báo cáo NCKT.

II/ Những vấn đề chi tiết:

Sau khi xem xét đơn giá các hạng mục chính, Bộ Giao thông vận tải có ý kiến như sau:

- 1. Với các đơn giá mà Đoàn nghiên cứu đã có phân tích hoặc chưa có phân tích chi tiết: căn cứ theo các đơn giá công trình đã được phê duyệt, đã được xây dựng ở Việt Nam đề nghị Đoàn nghiên cứu sử dụng cho các hạng mục thuộc phần cầu dẫn và cầu trên đường dẫn của Dự án xây dựng cầu Cần Thơ (Phụ lục 2).
- 2. Với các đơn giá các hạng mục thuộc phần cầu chính: đề nghị Đoàn nghiên cứu tham khảo và sử dụng đơn giá đấu thầu quốc tế của các dự án tương tự trong khu vực (Phụ lục 2).

III/ Tiến độ:

- 1. ЛСА sẽ cung cấp toàn bộ kết quả kiểm tra tiêu chuẩn kỹ thuật, các tồn tại về thiết kế (đã được yêu cầu trong Bản ghi nhớ ký ngày 7/8/2000) và cung cấp tiếp đơn giá chi tiết vào ngày 5/9/2000.
- 2. Đề nghị JICA trả lời ý kiến và gửi dự toán trên cơ sở bình luận tổng dự toán của phía Việt Nam vào ngày 10/9/2000.
- 3. Bộ Giao thông vận tải sẽ gửi cho JICA bình luận chính thức về TKKT và tổng dự toán của "Dự thảo Báo cáo cuối cùng về TKKT Dự án xây dựng cầu Cần Thơ" vào ngày 15/9/2000.
- 4. Sau khi nhận được các bình luận về "Dự thảo Báo cáo cuối cùng về TKKT và tổng dự toán Dự án xây dựng cầu Cần Thơ" từ phía Bộ Giao thông vận tải, phía JICA sẽ hoàn chỉnh hồ sơ trình lên Bộ Giao thông vận tải Báo cáo cuối cùng vào cuối tháng 10/2000.

Trên đây là ý kiến bình luận về dự toán lần thứ nhất của Bộ Giao thông vận tải. Mong sớm nhận được ý kiến của Cơ quan Hợp tác Quốc tế Nhật bản về , các vấn đề trên.

mrni

Nơi nhận:

-Như trên;

-Bộ trưởng (để b/c);

-Các thứ trưởng:

+Phạm Quang Tuyến

+Nguyễn Tấn Mẫn.

+Nguyễn Việt Tiến

-Vu KHDT;

-Vų QHQT;

-Vụ KHCN;

-Ban QLDAMý Thuận;

-TEDI South;

-Các đơn vị TVTĐ;

-Nippon Koei Co., Ltd.;

-Luu: VP, CGĐ (2).

K/T BỘ TRƯỞNG THỬ TRƯỞNG

Nguyễn Việ! Tiến

PHỤ LỤC 1 VỀ CÁC KHOẢN CHI PHÍ KHÁC (Kèm theo công văn số 2889......./GTVT/CGĐ ngày 30.. tháng 8 năm 2000)

Tên các hạng mục chỉ phí	Đơn vị tín	Glá trị	Ghl chú
ıl phí khác	Triệu USD	84,263	
nl phí Tư vấn xem xét hồ sơ thiết kế] - }	12,012	Theo văn bản số 44 ngày 14/04/1999 của Hội đồng thẩm định
o & đánh giả HST, giám sái thì công	l 1		-
% GTXL)	1		
ni phí QLDA, xãy dựng nhà	-	3,780	Theo văn bản số 44 ngày 14/04/1999 của Hội đồng thẩm định
ều hành, mua sắm thiết bị,chi phí	ĺĺĺ		•
ẩm định TKKT, TDT	ł i		
ni phi GPMB (hoại động Ban GPMB,	{ ·	10,720	Theo QĐ 1042/GTVT ngày 29/04/2000 của Bộ trưởng Bộ GTVT
vẽ địa chính, đền bù) và theo dôi	1 }		Số liệu TVTK báo cáo ngày 05/08/2000 tại Cục GĐ-QLCL
ól trường			
į phòng trượt giá	-	22,797	
/ phòng tăng khối lượng	-	22,058	- · · · · · · · · · · · · · · · · · · ·
ni phi rà phá bom mìn	! -	0,800	Theo dự toán tạm tính của Bộ Tư lệnh Công binh
ii vay trong thời gian xây dựng	-	9,596	• •
ni phi trang bị thiết bị duy lu bảo dưỡng	-	2,000	·
nà lưu niệm cầu (nhà, hiện vật, thiết bị, phịr	ກ)	0,500	Tạm tính
ni phí phục vụ giai đoạn thì công	Triệu USD	2,924	
nì phi biện dịch lài liệu, phục vụ các	1 - 1	0.5	Tạm linh
ộc họp hội nghị lác nghiệp dự án.			·
ni phi khởi công công trình	-	0,025	Gấp 2 lần dự án cầu Mỹ Thuận
i phí nghiệm lhu các cấp] -	0,03	Gấp 2 lần dự án cầu Mỹ Thuận
ni phí kiểm tra chất lượng các cấp	- [0,025	•
ni phi khánh thành bàn giao công trình	- 1	0,2	•
ni phi báo hiểm công trình (0,02%)	•	0,059	• • • • • • • • • • • • • • • • • • • •
i phi hoàn công lưu (rữ	-	0,025	Gấp 2 lần dự án cầu Mỹ Thuận
ni phí đảo tạo chuyển giao công nghệ	-	2	Gấp 2 làn dự án cầu Mỹ Thuận
ni phí kiểm toán (phía Việt Nam)		0,03	Tạm lính ·
ni phí guyết toán công trình	-	0,03	Tạm lính
Dna côha	Triệu USD	87 187	•
ng cộn	9	g Triệu USD	g Triệu USD 87 ,187

PHỤ LỤC SỐ 2- DỰ TOÁN CHI PHÍ XÂY DỰNG KẾT QUẢ THẨM ĐỊNH CỦA VIỆN KINH TẾ XÂY DỰNG - BỘ XÂ

.oại			Diễn giải	Đơn vị	Dơn giá	Đơn giá	Đơn giá
					Tiển ngoại tệ (Yên Nhật)	Tiển nội địa (VND)	Tổng cộng (VND)
,	·		Công tác chung				
` -	1	1	Huy động và giải toả				
	i		Huy động 1	LS	0	7.823.779.891	7.823,779.891
	1		Huy động 2	LS	255.474.524	10.015,618,372	38.077.451.078
, 🕂	1	(1)	Huy động 3	LS	0	4.161.585.048	4.161,585.048
7	-1		- Control of the cont				
1	1	(2)	Giải thể 1	LS	0	312.951.196	312.951.196
1	i	(2)	Giải thể 2	LS	102.048,931	680.000.000	11.889.311.693
١	ij	(2)	Giải thể 3	LS	. 0	135,000,000	135.000.000
,	2	 2	Xây dựng kho b⊜i tạm			·	
·	1		Xây dựng kho xưởng tạm 1	LS	0	17.569.140.570	17.569.140.570
1	1		Xāy dựng kho xưởng tạm 2	LS.	115.681.938	80.338.657.912	93.045.393.397
- 1	1		Xây dựng kho xưởng tạm 3	LS	0	10.914.563.700	10.914.563.700
		3	03				
	3		Công tác tạm Đường và cầu tạm số 1	LS	16.506.018	11.413.862.000	13.226.925.000
• •	3		Đường và cấu tạm số 2	LS	174,724,740	15.960.712.545	35.152.918.273
- 4	3		Đường và cấu tạm số 3	LS	48.254,356	20.865,675,551	26.166.030.478
	4	4	Duy tu và đảm bảo giao thông				
.	*	•	Duy lu và đảm bảo giao thông cho xe cô và		<u> </u>		
1	4	(1)	tấu thuyển gói 1	LS	0	219,798.463	219,798,463
1	4	(1)	Duy tu và đảm bảo giao thông cho xe cộ và tấu thuyển gói 2	LS	30.326.400	259.309.099	3.590.437.298
1	4	(1)	Duy tu và đảm bảo giao thông cho xe cộ và tầu thuyển gói 3	LS	0	233.828.152	233.828.152
1	5	5	Văn phòng cho kỹ sư				
1	5	(1)	Xây dựng và duy trì văn phòng cho kỹ sư kể cả đô gỗ, thiết bị và trang bị chuyên dùng	LS	0	677.970.000	677.970,000
		- <u>-</u> -		ļ			
1 -	6	6	Xe cộ và xuống cho kỹ sư	<u> </u>			
1	6	(1)	Cung cấp và duy trì xe cộ cho kỹ sư, bao gồm cả lái xe	LS	50.000.000	2.541.735.138	8.033.861,138
1	6	(2)	Cung cấp và bảo dưỡng tầu thuyến cho kỹ sư, bao gồm cả lái tầu	LS	0	2.969.675.000	2.969.675.000
.	7		Nhà ở cho kỹ sư	ļ			
	.' 7	7	Xây dựng và duy trì nhà ở cho kỹ sư	LS			
.' 	٠.	[\''' .	Asy doing ve day in hine o cho ky su		0	8.221.376.989	8,221,376,989
1	8						F 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	8	(1)	Các dịch vụ của Nhà thấu trong thời gian thực hiện công trình	LS	57.202.200	0	6.283,233,798
1	!		theo their cong that	† - <i></i> -	 		
2		٠	Don sạch mặt bằng và phá rỡ	l			
2	1	8	Don sạch mặt bằng và phá rỡ	<u> </u>	<u> </u>		
2	1	[(i)	Dọn sạch mặt bằng và phá rỡ (đồng lúa)	m2	0	1,943	1.943

Loạ	i		Diễn giảl	Đơn vị	Đơn giá	Đơn giá	Đơn giá
					Tiển ngoại tệ (Yên Nhật)	Tiền nội địa (VND)	Tổng cộng (VND)
2	1	(2)	Chuyển cây ra khỏi mặt bằng (trên 50 cây/100m2)	m2	0	4.329	. 4 329
	ļ						· .
_ 3	ļ		Công tác đất				
3	ļ1	9	Đấp và di chuyển vật liệu			00.675	
3	ļ¹,	(i)"	Lớp cát phủ (dày 700mm) Saud cava Cung cấp, đổ, lèn chặt và san cát lấp mặt	m2	. 0	28.275	28.275
3	1	(2)	đường ở đô sâu lớn hơn 1,05m dưới cốt của	m3	0	41.016	41.016
,		(2)	mat dường	1115		41.010	41.01
 د کا	 -		Cung cấp, đổ, lèn chặt và san cát lấp mặt				
ე გ	1	(3)	đường ở độ sâu nhỏ hơn 1,05m dưới cốt của	m3	o	39.082	39,08
5.		(-,	mặt đường (Lớp lót nền- Subgrade)			00,002	,
ud	π,		Cung cấp, đổ, lèn chặt và san cát lấp mặt				
3 tvd 3	1	(4)	đường trước khi chất tải ở độ sâu lớn hơn	m3	O	44.160	44.160
	1		2,0m trên lớp đây của lớp lót nền				
		·	Cung cấp, đổ và lấp cát thém vào nên đường	-			
3	1	(5)	ở độ sâu lớn hơn 2,0m trên lớp đây của lớp	m3	O	44.160	44.160
. <u>-</u>	ļ	ļ. <u> </u>	lót nền				
3	1		Chuyển các vật liệu chất tải trước	m3	0	14.816	14.81
3.	1_	(7)	Chuyển các vật liệu thêm	m3	0	14.114	14.114
	┨. │	. <u>.</u>					
3	2	i	Xử lý nền đất yếu				
3	2	(1)	Bác thám (PVD) Cọc cát (f=700mm) ở những vị tri đ⊟ chọn	m	47		6.00
3	2	(2)	theo qui định (SCP)	m	0	0	
3	2	(3)	Thiết lập phương pháp xử lý nên đất yếu gói	LS	7.541,588	0	828.387.07
			1 Thiết lập phương pháp xử lý nên đất yếu gói				
3	2	(3)	2 Thiết lập phương pháp xử lý nên đất yếu gói	LS	0	0	
3	2	(3)	3	LS	14.303.700	0	1.571,154.50
3	3	11	Đào và đắp đất cho các kết cấu				
	Τ_		Đào đất đối với bất cứ loại vật liệu nào bên			45.554	
3	3	(1)	trên mặt nước	m3	0	13.334	13.33
3	3	(2)	Đào đất đối với bất cứ loại vật liệu nào bên	m3	0	14.658	14.65
,	ľ	(2)	dưới mặt nước	l	L <u>.</u>		14.65
3	3_	(3)	Đào đặt cho kết cấu ở khu vực sông	m3	1.509	282.072	479.13
3	3.	(4)	·!- ·:'	m3	14	47.970	49.05
3	3	(5)	Đào đất đối với bất cư loại vật liệu nào ở trên	m3	o	14,000	14.00
	↓ .		mặt nước ngoài phần kết cấu .				
3	3	(6)	Đào đất đối với bất cứ loại vật liệu nào ở dưới mặt nước ngoài <u>phần kết cấ</u> u .	m3	0	14.000	14.00
	ļ., .						
4	┼¹-		Bảo vệ mái đốc				
	 -	12	Bảo vệ mái đốc				
4	1 -	(1)	San cạnh mái đốc bằng máy ủi Cung cấp, đổ, lèn chặt và san đất sét cho	m2	0	5.392	5.39
4	١	(2)	mặt bên của mái đốc (t=50cm)	m2	0	7.855	7.85
٠, ا	١,	(3)	Lớp đất mặt			47.004	
4	<u> </u>	1	Xây đả bảo vệ mái dốc	m2	0	47.081	47.08
,	1 7		IVOA OO DOO AG IIIGI OOC	m2	0	399.718	399.71
4	1	177	Xây đá bảo vệ mái đốc bên canh bờ đất				

, oại		ļ	Diễn giải	Đơn vị	Đơn giả	Đơn giá	Đơn giá
·					Tiển ngoại tệ (Yên Nhật)	Tiển nội địa (VND)	Tổng cộng (VND)
4	i	761 1	Móng cho phần xây dựng bảo vệ mái đốc bằng đá	m	519	758.159	815.205
4	1		Công tác xây phủ ngoài	m2	588	350.853	379.000
5		. !	Thoát nước				
5	1	13	ong BTCT			230,151	236,987
5 	1		ong BTCT, D-400mm	<u>m</u>	62		
5 	1	(2)	ống BTCT, D-500mm	m	97	306.014	316.634
5	2	14	R⊡nh bên thức				
5	2	(1)	R⊡nh bên hình chữ U có nắp bê tổng	m	477	1.496.335	1.548.761
Э.	2	(1)	(400°400)				
5	2	(2)	R⊡nh bên hình chữ U có nắp bê tông	m	418	1309.293	1:355.166
		(-)	(400*250)				
5	2	(3)	R⊡nh bēn hình chữ U (400*250)	m	267	804,280	832.459
5	2		R⊟nh bên hình chữ U (400*400-750)	m	362	1.314.000	1.360.000
5	2		R□nh bén hình chữ U (500*550)	m	475	1.555.993	1.605.552
5	2	(6)	Rānh bên hình chữ U (500*1000)	m	597	1.870.419	1.929.994
5	3	15	Hổ thụ_	 -			
5	3		Hổ thu loại A	Each	1,250	74.915.107	75 045 453
5	3		Hổ thu loại B	Each	1.283	74.922.855	75,056,743
5	3		Hố thu loại C	Each			
5	3	1	Hố thu loại D	Each			
	+-:	<u> </u>	Mièng thoát gói 1	Each	0	0	0
5 5	3		Miéng thoát gói 2	Each	0	0	. 0
5	3	(7)	Miệng thoát gói 3	Each	0	0	0
		-	Māt dường	ļ	<u> </u>		
6	1		Lớp nên và lớp lót nên	 -			
Þ	╢.	15	Cung cấp, đổ và đẩm chặt lớp lót nền (├ - 	 		
6	1	(1)	Subbase) (t=300)	m2	0	65.711	65,711
	-	ļ	Cung cấp, đổ và đẩm chặt lớp nên (·	
6	1	(2)	Base) (t=300)	m2	0	84.103	84, 103
•		· · · ·	10				
6	2	17_	Lop dinh bám adresart layar	1			
6	2	(1)	tớp định bảm bằng lớp lót bitum (mác MC-	m2	0	6.967	6.967
٠,	-	+ ,,,,	70 or RC-250)			2 050	2 000
Ь.	2	(2)	Lớp dinh bảm bằng bitum (mác RC-250)	m2	·	3.850	3.850
6	2	(3)		m2 m2	45 221	1.823 1.022	6.816 25.346
		' '					
6	3	18	Be tong at phan	ļ			
6	3	(1)	Lớp kết dinh bằng bètông át phan (t=100mm)	m2	165	56,704	74.080
6	3	(2)	Lớp bê tông át phan cho cầu thép (t=70mm)	m2	626	39.778	108.527
6	3	(3)	Lớp bệ tổng át phan mặt (t=50mm)	m2	79	52.432	65.464
6	3		Lớp bê tổng át phan mặt (t=70mm) cho cấu	m2	215	57 927	60.00
	13	(4)	bélông		115	57.827	69.991
Б	. 4	19	Duong rai soi graval mod	- 			
6	+	(1)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	m2	0	35,000	35.000
1	. ⊥ '	J. V!	[3-3/19 10/ 00/(1/ 100)			33,000	33.000

Loạ	i		Diễn giải	Đơn vị	Đơn giá	Dơn giá	Đơn giả
					Tiển ngoại tệ (Yên Nhật)	Tiến nội địa (VND)	Tổng cộng (VND)
7		-	Coc bé tông				
7	1	20	Cọc bế tổng				
7	1	(1)	Coc khoan đường kính 3000mm loại C (fc=30Mpa), gồm cả ống thép	m	385.617	14.670.858	57.027.962
7	1	(2)	Cọc khoan đường kính 2000 mm loại C (fc=30Mpa), gồm cả ống thép, với ống dựng cố định (tạm tính để dư trù vốn),	m	8.365	10.993.713	11.912,597
7	1	(3)	Cọc khoan đường kinh 1500 mm loại C (fc=30Mpa), gồm cả ống thép	m	4.577	4.926,072	5.428.89
7	1	(4)	Cọc khoan đường kính 1500mm loại C (fc=30Mpa), gồm cả ống thép, vớ <u>i ống dựng</u> cố định	m	18.726	5.138.467	7.195.537
7	1	(5)	Cọc khoan đường kinh 1200mm loại C (fc=30Mpa), gồm cả ống thép	m	5.561	3.208,389	3.819.290
7	1	(6)	Thử tải cọc A (đối với cọc khoan đường kinh 3000mm)	Each	30.749.220	0	3.377.571.813
7	1	(7)	Thử tải cọc B (không tinh cọc khoan đường kinh 3000mm)	Each	23.265.854	0	2,555,580,002
7.	1 -	(8)	Thử tải cọc bệ tông bằng sièu âm	Each	2\$5,871	0	28 105 526
8	1	21	Công tác bệ tông chung बैस्कार एक्ट Bệ tông				
8	1	-	Bê tông, loại A(fc=50Mpa)	m3	1.541	908,853	1,077.63
8	1	(2)	Bê tông, loai B-1 (fc=40Mpa)	m3	20.118	1.035.947	3,245.80
8	1	(3)	Bê tông, loại B-2 (fc=40Mpa)(tạm theo bê tổng tháp cấu MT)	m3	71.470	1.252.829	9.103.28
δ	ı	(4)	Bé tổng, loại C (fc=35Mpa)	m3	5.283	964.035	1,544,32
8	1	(5)	Bê tông, loại D-1 (fc=30Mpa)	m3	1.455	660.187	820.03
ß .	1	(6)	Bê tông, Ioai D-2 (fc=30Mpa)	m3	3.381	819.469	1.190.86
8	1	(7)	Bê tông, loại E (fc=24Mpa)	m3	5.878	743.808	1.389.41
8	1	(8)	Bê tông, loại F (fc=15Mpa)	m3	1.644	650,561	831.13
8	2	22	Thanh thép cốt và thanh căng trước				
8	2	(1)	Thanh thép cốt (cho công tháp, mũi cọc, các dâm hộp bệ tông đổ tại chỗ, các tấm rỗng, bản và dâm của các gián chữ l, trụ, móng, để, sàn cấu dẫn và <u>cờ cầu)</u>	tonne	1.449	4.659.477	4 818,693
8	2	² (2)	Thanh căng trước dọc bên trong khi lắp dựng (cho các cấu tấm rỗng và các cẩu có dẩm họp bê tông đổ tại chỗ)	tonne	225.434	4.570.495	29.332.74
8	2	(3)	Thanh căng trước dọc bên ngoài, sau khi hoàn thành lắp dựng (cho các cấu có dẩm hộp bằng bê tông đổ tại chỗ)	tonne	337.575	6.230.049	43,310,14
8	2	(4)	Các thanh căng trước loại A giao nhau bên trong (cho các cấu có dầm chữ I, sàn cấu rỗng, cấu có dầm hộp PC đổ tại chỗ và các thanh chống của cổng tháp)	tonne	568,907	5.424.000	67.915.72
	3	23	Dâm cấu chữ l đúc sắn may minds I o	ہار د			
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Losi			Diễn giải .	Đơn vị	Dơn giá	Đơn giá	Đơn giả
			alietacie		Tiền ngoại tệ (Yên Nhật)	Tiển nội địa (VND)	Tổng cộng (VND)
8	3	(2)	Dâm câu chữ I ứng lực trước, khẩu độ 37.00m, cao 1.85m	Each	1.833.769	66.852,882	268.278.643
δ.	3	(3)	Dầm cấu chữ l ứng lực trước, khẩu độ 31.00m, cao 1.85m	Each	1.392.858	46.130.026	199.125.026
8	3	(4)	Dâm cấu chữ l ứng lực trước, khẩu độ 31.00m, cao 1.65m	Each	1,334,914	41,375,790	188.006.065
8	3	. (5)	Dâm cầu chữ l ứng lực trước, khẩu độ 28,00m, cao 1.65m	Each	914.958	35.217.200	146.287.542
8	3	(6)	Dâm cấu chữ l ứng lực trước, khẩu độ 25.00m, cao 1.65m	Each	914.958	32.668.189	133.169.448
8	3	(7)	Dâm cầu chữ l ứng lực trước, khẩu độ 25.00m, cao 1.45m	Each	1.075.490	31.531.756	149.666.332
8	3	(8)	Tầm bê tông đúc sẵn (loại C) giữa các dầm t≍80mm	m2	135	1.786.638	1.801.444
			-				
- <u>8</u> 7	2	(1)	Dầm hộp PC đúc sẵn Sản xuất các đoạn của dầm hộp PC tại bái	Each	8.875,081	179.874.639	1.154.735.898
7	2	(2)	Lắp dựng các đoạn của dấm hộp PC tại cổng tháp	Each	6,950.920	7.208.554	770,715.133
7	2	(3)	Lắp dựng các đoạn của dầm hộp PC tại những nơi không phải cổng tháp	Each	5.207.821	4.894.183	576,934.317
7	2	(4)	Lắp đặt thanh càng trước dọc bên trong cho cáp dây văng	tonne	528.999	. 1.721.014	59.827,605
7	2	(5)	Lắp thanh PC cho cấp đây vàng	tấn	0		0
7.	2	(6)	Buộc hệ thống cáp phía đưới	LS	0	7.516.688.386	7.516.688.386
8	5		Dường cổng thoát nước				
8	5		Đường cống thoát nước, f=1,500mm	m	2.023	4.172.369	4.394.548
8	6	26	Cống hộp				
8	6	(1)	Cống hộp, loại A-s (2.50*1.50)	m	8.661	13.288,539	14.239.897
8	6	(2)	Cổng hộp, loại A-d (2.50*1.50*2)	m	12.698	17.235,763	18.630.513
8	6	(3)	Công hộp, loại B-d (2.50*2.00*2)	m	15.099	19,956,953	21.615,485
8	6	(4)	Cổng hộp, loại C-s (3.00*3.20)	m	15.370	17.908.187	19.596.514
8	6		Cống hộp, loại D-s (3.00*3.50)	m	20.357	26.067.958	28.304.022
8	6		Công hộp, loại E-s (3.00*3.80)	m	23.919	27.926.919	30,554,189
8	6		Công hôp, loại F-s (5.00*3.80)		39 449	42,831.526	
8	6		Cổng hộp, loại G-s (5.00*4.00)	m	35.617	43,701,616	47.164.711
<u>.</u>	6		Cổng hộp, loại H-s (5.00*4.50)	m			47.613.824
8	6		Cổng hộp, loại H-d (5.00*4.50*2)	m	40.805	52.346.352	56.828.458
8	6		Cong hop, loai I-s (6.50*4.50)	m	59.072 53.719	68.402.730 54.854.162	74.891.366 60.754.740
			Còng tác thép	 -			
9	1	27	Công tác thép				
9	i	(1)	Sản xuất và lắp dựng các đoạn kết cấu thép	tonne	0	39.513.650	39.513.650
9	1	(2)	Sản xuất và lắp dựng đoạn kết cấu thép và các đoạn PC Composite	Each	1.083.844	5.714.525.055	5.833.577.218
9	1	(3)	Lập dựng các đoạn thép	tonnne	31.441	53.764	2 507 270
9	1		Lắp dựng các đoạn Composite	Each	7.813.183	7.815.905	3.507.278 866.035.573
10			Công tác cáp văng				
	1	4	Công tác cáp văng				•

oại			Diễn giải	Đơn vị	Dơn giá	Đơn giá	Đơn giá
					Tiền ngoại tệ (Yên Nhật)	Tiển nội địa (VND)	Tổng cộng (VND)
10	1	(1)	Lắp đặt cáp vặng	tonne	674,014	244,453	74.279.882
10	1	(2)	Cố định cáp văng	No	612.745	403.974	67.709.076
 11			Tâm gối dỡ Marwy				
11	1	29	Tâm gối đố				
11	1	(1)	Tấm gối đỡ với các phụ kiện, loại 1 (600*300*57) (dấm cấu chữ I)	No	39.076	56.783	4.349.038
11	1	(2)	Tấm gối đỡ với các phụ kiện, loại 2 (500*250*50) (dầm cầu chữ I)	No	27.151	56.783	3.039.074
11	,	(3)	Tấm gối đỡ với các phụ kiện, loại 3 (700*350*50) (tấm rỗng)	No	53.287	66.131	5,919.272
11	1	(4)	Tám gối đỡ với các phụ kiện, loại 4 (700*350*52) (tấm rỗng)	No	53.287	56.783	5,909.924
 11	,	(5)	Tấm gôi đỡ với các phụ kiện, loại 5 (800*600*52) (tấm rỗng)	No	60.899	56.783	6.746,087
 11		(6)	Tâm gối đỡ với các phụ kiện, loại 6 (1500*1400*214) (hộp PC)	No	1.357.690	1.434.527	150.566.600
11	,	(7)	Tẩm gối đỡ với các phụ kiện, loại 7 (1410*1410*214) (hộp PC)	No	1.287.910	1.434.527	142.901.772
11	1	(8)	Tâm đệm đỡ với các phụ kiện, loại 8 (660*560*125) (nhịp sườn của hộp PC)	No	157.323	365.855	17.646.557
11	² 1	(9)	Tấm gối đỡ với các phụ kiện, loại 9 (600*400) (M) (dẩm chữ l)	·No	146.410	54,663	16.147.000
11	1	(10)	Tâm gối đỡ với các phụ kiện, loại 10(600*500) (M) (dâm chữ I)	No	138.995	72.200	15.267.506
11	1	(11)	Tấm gối đ ỡ với các phụ kiện, loại 11 (650*550) (M) (Rmax=210) (dầm chữ I)	No	98.340	68.108	10.801.913
11	1	(12)	Tâm gối đỡ với các phụ kiện, loại 12 (650*550) (F) (Rmax=210) (dầm chữ I)	No	122.864	68.000	13.563.000
11	1	(13)	Tấm gối đỡ với các phụ kiện, loại 13 (650*550) (F) (Rmax=220) (dẩm chữ l)	No	146.310	68.000	16.319.000
11	1	(14)	Tấm gối đỡ với các phụ kiện, loại 14 (720 720 130) (hộp PC)	No	265.296	392.350	29.140.787
11	,	(15)	Tấm gối đỡ với các phụ kiện, loại 15 (1620*1620*265) (hộp PC)	No	2,651,857	1,835,000	293.122.000
11	1	(16)	Tấm gôi đỡ với các phụ kiện, loại 16 (1120*1120*437) (cáp văng)	No	10.979.465	642.200	1.206.012.148
11	1	(17)	Tám gối đờ với các phụ kiện, loại 17 (1220°1220°459) (cáp văng)	No	12.435,808	642.200	1.365.980.467
11	1	(18)	Tếm gối đỡ với các phụ kiện, loại 18 (1120*1120*424) (cáp văng)	No	9.921.988	642.200	1.089.856.176
€ 16.2	F	alav	Công tác khác của cầu				
/'€\ 12	1	30	Lan can cầu và mối nổi	†	 		
12	1.	(1)	Lan can câu loai A	m	0	1.380.194	1,380,194
12	1	(2)	Lan can câu loại B	m	0	992.776	992.776
12	ī	(3)	Môi nối khe co giấn, loại A (300mm)	m	901.448	123.963	99.141.269
12	1	+	Mối nối khe co giãn, loại B (100mm)	m	189.810	219.242	21,068,45
12	1	(5)	Mối nói khe co giản, loại C (50mm)	m	99.900	212.487	11.185,75
12	2	32	Thoát nước cho cấu	L			
12	2	(1)	ống thoát nước, đường kinh 200mm gốm cả lắp đặt và đỡ (PVC)	m	2.503	8.756	283.698

.oại	i		Diễn giải	Đơn vị	Đơn giá	Đơn giá	. Đơn giá
					Tiển ngoại tệ (Yên Nhật)	Tiền nội địa (VND)	Tổng cộng (VND)
12	2	(2)	ống thoát nước, đường kính 165mm gồm cả lắp đặt và đỡ (PVC)	m	1,668	9.950	193.204
12	2	(3)	ống tiêu nước sản với phụ kiện, loại 1	Each	3.277	1,526,600	1.886.504
12	2		ống tiêu nước sản với phụ kiện, loại 2	Each	2.416	639.106	904,535
12	3	33	Hệ thống đèn báo vệ				
12	3		Hệ thống đèn bảo vệ	рò	0	15.566.000	15.566.000
12	4	34	Hệ thống trợ giúp trên biến				
12	4	L	Hệ thống đèn báo có trở ngại trên không	set	23.662.314	1.755.915	2.600.884.114
'~_ 12	†	(2)	Hệ thống đèn chiếu sáng ở trên cấu cho tẩu	set	4.682,813	113.056	514.484.981
12	1 1	l	thuyên Hệ thống phao hiệu hàng hải	set	7,992.000	308.059	878,169,479
· -	†						
13			Các dịch vụ điện				
3	1 -	35	Các dịch vụ điện			28.056.400.602	28.956,199.62
3	1 1		Diện cho gói 1	LS	0	28,956,199,622 12,551,992,544	12.551.992.54
3	<u> </u>		Diện cho gói 2	LS	0	28.368.797.123	28,368,797,12
3	<u> </u>	. (!).	Điện cho gói 3	Lo		28.366.797.123	20,300,797,12
4			Hệ thống tram thu lệ phí qua cầu				
4	11		Hệ thống trạm thu lệ phí qua cầu	<u> </u>			
4	. 1		Xây dựng các tram thu phí	LS	479.775	1.201.434.930	1.254.134.58
4		(2)	Mặt đường bê tông	m2	254	380.390	408,30
4	1	(3)	Xây đựng văn phòng công tác duy tu bảo dưỡng	LS	0	2.036.258.204	2.036.258,20
15			Lan can bảo vệ cho phương tiện đi lại				
	-	- 37	Lan can bảo vệ cho phương tiện đi lại	<u> </u>	<u> </u>		
	1	-	Lan can bảo về cho phương tiên đi lại (loại	 			
15	1.	(1)	A)	m	0	340.568	340.56
15	1	(2)	Lan can bảo vệ cho phương tiện đi lại (loại B)	m	0	340,568	340.56
15	1	(3)	Cội km bằng bêlông đúc sắn	Each	162	331.433	349.22
16	+		Biển báo hiệu giao thông	·			
16]1	38	Biển báo hiệu giao thông				
16	ī	(1)	Biển quy định và báo hiệu, cột loại 1	Each	0	. 1.233.765	1.233.76
16	17	(2)	· · · · · ·	Each	0	1.133,865	1.133.86
15	1	(3)	Biển quy định và báo hiệu, cột loại 3	Each	.0	1.008,990	1.008.99
16	1	(4)	Biển quy định và báo hiệu, cột loại 4	Each	0	866,633	866.63
16	1	(5)	Biển chỉ dẫn	Each	143	286.400	305.00
17	- -		Các thiết bị kiểm soát giao thống	+-	 		
17	1	39	· (· · · · · · · · · · · · · · · · · · ·	
17] (1)		m2	0	104,441	104.44
17	1-	(2)		Each		171.000	171.00
		1 '-'		+			
17	1	(3)	Bờ lễ bệ tông loại A	l m	55_	135.815	141,80

Loai	i		Diễn giải	Đơn vị	Đơn giá	Đơn giá	Đơn giá
					Tiến ngoại tệ (Yên Nhật)	Tiến nội địa (VND)	Tổng cộng (VND)
17	1	(5)	Barie bê tông, loại A (cho phần đường)	m	362	433.422	473.131
17	i	(6)	Barie bê tông, loại B (cho phần cấu)	m	362	433.422	473.131
17	۱		Các điểm giao nhau	Each			
18	-		Cành quan của Via hè				
18	1	40	Via hè lát bằng gạch bẽ tông tự chên				
15	1	(1)	Via hẻ bằng gạch bê tông tự chèn	m2	0	76.916	76.916

1.12 Technical Standards and Matters relating to the Technical Design of Can Tho Bridge Construction Project (No. 3410/GTVT/CGD), 9 October 2000

Ministry of Transport Socialist Republic of Vietnam

No.: 3410/GTVT-CGD

Re: Technical Standards and matters relating to

the Technical Design of Can Tho Bridge Construction Project

Hanoi, 9 October, 2000

To: The Japan International Cooperation Agency (JICA)

MOT received the letter dated 27 September 2000 of the IICA Study Team - Design Consultant Nippon Koei Co., Ltd. (the Study Team) providing answers to the matters mentioned in the Minutes of Meeting on 7 August 2000 between the representatives of the function departments and offices under MOT and the Study Team.

After studying answers made by the Study Team, at the request of Department of Science and Technology, and the Transport Construction Quality Control & Management Bureau and comments of the Vietnamese Proof Checking Consultant, MOT would have comments as follows:

. .

I. Design Standard

To agree with the standards applied, except the two standards as follows:

- 1. Regarding the acceleration coefficient, it is required to apply the coefficient A = 0.10 due to the following reasons:
- . The Vietnam Geophysics Institute proposed to select coefficent A = 0.07.
- According to the "Transportation Works in Earthquake" No. 22TCN 221-95, extremely important works should apply coefficient A = 0.10.
- The My Thuan bridge which is in similar conditions applied coefficient A = 0.10 (Both My Thuan Bridge and Can The Bridge are in grade-6 earthquake area).
- 2. Regarding the temperature effect, it is required to apply $\Delta T = \pm 15^{\circ}C$ due to the following reasons:
- ΔT = = 200C is usually applied in design of Vietnamese construction works.
- The My Thuan bridge was designed applying $\Delta T = \pm 15^{\circ}$ C.
- According to data of the Can Tho bridge construction project, the temperature difference is ± 11°C. Therefore, ΔT of higher value should be applied in order to assure the safety.

, 4

1 4 A -

II. Calculation Method:

- The Multi mode MM instead of Single mode SM (according to AASHTO LRFD, item 4.7.4.3.1) should be used in calculating the internal force by the earthquake loading combination.
- 2. According to the calculation made by the Vietnamese side, it is the wind loading combination which acts as the control group in calculation of the pylon foundation. Therefore, the Study Team is requested to review this matter.
- 3. It is requested to provide supplementary data for the technical design submitted to the Vietnamese side, including the following loading combinations:
- Loading combination caused by the breaking force on the bridge.
- Loading combination caused by the different subsidence of piers.
- Loading combination during the replacement of of cable stay or when a cable stay is suddenly broken.
- 4. Because the cable stay profile is not parallel, the Study Team is requested to apply the 3-dimension structure in calculation.
- 5. The Study Team is requested to apply the non-linear deformation (instead of linear deformation) according to item 4.6.3.7 of AASHTO in calculation of the main bridge.
- 6. To provide additional results on the calculation of the main girder's section in the case of torsion momentum and cutting force affecting at the same time.

III. Design solution:

- 1. According to the calculation made by the Vietnamese side, for bridges on the approach road using bored pile $\varnothing = 1.5m$, the number and length of piles can be remained, but the diameter can be reduced to $\varnothing = 1.2m$.
- 2. For bridges having the centerline skewing with the flow (the two piers are located alternately in the present design), it is requested to measure the flow direction in the flood season in the stage preparation for the shop drawings in order to decide the suitable pier's location.
- 3. For box culverts of ≥ 3m wide, the Study Team is requested to consider the removal of the embankment of 0.5m thick on the culvert in order to make the longitudinal section smoothly.
- 4. It is necessary to update the flood data in the year 2000 to incorporate into the design.

IV. Total cost estimate:

After studying the Draft Final Report and the total cost estimate in combination with the comments made by the Construction Economic Institute - Ministry of Construction, MOT accept the following results:

No.	Item.	Exchange ra USS1 = VND		Exchange ra US\$1 = VND	
		Mil. Yen	MO. USS	Mil. Yen	Mil. USS
I.	Construction & Installation fee	31,503.0	248	28,600.5	264.4
Π	Other coats				
1	Price escalation	778:0	6.2	3,096.0	24.4
2	Contingency	1,614.0	12.7	1,466.0	13.6
3	Consultant foe	1,721.0	13.6	1,721.0	15.9
4	Land acquisition cost	1,361.0	10.7	1,158.0	10.7
5	Administration cost	731.0	5.8	621.0	5.8
6	Maintenance equipment	254.0	2.0	216.0	2.0
_7	VAT Property of the Control	3,165.0	24.9	2,873.0	26.6
8	Income before tax	1,268,0	10,0	1,155.0	10,7
9::	Environmental protection	25.0	0,2	22.0	0.2
10	Bomb/ mine detection	102,0	0.8	86.0	0.8
•	Sub- total	10,870.0	85.6	9,905.0	91.8
	Total	42,521.0	334.8	41,014.5	375.2

However, the Study Team is requested to provide additional information on the following:

- 1. The Administration cost remains the same, but is proposed to separate into 2 items:
- Administration cost.
- Bridge maintenance equipment cost.
- 2. To add the toll plaza construction cost, estimatedly about 1 mil. USD.
- 3. Physical contingency can be 5%, but contingency for the Yen escalation is proposed to increase by 10% (if taking the exchange rate of US\$1 = \frac{1}{2}\$ 108, we can find that the price escalation possibility of the JPY is very high).

Above are the comments of MOT on the explanatory notes of the Study Team.

MOT would kindly request the JICA to study and reflect in the "Final Report on Technical Design of the Can The construction project" and the Total cost estimate before MOT giving its approval.

FOR THE MINISTER
VICE MINISTER

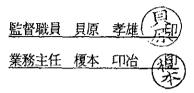
Nguyen Viet Tien

1.13 Memorandums of Meeting between JICA and Study Team (Described in Japanese Only)

様式第1号

打 合 簿

平成 12年 4月 13日



調査名 ヴィエトナム国カントー橋建設計画実施設計調査 (第2年次)

打合項目	打合内容及び結果
1. 分担監督職員につい	平成 12 年 4 月 10 日の打合せにおいて、JICA ヴィエトナム事務所長を分担
て	監督職員とし、その監督範囲について以下の通り合意した。
	1. 調査団員は以下の件について分担職員の承認を得ること。
[1) 事故・病気などやむをえない事由による団員の帰国
}	2) 軽微なフローの変更による現地工程の変更
]	3) 契約金額 500 万円以下の現地再委託契約
	4) 現地報告書説明
	5) 現地にて作成する報告書の技術的妥当性、計画的要素の妥当性、報告書
	の作成
	以上

打 合 簿

平成 12年 4月 13日

監督職員 貝原 孝雄



業務主任 榎本 卬冶



調査名 ヴィエトナム国カントー橋建設計画実施設計調査 (第2年次)

	打台	<u>}</u>	項	Ħ				打	合	内	容	及	び	結	果			
1.	現地再	委	託仕	·様書	調	査団は	現地	再委	託で	実施	する	「基	本設	計補	助、	詳細語	设計	補助、
	(案)	及	び契	2約書	積算:	補助、	入札	書図.	作成	補助	にか	かわ	る要	員派	遣亅	の仕札	漾書	(案)
	(案)	0)	承認	以につ	及び	契約書	(案) を	提出	し、	JI	CA	はこれ	れを着	承認 [した。		
	いて																	
					添付	書類:		, .				•						
							2.	業務	委託	契約	書(案)						
																		以上
																		火土

AGREEMENT
ON
THE ASSISTANT SERVICES (THE 2ND YEAR)
FOR
THE DETAILED DESIGN
OF
THE CAN THO BRIDGE CONSTRUCTION
IN
THE SOCIALIST REPUBLIC OF VIET NAM
(DRAFT)

APRIL, 2000

AGREEMENT

ON

THE ASSISTANT SERVICES (THE 2ND YEAR)

FOR

THE DETAILED DESIGN

OF

THE CAN THO BRIDGE CONSTRUCTION

THE SOCIALIST REPUBLIC OF VIET NAM

THIS AGREEMENT is made on the _____ day of _____ 2000 between Employer represented by Nippon Koei Contractor., Ltd., having its head office at 4, Kojimachi 5-chome, Chiyoda-ku, Tokyo, Japan (hereinafter called The Employer) and Transport Engineering Design Incorporated South (hereinafter called the Contractor) of the other part.

WHEREAS, The Employer is desirous that certain work should be undertaken for the Assistant Services (The 2nd Year) for the Study for the Detailed Design of the Can Tho Bridge Construction which is agreed between the Government of the Viet Nam and the Government of Japan. The Employer was entrusted by the Japan International Cooperation Agency (JICA) for the said purpose. The Employer accepted the Offer submitted by the Contractor for undertaking of this work.

WHEREAS, the Employer expects that the Contractor will furnish the Employer with the assistant services (the 2nd year) required under the Project.

WHEREAS, the Contractor agrees to render such services under the terms and conditions stipulated in this Agreement.

NOW THEREFORE, it is hereby agreed by and between the parties hereto as follows:

1. ASSIGNMENT

The assignment given to the Contractor is basically assistant services (the 2nd year) at the Project Office or any other assignment given to him or her from time to time.

2. SERVICES AND PERIOD

- 2.1 The Contractor shall carry out the services as described in the Technical Specification attached herewith, under the direction of the representative of NK (the RONK) or his designated person.
- 2.2 In order to undertake the above-mentioned specific tasks, the Contractor may be given further detailed instructions where necessary from time to time.
- 2.3 The positions and periods of services of the Contractor shall be shown in the schedule attached herewith. The period of services may, however, be extended or shortened upon written consent of the parties hereto.

3. BASIC WORKING TIME

Basic working time is regular time in Viet Nam's labor law as follows.

AM: 7h30 - 11h30 PM: 13h00 - 16h30 (Sundays and National holidays off)

4. TAX AND INSURANCE, ETC.

The Contractor shall be responsible for taxes, insurance, charges and/or fees of whatever imposed on the Contractor and the Contractor s staff.

5. PAYMENT

5.1 Basic Salary

The Employer shall pay based on the monthly invoice of the Contractor's remuneration for the time actually spent by the Contractor's staff in performing the services and with the working records for the Project, and certified by the RONK or designated person. For payment calculation, one (1) month period shall be considered from the beginning to the end of the month, while for the period less than one (1) month, it shall be calculated on a proratable bases (one day being equivalent to 1/30 of the month).

5.2 Overtime salary and Business trips

The overtime salary and the business trips will be paid to each engineer according actual condition by the RONK.

- Overtime salary:
 - +USD5/hour
 - +USD50/day (Sundays and National holidays)
- Business trips:
 - +Allowance and accommodation: USD 25/day
 - +Travelling tickets: actually paid

6. MANNERS OF SERVICE

- 6.1 The Contractor's staff shall execute his or her works in a diligent, honest and sober manner, and during the period of the services of the Project.
- 6.2 During the period of the services under the Project, the Contractor's staff shall be exclusively assigned to the Project and not be allowed to be engaged in any other services whatsoever.
- 6.3 Also the Contractor's staff shall not at any time disclose to any person or entity any confidential information obtained from his services under the Project.

7. REPLACEMENT OF STAFF

Should it become necessary to replace any member of the Contractor s staff during his or her assignment term, the RONK or his designated person could request for such replacement with a person of compatible experience and capability.

8. TERMINATION

This Agreement shall be terminated at the completion of the services unless otherwise terminated by either party upon thirty (30) days written notice, or by force measure and any other events not within the reasonable control of the parties hereto. The obligations and liabilities of the parties hereto shall expire at the termination of the Agreement.

9. MODIFICATION OF THIS AGREEMENT

This Agreement may only modified, in whole or in part, by the mutual agreement in writing of both parties

10. CONTRACT PRICE

The Employer agrees to the Contractor in consideration of fulfillment of the works and study in contract price of US\$ 17,000 (Seventeen thousand US dollars only) for the assistant services (the 2nd year) (US\$ 15,450) and the overtime works/the trips to out of city (US\$ 1,550, as the upper limit) in accordance with the terms and on conditions specified in the Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year entered on the first page hereof.

For and on behalf of THE EMPLOYER

THE CONTRACTOR

by
Authorized Representative
Name Koji Enomoto
Title Team Leader
The Detailed Design of
The Can Tho Bridge
Construction Project
Nippon Koei Co., Ltd.

by
Authorized Representative
Name Nguyen Van Loc
Title Director
Transport Engineering
Design Incorporated
South (TEDI SOUTH)

BILL OF QUANTITIES

No.	Position	B/R (USD)	M/M	Amount (USD)	Remarks
1	Chief Engineer	1,400	1.50	2,100	
2	Technical Advisor/ Coordinator	1,300	1.50	1,950	i
3	Bridge Engineer	1,200	1.50	1,800	
4	Finance Analyst	1,000	1.50	1,500	
5	Cost Estimator (A)	1,100	1.50	1,650	
6	Cost Estimator (C)	1,000	1.50	1,500	
7	Highway Engineer	1,200	1.50	1,800	
8	Document Specialist (A)	1,100	1.50	1,650	
9	Document Specialist (B)	1,000	1.50	1,500	
	TOTAL (M/M)		13.50	15,450	

Note: The Billing Rate (B/R) shall be inclusive of income tax, insurance, and any other taxes/charges imposed on from the Government of Viet Nam and Vietnamese provinces/cities.

Another, the expenses for the overtime works and the trips to out of city were estimated about US\$1,550 (one thousand five hundred fifty US dollars). It will be paid to each engineer according actual condition by the RONK.

Working Schedule of Staff to the Assistant Services (the 2nd Year) of the Study Team

					6661						!		2002			
						13	1st Year							2nd Year	47	
	Apr	May	l Jun	Jul	Aug	d _s S	ફ	Nov	Dec	Jan Fe	Feb 'A	Mar	Apr	May	Jun	Jul
Nsain and Approach Span Bridges Design		 							1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1							
Hydrological / Hydraulic / Drainnage System Design		 	 													
Highway Design													-			
Facility Design			 					The war the Buckley of the								
Cost Estimate							2.35 %	AT 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								
Financial Analysis																
Document Specialist							15 (15 (16))		1 (1 th 1 th 1 th 1 th 1 th 1 th 1 th 1							
CAD Operation	i 	•						24 65-32			— 12 4.4.5 					

THE CAN THO BRIDGE CONSTRUCTION SCHEDULE OF LOCAL STAFF

		1999	2000		M/N	
Position		1st year	!	1st year	2nd year	Total
	Apr. May Jun Jul	Aug Sep Oct Nov Dec Jan Feb	Mar Apr May Jun Jul			
Chief Eng				88	1.50	9.00
Termical Autosoft		15.5		7.50	1.50	6.00
Bridge Eng			100 Page 100	7.50	05.1	6.00
Drainage Eng				5.50	00.0	5.50
Hydrological & Hydraulic				2,00	0.00	2.00
Finance Estimale Eng				2.67	1.50	4.17
Cost Estimate Eng (Data)			Strategy, 188	7.50	1.50	9.00
Cost Estimate Eng		1. 可含化物, 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		6.67	0.00	6.67
		CONTRACTOR OF THE STATE OF THE		7.50	1.50	00'6
Facility Design Eng (A)				7.50	0.00	7.50
				750	00.0	7.50
Highway Eng				8,	1.50	00.6
Document Specialist(A)		本名の関係に対抗の対象を対象を対象を対象を対象の対象を対象を対象に対象に対象に対象を対象を対象を対象を対象を対象を対象を対象を対象を対象を対象を対象を対象を対		6.50	1.50	8.00
Document Specialist(B)			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5.70	1.50	7.20
CAD Operator(A)				82,	00.0	87.
CAD Operator(B)				2.00	0.00	8
CAD Operator(C)		の できません (大学) (大		2.00	00.0	\$.00
		TOTAL (Local Engineer)		108.54	13.50	122.04

THE DETAILED DESIGN OF THE CAN THO BRIDGE CONSTRUCTION PRROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM

TECHNICAL SPECIFICATION OF THE ASSISTANT SERVICES FOR THE STUDY (DRAFT)

APRIL, 2000

NIPPON KOEI CO., LTD.

TECHNICAL SPECIFICATIONS

1. General

This specification shall be applied to the works (the Works) of the assistant services (the 2nd year) for the Detail Design on the Can Tho Bridge Construction Project in Socialist Republic of Viet Nam, which is to be executed by Study Team represented by Nippon Koei Co, Ltd., having its head office at 4, Kojimachi 5-chome, Chiyoda-ku, Tokyo, Japan (hereinafter called the Study Team).

2. Introduction of the Project

In response to a request of Government of Viet Nam, Government of Japan decided to conduct the detailed design of the Can Tho Bridge Construction Project in the Socialist Republic of Viet Nam (hereinafter referred to as the Study and the Project), which is to be executed by JICA Team represented by Nippon Koei Co., Ltd., having its head office at 4, Kojimachi 5-chome, Chiyoda-ku, Tokyo, Japan in accordance with the relevant laws and regulations in force in Japan. JICA, the official agency responsible for the implementation of the technical cooperation programs of Government of Japanese, will undertake the Study in close cooperation with the authorities concerned of Government of Viet Nam.

3. Objective of the Study

The Objectives of the Study are to carry out necessary engineering and environmental surveys, complete a detailed design and draft tender documents of the Project, agreed on between OECF and Government of Viet Nam, and to pursue technology transfer to the Viet Namese counterpart personnel in the course of the Study.

4. Study Area and Bridge Location

The Study Area covers Can Tho City, Vinh Long Province and its vicinity where the influence of the Project will be expected. The Can Tho Bridge crossing the Hau River is situated about 2.9km downstream from the existing Can Tho ferry line.

5. Outline of the Project

1) Main and approach span bridges

•	Main bridge	1,090m
•	Approach span bridge (Vinh Long side)	480m
•	Approach span bridge (Can Tho side)	1,180m

- 2) Bridges for the approach road sections
 - L > 100m 3

- 100 > L > 50m 3
- L < 50m 11

Total 17 Bridges

- 3) Approach roads
 - Vinh Long side Approx. 5,410m
 - Can Tho side Approx. 7,690m

Total 13,100m

6. Scope of the Works

The staff to be provided by the Contractor shall assist the Study Team in coordination with local organization for collecting data, preparation of structural calculation and analysis, and design drawings in accordance with the requirements by the Study Team.

The "Contractor" shall mean any person, firm or company, which has chosen to enter into this contract after submitting a successful tender as part of an open bid by the Study Team and approval of JICA.

6.1 Detailed Requirements of the Assistant Services (The 2nd Year)

The detailed requirements of the assistant services (the 2nd year) can be categolized into four phases, i.e. detailed design, design quantities, cost estimate, and tender documents. The details are as below:

(1) Detailed Design

The staff to be provided by the Contractor shall assist the Study Team in preparing design calculations and drawings for the Detailed Design under the Study Teams supervision.

- a) Main span bridge and approach span bridge
- b) Approach roads
- c) Bridges in the approach road sections
- d) Interchanges
- e) Service areas
- f) Toll system and facilities
- g) Infrastructure facilities for resettlement inhabitants
- h) Design drawings

Design drawings will consist of:

- Drawing Schedule
- Location Map
- Construction Plan
- Alignment Layout
- Typical Cross-section
- Plan and Profile
- Elevation, Plan and Section of Bridge (General View)
- Superstructure (Main and Approach Span Bridges, Approach Roads & Bridges)
- Substructure
- Foundations
- Approach Road Plan
- Road Crossing Structures
- Soft Ground Treatment
- Intersections
- Drainage Systems
- Lighting, etc. Facilities
- Miscellaneous
- Ancillary Works
- Layout of Construction Yards

(2) Design Quantities

The staff to be provided by the Contractor shall assist in calculating the Bill of Quantity for the above drawings.

(3) Cost Estimate

The staff to be provided by the Contractor shall assist in estimating the construction costs based on the results of the detailed design and construction methods.

- a) Material cost, labor cost, transportation cost (land and ship), machinery cost, insurance and all other process costs.
- b) Work efficiency, productivity.
- c) Calculation, general expense and on-site expenses.
- d) Making of cost sheet for each item.
- e) Construction costs, supervision costs for the consulting service.
- f) Clients, general expenses.

- g) Compensation for acquisition of land, residence and facilities
- h) Calculation of cost for office work.
- i) In country exchange, foreign exchange.
- i) Tax, contingencies.

(4) Tender Documents

The staff to be provided by the Contractor shall assist in making tender document (draft) in accordance with the loan agreement packages. The tender documents include the following items.

- a) Pre-qualification document (including evaluation method)
- b) Tender document
 - Instructions for tenders
 - Form of Tender (form of tender, bid bond, performance bond)
 - Bill of quantities
 - General condition of contract
 - Specified condition of contract
 - General provisions
 - Technical specifications
 - Drawings
- c) Cost estimation books

6.2 Specific Duties and Obligations of the Assistant Staff

The assistant staff shall be responsible for the following duties and obligations in assisting the Study Team during the period of the Study.

(1) Chief Engineer

The Chief Engineer shall assist the Team Leader of the Study Team on all aspects of the Detailed Design and will be responsible for the management of the Contractor's staff. Other responsibilities shall include but not limited to the following:

- Assist the Team Leader to review and to adjust work schedule as necessary, and prepare guidelines particularly for the contractor s staff;
- Under the leadership of the Team Leader, hold regular project meeting and discuss problems and progress of activities;
- Prepare monthly project status to ensure the project standards as to quality are maintained at all times;

(2) Technical Advisor/Coordinator

The Technical Advisor/Coordinator will assist the Expatriate Staff in advising technical subjects and coordinating communication with the related authorities.

(3) Bridge Engineer

The Bridge Engineer will assist the Expatriate Bridge Engineer in the detailed design of the bridge structures. Other duties include the following:

- Review the Feasibility Study especially on the type of the bridge structure;
- Assess the existing conditions of the bridge site;
- Assist the Expatriate Bridge Engineer in the comparative study and selection of the type of bridge structure;
- Cost and quantity estimate of the bridge structure;
- And assist in the preparation of the Design Report

(4) Finance Analyst

The Finance Analyst shall be responsible for economical and financial analysis from the technical and social evaluation, environmental impact assessment.

(5) Cost Estimator (A), (B)

The Cost Estimators shall be responsible in doing unit price analysis of all construction items and in the collection of all necessary data such as market price of materials, equipment rental/owned costs and labor costs. Their other duties are the following:

- Preparation of the Bid Schedule or the Bill of Quantities
- Computation of bid quantities and costs
- Preparation of Unit Price Analysis Report
- Preparation of confidential Government Estimates by contract packaging
- Preparation of the Annual Financing Schedule

(6) Highway Engineer

The Highway Engineer shall assist the Expatriate Highway Engineer and will be responsible for the highway engineering.

- Review the Feasibility Study
- Setting up design criteria
- Geometrical standards
- Soft ground treatment
- Road lighting
- Road facilities

(7) Document Specialists (A), (B)

The Document Specialists shall be chiefly in charge in the preparation of tender documents to be submitted under the project. These documents include the Prequalification (P/Q) Documents, Instructions to Tenderer, Form of Tender, Form of Contract, General Conditions, Special Conditions, Form of Bonds, and Bill of Quantities. He shall also prepare the Technical Specifications for the construction of the project. His other duties include:

- Collection of all data regarding tendering such as Department Orders, Circulars etc.
- Establishment of the bid items in coordination with all the senior engineers and in accordance with the general specifications

7. Required Staff

The staff will work at the project office (Ho Chi Minh City), and assist the expatriate staff. The positions and number to be required are estimated as follow:

		for the 2nd year
1)	Chief Engineer	1.50
2)	Technical Advisor/Coodinator	1.50
3)	Bridge Engineer	1.50
4)	Finance Analyst	1.50
5)	Cost Estimator (A)	1.50
6)	Cost Estimator (B)	1.50
7)	Highway Engineer	1.50
8)	Document Specialist (A)	1.50
9)	Document Specialist (B)	1.50
	TOTAL	13.50 Man/Month

Note: - Preferably excellent spoken and written English for the positions from 1) to 9), and operating computer in his/ her expertise field for the positions from 1) to 9).

- Curriculum Vitae (C/V) will be required for the positions to be designated separately.

8. Measurement and Payment

Payment will be made based on the quantities as measured in the Bill of Quantities. The payment shall include full compensation for all designs.

BILL OF QUANTITIES

No.	Position	B/R	M/M	Amount	Remarks
1	Chief Engineer		1.50		ļ
2	Technical Advisor/Coodinator		1.50		
3	Bridge Engineer		1.50		
4	Finance Analyst		1.50		
5	Cost Estimator (A)		1.50		
6	Cost Estimator (B)		1.50		
7	Highway Engineer	<u> </u>	1.50		
8	Document Specialist (A)		1.50		
9	Document Specialist (B)		1.50		
	TOTAL (M/M)		13.50		

Note: The Billing Rate (B/R) shall be inclusive of income tax, insurance, and any other taxes/charges imposed on from the Government of Viet Nam and Vietnamese provinces/cities.

打 合 簿

平成 12年 4月21日

監督職員 貝原 孝雄 原

調査名 ヴィエトナム国カントー橋建設計画実施設計調査(第2年次)

打 合 項	—————————————————————————————————————	打合内容及び結果
		コンサルタントは現地再委託で実施する「基本設計補助、詳細設
21. 現地行女 3	記につい	計補助、積算補助、入札図書作成補助にかかわる要員派遣(第 2 年
で	4C(1 1	次)」の再委託先の選定経緯・理由及び見積を提出した。JICA は
		この内容を検討した結果、妥当なものとして、再委託契約を結ぶこ
		とを承認した。
		なお、再委託契約予定金額は 17,000US\$ (1,785,000 円:換算レ
		ート1US\$ = 105円)であり、契約書において計上した 1,820,000
		円の範囲内である。
		添付書類: 1. 選定経緯・理由
		2. 見積書
		3. 契約書(案)
		以上

添付書類: 1, 選定経緯·理由

1. 委託業務の概要

基本設計補助、詳細設計補助、積算補助、入札図書作成補助にかかわる要員派遣。

2. 予定委託先

Transport Engineering Design Inc. South (TEDI SOUTH)
92 Nam Ky Khoi Nghia, District 1, Ho Chi Minh City, Vietnam

3. 予定委託金額

1,785,000 円 (17,000US\$、1US\$=105 円とした場合) は、貴事業団との契約金額 (1,820,000 円) の範囲内である。

4. 委託先選定の経緯

- (1) 上記委託業務の内容について、第 1 年次の契約(第 NKA-403/1999 号承認)に引き続き、第 2 年次の作業の承認された「基本設計補助、詳細設計補助、積算補助、入札図書作成補助にかかわる要員派遣」の仕様書に従って、予定委託先の TEDI SOUTH に見積書の依頼をした。
- (2)業者からの見積書の提出と金額

Transport Engineering Design Inc. South (TEDI SOUTH)

(3)業者選定理由

- 見積内訳の内容は仕様書と一致し、金額は妥当である。
- 見積合計金額は貴事業団の契約額を超えていない。

上記の理由により、Transport Engineering Design Inc. South (TEDI SOUTH)を選定する。



CÔNG TY TƯ VẤN THIẾT KẾ GIAO THÔNG VẬN TẢI PHÍA NAM THẠNSPORT ENGINEERING DESIGN INCORPORATED SOUTH

Điạ chỉ: 92 Nam Kỳ Khởi Nghĩã, Quận 1, Tp. Hồ Chí Minh. Adress: 92 Nam Kỳ Khởi nghĩa, District 1, Hồ Chí Minh City

Diện Thoại: 08.8292.679 - 08.299.988 - Fax: (84 - 8) 8.292.661. Tel: 08.8299.988 - 08.8292.679 - Fax: (84 - 8) 8.292.661.

Email: tedisouth@hcm.vnn.vn

Ho Chi Minh City, April 16th 2000

Ref: Quotation for the assistant services (2nd year)

Detailed design of the Can Tho Bridge

Construction Project

TO: NIPPON KOEI CO., LTD.

Dear Sirs.

Transport Engineering Design Inc. South (TEDI South) would propose the Quotation for the assistant services (the 2nd year) for the detailed design of the Can Tho Bridge Construction Project as follows:

Services

USD 15,450

Overtime (estimated) :

USD 1,550

Total

USD 17,000

(Seventeen thousand US dollars)

(Details are shown in the Bill of Quantities enclosed)

Also, we would enclose herewith the Schedule of local staff (the 2^{nd} year) to assist the services of the Study Team.

Thank you for your cooperation.

t regards

ven Van Loc

Director

Cc: -File

BILL OF COST AND QUANTITIES OF ASSISTANT SERVICES (THE 2ND YEAR)

	Position	(USD)	M/M	Amount (USD)
	Chief Engineer	1,400	1.50	2,100
	Technical Advisor/ Coordinator	1,800	1.50	1,950
	Bridge Engineer	1,200	1.50	1,800
	Finance Analyst	1,000	1.50	1,500
	Cost Estimator (A)	1,100	1.50	1,660
Services	Cost Estimator (C)	1,000	1.50	1,500
	Highway Engineer	1,200	1.50	1,800
	Document Specialist (A)	1,100	1.50	1,650
	Document Specialist (B)	1,000	1.50	1,500
	Sub-Total CM/MO		13.50	15,450
Overtime (estimated)			1,550
TOTAL (M	/M)			17,000

THE CAN THO BRIDGE CONSTRUCTION SCHEDULE OF LOCAL STAFF

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Hydrological & Hydrablic Eng					1		$\frac{1}{1}$									28	00.00	200
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CAD Operator(C)						- - - - - - - - - - - - - - - - - - -	Property (Unite)	100000	Subsection for	স্থানা নিৰ্মান কৰি । শ্ৰীক্ষাৰ প্ৰস্থান কৰি প্ৰতিক্ৰিয়া কৰি কৰিছে কৰিছে কৰিছে কৰিছে কৰিছে কৰিছে কৰিছে কৰিছে ক	Poets.					5.00	00.0	5.00
						TOTAL (TOTAL (Local Engineer)	ineer)								108.54	13.50	122.04

AGREEMENT
ON
THE ASSISTANT SERVICES (THE 2ND YEAR)
FOR
THE DETAILED DESIGN
OF
THE CAN THO BRIDGE CONSTRUCTION
IN
THE SOCIALIST REPUBLIC OF VIET NAM
(DRAFT)

APRIL, 2000

AGREEMENT

ON

THE ASSISTANT SERVICES (THE 2ND YEAR) FOR

THE DETAILED DESIGN

OF

THE CAN THO BRIDGE CONSTRUCTION

THE SOCIALIST REPUBLIC OF VIET NAM

THIS AGREEMENT is made on the _____ day of _____ 2000 between Employer represented by Nippon Koei Contractor., Ltd., having its head office at 4, Kojimachi 5-chome, Chiyoda-ku, Tokyo, Japan (hereinafter called The Employer) and Transport Engineering Design Incorporated South (hereinafter called the Contractor) of the other part.

WHEREAS, The Employer is desirous that certain work should be undertaken for the Assistant Services (The 2nd Year) for the Study for the Detailed Design of the Can Tho Bridge Construction which is agreed between the Government of the Viet Nam and the Government of Japan. The Employer was entrusted by the Japan International Cooperation Agency (JICA) for the said purpose. The Employer accepted the Offer submitted by the Contractor for undertaking of this work.

WHEREAS, the Employer expects that the Contractor will furnish the Employer with the assistant services (the 2nd year) required under the Project.

WHEREAS, the Contractor agrees to render such services under the terms and conditions stipulated in this Agreement.

NOW THEREFORE, it is hereby agreed by and between the parties hereto as follows:

1. ASSIGNMENT

The assignment given to the Contractor is basically assistant services (the 2nd year) at the Project Office or any other assignment given to him or her from time to time.

2. SERVICES AND PERIOD

- 2.1 The Contractor shall carry out the services as described in the Technical Specification attached herewith, under the direction of the representative of NK (the RONK) or his designated person.
- 2.2 In order to undertake the above-mentioned specific tasks, the Contractor may be given further detailed instructions where necessary from time to time.
- 2.3 The positions and periods of services of the Contractor shall be shown in the schedule attached herewith. The period of services may, however, be extended or shortened upon written consent of the parties hereto.

3. BASIC WORKING TIME

Basic working time is regular time in Viet Nam's labor law as follows.

AM: 7h30 - 11h30 PM: 13h00 - 16h30 (Sundays and National holidays off)

4. TAX AND INSURANCE, ETC.

The Contractor shall be responsible for taxes, insurance, charges and/or fees of whatever imposed on the Contractor and the Contractor's staff.

5. PAYMENT

5.1 Basic Salary

The Employer shall pay based on the monthly invoice of the Contractor's remuneration for the time actually spent by the Contractor's staff in performing the services and with the working records for the Project, and certified by the RONK or designated person. For payment calculation, one (1) month period shall be considered from the beginning to the end of the month, while for the period less than one (1) month, it shall be calculated on a proratable bases (one day being equivalent to 1/30 of the month).

5.2 Overtime salary and Business trips

The overtime salary and the business trips will be paid to each engineer according actual condition by the RONK.

- Overtime salary:
 - +USD5/hour
 - +USD50/day (Sundays and National holidays)
- Business trips:
 - +Allowance and accommodation: USD 25/day
 - +Travelling tickets: actually paid

6. MANNERS OF SERVICE

- 6.1 The Contractor's staff shall execute his or her works in a diligent, honest and sober manner, and during the period of the services of the Project.
- 6.2 During the period of the services under the Project, the Contractor's staff shall be exclusively assigned to the Project and not be allowed to be engaged in any other services whatsoever.
- 6.3 Also the Contractor's staff shall not at any time disclose to any person or entity any confidential information obtained from his services under the Project.

7. REPLACEMENT OF STAFF

Should it become necessary to replace any member of the Contractor's staff during his or her assignment term, the RONK or his designated person could request for such replacement with a person of compatible experience and capability.

8. TERMINATION

This Agreement shall be terminated at the completion of the services unless otherwise terminated by either party upon thirty (30) days written notice, or by force measure and any other events not within the reasonable control of the parties hereto. The obligations and liabilities of the parties hereto shall expire at the termination of the Agreement.

9. MODIFICATION OF THIS AGREEMENT

This Agreement may only modified, in whole or in part, by the mutual agreement in writing of both parties

10. CONTRACT PRICE

The Employer agrees to the Contractor in consideration of fulfillment of the works and study in contract price of US\$ 17,000 (Seventeen thousand US dollars only) for the assistant services (the 2nd year) (US\$ 15,450) and the overtime works/the trips to out of city (US\$ 1,550, as the upper limit) in accordance with the terms and on conditions specified in the Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year entered on the first page hereof.

For and on behalf of THE EMPLOYER

THE CONTRACTOR

by
Authorized Representative
Name Koji Enomoto
Title Team Leader
The Detailed Design of
The Can Tho Bridge
Construction Project
Nippon Koei Co., Ltd.

by
Authorized Representative
Name Nguyen Van Loc
Title Director
Transport Engineering
Design Incorporated
South (TEDI SOUTH)

BILL OF QUANTITIES

No.	Position	B/R (USD)	M/M	Amount (USD)	Remarks
1	Chief Engineer	1,400	1.50	2,100	
2	Technical Advisor/ Coordinator	1,300	1.50	1,950	
3	Bridge Engineer	1,200	1.50	1,800	
4	Finance Analyst	1,000	1.50	1,500	
5	Cost Estimator (A)	1,100	1.50	1,650	
6	Cost Estimator (C)	1,000	1.50	1,500	
7	Highway Engineer	1,200	1.50	1,800	
8	Document Specialist (A)	1,100	1.50	1,650	
9	Document Specialist (B)	1,000	1.50	1,500	
	TOTAL (M/M)		13.50	15,450	

Note: The Billing Rate (B/R) shall be inclusive of income tax, insurance, and any other taxes/charges imposed on from the Government of Viet Nam and Vietnamese provinces/cities.

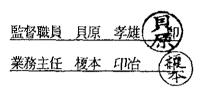
Another, the expenses for the overtime works and the trips to out of city were estimated about US\$1,550 (one thousand five hundred fifty US dollars). It will be paid to each engineer according actual condition by the RONK.

THE CAN THO BRIDGE CONSTRUCTION SCHEDULE OF LOCAL STAFF

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	Position	Chief Eng	Technical Advisor/ Coordinator	Bridge Eng	Drainage Eng	Hydrological & Hydraulic Eng	Finance Estimate Eng	Cost Estimate Eng (Data)	Cost Estimate Eng (breakdown)	Cost Estimate Eng (Computer)	Facility Design Eng (A)	Facility Design Eng (B)	Highway Eng (Infrastructure)	Document Specialist(A)	Document Specialist(B)	CAD Operator(A)	CAD Operator(B)	CAD Operator(C)	

打 合 簿

平成 12年 4月 18日



調査名 ヴィエトナム国カントー橋建設計画実施設計調査 (第2年次)

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打 合 簿

平成 12年 4月 25日

監督職員 貝原 孝雄 業務主任 榎本 卬冶

調査名 ヴィエトナム国カントー橋建設計画実施設計調査 (第2年次)

打 合 項 目	打	合内容及び結果
1. 現地再委託業務の	 	し、平成 12 年 4 月 21 日に承認された依託先
		Fに基づき、調査団は締結した契約の内容を説
	1	安当なものとして承認した。承認された契約
いて	書は、以下の通りであ	i
		,
		か、詳細設計補助、積算補助、入札図書作成補 要員派遣(第2年次)」
	23,-1, 1, 1, 1, 1	
	委託先	Transport Engineering Design Inc. South (TEDI SOUTH)
-		,
	契約金額	US\$17,000
		なお、再委託契約予定金額は US\$17,000
		(1,785,000 円:換算レート 1 US\$ = 105
		円)であり、契約書において計上した
		1,820,000 円の範囲内である。
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AGREEMENT
ON
THE ASSISTANT SERVICES (THE 2ND YEAR)
FOR
THE DETAILED DESIGN
OF
THE CAN THO BRIDGE CONSTRUCTION
IN
THE SOCIALIST REPUBLIC OF VIET NAM

APRIL, 2000



Who

AGREEMENT

ON

THE ASSISTANT SERVICES (THE 2ND YEAR)

FOR

THE DETAILED DESIGN

OF

THE CAN THO BRIDGE CONSTRUCTION

IN

THE SOCIALIST REPUBLIC OF VIET NAM

THIS AGREEMENT is made on the 24th day of April 2000 between Employer represented by Nippon Koei Contractor., Ltd., having its head office at 4, Kojimachi 5-chome, Chiyoda-ku, Tokyo, Japan (hereinafter called The Employer) and Transport Engineering Design Incorporated South (hereinafter called the Contractor) of the other part.

WHEREAS, The Employer is desirous that certain work should be undertaken for the Assistant Services (The 2nd Year) for the Study for the Detailed Design of the Can Tho Bridge Construction which is agreed between the Government of the Viet Nam and the Government of Japan. The Employer was entrusted by the Japan International Cooperation Agency (JICA) for the said purpose. The Employer accepted the Offer submitted by the Contractor for undertaking of this work.

WHEREAS, the Employer expects that the Contractor will furnish the Employer with the assistant services (the 2nd year) required under the Project.

WHEREAS, the Contractor agrees to render such services under the terms and conditions stipulated in this Agreement.

NOW THEREFORE, it is hereby agreed by and between the parties hereto as follows:

1. ASSIGNMENT

The assignment given to the Contractor is basically assistant services (the 2nd year) at the Project Office or any other assignment given to him or her from time to time.

2. SERVICES AND PERIOD

- 2.1 The Contractor shall carry out the services as described in the Technical Specification attached herewith, under the direction of the representative of NK (the RONK) or his designated person.
- 2.2 In order to undertake the above-mentioned specific tasks, the Contractor may be given further detailed instructions where necessary from time to time.
- 2.3 The positions and periods of services of the Contractor shall be shown in the schedule attached herewith. The period of services may, however, be extended or shortened upon written consent of the parties hereto.

3. BASIC WORKING TIME

Basic working time is regular time in Viet Nam's labor law as follows.

AM: 7h30 - 11h30 PM: 13h00 - 16h30 (Sundays and National holidays off)

4. TAX AND INSURANCE, ETC.

The Contractor shall be responsible for taxes, insurance, charges and/or fees of whatever imposed on the Contractor and the Contractor's staff.

5. PAYMENT

5.1 Basic Salary

The Employer shall pay based on the monthly invoice of the Contractor's remuneration for the time actually spent by the Contractor's staff in performing the services and with the working records for the Project, and certified by the RONK or designated person. For payment calculation, one (1) month period shall be considered from the beginning to the end of the month, while for the period less than one (1) month, it shall be calculated on a proratable bases (one day being equivalent to 1/30 of the month).

5.2 Overtime salary and Business trips

The overtime salary and the business trips will be paid to each engineer according actual condition by the RONK.

- Overtime salary:
 - +USD5/hour
 - +USD50/day (Sundays and National holidays)
- Business trips:
 - +Allowance and accommodation: USD 25/day
 - +Travelling tickets: actually paid

6. MANNERS OF SERVICE

- 6.1 The Contractor's staff shall execute his or her works in a diligent, honest and sober manner, and during the period of the services of the Project.
- 6.2 During the period of the services under the Project, the Contractor's staff shall be exclusively assigned to the Project and not be allowed to be engaged in any other services whatsnever.
- 6.3 Also the Contractor's staff shall not at any time disclose to any person or entity any confidential information obtained from his services under the Project.

7. REPLACEMENT OF STAFF

Should it become necessary to replace any member of the Contractor's staff during his or her assignment term, the RONK or his designated person could request for such replacement with a person of compatible experience and capability.

8. TERMINATION

This Agreement shall be terminated at the completion of the services unless otherwise terminated by either party upon thirty (30) days written notice, or by force measure and any other events not within the reasonable control of the parties hereto. The obligations and liabilities of the parties hereto shall expire at the termination of the Agreement.

9. MODIFICATION OF THIS AGREEMENT

This Agreement may only modified, in whole or in part, by the mutual agreement in writing of both parties

10. CONTRACT PRICE

The Employer agrees to the Contractor in consideration of fulfillment of the works and study in contract price of US\$ 17,000 (Seventeen thousand US dollars only) for the assistant services (the 2nd year) (US\$ 15,450) and the overtime works/the trips to out of city (US\$ 1,550, as the upper limit) in accordance with the terms and on conditions specified in the Agreement.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the day and year entered on the first page hereof.

For and on behalf of

THE EMPLOYER

Authorized Representative Name Koji Enomoto

Title Team Leader

The Detailed Design of

The Can Tho Bridge Construction Project

Nippon Koei Co., Ltd.

TRACTOR

Authorized Representative

Name Nguyen Van Loc

Title Director

Transport Engineering Design Incorporated South (TEDI SOUTH)

BILL OF QUANTITIES

No.	Position	B/R (USD)	M/M	Amount (USD)	Remarks
1	Chief Engineer	1,400	1.50	2,100	
2	Technical Advisor/ Coordinator	1,300	1.50	1,950	İ
3	Bridge Engineer	1,200	1.50	1,800	:
4	Finance Analyst	1,000	1.50	1,500	
5	Cost Estimator (A)	1,100	1.50	1,650	
6	Cost Estimator (C)	1,000	1.50	1,500	· :
7	Highway Engineer	1,200	1.50	1,800	
8	Document Specialist (A)	1,100	1.50	1,650	
9	Document Specialist (B)	1,000	1.50	1,500	
	TOTAL (M/M)		13.50	15,450	

Note: The Billing Rate (B/R) shall be inclusive of income tax, insurance, and any other taxes/charges imposed on from the Government of Viet Nam and Vietnamese provinces/cities.

Another, the expenses for the overtime works and the trips to out of city were estimated about US\$1,550 (one thousand five hundred fifty US dollars). It will be paid to each engineer according actual condition by the RONK.

Working Schedule of Staff to the Assistant Services (the 2nd Year) of the Study Team

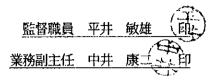
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平成 12年 10月 10日



調査名 ヴィエトナム国カントー橋建設計画実施設計調査業務

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