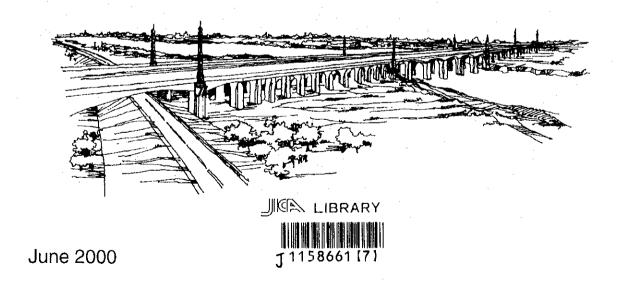
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
PROJECT MANAGEMENT UNIT THANG LONG
MINISTRY OF TRANSPORT
THE SOCIALIST REPUBLIC OF VIET NAM

## THE DETAILED DESIGN OF THE RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM

**FINAL REPORT** 

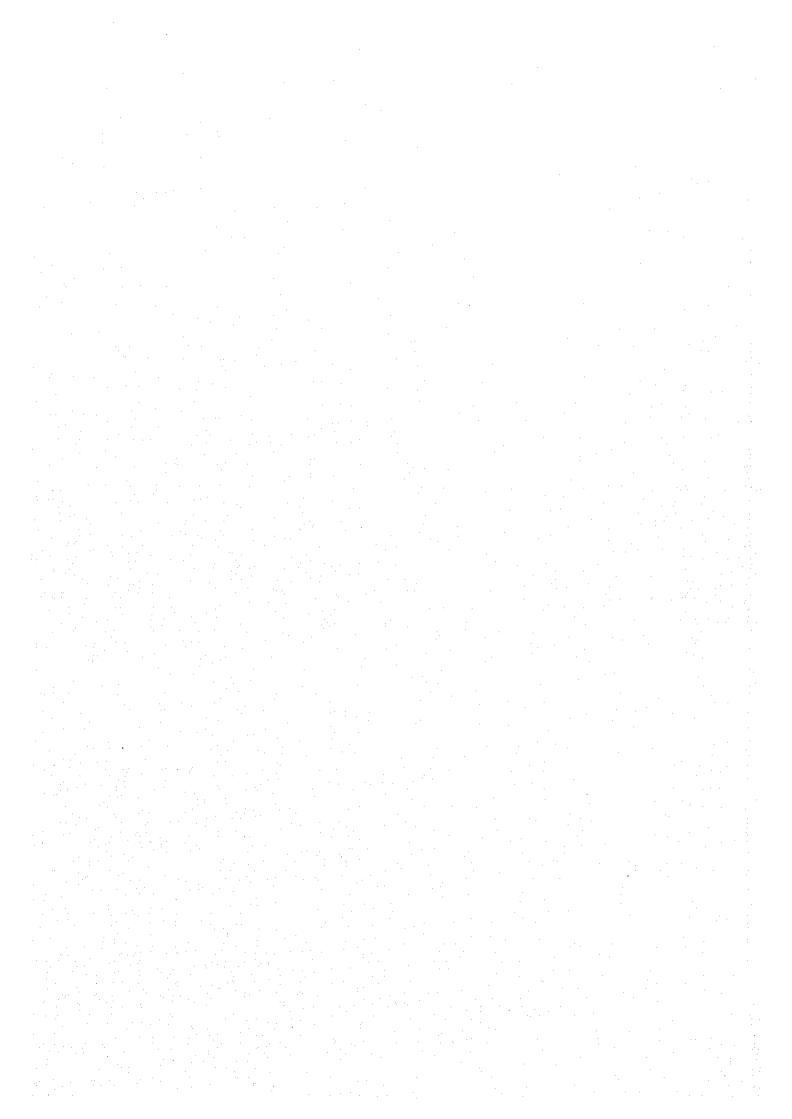
**VOLUME VI: ENGINEER'S COST ESTIMATES** 

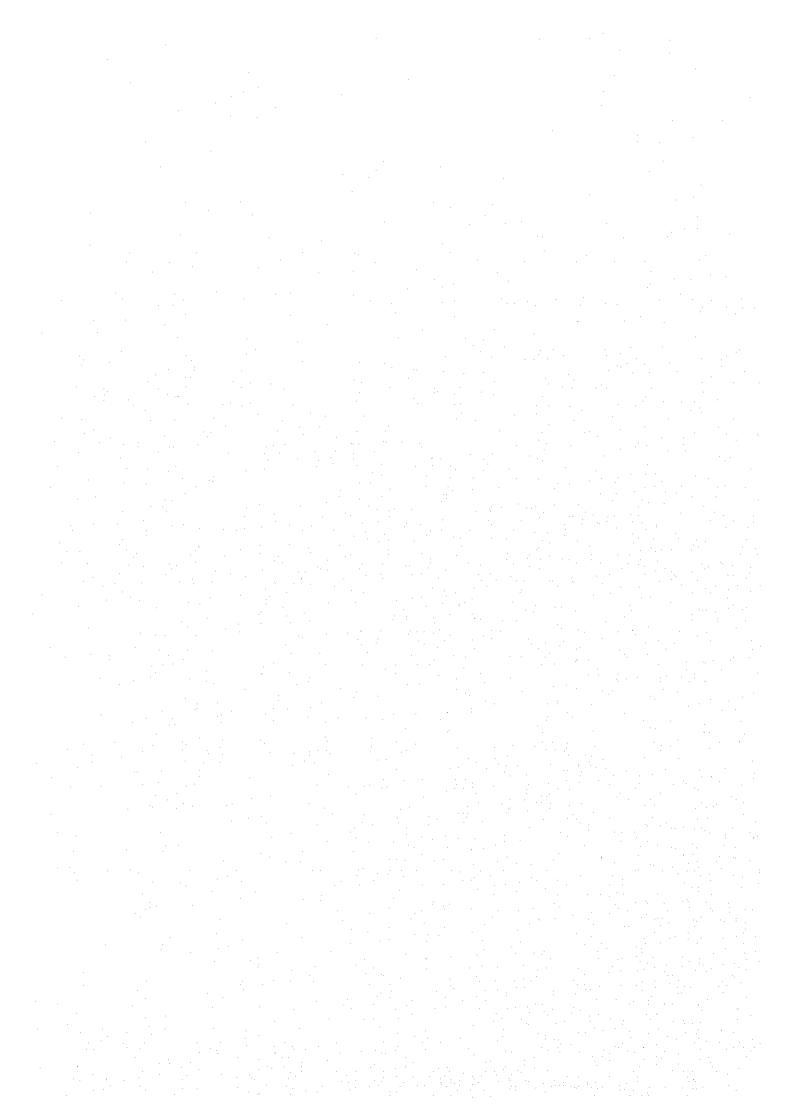


PACIFIC CONSULTANTS INTERNATIONAL

SSF CR(6) 00-100





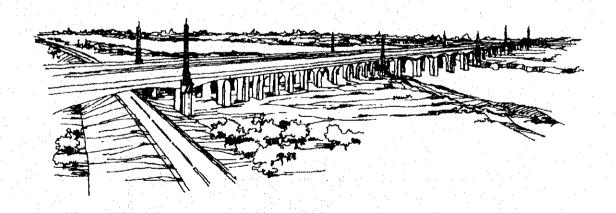


JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
PROJECT MANAGEMENT UNIT THANG LONG
MINISTRY OF TRANSPORT
THE SOCIALIST REPUBLIC OF VIET NAM

## THE DETAILED DESIGN OF THE RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT IN THE SOCIALIST REPUBLIC OF VIET NAM

**FINAL REPORT** 

**VOLUME VI: ENGINEER'S COST ESTIMATES** 



June 2000

PACIFIC CONSULTANTS INTERNATIONAL



### NOTE

The following exchange rate is applied

US\$ 1.00 = VN Dong 14,000 VN Dong 1.00 = JP Yen 0.01 (as of February 2000)

### LIST OF FINAL REPORT

Volume I: Summary

Volume II: Main Report

Volume III: Appendix

Volume IV: Design Report

Volume V: Tender Documents (Draft)

Volume VI: Engineer's Cost Estimates

Volume VII: Drawings < Package-1>

Volume VII: Drawings < Package-2>

Volume IX: Drawings < Package-3> (1 of 2)

Volume X: Drawings < Package-3 > (2 of 2)

Volume XI: Drawings < Package-4>

### THE DETAILED DESIGN

### $\mathbf{OF}$

### THE RED RIVER BRIDGE (THANH TRI BRIDGE) CONSTRUCTION PROJECT IN THE SOCIALIST REPUBLIC OF VIETNAM

### FINAL REPORT - Volume VI: Engineer's Cost Estimates

### TABLE OF CONTENTS

### LIST OF FINAL REPORT

		Page
		•
1.	BID PRICE SCHEDULE	C-1
	1.1 Package1	C-1
	1.2 Package2	C-23
	1.3 Package3	C-47
	1.4 Package3A	
2.	LIST OF MATERIAL COST	CB-1
3.	LIST OF EQUIPMENT COST	CB-6
4.	PROCESS COST	CB-9
	4.1 LIST OF PROCESS COST	CB-9
	4.2 PROCESS COST (1 - 243)	CB-21
	4.3 PROCESS COST (301 - To the end)	CB-26

## PACKAGE 1 RED RIVER BRIDGE BID PRICE SCHEDULE BASIC BID

### 

### PACKAGE 1 RED RIVER BRIDGE

### BID PRICE SCHEDULE BASIC BID

SUMMARY

	TOTAL	TOTAL COST	COMBINED
IRM NO.	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
- General	1,701,100,000	104,111,000,000	1
- Site Clearing	• A second of the	-	
- Demolition	•		1
- Road Earthwork	•	•	1
- Structure Excavation	847,786,240	29,177,824,000	1
SECTION 6 - Drainage		•	
SECTION 7 - Subgrade		•	
- Sub-Base and Base		•	1
SECTION 9 - Pavement	3,885,840	5,583,606,200	
SECTION 10 - Concrete Structure	6,888,069,242	420,943,005,788	1
SECTION 12 - Miscellaneous	8,080	19,354,800	•
SECTION 13 - Utilities	119,700,000	6,991,845,840	•
SECTION 15 - Diversion of existing Utilities	•	•	
Subtotal	9,560,549,402	566,826,636,628	1
SECTION 16 - Day work (1% of Subtotal)	95,605,494	5,668,266,366	-
SECTION 17 - Contingency (15% from section 2 to section 13)	1,178,917,410	69,407,345,494	
TOTAL	10,835,072,306	641,902,248,488	

## PACKAGE 1 RED RIVER BRIDGE BID PRICE SCHEDULE BASIC BID

COMBINED	EQUIVALENT TOTAL COST (VND)				
TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	641,902,248,488	32,095,112,424	40,439,841,655	714,437,202,567
TOTAI	FOREIGN CURRENCY COMPONENT (YEN)	10,835,072,306	541,753,615	682,609,555	12,059,435,476
		DIRECT COST	CONTRACTOR'S OVERHEAD	CONTRACTOR'S PROFIT & TAX	TOTAL COST
	DESCRIPTION		(1) x 5%	$[(1) + (2)] \times 6\%$	(1) + (2) + (3)
		(1)	(2)	(3)	(4)

### PACKAGE 1 RED RIVER BRIDGE

- 2	
늿	
`~	
23	
74	
ш	
7	
64	
щ	
ርኃ	
~	
•	
∹	
Ξ	
4	
4	
1. 1001	
4	
7	
CHON 1	
CTION 1	
CHON 1	
CTION 1	
CTION 1	
CTION 1	
CTION 1	
CTION 1	
CTION 1	
ITEM: SECTION 1	
CTION 1	

WORK ITEN	WORK ITEM: SECTION 1 - GENERAL			DASIC DID				
				UNIT COST	cost	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
	Mobilisation and Demobilisation	LS				785,900,000	69,407,300,000	
	Maintenance and Administration Equipment	LS				325,700,000	ı	
	River Training and Pier Protection System	LS				589,500,000	34,703,700,000	
								- Control of the Cont
SECTI	SECTION 1 - TOTAL TO SUMMARY					1,701,100,000	104,111,000,000	•

### PACKAGE 1 RED RIVER BRIDGE

## BID PRICE SCHEDULE

ſ													,
	ŒD	EQUIVALENT TOTAL COST (VND)				. ]					•		
ļ	COMBINED	IVAI OTA VND			,								
	Ö	EQU.										·	
	. [	×Z											'
		LOCAL JRRENC MPONE (VND)											
	ST	LOCAL CURRENCY COMPONENT (VND)		1						٠,			
	TOTAL COST					1							
	)TA	Z X Z						1				Ž	
	Ţ	FOREIGN CURRENCY COMPONENT (YEN)	, <u> </u>									. ,	
		FOR JAR							:				
		ک ک		ii.						. <u>.</u>			
		×I					1						
• . •	<u> </u>	LOCAL CURRENCY COMPONENT (VND)				1 1							
	H	SA PAGE											
BASIC BID	SOS	° 8											( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )
	UNIT COST	ZXZ											
		FOREIGN CURRENCY COMPONENT (YEN)											
		FOR JURE JAMP											
4 T		58		ļ		:					. ,		ACTOR A
		ŽĘ!	'										
•		QUANTITY	1				:						
•		OO.											1 a 175
		Ħ	E										20052
		UNIT	m.os										
ي	)					1							
WORK THEM, SECTION 2 SITE C'I EARING													SECTION 2 - TOTAL TO SUMMARY
7 F		NO	1							1:			WW.
, ELL	į	IP.TI	hino										SUI
5	5	DESCRIPTION	Oleaning and Gruthing										CTO
Z		DE	1 7				17.					1.5	XTA]
) Lu Lu Lu Lu Lu Lu Lu Lu Lu Lu Lu Lu Lu				9									¥
10 C	. 01		و	Circa									NZ NZ
TEN		<u>o</u>				1.2							Ĕ
7	2	ITEM NO.											SE
Ž	<b>∑</b>	E	2.01										

### PACKAGE 1 RED RIVER BRIDGE

:		
1	≤.	
1	≅	
	=	
1	₽	
(	⊇.	
	≥	
5	<del>"</del>	
	-	
	Ó	
,	-	
1	Ō.	
1	Ξ.	
ļ	5	
1	й	
	Ø	
i	÷	
i	Ξ	
į		
	J	
1	⇒.	
1	Ö	
1	₹	
1		

WOLLES LE LE	AL OLO LIOTA DE LOS LA			AND AND THE PARTY				
				UNIT COST	cosr	TOTAL COST	cosr	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	EQUIVALENT TOTAL COST
				(YEN)	(VND)	(YEN)	(VND)	(AND)
3.01(1)	Removal of Masonry and Concrete							P
	of Housing	cu.m		1		•	1	
3.01(2)	Removal of Existing Curb	lin.m					•	
3.01(3)	Removal of Existing Asphalt Pavement	cu.m				•	•	
3.01(4)	Removal of Existing Lighting Pole	each				•	-	
3.01(5)	Removal of Existing Bridge (Steel Bridge)	sq.m				1		
		·						
SECTIC	SECTION 3 - TOTAL TO SUMMARY					•	•	•

### PACKAGE 1 RED RIVER BRIDGE

=		ì
-		į
		!
•		2
		1
_		١
		1
Ì		ì
-		4
		١
-		1
μ	Ĺ	
		٠
ì		
-		

WORK ITEM: SI	WORK ITEM: SECTION 4 - ROAD EARTHWORK	RK		BASIC BID				
				UNIT COST	cosr	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	EQUIVALENT TOTAL COST
		. : 1		(YEN)	(VND)	(YEN)	(VND)	(QNA)
4.03 Cor	Common Excavation	ca.m					The state of the s	
4.04(1) Bor	Borrow Material	cu.m			•	1	1	
4.04(2) Sur	Surchage with Borrow Material	cu.m					1	
4.05 Mo	Monitoring of Settlement	ST.		•	, , , , , , , , , , , , , , , , , , ,			AND THE RESERVE THE PERSON NAMED IN
4.06	[Insuitable Material	cu.m	•	•			-	
4.07 San	Sand Fill Material	cu.m				. 1		
4.08 Gra	Granular Backfill	cu.m	1					***************************************
4.09 Реп	Permeable Backfill	cu.m				1		
4.10(2) Ver	Vertical Soil Drains (Fibre)	lin.m			•	1	-	
4.11(2) Geo	Geo-Textile Non-Woven Sheet	m.ps				ı		
SECTION 4	SECTION 4 - TOTAL TO SUMMARY						1	

### PACKAGE 1 RED RIVER BRIDGE

### RED KIVEK BKIDGE BID PRICE SCHEDULE RASIC RID

	-	T T							1	٠ [
	COMBINED	EQUIVALENT TOTAL COST (VND)								
	COST	LOCAL CURRENCY COMPONENT (VND)	4,285,764,000	24,262,920,000	629,140,000					29,177,824,060
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	90,704,000	756,976,000	106,240					847,786,240
	cosr	LOCAL CURRENCY COMPONENT (VND)	37,800	501,300	189,500					
BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)	800	15,640	32					
		QUANTITY	113,380	48,400	3,320					
ION		UNIT	cu.m	cu.m	cn.m					
WORK ITEM: SECTION 5 - STRUCTURE EXCAVATION		DESCRIPTION	Structure Excavation	Structure Excavation in the Red River Channel	Blinding Stone	O. C.				SECTION 5 - TOTAL TO SUMMARY
WORK ITEM:		ITEM NO.	5.01(1)	5.01(2)	5.01(3)					SECTI

### PACKAGE 1 RED RIVER BRIDGE

-			-			 	 	 	 -
	COMBINED	EQUIVALENT TOTAL COST (VND)							
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	1	l					•
	TOTAL	FOREIGN CURRENCY COMPONENT (YEN)	•	-					
	COST	LOCAL CURRENCY COMPONENT (VND)							
BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)							
		QUANTITIY	ı		•				
	, š.,	UNIT	lin.m	lin.m	lin.m				\$ 16.00 \$ 2.00 \$ 10.00 \$ 10.00
WORK ITEM: SECTION 6 - DRAINAGE		DESCRIPTION	U-Ditch, Type D-1	U-Ditch, Type D-2	U-Ditch, Type D-3				SECTION 6 - TOTAL TO SUMMARY
WORK ITEN		ITEM NO.	6.06(1)	6.06(2)	6.06(3)				SECTIC

## PACKAGE 1 RED RIVER BRIDGE

	•
	5
÷	÷
	٠.
	Ž
	1
	•

WORK ITE	WORK ITEM: SECTION 7 - SUBGRADE	-		BASIC BID			. , .	
				UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTIITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
7.01	Subgrade Preparation	m.ps	1	•	•		**	
		:						
						•		
SECTION	SECTION 7 - TOTAL TO SUMMARY					•		•

### PACKAGE 1 RED RIVER BRIDGE

## RED RIVER BRIDGE BID PRICE SCHEDULE BASIC BID

WORKITEN	WORK TIEM: SECTION 8 - SUB-BASES AND BASES	ASES		BASIC BID					
				UNIT COST	cosr	TOTAL COST	COST	COMBINED	
ITEM NO.	DESCRIPTION	TIND	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)	and the second s
8.01						1			and their states are an
8.02	Sub-Base Committee Course	E 2					3		
	Clainal base course								
			:						
SECTI	SECTION 8 - TOTAL TO SUMMARY						1	1	-

## PACKAGE 1 RED RIVER BRIDGE

	COMBINED	EQUIVALENT TOTAL COST (VND)			, and the second	And the second s				i disawa	1
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	1	139,887,800	•	,	1	3,184,538,400	2,259,180,000		5,583,606,200
	TOTAI	FOREIGN CURRENCY COMPONENT (YEN)			t	•	•	3,885,840	•		3,885,840
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)		3,460		•		34,420	2,310,000		
BID PRICE SCHEDULE BASIC BID	UNIT	FOREIGN CURRENCY COMPONENT (YEN)			•	•		42	•		
BID		QUANTITY		40,430	•	•		92,520	978		
		UNIT	kg	kg	ton	ton	ton	m.ps	ton		
WORK ITEM: SECTION 9 - PAVEMENTS		DESCRIPTION	Bituminous Prime Coat	Bituminous Tack Coat	Asphalt Treated Base Course	Asphalt Concrete Binder Course	Asphalt Concrete Surface Course	Asphalt Concrete Surface Course (thickness 7.5cm)	Asphalt Cement		SECTION 9 - TOTAL TO SUMMARY
WORK ITEN		ITEM NO.	9.04	9.05	9.07(1)	9.07(2)	9.07(3)	9.07(3)A	9.07(4)		SECTIC

### PACKAGE 1 RED RIVER BRIDGE

WOKALIEN	WORK HEM: SECTION TO - CONCRETE STACES ON	֓֞֝֟֝֟֝֟֝֟֝֓֓֓֓֓֓֟֟֜֟֟֟֟֟֟֟֟֟֟						
				UNIT COST	COST	TOTAL	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
10.01(A-1)	Structural Concrete. Class A-1	cu.m	43,578	21,700	1,405,300	945,642,600	61,240,163,400	
10.01(A-2)	Structural Concrete, Class A-2	cu.m	36,251	20,580	1,607,790	746,045,580	58,283,995,290	
10.01(C-1)	Structural Concrete Class C-1	ca.m	6,942	1,410	832,320	9,788,220	5,777,965,440	
10.01(C-4)	Structured Concrete Class C.4	E 15	123.907	1,360	832,320	168,513,520	103,130,274,240	:
10.01(E-1)	Structural Concrete. Class E-1	Cu.m	126	708	737,190	89,208	92,885,940	
10.01(G)	Structural Concrete Class G	cu.m	1,656	840	449,300	1,391,040	744,040,800	
10.02	Reinforcing Steel Bars	ton	23,890	29,000	1,971,000	692,810,000	47,087,190,000	
10.03(1)	PC Tendon, Strand Type A (12T15.2)	ž	2,479,200	310	6,810	768,552,000	16,883,352,000	- Legendary
10.03(2)	PC Tendon, Strand Type B (4T15.2)	ķ	29,600	320	20,430	9,472,000	604,728,000	
10.03(3)	PC Tendon, Strand Type C (3T15.2)	kg	546,200	324	27,240	176,968,800	14,878,488,000	
SUB-	SUB-TOTAL CARRIED FORWARD					3,519,272,968	308,723,083,110	·

## PACKAGE 1 RED RIVER BRIDGE

			BID	BID PRICE SCHEDULE	DULE			
WORK ITEM	WORK ITEM: SECTION 10 - CONCRETE STRUCTURE	æ		BASIC BID				- Annual Control of the Control of t
				UNIL	UNIT COST	TOTAL COST	.cosr	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN	LOCAL	FOREIGN	LOCAL	EQUIVALENT
				COMPONENT (YEN)	COMPONENT (VND)	COMPONENT (YEN)	COMPONENT (VND)	COST (VND)
SUB-1	SUB-TOTAL BROUGHT FORWARD					3,519,272,968	308,723,083,110	1
10.03(4)	PC Tendon, Strand Type D.(12T12.7)	K,	286,100	380	9,530	108,718,000	2,726,533,000	
10.03(5)	PC Tendon, Strand Type E (7T12.7)	kg		•		•	•	
10.03(6)	PC Tendon, Bar Type F (Ф32)	ĸ,	67,600	620	4,770	41,912,000	322,452,000	
10.03(7)	PC I-Girder Length 20m; Height 1.65m	each	4	821,860	37,574,940	5,753,020	263,024,580	
10.03(9)	PC I-Girder Length 28m; Height 1.65m	each	14	1,074,740	49,136,460	15,046,360	687,910,440	
10.03(10)	PC I-Girder Length 33m; Height 1.65m	each	168	1,264,400	57,807,600	212,419,200	9,711,676,800	
SUB-	SUB-TOTAL CARRIED FORWARD					3,903,121,548	322,434,679,930	•

### PACKAGE 1 RED RIVER BRIDGE

## BID PRICE SCHEDULE

BASIC BID

WORK ITEM: SECTION 10 - CONCRETE STRUCTURE

EQUIVALENT COMBINED TOTAL COST (VND) 322,434,679,930 7,313,499,000 56,859,194,700 22,814,686,900 625,000,000 414,203,548,610 195,750,000 3,505,420,000 455,318,080 COMPONENT CURRENCY LOCAL (SND) TOTAL COST 626,545,260 85,354,650 242,227,840 5,402,938,602 3,903,121,548 466,802,800 2,565,000 76,321,504 COMPONENT CURRENCY FOREIGN (YEN) 855,380 262,280 1,740,410 2,778,890 391,500 330,700 COMPONENT CURRENCY LOCAL (VND) UNIT COST 9,983 19,178 29,504 5,130 44,038 43,964 FOREIGN COMPONENT (YEN) 8,550 32,670 8,210 500 1,736 QUANTITY 10,600 LIND lin.m lin.m lin.m Provisional lin.m lin.m lin.m lin.m lin.m fest Drilling for Soil Investigation, Fest Drilling for Soil Investigation, SUB-TOTAL BROUGHT FORWARD SUB-TOTAL CARRIED FORWARD Ultra-Sonic and Pile Integrity Test Drilling for Soft Ground Cast-In-Place Concrete Pile, Cast-In-Place Concrete Pile, Cast-In-Place Concrete Pile, Bridge Parapet and Railing, Bridge Parapet and Railing, DESCRIPTION in the Red River Channel Complete (Type A) Complete (Type B) D = 1000 nmD = 1500 mmD = 2000 mminvestigation **Testing** General ITEM NO. 10.07(1) 10.07(2) 10.07(T) 10.09(2)10.08(1)0.07(3) 10.08(2) 10.08(3) 10.09(1)

## PACKAGE 1 RED RIVER BRIDGE

WORK ITEM	WORK ITEM: SECTION 10 - CONCRETE STRUCTURE	æ	BID	BID PRICE SCHEDULE BASIC BID	DULE			
				TINU	UNIT COST	TOTAI	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTIITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
SUB-T	SUB-TOTAL BROUGHT FORWARD					5,402,938,602	414,203,548,610	•
10.10(1)	Expansion Joint, Type A 40mm	lin.m	93	50,230	159,300	4,671,390	14,814,900	
10.10(2)	Expansion Joint, Type B 109mm	lin.m				•		
10.10(3)	Expansion Joint, Type C 150mm	lin.m	93	113,530	159,300	10,558,290	14,814,900	
10.10(4)	Expansion Joint, Type D 230mm	lin.m	156	176,270	159,300	27,498,120	24,850,800	
10.11(1)A	Reaction Distribution Bearing, Type A 175t	each	3	929,200	3,759,900	2,787,600	11,279,700	
10.11(1)B	Reaction Distribution Bearing, Type B 300t	each	57	1,818,000	5,300,100	103,626,000	302,105,700	
10.11(1)C	Reaction Distribution Bearing, Type C 650t	each	3	4,797,500	13,204,200	14,392,500	39,612,600	
10.11(1)D	Reaction Distribution Bearing, Type D 800t	each	78	6,565,000	17,296,700	512,070,000	1,349,142,600	
10.11(1)E	Reaction Distribution Bearing, Type E 850t	each	57	7,701,300	18,835,500	438,974,100	1,073,623,500	
SUB-1	SUB-TOTAL CARRIED FORWARD					6,517,516,602	417,033,793,310	

### PACKAGE 1 RED RIVER BRIDGE

	COMBINED	EQUIVALENT TOTAL COST (VND)		The state of the s									
	cosr	LOCAL CURRENCY COMPONENT (VND)	417,033,793,310	ı	213,343,200	4	t	664,826,400	103,899,600	8,658,300	112,557,900	8,658,300	418,145,737,010
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	6,517,516,602	1	46,904,400			290,880,000	7,543,200	509,040	4,923,100	404,600	6,868,680,942
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)			5,926,200	•	•	55,402,200	618,450	618,450	618,450	618,450	
BID PRICE SCHEDULE BASIC BID	UNIT	FOREIGN CURRENCY COMPONENT (YEN)			1,302,900			24,240,000	44,900	36,360	27,050	28,900	
BID		QUANTITY		1	36			12	168	14	182	14	
Œ		UNIT		each	each	esch	each	each	each	each	each	each	
REPUBLICATION OF MORPORA STATES EN S	SECTION 10 - CONCRETE STREET	DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Pot Bearing, Type A 350t	Pot Bearing, Type B 400t	Dee Denim Time C 450t	For Dearing, Type C 450.	Dot Bearing Tyne E 2 250!	Elastomeric Bearing Pad, Type A 510*310*56	Elastomeric Bearing Pad, Type B 510*310*44	Elastomeric Bearing Pad, Type C 510*310*36	Elastomeric Bearing Pad, Type D 510*260*40	SUB-TOTAL CARRIED FORWARD
A CLUBAL AND CARA	WORK IIEM	ITEM NO.	SUB-T	10.11(2)A	10.11(2)B	10.11(2)C	10.11(2)D	10.11(2)E	10.11(3)A	10.11(3)B	10.11(3)C	10.11(3)D	SUB-

### PACKAGE 1 RED RIVER BRIDGE

3)
Z,
$\supset$
-
O
$\supset$
≂
=
'n
Ħ.
_
щ
α.
$\circ$
Z,
Õ.
റ
_
Ξ
0
_
0
0
2 2 2 3
ON 10
10N 10
CHON 10
10N 10
ECTION 10
ECTION 10
ECTION 10
M: SECTION 10
M: SECTION 10
CITEM: SECTION 10
CITEM: SECTION 10
RK ITEM: SECTION 10
KK ITEM: SECTION 10

OKA LIEM:	UKA II EWI. SECTION TO - CONCRETE STANCTONE	}		DESCRIPTION OF THE PARTY OF THE				
				UNIT COST	COST	TOTAL COST	COST	COMBINED
TEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
SUB-TO	SUB-TOTAL BROUGHT FORWARD					6,868,680,942	418,145,737,010	
0.12(1)	PVC Drain Pipe, D = 15cm	lin.m				ı	t	
0.12(2)	PVC Drain Pipe, D = 20cm	lin.m	2,480	6	226,170	22,320	560,901,600	
0.12(3)	Deck Drain Box	each	356	436	562,040	155,216	200,086,240	
0.12(4)	Precast RC Plate, Type A	m.ps	8,178	1,138	140,271	9,306,564	1,147,136,238	
0.12(5) I	Bridge Deck Waterproofing, Type A	sq.m	97,100	102	9,157	9,904,200	889,144,700	
		1 -						
SECTION	SECTION 10 - TOTAL TO SUMMARY					6,888,069,242	420,943,005,788	3

## PACKAGE 1 RED RIVER BRIDGE

WORK ITEM	WORK ITEM: SECTION 12 - MISCELLANEOUS		BID	BID PRICE SCHEDULE RASIC RID	DULE			
				TIMU	UNIT COST	TOTAL	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	EQUIVALENT TOTAL COST
12.01(1)	Grassed Area, Solid Sodding	SG.m		(YEN)	(NAD)	(YEN)	(VND)	(VND)
12.02	Stone Masonry	Cu.m					•	
12.03(3)	Rock Filled Gabion Baskets	sq.m						
12.05(1)	Motared Stonework for Slope Protection	sq.m			1			
	Motared Stonework for Slope Protection (below River Water Level)	sq.m				1		
	Vehicle Guardrail, Type A	lin.m	•					
	Pipe Guardrail, Type B, Movable	lin.m						
	Regulatory and Warning Signs Type-A (1 Board)	each						
	Regulatory and Warning Signs Type-C (2 Board)	each				1		
12.09(1)	Road Marking, Type A (General Application)	sq.m			•	1	1	
SUB-T(	SUB-TOTAL CARRIED FORWARD					1		

## PACKAGE 1 RED RIVER BRIDGE

<u>~</u>	
$\sim$	
SS	
ത്	
7	
4	
۹,	
ᅟ	
ᆸ	
冚	
MISCELL	
メ	٠
¥	
ᄫ	
~	
- 1	
2	
÷	
_	
4	
O	
SECTION	
$\overline{}$	
$\circ$	
ш	
S	
7	
ج.	
щ	
۳,	
<b>CITEM</b>	
¥	
~	
ORK	

VORN HEM.	WORN I EM: SECTION IZ - MISCELL-MECOS			DASIC DID				
				UNIT COST	COST	TOTAI	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIL	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	EQUIVALENT TOTAL COST
				(YEN)	(VND)	(YEN)	(VND)	(VND)
SUB-T(	SUB-TOTAL BROUGHT FORWARD						•	
2.09(2)	Road Marking, Type A (Special Application)	sq.m		•	•	1	1	
2.12(1)	Concrete Curb, Type A	lin.m			,	-		
2.12(2)	Concrete Curb, Type B	lin.m	•	•		1		
2.12(3)	Asphalt Concrete Curb	lin.m	•		-	•		
2.21	Bronze Bridge Name Plaques	each	8	1,010	2,419,350	8,080	19,354,800	
SECTIO	SECTION 12 - TOTAL TO SUMMARY					8,080	19,354,800	

### PACKAGE 1 RED RIVER BRIDGE

### RED KIVEK BKIDGE BID PRICE SCHEDULE BASIC BID

WORK ITEM	WORK ITEM: SECTION 13 - UTILITIES			DASIC DID				
				UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
13.01(2)	Road Lighting Unit. Type A4.1	each	176		8,450,000		1,487,200,000	
13.01(4)	Road Lighting Unit, Type F1	each	9		6,755,000		40,530,000	
13.01(6)	Power Supply Receiving Panel (SS)	each	<b>[1</b>		5,748,300	F	5,748,300	
13.01(7)	Low Voltage Distribution Panel	each	Ī		11,366,200		11,366,200	in the state of th
13.01(8)	Tighting Panel (DB)	each	14		7,699,900	•	107,798,600	· · · · · · · · · · · · · · · · · · ·
13.01(10)	Cable, X-LPE Armer Type 4c - 25mm2	lin.m	160		115,310		18,449,600	The state of the s
13.01(11)	Cable, X-LPE Armer Type 4c - 16mm2	lin.m	9,138		96,470		881,542,860	
13.01(12)	Cable, X-LPE Armer Type 4c - 10mm2	lin.m	6,738		64,440		434,196,720	
13.01(13)	Cable, X-LPE/ PVC 4c - 10mm2	lin.m	340		47,800	1	16,252,000	
13.01(14)	Grounding Wire, BCC 6mm2	lin.m	6,752		78,000		526,656,000	
SUB-1	SUB-TOTAL CARRIED FORWARD						3,529,740,280	

## PACKAGE 1 RED RIVER BRIDGE

WORK ITE	WORK ITEM: SECTION 13 - UTILITIES			BASIC BID	ja į			
				UNIT COST	COST	TOTAL	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIL	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	EQUIVALENT TOTAL COST
				(YEN)	(VND)	(YEN)	(VND)	(VND)
SUB-1	SUB-TOTAL BROUGHT FORWARD					1	3,529,740,280	<b>3</b>
13.01(15)	PVC Conduit, 50mm dia with Fittings	lin.m	28,372	•	92,000		2,610,224,000	
13.01(16)	Pull Box, Type F	each	190	•	940,400	-	178,676,000	
13.01(17)	Pull Box, Type G	each	36		884,000		31,824,000	
13.01(18)	Power Receiving, 30 kVA	each	1		380,000,000	1	380,000,000	
13.01(19)	Application for Power Connection	each	T	:	50,000,000	. 1	50,000,000	
13.01(20)	Watt Hour Meter Box and Panel	each	1		2,550,000	ŀ	2,550,000	
13.01(21)	Protection of Expansion Joint	each	120		250,000	•	30,000,000	
13.01(22)	Buried Cable Protector	lin.m	466		84,160	•	39,218,560	
13.01(23)	Marker for Underground Cables	each	233		181,000	1	42,173,000	
SUB-	SUB-TOTAL CARRIED FORWARD						6,894,405,840	1

### RED RIVER BRIDGE PACKAGE 1

## BID PRICE SCHEDULE

	COMBINED	EQUIVALENT TOTAL COST (VND)						· ·			•
	cost	LOCAL CURRENCY COMPONENT (VND)	6,894,405,840	23,940,000	13,100,000	53,200,000	7,200,000				6,991,845,840
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	•	119,700,000	ı	1	1				119,700,000
	COST	LOCAL CURRENCY COMPONENT (VND)		3,990,000	13,100,000	380,000	1,200,000			 	
BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)		19,950,000			•				
OTO .		QUANTITY		9	1	140	9				
		UNIT		set	LS	lin.m	each				
WORK ITEM: SECTION 13 - UTILITIES		DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Navigation Light	Power Connection for Package 1	Duct Bank, Tvpe A	Manhole Tyne A	The state of the s			SECTION 13 - TOTAL TO SUMMARY
WORKITEN		ITEM NO.	SUB-T(	13.01(24)	13.01(32)	13.02(1)	13.02(3)				SECTIO

## PACKAGE 2 GIA LAM SECTION BID PRICE SCHEDULE BASIC BID

### PACKAGE 2 GIA LAM SECTION

SUMMARY			
	TOTAL COST	COST	COMBINED
ITEM NO.	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
SECTION 1 - General	126,064,265	9,370,611,592	
SECTION 2 - Site Clearing	2,265,480	118,056,680	*
SECTION 3 - Demolition		1	
SECTION 4 - Road Earthwork	822,273,575	32,254,450,884	al
SECTION 5 - Structure Excavation	16,831,264	978,941,500	1
SECTION 6 - Drainage	6928396	8,299,688,878	,
SECTION 7 - Subgrade	2,022,600	82,252,400	1
SECTION 8 - Sub-Base and Base	5,791,280	9,469,991,750	1
SECTION 9 - Pavement	63,129,550	17,957,491,690	
SECTION 10 - Concrete Structure	1,542,364,140	98,537,290,078	1
SECTION 12 - Miscellaneous	56,948,644	5,764,470,831	
SECTION 13 - Utilities		13,949,597,140	•
SECTION 15 - Diversion of existing Utilities	•	1	1
Subtotal	2,647,349,567	196,782,843,423	
SECTION 16 - Day work (1% of Subtotal)	26,473,496	1,967,828,434	
SECTION 17 - Contingency (15% from section 2 to section 13)	378,192,795	28,111,834,775	a constitution of the cons
TOTAL	3,052,015,858	226,862,506,632	

### PACKAGE 2 GIA LAM SECTION

			TOTAL	TOTAL COST	COMBINED
	DESCRIPTION		FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
(1)		DIRECT COST	3,052,015,858	226,862,506,632	
(2)	(1) x 5%	CONTRACTOR'S OVERHEAD	152,600,793	11,343,125,332	•
(3)	$[(1) + (2)] \times 6\%$	CONTRACTOR'S PROFIT & TAX	192,276,999	14,292,337,918	
(4)	(1) + (2) + (3)	TOTAL COST	3,396,893,650	252,497,969,882	1

	COMBINED	EQUIVALENT TOTAL COST (VND)						
	.cosr	LOCAL CURRENCY COMPONENT (VND)	9,370,611,592					9,370,611,592
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	126,064,265					126,064,265
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)						
BID PRICE SCHEDULE BASIC BID	UNIT	FOREIGN CURRENCY COMPONENT (YEN)						
<b>BID</b>		QUANTITY						
		UNIT	য়					
WORK ITEM: SECTION 1 - GENERAL		DESCRIPTION	General					SECTION 1 - TOTAL TO SUMMARY
WORKITEN		ITEM NO.	ı					SECTI

	COMBINED	EQUIVALENT TOTAL COST (VND)							
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	118,056,680						118,056,680
	TOTA	FOREIGN CURRENCY COMPONENT (YEN)	2,265,480						2,265,480
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)	469						
BID PRICE SCHEDULE BASIC BID	TINO	FOREIGN CURRENCY COMPONENT (YEN)	6						
BID		QUANTITY	251.720						
		UNIT	m.os						
WORK THEM: SECTION 2 - SITE CLEARING		DESCRIPTION	Clearing and Fruithing	Coamp and Crossing			The state of the s		SECTION 2 - TOTAL TO SUMMARY
MELLI AGOM	WORNITE H	ITEM NO.	2.01						SECTIO

			BID	BID PRICE SCHEDULE	DULE			
WORK ITE	WORK ITEM: SECTION 3 - DEMOLITION			BASIC BID				
			5	TINU	UNIT COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN	LOCAL	FOREIGN	LOCAL	EQUIVALENT TOTAL
				COMPONENT (YEN)	COMPONENT (VND)	COMPONENT (YEN)	COMPONENT (VND)	COST (VND)
3.01(1)	Removal of Masonry and Concrete							
	Structures including Kemaining Farts of Housing	cu.m		•		•		
3.01(2)	Removal of Existing Curb	lin.m						
3.01(3)	Removal of Existing Asphalt Pavement	cu.m	1				1 1 1	· ·
3.01(4)	Removal of Existing Lighting Pole	each	•			•	•	
3.01(5)	Removal of Existing Bridge (Steel Bridge)	sq.m				•		
							2	
SECTION	SECTION 3 - TOTAL TO SUMMARY						•	•

WORK	
~	
$\overline{C}$	
Š	
2	
FARTHW	i
Į.	
$\sim$	Ì
<	
ĹŢ.	
AD	
~	
$\sim$	۱
ROAD FART	
4	
Δ 4	
4 N.	
TON 4	
4 NOTT	
4 NOTTO	
FOTTON 4	
SECTION 4	
Ü	
>	
>	
TEM S	
TTFM S	֡
TTFM S	֡
TTFM S	
TEM S	֡

		COMBINED	EQUIVALENT	COST (VND)										
		TOTAL COST	LOCAL	COMPONENT (VND)	228,608,500	12,118,425,540	841,705,700	8,986,381,080	1,583,973,252	49,188,692	5,501,044,120	2,945,124,000		32,254,450,884
		TOTAI	FOREIGN	COMPONENT (YEN)	13,029,500	202,944,495	20,620,600	209,080,760	1,177,578	36,022	364,527,020	10,857,600		822,273,575
DULE		UNIT COST	LOCAL CURRENCY	COMPONENT (VND)	1,930	13,316	7,429	21,963	108,954	113,338	2,158	8,680		
BID PRICE SCHEDULE	BASIC BID	LIND	FOREIGN	COMPONENT (YEN)	110	223	182	511	81	83	143	32		
BID			QUANTITY		118,450	910,065	113,300	409,160	14,538	434	2,549,140	339,300		
	X X		UNIT		cu.m	cu.m	cu.m	cu.m	cu.m	cu.m	lin.m	sq.m		
	WORK ITEM: SECTION 4 - ROAD EARTHWORK		DESCRIPTION		Common Excavation	Borrow Material	Unsuitable Material	Sand Fill Material	Granular Backfill	Permeable Backfill	Vertical Soil Drains (Fibre)	Geo-Textile Non-Woven Sheet		SECTION 4 - TOTAL TO SUMMARY
	WORK ITE		ITEM NO.		4.03	4.04(1)	4.06	4.07	4.08	4.09	4.10(2)	4.11(2)		SECTI

### PACKAGE 2 GIA LAM SECTION

### GIA LAM SECTION BID PRICE SCHEDULE BASIC BID

Z
0
Ť
໘.
٧,
>
⋖
U
×
μÌ.
<u>.</u>
=
<u>e</u>
$\boldsymbol{\mathcal{L}}$
7
v
$\supset$
$\alpha$
K
S
t
S
_
4
$\mathbf{Q}$
Б
Щ
23
• • •
3
6
Ē
$\Box$
Ų.
J
<u>×</u>
Q
3
_

				TINU	UNIT COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	TINO	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
5.01(1)	Structure Excavation	cu.m	21,000	800	37,800	16,800,000	793,800,000	
5.01(3)	Blinding Stone	cu.m	7/6	32	189,500	31,264	185,141,500	
		: : :						
1 10								
						,		
SECTIC	SECTION 5 - TOTAL TO SUMMARY					16,831,264	978,941,500	

### PACKAGE 2

SECTI	
<b>GIA LAM</b>	

WORK ITEI ITEM NO. 6.05(4)	WORK ITEM: SECTION 6 - DRAINAGE  ITEM NO. DESCRIPTION  6.05(4) RC Pipe, D=75cm  Type A-1  Type A-1  Type A-1	UNIT UNIT	BID QUANTITY 2,018	BID PRICE SCHEDULE  BASIC BID  UNIT COST  FOREIGN  COMPONENT  COMP	COST  LOCAL  CURRENCY  COMPONENT  (VND)	FOREIGN LUCURRENCY CURPONENT COM (YEN) (YEN) (YEN)	LOCAL CURRENCY COMPONENT (VND) 1,849,934,906	COMBINED EQUIVALENT TOTAL COST (VND)
6.05(7)	Type A-2 RC Pipe, D=125cm Type A-2 Type A-2	fin.m lin.m	152	2,826	1,547,261	429,552	235,183,672	
6.05(8)	RC Pipe, D=125cm Type B-2	lin.m	156	8,030	5,788,700	1,252,680	903,037,200	
6.05(9)	RC Pipe, D=150cm Type A-2	lin.m	243	5,590	3,929,900	1,358,370	954,965,700	
6.06(1)	RC Pipe, D=150cm Type B-2	lin.m	115	10,160	7,145,200	1,168,400	821,698,000	
6.06(2)	U-Ditch, Type U-1	lin.m	1,520	74	213,294	112,480	324,206,880	
6.06(2A)	U-Ditch, Type U-2 U-Ditch, Type U-4	lin.m Iin.m	098	117	134,044	100,620	115,277,840	
6.06(3)	U-Ditch, Type U-3	lin.m	1,468	111	127,342	162,948	186,938,056	
SUB-1	SUB-TOTAL CARRIED FORWARD					7,376,640	6,695,225,014	

>
핏
9
⅀
Ž
$\supset$
≫
Ä
$\boldsymbol{\vdash}$
ø
7.
Z
NO.
NOIL
CHON
ы
·
ы
M: SEC
M: SEC
: SEC
M: SEC
ITEM: SEC
ITEM: SEC
ITEM: SEC

			BID	BID PRICE SCHEDULE	DULE			
WORK ITEN	WORK ITEM: SECTION 6 - DRAINAGE			BASIC BID				
				UNIT COST	cost	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN	LOCAL CURRENCY	FOREIGN	LOCAL	EQUIVALENT TOTAL
				COMPONENT (YEN)	COMPONENT (VND)	COMPONENT (YEN)	COMPONENT (VND)	COST (VND)
SUB-T	SUB-TOTAL BROUGHT FORWARD					7,376,640	6,695,225,014	,
6.06(5)	Mortared Stone Channel, Type C-1	lio.m	640	141	274,851	90,240	175,904,640	
6.06(6)	Mortared Stone Channel,	Į į	785	091	316 697	132 665	248 607 145	
6.06(8)								
	Catch Basin, Types R1, R2 and R4	each	26	8,116	2,930,193	211,016	76,185,018	
(6)90:9		•		,		707	001 012 12	<del>, , , , , , , , , , , , , , , , , , , </del>
	Catch Basin, Type R3	each	94	366	612,970	34,404	57,619,180	
6.06(10)	Catch Basin, Type F	each	102	11,768	3,028,153	1,200,336	308,871,606	
6.06(11)	Catch Basin Tyne S1	each	71	746	1.661.781	52.966	117,986,451	
6.06(13)								
	Headwall, for 125-A	each	18	11,951	13,437,481	215,118	241,874,658	
6.06(14)					( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (	6		
	Headwall, for 125-B	each	4	15,563	19,048,359	757,70	76,193,430	
6.06(15)	Headwall, for 150-A	each	10	15,982	16,124,524	159,820	161,245,240	
SUB-T	SUB-TOTAL CARRIED FORWARD					9,535,457	8,159,712,388	1

	COMBINED	EQUIVALENT TOTAL COST (VND)	•						
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	8,159,712,388	139,976,490					8,299,688,878
	TOTAI	FOREIGN CURRENCY COMPONENT (YEN)	9,535,457	123,312					9,658,769
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)		23,329,415					
BID PRICE SCHEDULE BASIC BID	TINU	FOREIGN CURRENCY COMPONENT (YEN)		20,552					
BID		QUANTITY		9					
		LIND		each					
WON'Y THEM. CECTION 6. DRAINAGE	A. SECTION O - MARKETON	DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Headwall for 150-B					SECTION 6 - TOTAL TO SUMMARY
April adom	WORNILLEN	ITEM NO.	SUB-T(	6.06(16)					SECTIC

### PACKAGE 2 GIA LAM SECTION

### GIA LAM SECTION BID PRICE SCHEDULE BASIC BID

	COMBINED	EQUIVALENT TOTAL COST (VND)		,				
	COST	LOCAL CURRENCY COMPONENT (VND)	82,252,400					82,252,400
	TOTAL COST	FOREIGN CURRENCY COMPONENT (XEN)	2,022,600					2,022,600
	UNIT COST	LOCAL CURRENCY COMPONENT (VND)	610					
BASIC BID	UNIT	FOREIGN CURRENCY COMPONENT (YEN)	15					
		QUANTITY	134,840					
	-	TINU	sq.m					
WORK ITEM: SECTION 7 - SUBGRADE	DESCRIPTION		Subgrade Preparation					SECTION 7 - TOTAL TO SUMMARY
WORK ITE		ITEM NO.	7.01					SECT

	COMBINED	EQUIVALENT TOTAL COST (VND)						. :	
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	6,903,352,050	2,566,639,700					9,469,991,750
	TOTAL	FOREIGN CURRENCY COMPONENT (YEN)	4,171,380	1,619,900					5,791,280
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)	122,465	153,691					
BID PRICE SCHEDULE  3ASES BASIC BID	TINU	FOREIGN CURRENCY COMPONENT (YEN)	74	97					
		QUANTIITY	56,370	16,700					
		UNIT	cu.m	cu.m					
WORK ITEM: SECTION 8 - SUB-BASES AND BASES		DESCRIPTION	Sub-Base	Granular Base Course					SECTION 8 - TOTAL TO SUMMARY
WORKITEN		ITEM NO.	8.01	8.02					SECTI

### PACKAGE 2 GIA LAM SECTION

WORK ITEN	WORK ITEM: SECTION 9 - PAVEMENTS	:		BASIC BID				
				UNIT COST	cosr	TOTAI	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	EQUIVALENT TOTAL COST (VND)
9.04	Rituminous Prime Cost	63	141.270	1	3,494		493,597,380	
9.05	Bituminous Tack Coat	0 0	88 390		3.461		305,917,790	
9.07(1)	Asphalt Treated Base Course	ton	87,600	179	152,422	15,680,400	13,352,167,200	
9.07(2)	Asphalt Concrete Binder Course	ton	10.890	235	153,668	2,559,150	1,673,444,520	
9.07(3)	Asphalt Concrete Surface Course	ton	12.800	338	166.591	4.326,400	2,132,364,800	
9.07(4)	Asnhalt Cement	Ę	1.756	23.100	1	40,563,600		
					and a second			
 SECTION	SECTION 9 - TOTAL TO SUMMARY					63,129,550	17,957,491,690	

63,129,550 | 17,957,491,690

	ļ
ភ	İ
2	
$\overline{z}$	
Z.	ļ
S	Ì
ETE STRU(	
Ξ	
Z	
$\simeq$	
$\overline{}$	
Š	
01	
) - 01 Z	
) - 01 NOL	
CHON 10 - (	
SECTION 10 - (	
: SECTION 10 - (	
EM: SECTION 10 - (	
THEM: SECTION 10 - (	
EM: SECTION 10 - (	

		COMBINED	EQUIVALENT TOTAL COST (VND)									and the second s		
		COST	LOCAL CURRENCY COMPONENT (VND)	5,189,946,120	6,354,763,200	14,910,180,480	1,332,291,900		256,542,120	276,319,500	7,207,947,000	755,637,600	814,401,090	37,098,029,010
		TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	66.432.240	10,765,350	24.363,040	1,313,700		246,384	516,600	106,053,000	34,397,600	12,756,160	256,844,074
ULE		COST	LOCAL CURRENCY COMPONENT (YND)	1 607.790	832,320	832.320	1,531,370	1	737.190	449,300	1,971,000	6,810	20,430	
BID PRICE SCHEDULE BASIC BID	BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT	20 580	1,410	1 360	1.510		708	840	29,000	310	320	
BID			QUANTITY	2 220	7.635	17 014	870		348	615	3,657	110,960	39,863	
	E		UNIT				E E	5	F 5	cr.m	ton	kg	kg	
	WORK ITEM: SECTION 10 - CONCRETE STRUCTURE		DESCRIPTION		Structural Concrete, Class A-2	Siluctural Constant, Care Co.	Structural Concrete, Class C-4	Sinctural Concrete, Class Co.	Structural Concrete, Class D-1	Structural Concrete, Class E-1	Reinforcing Steel Bars	PC Tendon, Strand Type A (12T15.2)	PC Tendon, Strand Type B (4T15.2)	SUB-TOTAL CARRIED FORWARD
	<b>WORK ITEM</b>		ITEM NO.	10.01(A-2)	10.01(C-1)	10.01(C-4)	10.01(C-5)	10.01(D-1)	10.01(E-1)	10.01(G)	10.02	10.03(1)	10.03(2)	SUB-

Ή)	
≝.	
$\supset$	
ᆮ.	
$\overline{}$	
Ų	
·~	
_	
<b>P</b>	
_	
٠.	
0	
巴	
ᆮ	
Щ	
œ,	
$_{\odot}$	
÷	
<u>~</u>	
O	
$\tilde{c}$	
v	
7	
7	
7	
7	
7	
7	
7	
7	
ĕ	
HON 10 - (	
7	
CHON 10 - 0	
ECTION 10 - (	
CHON 10 - 0	
: SECTION 10 - (	
ECTION 10 - (	
M: SECTION 10 - (	
M: SECTION 10 - (	
A: SECTION 10 - (	
TEM: SECTION 10 - (	
ITEM: SECTION 10 - (	
KITEM: SECTION 10 - (	
ITEM: SECTION 10 - (	
KITEM: SECTION 10 - (	
KITEM: SECTION 10 - (	
KITEM: SECTION 10 - (	

			BID	BID PRICE SCHEDULE	DULE			
WORK ITEM	WORK ITEM: SECTION 10 - CONCRETE STRUCTURE	RE		BASIC BID				
				UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTIITY	FOREIGN CURRENCY	LOCAL CURRENCY	FOREIGN CURRENCY	LOCAL CURRENCY	EQUIVALENT TOTAL COST
				(YEN)	(VND)	(YEN)	(QNV)	(VND)
SUB-T	SUB-TOTAL BROUGHT FORWARD					256,844,074	37,098,029,010	
10.03(4)	PC Tendon, Strand Type D (12T12.7)	kg	523,497	380	9,530	198,928,860	4,988,926,410	
10.03(7)	PC LGirder Length 20.0m; Height 1.65m	each	20	821,860	37,574,940	16,437,200	751,498,800	
10.03(8)	PCI-Girder Length 28.0m: Height 1.50m	each	62	1,011,520	46,246,080	79,910,080	3,653,440,320	
10.03(10)	PC I-Girder Length 33.0m; Height 1.65m	each	251	1,264,400	57,807,600	317,364,400	14,509,707,600	
10.03(11)	PC I-Girder Length 35.0m; Height 1.75m	each	16	1,390,840	63,588,360	22,253,440	1,017,413,760	
10.07(1)	Cast-In-Place Concrete Pile, D = 1000mm	lin.m	16,385	9,983	855,380	163,571,455	14,015,401,300	
10.07(2)	Cast-In-Place Concrete Pile, D = 1500mm	lin.m	3,655	19,178	1,740,410	70,095,590	6,361,198,550	
10.07(3)	Cast-In-Place Concrete Pile, D = 2000mm	lin.m	3,912	29,504	2,778,890	115,419,648	10,871,017,680	
10.07(T)	Ultra-Sonic and Pile Integrity Testing	Provisional Sum	t		•		625,000,000	
SUB-	SUB-TOTAL CARRIED FORWARD					1,240,824,747	93,891,633,430	•

### GIA LAM SECTION PACKAGE 2

BID PRICE SCHEDULE

BASIC BID

•
Щ.
TURE
Ę
$\simeq$
RUCI
Ε
S
出
μ
χ.
×
ō
r \
$\circ$
10 - CONCRETE STRI
10N 10
10N 10
KITEM: SECTION 10
10N 10

EQUIVALENT COMBINED TOTAL COST (VND) 61,807,500 123,615,000 231,490,000 895,423,920 9,558,000 51,072,000 61,808,400 93,891,633,430 COMPONENT CURRENCY LOCAL (SND) TOTAL COST 1,240,824,747 590,400 1,180,800 30,826,600 150,093,096 19,489,240 4,909,200 13,574,400 COMPONENT CURRENCY FOREIGN (YEN) 330,700 159,300 159,300 4,256,000 206,025 206,025 262,280 COMPONENT CURRENCY LOCAL (SNV) UNIT COST 44,038 CURRENCY 1,968 1,968 43,964 50,230 81,820 1,131,200 FOREIGN (KEN) 388 009 92 3,414 300 S 12 QUANTITY UNIT lin.m lin.m lin.m lin.m lin.m each Test Drilling for soill Investigation, Expansion Joint, Type B 109mm SUB-TOTAL BROUGHT FORWARD Expansion Joint, Type A 40mm Test Drilling for Soft Ground Bridge Parapet and Railing, Bridge Parapet and Railing, DESCRIPTION Pot Bearing, Type A 350t Complete (Type A) Complete (Type B) investigation General ITEM NO. 0.11(2)A 0.11(2)C10.08(1) 10.08(3)10.09(2) 10.10(1)0.09(1)10.10(2)

23,088,800

6,019,600

5,772,200

1,504,900

96,834,600

28,482,000

16,139,100

4,747,000

ø

each

SUB-TOTAL CARRIED FORWARD

Pot Bearing, Type D 950t

each

Pot Bearing, Type C 450t

10.11(2)D

95,446,331,650

1,495,990,083

## PACKAGE 2 GIA LAM SECTION

BID PRICE SCHEDULE

щ	
E	
๘	
ن	
$\sim$	
Ë	
Ś	
Е	
Ц	
2	
×	
á	
U	
Y	-
Ĭ	
~	
Ĭ	
ON 10	
10N 10-	
10N 10-	
110N 10 - (	
SECTION 10 - (	
ECTION 10 - 0	
SECTION 10 - (	
CITEM: SECTION 10 - 0	
CITEM: SECTION 10 - 0	
EM: SECTION 10 - (	

BASIC BID

				UNII	UNIT COST	TOTAL COST	cost	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY	LOCAL	FOREIGN	LOCAL	EQUIVALENT TOTAL
				COMPONENT (YEN)	COMPONENT (VND)	COMPONENT (YEN)	COMPONENT (VND)	COST (VND)
SUB-1	SUB-TOTAL BROUGHT FORWARD					1,495,990,083	95,446,331,650	
10.11(3)A	Elastomeric Bearing Pad, Type A 510*310*56	each	267	44,900	618,450	11,988,300	165,126,150	
10.11(3) <b>B</b>	Elastomeric Bearing Pad, Type B 510*310*44	each	62	36,360	618,450	2,872,440	48,857,550	
10.11(3)C	Elastomeric Bearing Pad, Type C 510*310*36	each	346	27,050	618,450	9,359,300	213,983,700	
10.11(3)D	Elastomeric Bearing Pad, Type D 510*260*40	each	40	28,900	618,450	1,156,000	24,738,000	
10.11(3)E	Elastomeric Bearing Pad, Type E 330*330*54	each	16	30,930	618,450	494,880	9,895,200	
10.11(3)F	Elastomeric Bearing Pad, Type F 510*510*44	чэвэ	4	59,820	618,450	239,280	2,473,800	
10.11(3)G	Elastomeric Bearing Pad, Type G 510*510*26	еаср	12	50,200	618,450	602,400	7,421,400	
10.11(3)Н	Elastomeric Bearing Pad, Type H 480*480*44	each	4	44,470	618,450	177,880	2,473,800	
10.12(2)	PVC Drain Pipe, D = 20cm	lin.m	1,109	6	226,170	9,981	250,822,530	
SUB-1	SUB-TOTAL CARRIED FORWARD					1,522,890,544	96,172,123,780	

	COMBINED	EQUIVALENT TOTAL COST (VND)			in the second se		- Parling view			•
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	96,172,123,780	74,189,280	2,016,816,438	274,160,580				98,537,290,078
	TOTAI	FOREIGN CURRENCY COMPONENT (YEN)	1,522,890,544	57,552	16,362,164	3,053,880				1,542,364,140
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)		562,040	140,271	9,157				
BID PRICE SCHEDULE BASIC BID	UNIT	FOREIGN CURRENCY COMPONENT (YEN)		436	1,138	102				
BID		QUANTITY		132	14,378	29.940				
R E		UNIT		each	m.ps	5	<u> </u>			
THE STRUCTURE		DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Deck Drain Box	Precast RC Plate. Type A	Bridge Deck Waterproofing,				SECTION 10 - TOTAL TO SUMMARY
WOOD YEEM.	WORK LIEM.	ITEM NO.	T-BUS	10.12(3)	10.12(4)	10.12(5)				SECTIC

### PACKAGE 2 GIA LAM SECTION

ORK ITEM	WORK ITEM: SECTION 12 - MISCELLANEOUS			BASIC BID				
				UNIT COST	COST	TOTAL COST	cosr	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
12.01(1)	Grassed Area, Solid Sodding	sq.m	100,000		23,594	•	2,359,400,000	
12.02	Stone Masonry	cu.m	730	143	440,219	104,390	321,359,870	
12.05(2)	Motared Stonework for Slope Protection (below River Water Level)	m.ps	540	1 1	121,853	1	65,800,620	
12.06(1)	Vehicle Guardrail, Type A	lin.m	14,960	3,560	13,294	53,257,600	198,878,240	
12.06(2)	Pipe Guardrail, Type B, Movable	lin.m	1,530	938	26,918	1,435,140	41,184,540	
12.07(1)	Regulatory and Warning Signs Type-A (1 Board)	each	12	257	812,884	3,084	9,754,608	
12.07(2)	Regulatory and Warning Signs Type-C (2 Board)	each	12	257	1,201,066	3,084	14,412,792	
12.07(3)	Precast Concrete Km Indicator Post	each	9	19	375,970	114	2,255,820	
12.07(4)	Precast Concrete Guide Post	each	76	13	169,928	886	12,914,528	
12.07(5)	Guide Sign, Type A	each	20	513	1,773,367	10,260	35,467,340	
SUB-	SUB-TOTAL CARRIED FORWARD					54,814,660	3,061,428,358	4

## PACKAGE 2 GIA LAM SECTION

BID PRICE SCHEDULE RASIC RID	UNIT COST TOTAL COST COMBINED	FOREIGNLOCALFOREIGNLOCALEQUIVALENTCURRENCYCURRENCYCURRENCYTOTALCOMPONENTCOMPONENTCOMPONENTCOST(YEN)(YND)(YND)(YND)	54,814,660 3,061,428,358	60 16,142 36,600 9,846,620	66 17,756 338,580 91,088,280	101 101,461 1,138,270 1,143,465,470	76 76,096 490,960 491,580,160	18 19,847 97,254 107,233,341	- 758,917,750	- 46,062 - 23,491,620	1,010 2,419,351 32,320 77,419,232	56,948,644 5,764,470,831
		UNIT QUANTITY		sq.m	sq.m 5,130	lin.m 11,270	lin.m 6,460	lin.m 5,403	sq.m 10,750	each	each	
WORV TREM, SECTION 12 MISCELL ANEDLIS	WORN TEAM. SECTION 12 - MISCELLE MISCEL	ITEM NO. DESCRIPTION U	SUB-TOTAL BROUGHT FORWARD	12.09(1) Road Marking, Type A (General Application) s	12.09(2) Road Marking, Type A (Special Application) s	12.12(1) Concrete Curb, Type A				12.17 Queen Crape-Myrtle e	Plaques	SECTION 12 - TOTAL TO SUMMARY

### PACKAGE 2 GIA LAM SECTION

-	
0	
71	
1	
_	
-	
3	
7	
_	
_	
_	
_	
13	
•	
~	
•	
-	
Š	
Š	
ECTION	
ECTION	
ECTION	
SECTION	
SECTION	
M. SECTION	
EM: SECTION	
EM: SECTION	
TEM: SECTION	
EM: SECTION	
ITEM: SECTION	
THEM: SECTION	
THEM: SECTION	
THEM: SECTION	
K ITEM: SECTION	
THEM: SECTION	

6	Ĺ,			***************************************								
COMBINED	EQUIVALENT TOTAL COST (VND)											
COST	LOCAL CURRENCY COMPONENT (VND)	1,445,385,000	439,400,000	1,174,500,000	148,610,000	3,420,000	40,238,100	79,563,400	215,597,200	350,385,000	830,232,000	
TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	•	•	•		1	1		_			
COST	LOCAL CURRENCY COMPONENT (VND)	8,655,000	8,450,000	15,660,000	6,755,000	570,000	5,748,300	11,366,200	7,699,900	200,220	115,310	
UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)					•		•				
	QUANTITY	167	52	75	22	9	7	7	28	1,750	7,200	
	UNIT	each	each	each	each	each	each	each	each	lin.m	lin.m	
	DESCRIPTION	Road Lighting Unit, Type A2.1	Road Lighting Unit, Type A4.1	Road Lighting Unit, Type B2.1	Road Lighting Unit. Type F1	Road Lighting Unit, Type G1	Power Supply Receiving Panel (SS)	Low Voltage Distribution Panel (MDP)	Lighting Panel (DB)	Cable, X-LPE Armer Type 4c - 50mm2	Cable, X-LPE Armer Type 4c - 25mm2	STIB-TOTAL CARRIED FORWARD
	ITEM NO.	13.01(1)	13.01(2)	13.01(3)	13.01(4)	13.01(5)	13.01(6)	13.01(7)	13.01(8)	13.01(9)	13.01(10)	STIR-7

		COMBINED	EQUIVALENT TOTAL COST (VND)		0	0	0	0	0	0	0	0	0	- 0
		TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	4,727,330,700	709,054,500	1,143,810,000	153,916,000	326,508,000	1,674,400,000	60,185,600	15,912,000	2,660,000,000	350,000,000	11,821,116,800
		TOTAI	FOREIGN CURRENCY COMPONENT (YEN)		-		-							
DULE		COST	LOCAL CURRENCY COMPONENT (VND)		96,470	64,440	47,800	78,000	92,000	940,400	884,000	380,000,000	50,000,000	
BID PRICE SCHEDULE	BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)										•	
BID			QUANTITY		7,350	17,750	3,220	4,186	18,200	64	18	7.	7	
			UNIT		lin.m	lin.m	lia.m	lin.m	lin.m	each	each	each	each	
	WORK ITEM: SECTION 13 - UTILITIES		DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Cable, X-LPE Armer Type 4c - 16mm2	Cable, X-LPE Armer Type 4c - 10mm2	Cable, X-LPE/ PVC 4c - 10mm2	Grounding Wire BCC 6mm2	PVC Conduit, 50mm dia with	Pull Box, Type F	Pull Box, Type G	Power Receiving, 30 kVA	Application for Power Connection	SUB-TOTAL CARRIED FORWARD
	WORK ITE	WOLKE ILL	ITEM NO.	SUB-1	13.01(11)	13.01(12)	13.01(13)	13.01(14)	13.01(15)	13.01(16)	13.01(17)	13.01(18)	13.01(19)	SUB-

_
S
m
=
-
드
. 3
_
ᆫ
₽.
$\sim$
٠.
Ė
-
4
$\sim$
Ξ
$\mathbf{r}$
Q
ш
$\pi$
Ψ,
ئث
2
щ
$\vdash$
-
7
~
$\overline{}$
O

## PACKAGE 3 THANH TRI SECTION BID PRICE SCHEDULE BASIC BID

### 

### PACKAGE 3 THANH TRI SECTION

### BID PRICE SCHEDULE BASIC BID

SUMMARY

	TOTAI	TOTAL COST	COMBINED
ITEM NO.	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (YND)	EQUIVALENT TOTAL COST (VND)
General	233,949,208	15,494,799,692	
- Site Clearing	4,365,360	227,483,760	
- Demolition	844,000	14,160,000	
- Road Earthwork	2,476,997,625	75,317,133,182	
- Structure Excavation	54,556,160	3,025,190,000	
- Drainage	19,791,978	19,572,187,989	
- Subgrade	5,331,000	216,794,000	1
- Sub-Base and Base	13,016,300	21,246,403,100	
- Pavement	169,298,790	21,648,552,050	
SECTION 10 - Concrete Structure	1,731,404,736	123,591,233,674	
SECTION 12 - Miscellaneous	99,864,220	17,118,642,409	
- Utilities		22,848,224,680	1
- Toll Plaza and Control Building	103,514,000	3,569,989,000	
SECTION 15 - Diversion of existing Utilities	•	1,500,000,000	,
Subtotal	4,912,933,377	325,390,793,536	-
SECTION 16 - Day work (1% of Subtotal)	49,129,334	3,253,907,935	
SECTION 17 - Contingency (15% from section 2 to section 15)	701,847,625	46,484,399,077	
TOTAL	5,663,910,336	375,129,100,548	

## PACKAGE 3 THANH TRI SECTION

			TOTAL	TOTAL COST	COMBINED
	DESCRIPTION		FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
(1)		DIRECT COST	5,663,910,336	375,129,100,548	
(2)	(1) x 5%	CONTRACTOR'S OVERHEAD	283,195,517	18,756,455,027	1
(3)	$[(1) + (2)] \times 6\%$	CONTRACTOR'S PROFIT & TAX	356,826,351	23,633,133,334	
(4)	(1) + (2) + (3)	TOTAL COST	6,303,932,204	417,518,688,909	

## PACKAGE 3 THANH TRI SECTION

FI	
CIU	֝֝֝֜֜֜֜֝֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֓֓֓֓֓֜֜֜֜֜֓֓֓֓
Z	

Ţ		·	<del></del>			····	 	~~~	 ,
	COMBINED	EQUIVALENT TOTAL COST (VND)							
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	15,494,799,692						15,494,799,692
	TOTAI	FOREIGN CURRENCY COMPONENT (YEN)	233,949,208						233,949,208
	cosr	LOCAL CURRENCY COMPONENT (VND)							
BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)	ſ						
		QUANTITY							
		UNIT	LS	; ·	11,				
WORK ITEM: SECTION 1 - GENERAL		DESCRIPTION	General						SECTION 1 - TOTAL TO SUMMARY
WORK ITEN		ITEM NO.	1						SECTIC

## PACKAGE 3 THANH TRI SECTION

WOLL THE	MONN LLEM. SECTION 2 - SITE CLEANING			DANIC BID			
				TSOO TINU	cost	TOTAL COST	COST
ITEM NO.	DESCRIPTION	UNIT	UNIT QUANTITY	FOREIGN	LOCAL	FOREIGN	LOCAL
. i				COMPONENT	COMPONENT	COMPONENT	COMPONE
				(YEN)	(NAD)	(XEN)	
2.01							
	Clearing and Grubbing	sq.m	485,040	6	469	4,365,360	227,483,7

				LOST UNIT COST	COST	TOTAL COST	, cost	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
2.01	Clearing and Grubbing	sq.m	485,040	6	469	4,365,360	227,483,760	
	10000							
SECTIO	SECTION 2 - TOTAL TO SUMMARY					4,365,360	227,483,760	

### PACKAGE 3 THANH TRI SECTION

WORK ITE	WORK ITEM: SECTION 3 - DEMOLITION			BASIC BID				
				UNIT	UNIT COST	TOTAI	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
3.01(1)	Removal of Masonry and Concrete Structures including Remaining Parts of Housing	cu.m						
3.01(2)	Removal of Existing Curb	lin.m		1				
3.01(3)	Removal of Existing Asphalt Pavement	cu.m					•	
3.01(4)	Removal of Existing Lighting Pole	each		•		•	1	
3.01(5)	Removal of Existing Bridge (Steel Bridge)	sq.m	400	2,110	35,400	844,000	14,160,000	
						:		
SECTI	SECTION 3 - TOTAL TO SUMMARY					844,000	14,160,000	•

## PACKAGE 3 THANH TRI SECTION

	l
XX.	
THW(	
EAR	
- ROAD EARTHWORK	
<b>TEM: SECTION 4</b>	
<u> </u>	
<b>ORK</b>	

	COMBINED	EQUIVALENT TOTAL COST (VND)						and the second s					Ē
	COST	LOCAL CURRENCY COMPONENT (VND)	475,938,000	19,454,676,000	•	1,781,474,200	21,840,007,200	2,071,651,356	167,400,226	20,182,887,000	3,755,783,200	5,587,316,000	75,317,133,182
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	27,126,000	325,803,000		43,643,600	508,138,400	1,540,134	122,591	1,301,148,300	248,877,200	20,598,400	2,476,997,625
	cosr	LOCAL CURRENCY COMPONENT (VND)	1,930	13,316	-	7,429	21,963	108,954	113,338	11,370	2,158	8,680	
DASIC DID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)	110	223		182	511	81	83	733	143	32	
		QUANTITY	246,600	1,461,000	1	239,800	994,400	19,014	1,477	1,775,100	1,740,400	643,700	
<del>4</del>		UNIT	cu.m	cu.m	cu.m	cu.m	cu.m	cu.m	сп.т	lin.m	lin.m	m.ps	
WORK ITEM: SECTION 4 - ROAD EAKTHWORK		DESCRIPTION	Common Excavation	Borrow Material	Surchage with Borrow Material	Tranitable Material	Sand Fill Material	Granular Backfill	Permeable Backfill	Vertical Soil Drains (Sand, 40cm dia).	Vertical Soil Drains (Fibre)	Geo-Textile Non-Woven Sheet	SECTION 4 - TOTAL TO SUMMARY
WORK ITE		ITEM NO.	4.03	4.04(1)	4.04(2)	4.06	4.07	4.08	4.09	4.10(1)	4.10(2)	4.11(2)	SECTI

## PACKAGE 3 THANH TRI SECTION

٠.	ı
	ı
	i
	ı
_	ı
5	ı
¬	ı
=	Į
_	ł
€	ı
>`	ì
-	ì
٩.	1
ر	ì
≺	1
T)	1
	į
ц	Į
Y.	1
	ı
_	ı
<u></u>	ı
=	ı
_	ı
×	ı
_	ı
n	ı
ı.	ı
^	ì
	Į
Z	ł
$\sim$	Į
~	ı
_	ı
Э.	į
ī.	i
n	ì
	1
S	
~	
I.	
-	
7	
7	
7	
3	

				 	 	,	 	 
COMBINED	EQUIVALENT TOTAL COST (VND)							•
TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	2,574,180,000	451,010,000					3,025,190,000
TOTAI	FOREIGN CURRENCY COMPONENT (YEN)	54,480,000	76,160	-				54,556,160
cost	LOCAL CURRENCY COMPONENT (VND)	37,800	189,500					
UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)	008	32					
	QUANTITY	68,100	2,380					
	UNIT	cu.m	cu.m				. *	
	DESCRIPTION	Structure Excavation	Blinding Stone					SECTION 5 - TOTAL TO SUMMARY
	ITEM NO.	5.01(1)	5.01(3)			7 7 8		SECTI

## PACKAGE 3 THANH TRI SECTION

E	
4	
ζ,	)
7	
<	ŕ
~	

WORK ITE	WORK ITEM: SECTION 6 - DRAINAGE			BASIC DID				
				UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNII	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
6.05(4)	RC Pipe, D=75cm Type A-1	lin.m	10,405	490	916,717	5,098,450	9,538,440,385	
6.05(5)	RC Pipe, D=75cm Type A-2	lin.m	089	2,826	1,547,261	1,921,680	1,052,137,480	
6.05(7)	RC Pipe, D=125cm Type A-2	lin.m	494	4,420	3,183,800	2,183,480	1,572,797,200	
6.05(8)	RC Pipe, D=125cm Type B-2	lin.m	T	8,030	5,788,700	618,310	445,729,900	
6.06(1)	U-Ditch, Type U-1	in.m	9,830	74	213,294	727,420	2,096,680,020	
6.06(2)	U-Ditch, Type U-2	lin.m	2,460	117	134,044	287,820	329,748,240	
6.06(3)	U-Ditch, Type U-3	lin.m	1,840	111	127,342	204,240	234,309,280	
6.06(5)	Mortared Stone Channel, Type C-1	lin.m	4,105	141	274,851	578,805	1,128,263,355	
(9)90.9	Mortared Stone Channel, Type C-2 and C-4	lin.m	069	169	316,697	116,610	218,520,930	
6.06(7)	Mortared Stone Channel, Type C-3	lin.m	165	2,891	3,479,468	477,015	574,112,220	
SUB-7	SUB-TOTAL CARRIED FORWARD					12,213,830	17,190,739,010	1

### PACKAGE 3 THANH TRI SECTION

	COMBINED	EQUIVALENT TOTAL COST (VND)	ŧ								 1
	COST	LOCAL CURRENCY COMPONENT (VND)	17,190,739,010	392,645,862	85,815,800	1,589,780,325	33,235,620	241,874,658	38,096,714		19,572,187,989
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	12,213,830	1,087,544	51,240	6,178,200	14,920	215,118	31,126		19,791,978
	UNIT COST	LOCAL CURRENCY COMPONENT (VND)		2,930,193	612,970	3,028,153	1,661,781	13,437,481	19,048,357		
BASIC BID	UNIT	FOREIGN CURRENCY COMPONENT (YEN)		8,116	366	11,768	746	11,951	15,563		
		QUANTITY		134	140	525	20	18	2		
		UNIT		each	each	each	each	each	each		
WORK ITEM: SECTION 6 - DRAINAGE		ITEM NO. DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	6.06(8) Catch Basin, Types R1, R2 and R4	6.06(9) Catch Basin, Type R3	6.06(10) Catch Basin, Type F	6.06(11) Catch Basin Tyne S1	6.06(13) Headwall, for 125-A	6.06(14) Headwall, for 125-B		SECTION 6 - TOTAL TO SUMMARY

## PACKAGE 3 THANH TRI SECTION

	COMBINED	EQUIVALENT TOTAL COST (VND)				The state of the s		·	
	COST	LOCAL CURRENCY COMPONENT (VND)	216,794,000						216,794,000
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	5,331,000						5,331,000
DULE	COST	LOCAL CURRENCY COMPONENT (VND)	610						
BID PRICE SCHEDULE BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)	15						
BID		QUANTITY	355,400						
		UNIT	m.ps						
WONY THEM, SECTION 7 STIRED ADE	A: SECTION : - SCHOOLS	DESCRIPTION	Suberade Preparation						SECTION 7 - TOTAL TO SUMMARY
CHI ACOM	WORNIE	ITEM NO.	7.01						SECTIC

## PACKAGE 3 THANH TRI SECTION

WORK ITEN	WORK ITEM: SECTION 8 - SUB-BASES AND BASES	SASES		BASIC BID				
				UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (YND)	EQUIVALENT TOTAL COST (VND)
8.01	Sub-Base	cu.m	119,400	74	122,465	8,835,600	14,622,321,000	
8.02	Granular Base Course	cn.m	43,100	76	153,691	4,180,700	6,624,082,100	
			2					-
SECTION	SECTION 8 - TOTAL TO SUMMARY					13,016,300	21,246,403,100	1

## PACKAGE 3 THANH TRI SECTION

EMENTS
-
9-P
NOL
EM: SECTION 9 - PA
CITEM
ORK ITEM

	COMBINED	EQUIVALENT TOTAL COST (VND)										1
	COM	EQUIV TO CC CC										
	COST	LOCAL CURRENCY COMPONENT (VND)	852,186,600	705,005,700	10,036,988,700	3,349,962,400	5,549,146,210		993,514,440	161,748,000		21,648,552,050
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)			11,787,150	5,123,000	11,258,780	139,477,800	1,349,660	302,400		169,298,790
	OST	LOCAL CURRENCY COMPONENT (VND)	3,494	3,461	152,422	153,668	166,591	_	277,518	449,300		
BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)		•	179	235	338	23,100	377	840		
		QUANTITY	243,900	203,700	65,850	21,800	33,310	6,038	3,580	360		
		UNIT	kg	kg	ton	ton	ton	ton	sq.m	cu.m		
STNEW DAVEMENTS	M. SECTION 7 - LTS STORY	DESCRIPTION	Bituminous Prime Coat	Rituminous Tack Coat	Asphalt Treated Base Course	Asphalt Concrete Binder Course	Asphalt Concrete Surface Course	Asphalt Cement	Portland Cement Concrete Pavement (thickness 25cm)	Lean Concrete Base		SECTION 9 - TOTAL TO SUMMARY
Children Const	WOKKIIE	ITEM NO.	9.04	9.05	9.07(1)	9.07(2)	9.07(3)	9.07(4)	9.08(1)	9.09(1)		SECT

### PACKAGE 3 THANH TRI SECTION

### BID PRICE SCHEDULE

BASIC BID

щ	ł
$\alpha$	:
Ξ	١
Ę	4
C	)
Ξ	ì
$\tilde{\alpha}$	1
Ε	7
Ù	3
ſŦ	3
	1
Ĺ	ì
$\tilde{\alpha}$	?
7	i
÷	í
5	₹
۶	₹
Ç	,
C	۶
ŗ	4
Z	
C	j
Ē	٠
7	₹
٧	₹
H	₹
٧	,
÷	ź
•	₹
۳	4
۶	7
	į
7	7
9	7
ž	?
2	٤

EQUIVALENT COMBINED TOTAL COST SND 7,217,879,040 404,717,310 490,054,410 2,940,647,910 27,103,668,480 3,839,144,590 482,548,200 11,270,178,000 503,313,480 54,252,151,420 COMPONENT CURRENCY LOCAL (SND) TOTAL COST 44,287,040 165,822,000 37,640,820 12,227,520 3,785,570 388,692 902,160 7,675,840 295,641,122 22,911,480 COMPONENT FOREIGN (KEK) 6,810 449,300 1,971,000 832,320 832,320 20,430 1,531,370 1,607,790 737,190 COMPONENT CURRENCY LOCAL (MAX) UNIT COST 20,580 1,410 1,360 1,510 708 840 310 320 29,000 COMPONENT CURRENCY FOREIGN (XEN) 1,074 5.718 1,829 8,672 32,564 2.507 549 73,908 23,987 QUANTITY LIND Cu.m Cu.m CU.III Cu.III cu.m cu.m Cu.m ton kв Ŗ SUB-TOTAL CARRIED FORWARD Structural Concrete, Class A-2 Structural Concrete, Class C-5 Structural Concrete, Class C-1 Structural Concrete, Class C-4 Structural Concrete, Class D-1 Structural Concrete, Class E-1 Structural Concrete, Class G DESCRIPTION Reinforcing Steel Bars PC Tendon, Strand PC Tendon, Strand Type A (12T15.2) Type B (4T15.2) ITEM NO. 10.01(A-2)10.01(C-1)(0.01(C-5)0.01(C-4)0.01(E-1)0.01(D-1) 10.01(G)10.03(1)10.03(2) 10.02

#### PACKAGE 3 THANH TRI SECTION

II.
×
$\supset$
Н
O
$\Box$
8
Ε
S
ω
⊏
ш
2
$\overline{\mathbf{O}}$
Ž
S
8
Ÿ
÷
ò
110
N 10
ON 10
TON 10
CHON 10
ECTION 10
CHON
K ITEM: SECTION
ITEM: SECTION
K ITEM: SECTION
K ITEM: SECTION
K ITEM: SECTION

WORK ITEM:	WORK ITEM: SECTION 10 - CONCRETE STRUCTURE	E E		DASIC DID				
				UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITIY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
SUB-T	SUB-TOTAL BROUGHT FORWARD					295,641,122	54,252,151,420	1
10.03(4)	PC Tendon, Strand Type D (12T12.7)	kg	612,953	380	9,530	232,922,140	5,841,442,090	
10.03(8)	PCI-Girder Length 28.0m; Height 1.50m	each	75	1,011,520	46,246,080	75,864,000	3,468,456,000	
10.03(10)	PC I-Girder Length 33.0m; Height 1.65m	each	273	1,264,400	57,807,600	345,181,200	15,781,474,800	
10.03(11)	PC I-Girder Length 35.0m; Height 1.75m	each	58	1,390,840	63,588,360	80,668,720	3,688,124,880	
10.07(1)	Cast-In-Place Concrete Pile, D = 1000mm	Jin.m	23,886	9,983	855,380	238,453,938	20,431,606,680	
10.07(2)	Cast-In-Place Concrete Pile, D = 1500mm	lin.m	8,104	19,178	1,740,410	155,418,512	14,104,282,640	
10.07(T)	Ultra-Sonic and Pile Integrity Testing	Provisional Sum					625,000,000	
10.08(1)	Test Drilling for Soill Investigation, General	lin.m	009	1,968	206,025	1,180,800	123,615,000	
10.08(3)	Test Drilling for Soft Ground Investigation	lin.m	909	1,968	206,025	1,180,800	123,615,000	
SUB-1	SUB-TOTAL CARRIED FORWARD					1,426,511,232	118,439,768,510	

### PACKAGE 3 THANH TRI SECTION

WORK ITEM	WORK ITEM SECTION 10 - CONCRETE STRUCTIRE	ξ	BID	BID PRICE SCHEDULE RASIC RID	DULE			
				UNIT	UNIT COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN	LOCAL	FOREIGN	LOCAL	EQUIVALENT TOTAL
				COMPONENT (YEN)	COMPONENT (VND)	COMPONENT (YEN)	COMPONENT (VND)	COST (VND)
SUB-T	SUB-TOTAL BROUGHT FORWARD		No.			1,426,511,232	118,439,768,510	
10.09(1)	Bridge Parapet and Railing, Complete (Type A)	i.	400	44 038	330.700	17.615.200	132.280.000	
10.09(2)	Bridge Parapet and Railing,	lin m	0.40.070	73 067	767 780	178 933 480	1 067 479 600	
10.10(1)	Expansion Joint, Type A 40mm	il mil	546	50,230	159,300	27,425,580	86,977,800	
10.11(2)C	Pot Bearing, Type C 450t	each	16	1,504,900	5,772,200	24,078,400	92,355,200	
10.11(3)A	Elastomeric Bearing Pad, Type A 510*310*56	each	331	44,900	618,450	14,861,900	204,706,950	
10.11(3)B	Elastomeric Bearing Pad, Type B 510*310*44	each	27	36,360	618,450	2,727,000	46,383,750	
10.11(3)C	Elastomeric Bearing Pad, Type C 510*310*36	each	406	27,050	618,450	10,982,300	251,090,700	
10.11(3)D	Elastomeric Bearing Pad, Type D 510*260*40	each	1		•	<b>1</b>	ı	
10.11(3)E	Elastomeric Bearing Pad, Type E 330*330*54	each	48	30,930	618,450	1,484,640	29,685,600	
SUB-1	SUB-TOTAL CARRIED FORWARD					1,704,619,732	120,350,728,110	1

#### THANH TRI SECTION PACKAGE 3

### BID PRICE SCHEDULE

(I)
TURE
5
Ξ.
ខ្ម
Š
Z
=
ΩÍ
ш
F
Ξ
24
O
Ż
Ö
_
u
7
10 - C
CHON 10
CHON 10
CHON 10
M: SECTION 10
M: SECTION 10
M: SECTION 10
M: SECTION 10
IK ITEM: SECTION 10
M: SECTION 10

EQUIVALENT TOTAL COMBINED COST (VND) 120,350,728,110 1,731,404,736 | 123,591,233,674 22,264,200 7,421,400 324,780,120 83,181,920 2,474,941,524 320,495,000 7,421,400 COMPONENT CURRENCY LOCAL (SND) TOTAL COST 12,924 20,078,872 1,704,619,732 64,528 3,570,000 717,840 1,807,200 533,640 COMPONENT CURRENCY FOREIGN (YEN) 618,450 562,040 618,450 618,450 226,170 9.157 140,271 COMPONENT CURRENCY LOCAL (SND) UNIT COST BASIC BID 50,200 436 1,138 59,820 44,470 0 102 COMPONENT CURRENCY FOREIGN (KEN) 1,436 148 17,644 35,000 36 12 12 QUANTITY UNIT lin.m sg.m sq.m lin.m each each each each Elastomeric Bearing Pad, Type G Elastomeric Bearing Pad, Type H Elastomeric Bearing Pad, Type F SECTION 10 - TOTAL TO SUMMARY SUB-TOTAL BROUGHT FORWARD Bridge Deck Waterproofing, PVC Drain Pipe, D = 15cm PVC Drain Pipe, D = 20cm DESCRIPTION Precast RC Plate, Type A Deck Drain Box 510\*510\*26 480\*480\*44 510\*510\*44 Type A ITEM NO. 10.11(3)G 0.11(3)H 10.11(3)F 10.12(5) 10.12(1) 10.12(2) 10.12(3) 10.12(4) ž

### PACKAGE 3 THANH TRI SECTION

BID PRICE SCHEDULE
BASIC BID

WORK ITEM: SECTION 12 - MISCELLANEOUS

			***************************************					
				UNIT	UNIT COST	TOTAL	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	CURRENCY COMPONENT	EQUIVALENT TOTAL COST
12.01(1)							(2)	
	Grassed Area, Solid Sodding	sq.m	200,000	•	23,594	•	4,718,800,000	
12.02	Stone Masonry	cu.m	7,590	143	440,219	1.085.370	3.341.262.210	
12.05(1)	Motared Stonework for Slope		i c					
	Froiection	Sq.m	2,740	1	101,544	,	278,230,560	
12.05(2)	Motared Stonework for Slope Protection (below River Water Level)	sq.m	3,640	1	121,853	•	443.544.920	
12.06(1)								
	Vehicle Guardrail, Type A	lin.m	22,890	3,560	13,294	81,488,400	304,299,660	
12.06(2)								
	Pipe Guardrail, Type B, Movable	lin.m	12,140	938	26,918	11,387,320	326,784,520	
12.07(1)	Regulatory and Warning	1000	•	t c	700		1	
12.07(2)	Demisters and Woming	Cacil	77	/27	012,004	3,004	3,734,008	
	Signs Type-C (2 Board)	each	12	257	1.201.066	3.084	14.412.792	
12.07(3)	Precast Concrete Km Indicator Post	each	10	19	375.970	190	3.759.700	
12.07(4)								
	Precast Concrete Guide Post	each	144	13	169,928	1,872	24,469,632	
SUB-T	SUB-TOTAL CARRIED FORWARD					93,969,320	9,465,318,602	

#### PACKAGE 3 THANH TRI SECTION

NEOUS
٦
0
Œ)
ァ
$\neg$
SECTION 12 - MISCELLAD
⊣.
Η.
μí
Ų
S
≂
2
•
$\sim$
-
4
0
53
ب
щ
•,
ند
ž
EX:
TEM:
ITEM:
ITEM:
ITEM:
ORK ITEM:

#### PACKAGE 3 THANH TRI SECTION

### BID PRICE SCHEDULE

BID
Q
S
⋖
B
ŧ.

WORK ITEM: SECTION 13 - UTILITIES

				UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
13.01(1)	Road Lighting Unit, Type A2.1	each	523		8,655,000	1	4,526,565,000	
13.01(2) Roa	Road Lighting Unit, Type A4.1	each	42		8,450,000		354,900,000	
13.01(3) Roa	Road Lighting Unit, Type B2.1	each	131		15,660,000		2,051,460,000	
13.01(4) Roa	Road Lighting Unit, Type F1	each	37		6,755,000	•	249,935,000	
13.01(5) Roa	Road Lighting Unit, Type G1	each	44		570,000	•	25,080,000	
13.01(6) Pow	Power Supply Receiving Panel (SS)	each	12		5,748,300		68,979,600	
13.01(7) Low V (MDP)	Low Voltage Distribution Panel (MDP)	each	12	ı	11,366,200	•	136,394,400	
13.01(8) Ligh	Lighting Panel (DB)	each	48		7,699,900	•	369,595,200	
13.01(9) Cabi	Cable, X-LPE Armer Type 4c - 50mm2	lin.m	750	ŧ	200,220		150,165,000	
13.01(10) Cabl	Cable, X-LPE Armer Type 4c - 25mm2	lin.m	1,800	•	115,310		207,558,000	
SUB-TOTA	SUB-TOTAL CARRIED FORWARD					1	8,140,632,200	·

#### PACKAGE 3 THANH TRI SECTION

#### THE SCHEDING OF

H
-
$\Box$
$\overline{}$
7
$\blacksquare$
$\mathbf{C}$
Ō
F-3
Ħ.
$\mathbf{C}$
$\Box$
<u> </u>
ہم
$\blacksquare$
A

	COMBINED	EQUIVALENT TOTAL COST (VND)	,										•
	COST	LOCAL CURRENCY COMPONENT (VND)	8,140,632,200	1,215,522,000	2,368,170,000	178,294,000	28,860,000	22,448,000	39,496,800	77,792,000	4,560,000,000	600,000,000	17,231,215,000
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)		•	•	1	•	I.		•	1	1	
	UNIT COST	LOCAL CURRENCY COMPONENT (VND)		96,470	64,440	47,800	78,000	92,000	940,400	884,000	380,000,000	50,000,000	
BASIC BID	TINU	FOREIGN CURRENCY COMPONENT (YEN)		1			1						
		QUANTITY		12,600	36,750	3,730	370	244	42	88	12	12	
		UNIT		lin.m	lin.m	lin.m	lin.m	lin.m	each	each	each	each	
WORV TEN CECTION 13 - ITHI ITIES	A. Section is a confidence	DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Cable, X-LPE Armer Type 4c - 16mm2	Cable, X-LPE Armer Type 4c - 10mm2	Cable, X-LPE/ PVC 4c - 10mm2	Grounding Wire, BCC 6mm2	PVC Conduit, 50mm dia with Fittings	Pull Box, Type F	Pull Box, Type G	Power Receiving, 30 kVA	Application for Power Connection	SUB-TOTAL CARRIED FORWARD
XX/OBY 17PE	WORK TILL	ITEM NO.	SUB-T	13.01(11)	13.01(12)	13.01(13)	13.01(14)	13.01(15)	13.01(16)	13.01(17)	13.01(18)	13.01(19)	SUB-1

### PACKAGE 3 THANH TRI SECTION

#### BID PRICE SCHEDULE BASIC BID

WORK ITEM: SECTION 13 - UTILITIES

WOKK IIEN	WOKN TIEM: SECTION 13 - UTILITIES			DASIC DID			A	
				UNIT COST	cosr	TOTAL	TOTAL COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	EQUIVALENT TOTAL COST
SUB-T(	I SUB-TOTAL BROUGHT FORWARD	(1945) (1444) (1444) (1444)				(552)	17,231,215,000	-
13.01(20)	Watt Hour Meter Box and Panel	each	12		2,550,000	1	30,600,000	
13.01(21)	Protection of Expansion Joint	each	65		250,000	•	16,250,000	
13.01(22)	Buried Cable Protector	lin.m	36,750	1	84,160	ŧ	3,092,880,000	
13.01(23)	Marker for Underground Cables	each	1,225	•	181,000	1	221,725,000	
13.01(25)	Control Cable, X-LPE 7c-10mm2	lin.m	928	I	88,310	•	81,951,680	
13.01(26)	Traffic Control Master Unit	each	13		22,448,000	•	291,824,000	
13.01(27)	Manual Push Botton	each	58	1	750,000		43,500,000	
13.01(28)	Traffic Signal Unit, Type 1	each	58		11,450,000	I	664,100,000	
13.01(29)	Traffic Signal Unit, Type 2	each	54	<b>1</b>	8,630,500		466,047,000	
SUB-T	SUB-TOTAL CARRIED FORWARD					•	22,140,092,680	1

### PACKAGE 3 THANH TRI SECTION

19		
•		ċ
		٠
,		
IN SECTION		
≾		
_		
۲		
Š		
万 フ		
J		
¥		
Η		
Ħ		
7		
HANHI		
₹		٠,
_	į	

		COMBINED	EQUIVALENT TOTAL COST (VND)	•							3
	1000	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	22,140,092,680	50,102,000	6,550,000	367,080,000	284,400,000			22,848,224,680
		IOIAI	FOREIGN CURRENCY COMPONENT (YEN)		3	l	•				•
DULE		UNIT COST	LOCAL CURRENCY COMPONENT (VND)		3,854,000	6,550,000	380,000	1,200,000			
BID PRICE SCHEDULE	DASIC DID	TINO	FOREIGN CURRENCY COMPONENT (YEN)		-						
BID			QUANTITY		13	-	996	237			
			UNIT		each	ដ	li.m	each			
	WORK ITEM: SECTION 13 - UTILITIES		DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Emergency Back-Up Unit	Power Connection for Package 3	Duct Bank Tyne A	Manhole Tyne A			SECTION 13 - TOTAL TO SUMMARY
	WORK ITE		ITEM NO.	SUB-7	13.01(30)	13.01(32)	13.02(1)	13.02(3)			SECTI

### PACKAGE 3 THANH TRI SECTION

BID PRICE SCHEDULE WORK ITEM: SECTION 14 - TOLL PLAZA AND CONTROL BUILDING BASIC BID	UNIT COST TOTAL COST COMBINED	DESCRIPTION UNIT QUANTITY CURRENCY CURRENCY CURRENCY COMPONENT COMPONENT COMPONENT (YEN) (YEN) (YEN) (YEN) (YEN) (YND) (YND) (YND) (YND) (YND) (YND)	ure for Toll Gates,       228       2,750,000       -       627,000,000	Type A 2,259,000 - 9,036,000 - 9,036,000	Type B - 5,523,000 - 5,523,000 -	lding sq.m 779 - 1,870,000 - 1,456,730,000	se sq.m 8 - 990,000 - 7,920,000	Motorbike Keeping         sq.m         107         -         990,000         -         105,930,000	on sq.m 35 - 34,650,000		e	KIED FORWARD 14,559,000 2,307,310,000 -
SECTION 14 - TOLL PLAZA AND CONTR		DESCRIPTION	Roof Structure for Toll Gates, including Foundations	Toll Booth, Type A (Standard Type)	Toll Booth, Type B (Long Type)	Control Building sq	Guard House sq	Garage and Motorbike Keeping sq	Pump Station sq	er Tank, 5cu.m	Deep Well and Water Treatment	SUB-TOTAL CARRIED FORWARD
WORK ITEM		ITEM NO.	14.02(1)	14.02(2)	14.02(3)	14.03(1)	14.03(2)	14.03(3)	14.03(4)	14.03(5)	14.03(6)	L-EINS

### PACKAGE 3 THANH TRI SECTION

							*************		 			
	COMBINED	EQUIVALENT TOTAL COST (VND)	-							50447		
	cosr	LOCAL CURRENCY COMPONENT (VND)	2,307,310,000	27,280,000	154,550,000	9,800,000	5,280,000	88,000,000	247,520,000	6,320,000	12,500,000	2,858,560,000
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	14,559,000	1			,	•	-		•	14,559,000
	COST	LOCAL CURRENCY COMPONENT (VND)		1				275,000	9,520,000	6,320,000	12,500,000	
DASIC DID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)		•		1						
OILUING		QUANTITY		•	•	<b>3</b>		320	26		*	
A I KOL D		UNIT		LS	LS	S.I.	SI	m.ps	each	each	each	
WORK ITEM: SECTION 14 - TOLL PLAZA AND CONTROL BUILDING		DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Underground Water Storage Tank, 80cu.m	Fire Pump and Hydrant and Exterior Water Lines	Concrete Septic Tank. 27 cu.m	Exterior Storm Sewer and Sanitary Sewer I ines	Landscaping	Road Lighting Unit, Type A2.1	Power Supply Receiving Panel (SS)	Low Voltage Distribution Panel (MDP)	SUB-TOTAL CARRIED FORWARD
<b>WORK ITEM</b>		ITEM NO.	SUB-T	14.03(7)	14.03(8)	14.03(9)	14.03(10)	14.03(11)	14.04(1)	14.04(2)	14.04(3)	SUB-

#### PACKAGE 3 THANH TRI SECTION

	Į
AND CONTROL BUILDING	
TOLL PLAZA AND C	
WORK ITEM: SECTION 14 - 1	

QUANTITY FOREIGN LOCAL CURRENCY CURRENCY COMPONENT (YEN) (YND)
e.
57
184
42
1
1
945
32

#### PACKAGE 3 THANH TRI SECTION

	COMBINED	EQUIVALENT TOTAL COST (VND)										
	8	EQU.			y		:					
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	3,148,597,000	15,840,000	75,552,000	330,000,000		ŀ	::		1	3,569,989,000
	TOTA	FOREIGN CURRENCY COMPONENT (YEN)	14,559,000			•	6,252,000	2,412,000	4,482,000	540,000	600,000	28,845,000
	UNIT COST	LOCAL CURRENCY COMPONENT (VND)		1,320,000	787,000	330,000,000				1		
BASIC BID	IINO	FOREIGN CURRENCY COMPONENT (YEN)					1,042,000	402,000	747,000	90,000	100,000	
UILDING		QUANTITY		12	96	1	9	9	9	9	9	
NTROL B		UNIT		each	lin.m	set	set	each	each	each	each	
WORK ITEM: SECTION 14 - TOLL PLAZA AND CONTROL BUILDING		DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Manhole, Type A	Duct Bank, Type B	Generator, 30kVA	Fare Display and Toll Collection Terminal	Receipt Printer	Toll Collection Terminal Switch Board	Overhead Traffic Light	Lane Traffic Light	SUB-TOTAL CARRIED FORWARD
WORK ITEM		ITEM NO.	SUB-T	14.04(13)	14.04(14)	14.04(15)	14.05A(1)	14.05A(2)	14.05A(3)	14.05A(4)	14.05A(5)	SUB-7

### PACKAGE 3 THANH TRI SECTION

	COMBINED	EQUIVALENT TOTAL COST (VND)																			1
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	3,569,989,000		1							1									3,569,989,000
	TOTA	FOREIGN CURRENCY COMPONENT (YEN)	28,845,000		450,000		1,644,000		9,570,000		6,024,000	5,508,000		532,000		138,000		1,506,000		17,556,000	71,773,000
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)					1					ŧ		•		•		-		•	
BID PRICE SCHEDULE BASIC BID	JUNI	FOREIGN CURRENCY COMPONENT (YEN)			000,57		137,000		1,595,000		502,000	918,000		532,000		23,000		251,000		2,926,000	
BUILDING		QUANTITY			9		12		9		12	9		1		9		9		9	
		UNIT		,	each		each		each	:	set	each		each		set		set		set	
WORK ITEM: SECTION 14 - TOLL PLAZA AND CONTROL		DESCRIPTION	SUB-TOTAL BROUGHT FORWARD		Violation Alarm Unit		Loop Coil Vehicle Detection Unit	Automatic Vehicle	Classification Unit		Lane Open/Close Barrier	Uninterruptible Power Supply, SkVA 40 minutes		Power Distribution Board		Booth Communication Unit		Car Call System		Closed Circuit Television System	SUB-TOTAL CARRIED FORWARD
WORK ITEM		ITEM NO.	SUB-T	14.05A(6)		14.05A(7)		14.05A(8)		14.05A(9)		14.05A(10)	14.05A(11)		14.05A(12)		14.05A(13)		14.05A(14)	*.	SUB-1

### PACKAGE 3 THANH TRI SECTION

	COMBINED	EQUIVALENT TOTAL COST (VND)										
	cosr	LOCAL CURRENCY COMPONENT (VND)	3,569,989,000	1	•	•	1	E	1	ı		3,569,989,000
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	71,773,000	132,000	3,125,000	2,360,000	186,000	2,794,000	3,102,000	616,000	625,000	84,713,000
DULE	UNIT COST	LOCAL CURRENCY COMPONENT (VND)					1			1		
BID PRICE SCHEDULE RASIC RID	UNIT	FOREIGN CURRENCY COMPONENT				000 098 6	186.000	2,794,000	3,102,000		625,000	
	BUILDING	QUANTITY			•				<b>T</b>	ı	-	
		UNIT		S.I	SJ	1	cach each	each	each	I.S	each	
	WORK ITEM: SECTION 14 - TOLL PLAZA AND CONTRUL	DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Documentation Device	Snare Parts		Central Data Processing Unit	Frinter Central Data Server	Closed Circuit Television Master Unit	Video and Cabling	Real Time Monitoring Console	SUB-TOTAL CARRIED FORWARD
	WORK ITEN	ITEM NO.	SUB-1	14.05A(15)	14.05A(16)	14.05B(1)	14.05B(2)	14.05B(3)	14.05B(4)	14.05B(5)	14.05B(6)	SUB

#### PACKAGE 3 THANH TRI SECTION

### THANH TRI SECTION BID PRICE SCHEDULE BASIC BID

	COMBINED	EQUIVALENT TOTAL	COST (VND)	1								
	.cosr	LOCAL	COMPONENT (VND)	3,569,989,000		•	-					3,569,989,000
	TOTAL COST	FOREIGN CURRENCY	COMPONENT (YEN)	84,713,000	954,000	862,000	918,000	242,000	1,265,000	14,560,000		103,514,000
	UNIT COST	LOCAL CURRENCY	COMPONENT (VND)		1			1	- I	1		
BASIC BID	TINU	FOREIGN	COMPONENT (YEN)		954,000	862,000	918,000	242,000	1		, Arviva	
BUILDING		QUANTITY			<del>,</del> t	1	<del>, , ,</del>	1	1			
		UNIT			each	set	each	each	LS	I.S.		
WORK ITEM: SECTION 14 - TOLL PLAZA AND CONTROL		DESCRIPTION		SUB-TOTAL BROUGHT FORWARD	Booth Communication Master Unit	Modulation and Demodulation Interface Unit	Uninterruptible Power Supply, 5kVA 40 minutes	Power Distribution Board	Spare Parts	Training		SECTION 14 - TOTAL TO SUMMARY
WORK ITEM		ITEM NO.		SUB-T	14.05B(7)	14.05 <b>B</b> (8)	14.05 <b>B</b> (9)	14.05B(10)	14.05B(11)	14.05C		SECTIC

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT BID PRICE SCHEDULE BASIC BID

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

#### BID PRICE SCHEDULE BASIC BID

EQUIVALENT TOTAL COST (VND) COMBINED 1,002,495,400 85,887,075,810 19,354,800 1,841,936,500 1,032,203,574 13,463,524,877 1,005,970,000 117,716,085,837 103,220,357,387 13,463,524,877 LOCAL CURRENCY COMPONENT (VND) TOTAL COST ,370,583,330 8,080 69,798,454 17,391,360 7,986,300 ,465,767,524 14,657,675 1,689,820,560 209,395,361 FOREIGN CURRENCY COMPONENT (YEN) - Contingency (15% from section 2 to section 13) SECTION 15 - Diversion of existing Utilities SECTION 16 - Day work (1% of Subtotal) - Structure Excavation - Sub-Base and Base SECTION 10 - Concrete Structure ITEM NO. Subtotal TOTAL - Road Earthwork SECTION 12 - Miscellaneous - Site Clearing - Demolition - Pavement - Subgrade - Drainage SECTION 13 - Utilities General SECTION 17 SECTION 8 ECTION 9 SECTION 6 ECTION 7 SECTION 5 SECTION 2 SECTION 3 SECTION 4 SECTION 1 SUMMARY

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT BID PRICE SCHEDULE BASIC BID

			TOTAL	TOTAL COST	COMBINED
	DESCRIPTION	<b>Z</b>	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
(1)		DIRECT COST	1,689,820,560	117,716,085,837	•
(2)	(1) x 5%	CONTRACTOR'S OVERHEAD	84,491,028	5,885,804,292	
(3)	$[(1) + (2)] \times 6\%$	CONTRACTOR'S PROFIT & TAX	106,458,695	7,416,113,408	
(4)	(1) + (2) + (3)	TOTAL COST	1,880,770,283	131,018,003,537	1

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

•		
	- 1	
	- 1	
ì		
	. 1	
	-	
	~	
	~,	
	☶	
	ш	
	~	
	щ	
	מא	
	$\overline{}$	
	- 1	
	•	
	٠,	
	٠.	
	u	
	_	
	r)	
	ш	
	7	
	•,	
٠		
	-	
	>	
	$\overline{}$	
	ш	
	⊏	
	_	
	Ì	
	. 4	
	$\Box$	
	$\sim$	
	$\circ$	
	~	
	75	
	_	

				 	 			 فالربية بالراجية والمتالة	The second second
COMBINED	EQUIVALENT TOTAL COST (VND)					·			,
TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	13,463,524,877	:				·		13,463,524,877
TOTA	FOREIGN CURRENCY COMPONENT (YEN)	69,798,454							69,798,454
cosr	LOCAL CURRENCY COMPONENT (VND)								
UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)	•							
	QUANTIITY	1							
	UNIT	LS.							
	DESCRIPTION	Mobilisation and Demobilisation							SECTION 1 - TOTAL TO SUMMARY
	ITEM NO.								SECTIC

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

WORK ITEN	WORK ITEM: SECTION 2 - SITE CLEARING			Design of		***************************************	3000	CONTRIBED
				UNIT COST	COST	TOTAL COST	COSI	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
2.01		£						
	Clearing and Grubbing	mr-he						
SECTION	SECTION 2 - TOTAL TO SUMMARY							

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

## BID PRICE SCHEDULE

				RASIC BID				
ORK ITEM: S	ORK ITEM: SECTION 3 - DEMOLITION			UNIT COST	COST	TOTAL COST	COST	COMBINED
TEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT	FOREIGN CURRENCY COMPONENT	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
				(YEN)	(ditt)			
01(1)   Re  St	Removal of Masonry and Concrete Structures including Remaining Parts				•	•		
	of Housing	Sa.m						
.01(2)	Removal of Existing Curb	lin.m						
.01(3) R	Removal of Existing Asphalt					•	• ]	
	Pavement	cu.m						
.01(4)					1			
R	Removal of Existing Lighting Pole	eacu						-
.01(5) R	Removal of Existing Bridge (Steel				•		1	
Æ)	Bridge)	el so						
		-						
		-						
		· · · · · · · · · · · · · · · · · · ·						
SECTIO	SECTION 3 - TOTAL TO SUMMARY							

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

WORK ITEM: SECTION 4 - ROAD EARTHWORK	)RK		BASIC BID				
			UNIT COST	COST	TOTAL COST	COST	COMBINED
ITEM NO. DESCRIPTION	UNIT	QUANTITIY	FOREIGN	LOCAL	FOREIGN	LOCAL	EQUIVALENT TOTAL
			COMPONENT (YEN)	COMPONENT (VND)	COMPONENT (YEN)	COMPONENT (VND)	COST (VND)
4.03 Common Excavation	cu.m	•				•	
4.04(1) Borrow Material	cu.m					Į.	
4.04(2) Surchage with Borrow Material	cu.m	1		1		1	
4.05 Monitoring of Settlement	LS					1	
4.06 Trisuitable Material	ca.m	1	-		•	•	
4.07 Sand Fill Material	co.m	f			,	1	
4.08 Granular Backfill	cn.m						
4.09 Permeable Backfill	cu.m				•		
4.10(2) Vertical Soil Drains (Fibre)	lin.m					1	
4.11(2) Geo-Textile Non-Woven Sheet	sq.m	•			•	1	
SECTION 4 - TOTAL TO SUMMARY							

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

WORK ITEM: SECTION 6 - DRAINAGE			DANCE DIA				
			UNIT COST	COST	TOTAL COST	cosr	COMBINED
ITEM NO. DESCRIPTION	TIND	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
6.06(1) Tr.Ditch. Type U-1	lin.m				f		
6.06(2) U-Ditch, Type U-2	lin.m				1	ı	
6.06(3) U-Ditch, Type U-3	lin.m	ı	<b>!</b>		ı	1	
SECTION 6 - TOTAL TO SUMMARY						. 1	

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

## BID PRICE SCHEDULE

				UNIT COST	COST	TOTAL COST	cost	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
7.01	Subgrade Preparation	m.ps		And the state of t		1	_	
:							-	
SECTIC	SECTION 7 - TOTAL TO SUMMARY					1		

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

WORK ITEA	WORK ITEM: SECTION 8 - SUB-BASES AND BASES	SASES		BASIC BID		11000	Hood	GOMBINED
				UNIT COST	COST	TOTAL COST	COST	COMBENED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN	LOCAL	FOREIGN CURRENCY	LOCAL CURRENCY	EQUIVALENT TOTAL
				COMPONENT (YEN)	COMPONENT (VND)	(YEN)	(VND)	(VND)
8.01	Suh-Base	cu.m		i i	1	1		
8.02	Granular Base Course	cu.m	1					
							:	
SECTION	SECTION 8 - TOTAL TO SUMMARY							

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

## BID PRICE SCHEDULE

	<u> </u>	· · · · · · · · · · · · · · · · · · ·
	TOTAL COST	LOCAL
	TOTAI	FOREIGN
	UNIT COST	LOCAL
BASIC BID	TINU	FOREIGN
		UNIT QUANTITY
		UNIT
KITEM: SECTION 9 - PAVEMENTS		DESCRIPTION
RK ITEM		SM NO.

	COMBINED	EQUIVALENT TOTAL COST (VND)	Q	0	1			:			
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	42,177,400	960,318,000		e.					1 003 405 400
	TOTA	FOREIGN CURRENCY COMPONENT (YEN)		1,171,800	6,814,500				·		, cc
	COST	LOCAL CURRENCY COMPONENT (VND)	3,460	34,420							
BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)		42	23,100						
		QUANTIITY	12,190	27,900	295						
		UNIT	X SS	sq.m	ton					-	
WORK ITEM: SECTION 9 - PAVEMENTS		DESCRIPTION	Bituminous Tack Coat	Asphalt Concrete Surface Course (thickness 7.5cm)	Asphalt Cement						SECTION 9 - TOTAL TO SUMMARY
WORK ITEM		ITEM NO.	9.05	9.07(3).A	9.07(4)						SECTIO

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

TRUCTURE	
- CONCRETE S	
CTION 10 - (	
ITEM: SE(	
WORK	

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

			٠
	٠	٠.	١
		•	
r	r	٦	
•		3	
ſ	1	4	
ï	-		
ŀ		)	
L	_	4	
ŀ			
۱	_	)	
۲	=	ב	
۲	•	•	
ć	3	•	
ĺ	-	٦	
t		4	
Ī	7	3	
`	•	٠	
	1	3	
F	_	3	
ť	•	4	
ſ	T	٦	
7	7	7	
ŝ	1	4	
í		١	
3	٠	•	
٦	7	7	
4	1	₹	
ĺ		)	
i	٠	۲	
١	_	,	
١		•	
١		,	
	_	,	
	-	2	
		2	
\ \ \ \		2	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_	2	
< · · · · · · · · · · · · · · · · · · ·	-	7, 27, 77	
< · · · · · · · · · · · · · · · · · · ·	_	2	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	_	2	
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	_	2	
· · · · ·	_	2	
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2	
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2	
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2	
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2	
<		2	
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		2	
		2	
		2	
		2	
		2	
		2	
		2	
		2	
		2	
		2	
		2	
		2	

COMBINED	EQUIVALENT TOTAL COST (VND)		in the second se									1
cost	LOCAL CURRENCY COMPONENT (VND)	38,639,358,730	4,439,623,680	15,954,897,600	763,060,320	21,718,098,200	1,740,410,000	625,000,000	61,807,500	66,140,000	1,055,939,280	85,064,335,310
TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)	394,281,706	97,105,920	348,974,400	16,690,080	253,468,370	19,178,000		590,400	8,807,600	176,999,064	1,316,095,540
COST	LOCAL CURRENCY COMPONENT (VND)		46,246,080	57,807,600	63,588,360	855,380	1,740,410	1	206,025	330,700	262,280	
UNIT COST	FOREIGN CURRENCY COMPONENT (YEN)		1,011,520	1,264,400	1,390,840	636'6	19,178		1,968	44,038	43,964	
	QUANTITY		96	276	12	25,390	1,000	1	300	200	4,026	
	UNIT		each	each	each	lin.m	lin.m	Provisional Sum	lin.m	lin.m	lin.m	
	DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	PC I-Girder Length 28m; Height 1.50m	PC I-Girder Length 33m; Height 1.65m	PC I-Girder Length 35m; Height 1.75m	Cast-In-Place Concrete Pile, D = 1000mm	Cast-In-Place Concrete Pile, D = 1500mm	Ultra-Sonic and Pile Integrity Testing	Test Drilling for Soil Investigation, General	Bridge Parapet and Railing, Complete (Type A)	Bridge Parapet and Railing, Complete (Type B)	SUB-TOTAL CARRIED FORWARD
	ITEM NO.	r-ans	10.03(8)	10.03(10)	10.03(11)	10.07(1)	10.07(2)	10.07(T)	10.08(1)	10.09(1)	10.09(2)	SUB-

#### **EXTENSION OF THANH TRI VIADUCT** PACKAGE 3A

### BID PRICE SCHEDULE

E.
5
ÄČ
EST
RET
SKC
ರ
2
CIION 1
Z
ECTION 1
ITEM: SECTION 1
ECTION 1

EQUIVALENT COMBINED TOTAL COST (VND) 7,646,400 178,113,600 59,371,200 237,484,800 14,842,800 9,895,200 4,947,600 28,196,100 46,177,600 85,651,010,610 85,064,335,310 COMPONENT CURRENCY LOCAL (SND) TOTAL COST 401,600 1,316,095,540 12,039,200 12,931,200 10,387,200 742,320 1,369,862,810 8,890,710 3,927,360 3,490,560 957,120 COMPONENT CURRENCY FOREIGN (YEN) 618,450 159,300 5,772,200 618,450 618,450 618,450 618,450 618,450 159,300 COMPONENT CURRENCY LOCAL UNIT COST BASIC BID 27,050 30,930 59,820 44,900 36,360 50,230 81,820 1,504,900 50,200 COMPONENT CURRENCY FOREIGN (XEN) 288 œ ∞ 384 24 9 177 84 96 QUANTITY UNIL lin.m lin m each each each each each each each Elastomeric Bearing Pad, Type A Elastomeric Bearing Pad, Type B Elastomeric Bearing Pad, Type C Elastomeric Bearing Pad, Type E Elastomeric Bearing Pad, Type G Elastomeric Bearing Pad, Type F Expansion Joint, Type B 109mm Expansion Joint, Type A 40mm SUB-TOTAL BROUGHT FORWARD SUB-TOTAL CARRIED FORWARD DESCRIPTION Pot Bearing, Type C 450t 510\*310\*56 330\*330\*54 510\*510\*44 510\*310\*44 510\*510\*26 510\*310\*36 ITEM NO. 10.11(3)A 10.11(3)G 10.11(3)C 10.11(3)B 0.11(2)C10.11(3)E 10.11(3)F 10.10(1) 10.10(2)

#### **EXTENSION OF THANH TRI VIADUCT** PACKAGE 3A

## BID PRICE SCHEDULE

WORK ITEM: SECTION 10 - CONCRETE STRUCTURE

EQUIVALENT COMBINED TOTAL COST (SND) 85,887,075,810 9,895,200 226,170,000 85,651,010,610 COMPONENT CURRENCY LOCAL (VND) TOTAL COST CURRENCY 711,520 9,000 1,370,583,330 1,369,862,810 FOREIGN (YEN) 226,170 618,450 COMPONENT CURRENCY LOCAL (VND) UNIT COST BASIC BID 44,470 9 COMPONENT CURRENCY FOREIGN (YEN) 1,000 16 QUANTITY UNIT lin.m each Elastomeric Bearing Pad, Type H SECTION 10 - TOTAL TO SUMMARY SUB-TOTAL BROUGHT FORWARD PVC Drain Pipe, D = 20cm DESCRIPTION 480\*480\*44 ITEM NO. 10.11(3)H 10.12(2)

#### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

### BID PRICE SCHEDULE

WORK ITEM:	WORK ITEM: SECTION 12 - MISCELLANEOUS			BASIC BID				
				UNIT	UNIT COST	TOTAL COST	COST	COMBINED
ITEM NO.	DESCRIPTION	UNIT	QUANTITY	FOREIGN	LOCAL	FOREIGN	LOCAL	EQUIVALENT TOTAL
				COMPONENT (YEN)	COMPONENT (VND)	COMPONENT (YEN)	COMPONENT (VND)	COST (VND)
12.01(1)	Onlid Sodding	E OS		•				
12.02	Olassed Alea, colla coccuia	E		1		•	•	
12.03(3)	Stone Masonry Rock Filled Gabion Baskets	sq.m				•		
12.05(1)	Motared Stonework for Slope Protection	m.ps	1	1	•	-	,	
12.05(2)	Motared Stonework for Slope Protection (below River Water Level)	m.ps					•	
12.06(1)	Vehicle Guardrail, Type A	lin.m				•	•	
12.06(2)	Pipe Guardrail, Type B, Movable	lin.m		<b>1</b>			*	
12.07(1)	Regulatory and Warning Signs Type-A (1 Board)	each	•	•		•		
12.07(2)	Regulatory and Warning Signs Type-C (2 Board)	each	1	•				
 12.09(1)	Road Marking, Type A (General Application)	sq.m			-	•	•	
SUB-1	SUB-TOTAL CARRIED FORWARD						•	

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

### BID PRICE SCHEDULE

		BASIC BID				
		UNIT	cosr	TOTAL	cosr	COMBINED
UNIL	QUANTITY	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	FOREIGN CURRENCY COMPONENT (YEN)	LOCAL CURRENCY COMPONENT (VND)	EQUIVALENT TOTAL COST (VND)
						•
sq.m				,		
lin.m			•	1		
in.m	_					
lin.m			-	-	•	
each	8	1,010	2,419,350	8,080	19,354,800	
				8,080	19,354,800	1
CONT Iji.m lin.m lin.m lin.m		QUANTITY 8 8	FOREIG CURREN COMPONI (YEN)	FOREIGN L CURRENCY CUR COMPONENT COM (YEN) (	FOREIGN LOCAL FOREI CURRENCY CURRENCY COMPONENT COMPON (YEN) (YND) (YEN	TOTAL COST

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

### BID PRICE SCHEDULE

- UTILITIES
'n.
13
7
$\tilde{a}$
$\simeq$
$\vdash$
Ų
Œ
S
Σ
ω
-
-
$\mathbf{x}$
⊋
Ö
5

Г		T	T	—-т		T	·····	T	T	T		Т	
	COMBINED	EQUIVALENT TOTAL COST (VND)											
	TOTAL COST	LOCAL CURRENCY COMPONENT (VND)	51,930,000	507,000,000	1	27,020,000		5,748,300	11,366,200	30,799,600	25,427,940	63,420,500	722,712,540
	TOTAL	FOREIGN CURRENCY COMPONENT (YEN)	. •	. 1	1				1		1	l	1
	UNIT COST	LOCAL CURRENCY COMPONENT (VND)	8,655,000	8,450,000	15,660,000	6,755,000	570,000	5,748,300	11,366,200	7,699,900	200,220	115,310	
BASIC BID	TIND	FOREIGN CURRENCY COMPONENT (YEN)							•	<b>t</b>			
		QUANTITY	9	09	0	4	0	1		4	127	550	
		UNIT	each	each	each	each	each	each	each	each	lin.m	lin.m	
WORK ITEM: SECTION 13 - UTILITIES		DESCRIPTION	Road Lighting Unit, Type A2.1	Road Lighting Unit, Type A4.1	Road Lighting Unit, Type B2.1	Road Lighting Unit, Type F1	Road Lighting Unit. Type G1	Power Supply Receiving Panel (SS)	Low Voltage Distribution Panel (MDP)	Lighting Panel (DB)	Cable, X-LPE Armer Type 4c - 50mm2	Cable, X-LPE Armer Type 4c - 25mm2	SUB-TOTAL CARRIED FORWARD
WORK ITEM		ITEM NO.	13.01(1)	13.01(2)	13.01(3)	13.01(4)	13.01(5)	13.01(6)	13.01(7)	13.01(8)	13.01(9)	13.01(10)	SUB-

## PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

### BID PRICE SCHEDULE

### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

## BID PRICE SCHEDULE

	4	2
	Ŀ	Ξ
	٢	
 	ζ	
		_
	. C.L.∪ ▼	ř.
	4	1
	ç	C
1		
ı		
ł		

	-	í-i	Ī											1
	COMBINED	EQUIVALENT TOTAL COST	(VND)											
	COST	LOCAL CURRENCY	(VND)	1,526,120,500	2,550,000	2,000,000	141,388,800	10,136,000	1	19,428,200	22,448,000	3,000,000	45,800,000	1,772,871,500
	TOTAL COST	FOREIGN CURRENCY	(YEN)	1		•	1		•	1		1	•	•
	COST	LOCAL CURRENCY	(VND)		2,550,000	250,000	84,160	181.000	399,000	88,310	22,448,000	750,000	11,450,000	
BASIC BID	UNIT COST	FOREIGN CURRENCY	COMPONENT (YEN)				•	1	1,995,000					
		QUANTITY			1	8	1680	95	O	220	1	7	4	
-		UNIT			each	each	lin.m	į Jose	Set	lin.m	each	each	each	
WORK ITEM: SECTION 13 - UTILITIES		DESCRIPTION		SUB-TOTAL BROUGHT FORWARD	Watt Hour Meter Box and Panel	Protection of Expansion Joint	Buried Cable Protector	Marker for Underground Cables	Navioation Light	Control Cable, X-LPE 7c-10mm2	Traffic Control Master Unit	Manual Push Botton	Traffic Signal Unit, Type 1	SUB-TOTAL CARRIED FORWARD
WORK ITEN		ITEM NO.		SUB-T	13.01(20)	13.01(21)	13.01(22)	13.01(23)	13.01(24)	13.01(25)	13.01(26)	13.01(27)	13.01(28)	SUB-T

### PACKAGE 3A EXTENSION OF THANH TRI VIADUCT

## BID PRICE SCHEDULE

	8	ENT	1									
	COMBINED	EQUIVALENT TOTAL COST (VND)										
	COST	LOCAL CURRENCY COMPONENT (VND)	1,772,871,500	17,261,000	3,854,000	6,550,000	34,200,000	1	7,200,000			1,841,936,500
	TOTAL COST	FOREIGN CURRENCY COMPONENT (YEN)		1	1		•					•
	osr	LOCAL CURRENCY COMPONENT (VND)		8,630,500	3,854,000	6,550,000	380,000	715,000	1,200,000	1,080,000		
BASIC BID	UNIT COST	FOREIGN CURRENCY COMPONENT		•		1	1		ı			
		QUANTITY		2	1	1	06	0	9	0		
٠.		TIND		each	each	LS	lin.m	lin.m	each	each		
School Branch Strategy	WORK ITEM: SECTION 13 - OTHER ITEM	DESCRIPTION	SUB-TOTAL BROUGHT FORWARD	Traffic Signal Unit, Type 2	Emergency Back-up Unit	Power Connection for Package 3A	Duct Bank, Type A	Duct Bank, Type B	Manhole, Type A	Manhole, Type B		SECTION 13 - TOTAL TO SUMMARY
	WORK ITEM	ITEM NO.	SUB-TO	13.01(29)	13.01(30)	13.01(32)	13.02(1)	13.02(2)	13.02(3)	13.02(4)		SECTIC

### LIST OF MATERIAL COST

### LIST OF MATERIAL UNIT COST (1)

1			<del></del>		Price		
No.	Material	Standard	Unit	Foreign		Local	(VND)
				(J.YEN)	YAT	Included	VAT Excluded
	Steel plate	t=3.2 ~ 6mm	kg	$41 \times 0.9 = 37$			-
2	Steel plate	(= 9~25mm	kg	$45 \times 0.9 = 41$		-	-
3	Flat steel	4.5x65~9.0x100	kg	50x0.9=45		-	<u> </u>
4	Shaped steel	L - 50x50x6 ~ 75x75x9	kg	-	a) 	4,620	4,200
5	Shaped steel	L - 125x80x10 ~ 125x125x10	kg	<u> </u>	a)	4,730	4,300
6	Round bar	(Ф 6 ~ Ф 10)	kg	·	a}	4,279	3,890
7	Round bar	(Ф12)	kg		a)	4,224	3,840
8	Round bar	(Ф 14 ~ Ф 22)	kg		3)	4,180	3,800
9	Round bar	(Φ>22)	kg	-		4,279	3,890
10	Steel pipe	S.G.P 25A ~ 50A	kg	120x0.9=108		-	
11	Steel square pipe	100x100x3.2	kg	54x0.9=49		-	-
12	Steel Channel	65mm ~ 120mm	kg			4,730	4,300
<b></b> -		C 300: 65x100x10	kg		3)	4,800	4,364
13	Shaped steel		1	47,950 x 0.9 = 43,155	<b></b>	- 1,000	1,20
14	Hand rail	h=0.63 ; W=2.00	les-	47,930 & 0.9 - 43,133		4,730	4,300
15	I - Section steel		kg	<u> </u>	a)	74,000	67,300
16	Tecs (T1)	200~160	cach	<u> </u>	a)		<del>   </del>
17	Tees (T2)	200	each			64,000	58,200 22,000
18	Gabion	Mesh 10x10 - Ф 3; w=1.2m	m	<del>-</del>		24,200	22,000
19	Gabion	200 01 200 02	nanh		3).	56,700	51,500
20	Pipe joint	250 C1 ~200 C2	cach		(a)	36,300	33,000
21	Hanger	Ф 150 ~Ф 200	each	57-0 0-51	<b> </b>	30,300	.75,000
22	Light gauge shaped steel	150x50x20x3.2	kg .	57x0.9=51	a)	220.500	291,400
23	Drain box (Cast-iron)	(300x250)mm x 500mm	each		a)	320,500	1
24	Drain box (Cast-iron)	(300x250)mm x 600mm	each		┼──	394,000	358,200
25	Carbon steel pile	25 A	kg	60x0.9=54	<del>-</del>		<del>-</del>
26	Carbon steel pile	30A	kg	60x0.9=54	<del> </del>		-
27	Carbon steel pile	32A	kg	60x0.9=5	<u> </u>	-	
28	Reinforcing steel bar	deformed bar less than 13 mm	ton	24,000			ļ
29	Reinforcing steel bar	deformed bar 13mm ~ 28 mm	ton	23,000	a)	4,180,000	3,800,000
30	Reinforcing steel bar	deformed bar 29mm ~ 32 mm	ton	24,000	ļ		-
31	Reinforcing steel bar	deformed bar 35mm ~ 36 mm	ton	27,000			-
32	Wire rope	Ф[6	m		ļ	22,000	
33	Anchor bolt	with 2 nut ;M 24x600 mm	each	-	a) ·	27,500	
34	Electroded		kg			7,370	-f
35	Anealed steel wire		kg	-		7,040	6,400
36		50x50x6	kg	34x0.9=3	· ·	-	<u> </u>
37	Steel plate	50~90x4.5	kg	50x0.9=4		<del></del>	<u> </u>
38	Sheath	ф70	m	369x().9=33		-	<u> </u>
39	PC strand	SWPR 7B;12 T15.2	kg	269x0.9=24		-	
40	Fine ceramics anchor	M 12	each	$470 \times 0.9 = 42$			<u>-</u>
41	Anchor bolt	(Fix side) Φ 32mm x760mm	each	280x0.9=25	0	<u> </u>	-
42	Anchor bolt	(Mov.side) Φ 32mm x760mm	each	280x0.9=25	0 :		
43	Anchor bolt	(Mov.side) Φ 28mm x720mm	each	202x0.9=18	2		-
44	Anchor cap	(Fix side) 32A x350mm	each	109x0.9=9	8		<u> </u>
45	Anchor cap	(Fix side) 50A x340mm	each	164x0.9=14	8	-	
40		(Mov.side) 65A x350mm	each	235x0.9=21	1		
4.			set	1,480x0.9~1,33	2		
41		30mm	m	34,200x0.9=30,78		-	

Note: Foreign price: (Based on price book of Japan)

a) Price based on the "Market prices" in Hanoi.

b) - Price based on the Quotation of concrete company added the transportation cost.

### LIST OF MATERIAL UNIT COST (2)

	<del></del>				Price		
No.	Matoulal	Standard	Unit	Foreign Local (VND)			
No.	Material	Standard	\''''\	(J.YEN)	VAT Included	VAT Excluded	
49	Expansion joint B	50mm	m	100,000x0.9=90,000		-	
50	Expansion joint C	110mm	m	353,000x0.9=317,700	-		
51	Expansion joint D	150mm	m	353,000x0.9=317,700		•	
52	Coupler	for PC strand; 320 ton	each	66,300 x 0.9 = 59,670	-		
53	Sheath	Ф55	m	295 x 0.9 = 266			
54	Sheath	Ф 38	m	170 x0.9 = 153	-	1 -	
55	Epoxy resin mortar		kg	2,860x0.9=2,574	_	-	
56	Bridge name plaque	760x490x15	each		2,139,500	1,945,000	
57	Geo-textile sheet	1=0.2mm	m2	-	3,190	2,900	
58	Anchor bolt	M 16x160	each	230		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	
59	Plastics pipe	PVC Φ 30	m		2) 4,640	4,220	
60	Plastics pipe	PVC Φ 50	m		a) 7,780	7,070	
	Steel pipe	Ф 50	m		a) 36,500	33,182	
61		250W -Sodium lamps	set		a) 1,185,800	1,078,000	
62	Street lighting Round poles	Steel : I=10m	set		a) 2,667,500	2,425,000	
63	l	Steel; 1=10H	<del> </del>		176,000	160,000	
64	Single arm pole Asphalt joint filler	t=20mm	set m2	1,640 x 0.9=1,476	170,000	100,000	
65	<del> </del>		1	820 x 0.9=738			
66	Cut off plate	flat type W=200mm width Ф 900mm	set	820 X 0.9-738	<sup>a)</sup> 338,000	307,273	
67	Octagonal sign		+		a) 208,000	189,091	
68	Triangular warning sign	900x900x900mm	set m <sup>2</sup>	•		509,091	
69	Other warning sign type	Rectangler	1	<u> </u>	300,000	<del></del>	
70	Painted pole	Ф 80 (I=3.5m~3.7m)	set	<u> </u>	170,000	161,818	
71	Portland cement	(Hoang thach PC 40)	kg		964	876	
72	Non-shrinkage mortar		kg	<u>-</u>	10,000	9,091	
73	Admixture	for concrete	liter	-	33,000	50,000	
74	R C pipe	Ф750mmx1000mm	m		317,300	288,455	
75	R C pipe	Ф 1000mmx1000mm	<u>. m</u>	<u> </u>	330,300	542,100	
76	R C pipe	Ф1250mmx1000mm	m		100,300	643,900	
77	R C pipe	Ф1500mmx1000mm	m	<u> </u>	b) 1,032,300	938,500	
78	R C pipe	Ф2000mmx1000mm	m		1,701,000	1,800,900	
79	Concrete cradle for RC pipe	Ф1000,1-1000mm	each		4,57,000	399,100	
80	Concrete cradle for RC pipe	Ф1250,I=1000mm	each		b) 535,700	487,000	
81	Concrete cradle for RC pipe	Ф1500,1=1000mm	each	-	042,000	583,600	
82	Concrete cradle for RC pipe	Ф2000,I=1000mm	cach	_	812,000	738,200	
83	Cast - iron anchor		each	<u> </u>	1,373,000	1,250,000	
84	Rope	Ф 45	m	980 x 0.9 = 882	·	•	
85		M27*80	each	•	a) 13,200	12,000	
86	Concrete curb	260*230*1000	m		<sup>b)</sup> 31,570	28,700	
87	Anchor bolt	Ф 42 х 600	each	$333 \times 0.9 = 300$	31,570	28,700	
88	l'ar joint filler	Specific gravity 1.53	kg	570 x 0.9 = 513		<u> </u>	
89	Anchor cap	80 A x350mm	each	272 x 0.9 = 245	5		
90	Km post	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	each		h) 253,000	230,000	
91	Traffic post		each		b) 69,300	63,000	
92		220x105x60mm	piece	-	327	29	
93			kg		2,540	2,310	
94		for surface cosure	ton		308,900	1	
9:		for binder cosure	ton		287,280	1	
<u>_9</u> :	мариан нихноге	tor owner cosure	1 (0)1	L		/1 201,10	

### LIST OF MATERIAL UNIT COST (3)

[]			П		Price	: :
No.	Material	Standard	Unit	Foreign	<del></del>	(VND)
				(J.YEN)	VAT Included	VAT Excluded
96	Anchor bolt	Ф 25 х 600	each	190 x 0.9 = 171	-	-
97	Tar for prime coat	·	kg		3,700	3,360
98	Tar for tack coat		kg	· · · · · · · · ·	3,700	3,360
99	Admixture	for PC grout	kg	212x0.9=190	_	
	Yellow sand	for sand pile	m³		55,000	50,000
101	Black sand	for bedding work	m <sup>3</sup>		28,930	26,300
102	Concrete anchor	M12	each	120x0.9=108	1,850	1,682
103	Anchorage	(Tensioning) 60 ton	each	$3,790 \times 0.9 = 3,411$	<u>-</u>	1, -
104	Coarse aggregate	for concrete	ton	<u> </u>	64,300	58,444
105	Anchorage	(Fixed side) 60 ton	each	$4,230 \times 0.9 = 3,807$	· · · · ·	-
106	Fine aggregate	Yellow sand for concrete	ton		a) 55,000	50,000
107	Stone for base course	<u> </u>	m3	*	-	_
108	Stone for sub- base course		m3		a) 96,800	88,000
109	Cobble stone		m³		a) 69,300	63,000
110	Crushed stone	4x6	m'		93,940	85,400
111	Crushed stone	2x4	m <sup>3</sup>		a) 97,900	89,000
112	Crushed stone	1x2	m³	-	a) 111,100	101,000
113	Crushed stone	0.5x1	m <sup>3</sup>		121,000	110,000
114	Clayey soil		1113		a) 15,000	13,640
115	Borrow material	transport about: 10 km	m <sup>3</sup>	•	a) 15,312	13,920
116	PC Cable	SWPR 19 21.8	kg	296 x 0.9 = 266	15,2.2	13,220
117	H steel	400x400x13x21	ton	39,000x0.9=35,100		
118	Asphalt joint filler	t=10 mm	m2	$820 \times 0.9 = 738$		
119	Jack base		each	$1,250 \times 0.9 = 1,125$		
1	Filler for asphalt mixture		kg	1,230 x 0.7 - 1,123	253	230
121	Steel rail	30kg/m	ton	115,000x0.9=103,500	. 233	230
122	Floor plate	зокул	m <sup>2</sup> day	710	<u>-</u>	
123	Jack base	Stroke 250 mm	each	1,040 x 0.9 = 936		
124	Bolt nut	M 12x250	each	7,040 x 0.7 - 250	3,146	2,860
125	Connection pin	171 12.72.70	1 1	165 x 0.9 = 149	3,140	2,800
126	Casing		each			-
127	Rod		cach	16,300	<u>-</u>	
128	Metal crown		cach	<del></del>		-
	Core-tube		cach	4,700	-	
-	Plywood panel	10 1000 0110	each m²	14,970	a) 55 000	
130	<del>                                     </del>	12 x 1220 x 2440	~		2.5,770	50,900
131	Quartered log		m <sup>3</sup>		3,300,300	3,073,000
132	Timber		m³	-	1,457,000	1,324,600
133	Regular steeper		m³		1,400,000	1,272,727
134	Diesel oil		liter	<u> </u>	3,000	3,273
135	Gasoline		liter	-	a) 4,600	4,182
136	Heavy oil		liter	<u> </u>	3,600	3,273
137	Lawn		m²		a) 5,000	4,545
138	Guard rail	2.67x310x4.0m	m	5,120x0.7=3,580	-	<u> </u>
139	Guard rail post	2.67x310x4.0m				
140	<u> </u>	Ф 150	m	•	80,400	73,091
141		Ф 200	m		107,000	97,273
142	<del></del>		each	•	5,000	4,545
143	Steel Wire	Ф9	<u></u>	158x0.9=142	<u> </u>	

### LIST OF MATERIAL UNIT COST (4)

	<del></del>	<u> </u>	<del>-</del>		Price		
No.	Material	Material Standard	Unit	Foreign Local (VND)			
i				(J.YEN)	VAT Included	VAT Excluded	
144	Flat steel	12x170	kg	54x().9=49			
145	Flat steel	8x40x(1,~200~250)	kg	52x().9=47		-	
146	Flat steel	12x20	kg	55x0.9=50	· -		
147	L Shaped steel	100x100x10	ton	43,000x0.9=38,700	-		
	Asphalt water proofing	2° 3 4 4 600 N	- kg m²	54x0.9-49	a) 20,000	10 102	
	Geo-textile sheet Jack( head)	Tensile strength>40KN/m P-11	each	22,200x0.9=19,980	20,000	18,182	
151	Square shore	300x2000	each	17,000x0.9=15,300			
	PC strand	SWPR 7A; 12 T12.4	kg	250x0.9=225			
	Round pipe joint	OTTE THE T	each	180x0.9=162			
154	Jack( base)	Р-В	each	30,200x0.9=27,180	<u> </u>		
	· · · · · · · · · · · ·						
	II shaped steel	350x350x12x19	ton	40,000x0.9=36,000	-		
	II shaped steel	300x300x10x15	ton	38,000x0.9=34,200	<u>-</u>	-	
_	PC steel bar	Ф32	kg	230x0.9=207			
158	Sheath	Φ 40	In :	180x0.9=162	-	-	
159	Jack base stroke	460mm	each	1,500x0.9=1,350	-		
160	Clamp		each	220x0.9=198	•		
161	Sheath	Ф 65 mm	m	$342 \times 0.9 = 308$			
162	Anchorage	(Tensioning) 195 ton	set	$18,500 \times 0.9 = 16,650$			
163	PC steel bar	Ф26	kg	230x0.9=207			
164	Sheath	Φ32	m	148x0.9=133			
165	H shaped steel	200x200x8x12	ton	38,000x0.9=34,200			
166	Anchorage	SBPRB Ф 32 (Tension side)	each	6,110x0.9=5,500	-		
167	Anchorage	SBPRB Φ 32( Fixed side )	each	5,140x0.9=4,630	-	-	
168	Coupler		each	1,930x0.9=1,740		-	
169	PC steel bar	Ф32- SBPR - 930/1080	kg	237x0.9=213	1 44		
170	Steel sheet pile	typeIV; 400x170x15.5	ton	82,000x0,9=73,800			
171	Curing compound		kg	500 x 0.9 = 450	1.	_	
172	Steel sheet pile	typeII; 400x100x10.5	ton	82,000x0,9=73,800	·		
173	Curing mat	1.0m x 30 m x 10mm	m2	$450 \times 0.9 = 405$	<del> </del>		
174		Ф 19mm	m		a) 4,400	4,000	
175		Ф 50	each		a) 3,960	3,600	
176			kg		a) 880	800	
177	<del>* </del>	500x300x59; w=100kg	each	232,800x0.9=209,520	1	000	
			1	[	1	<del></del>	
178		500x330x63 ; w=107 kg	each	246,400x0.9=221,760			
179		500x300x59; w=103kg	each	248,600x0.9=223,740	<del></del>		
180		510x310x56; w=21 kg	each	62,000x0.9=55,800		-	
181	- <del> </del>	810x610x110; w=527 kg	each	876,200x0.9=788.580		-	
182		1,260x1,110x121.5;w=465 kg	each	1,429,700x0.9=1,286,730	<del></del>	<u> </u>	
183		Φ 42.7 mm	, kg	$56 \times 0.9 = 50$			
184	Steel pipe	Φ 60.5 mm	kg	$56 \times 0.9 = 50$			
183	Steel pipe	Φ 89.1 mm	kg	$56 \times 0.9 = 50$	0		
180	Steel pipe	Ф 114.3 mm	kg	$57 \times 0.9 = 51$	•	-	
187	7 Steel pipe	Ф 139.8 mm	kg	57 x 0.9 = 51			
188	8 panel	SS	set	_	a) 1,717,353	1,561,230	
189	9 panel	MDP	set		a) 8,374,424	7,613,113	
191		DB	set		4,308,909		
19	1'		nı		76,384		

### LIST OF MATERIAL UNIT COST (5)

					Price		
No.	Material	Standard	Unit	Foreign	Local (VND)		
	<u> </u>			(J.YEN)	VAT Included	VAT Excluded	
192	Underground cable 4°x16 mm²		m	-	a) 59,013	53,648	
193	Underground cable 4°x10 mm²		m		a) 41,646	37,860	
194	Cable 4 ° x 10 mm <sup>2</sup>		m		25,410	23,100	
195	Cable 4 ° x 16 mm²	· · · · · · · · · · · · · · · · · · ·	m.		56,080	32,800	
196	Grounding Wire BCC 6mm	Copper	131	· · · · · · · · · · · · · · · · · · ·	29,990	36,360	
197	Grounding Electrode	Соррет bar (Ф10;1-1.5m)	each	-	40,247	36,588	
198	Duct bank Pull box type - A	PVC Φ 100	m each		<sup>a)</sup> 27,720 (a) 70,110	25,200 63,736	
200	Power reserving point	31.5 KVA	each		a) 116,552,040	105,956,400	
201	Watt hour meter and panel box	31.5 KVA	cach		a) 1,650,000	1,500,000	
202	PC strand	SWPR 7B;12 T 12.7	kg	256x0.9=230	- 1,050,000	-	
203	PC strand	7 T 12.7	kg	256x0.9=230			
204	Anchorage	(Fix side) 225 ton	set	22,200x0.9=19,980		_	
205	Anchorage	(Fix side) 130 ton	set	13,930x0.9=12,537		_	
	Anchorage	(Tensioning) 225 ton	set	18,500x0.9=16,650			
	Anchorage	(Tensioning) 130 ton	set	10,080x0.9=9,072	_	•	
208	PC strand	SWPR 7B ; 12T15.2	kg	269 x 0.9 = 242	-	· -	
209	Anchorage	(Fix side) 320 ton	set	31,500 x 0.9 = 28,350	-	•	
210	Anchorage	(Tensioning) 320 ton	set	27,000 x 0.9 = 24,300		· <u>-</u>	
211	Covering Sheet	4mx50m	m2		1,650	1,500	
212	Bolt	Ф 12*75	each		1,850	1,682	
213	Bolt	Ф 16*150	cach		2,770	2,520	
214	Shaped steel	150x90x9	kg	Annual Control	5,650	5,136	
215	Steel pipe	Ф 48,6	kg		8,264	7,513	
216	Shaped steel	C380x100x10.5	kg		5,500	5,000	
217	Shaped steel	C 250x90x9.0	kg		5,500	5,000	
218	Steel pipe	Φ 42.7 mm	kg	56x0.9=50		-	
219	Steel pipe	Ф 60.5mm	kg	56x0.9=50	- 1		
220	Steel pipe	Φ 89.1 mm	kg	56x0.9=50	ļ <u>-</u>	-	
221	Steel pipe	Ф114.3 mm	kg	57x0.9=51	-		
222	Steel pipe	Ф139.8 mm	kg	57x0.9=51	-	-	
223	Plastic wick	W=98mm : t=3mm	m		4,345	3,950	
	Rubber bearing	1,010x860x143; w≈1,108 kg	each	1,995,600x0.9=1,796,040		-	
225	Steel tube		l m		31,192	28,356	

### LIST OF EQUIPMENT COST

### SUMMARY OF UNIT COST OF EQUIPMENT OWNING AND OPERATION (1)

				Cost 1	
No.	Equipment	Unit	FC Portion LC Portion		
			(J.YEN)	(VND)	
1	Generator (60 KVA)	day	3,100	143,000	
2	Generator (15 KVA)	day	1,580	45,000	
3	Bulldozer (15 ton)	hr	4,030	91,000	
4	Swamp bulldozer (16 ton)	hr	3,880	91,000	
5	Back hoe (hydraulic 1,0 m3)	hr	4,010	131,000	
6	Back hoe (hydraulic 0.6m3)	hr	2,560	92,000	
7	Back hoc (hydraulic 0.35 m3)	hr	1,460	64,000	
8	Large-sized breaker (600 ~ 800 kg)	day	6,660	-	
9	Concrete breaker (20 kg)	day	160		
10	Tension jack and pump (70 ton)	day	1,360		
11	Tractor shovel (1.4m3)	hr	2,270	59,000	
12	Tractor shovel (0.8 m3)	hr	1,130	48,000	
13	Clamshell (0.6m3)	hr	2,830	89,000	
14	Motor grader (3.1m)	hr	2,850	58,000	
15	Truck crane (hydraulic 120 ton)	hr	24,600	99,000	
16	Truck crane (hydraulic 40 ~ 45 ton)	hr	7,320	68,000	
17	Truck crane (hydraulic 20 ~ 22 ton)	hr	3,520	55,000	
18	Truck crane (hydraulic 15 ~ 16 ton)	hr	3,080	55,000	
19	Truck crane (hydraulic 10~11 ton)	hr	2,260	55,000	
20	Truck crane (hydraulic 4.8 ~ 4.9 ton)	hr	1,250	46,000	
21	Truck with crane (4 ton truck, 2.9 ton hanging load)	hr	1,080	50,000	
22	Concrete pump (55 ~60 m3/hr)			·	
23	Crawler crane (40 ton)	hr	3,820	56,000	
24	Diesel engine (5.2 ps)	hr	4,970	60,000	
25	Electric hoist	day	310		
26	Boring pump (30 l/min)	day	1,530		
27	Vibrohammer pile driver (60 KW)	day	1,570		
28	Boring machine (Φ 86)	hr	7,920	60,000	
29	Reverse circulation drill ( $\phi$ max = 3000 mm)	day	3,040	<u> </u>	
30	Three-wings bit (\$ 800-1200mm)	hr hr	5,470	<u> </u>	
31	Hammer grab (φ 1000mm)	day	1,510	-	
32		day	8,100	•	
	Hammer crown ( \phi 1200 mm)	day	1,990		
33	Dump truck (11 ton) Truck (11 ton)	hr	1,650	67,000	
		hr	2,210	67,000	
35	Truck (4 ~ 4.5 ton)	hr hr	850	51,000	
36.	Trailer (32 ton)	hr	3,420	87,000	
37	Trailer (28 ton)	hr	3,190	87,000	
38	Vibrating roller (combined type 3 ~ 4 ton)	hr	1,400	36,000	
39	Vibrating roller (0.8 ~ 1.1 ton)	hr	350	29,000	
40	Road roller (macadam 10 ~ 12 ton)	lir .	2,010	48,000	
41	Tired roller (8 ~ 20 ton)	hr.	1,990	50,000	
42	Tamper (60 ~ 100 kg)	day	610	191,000	
43	Asphalt finisher (crawler type 2.4 ~ 5.0m)	hr	8,700	44,000	
44	Road sprinkler (5500 ~ 6500 liter)	hr	1,230	42,000	
45	Road sprinkler (3800 liter)	br	930	40,000	
46	Tension jack and pump (320 ton)	day	4,640		
47	Road sweeper (brush type)	hr	3,620	58,000	
48	Generator (200 KVA)	day	7,920	464,000	
49	Generator (125 KVA)	day	5,180	291,000	
50	Generator (100 KVA)	day	4,100	230,000	

### SUMMARY OF UNIT COST OF EQUIPMENT OWNING AND OPERATION (2)

			Co	ost
No.	Equipment	Unit	FC Portion	LC Portion
			(J.YEN)	(VND)
51 (	Generator (75 KVA)	day	4,030	172,000
	Generator (10 KVA)	day	1,250	35,000
	Generator (2KVA)	day	290	24,000
	Cension jack and pump (200 ton)	day	2,300	-
	Welding machine (250 A)	day	1,390	31,000
	Air compressor (10.5 - 11.0 m3/min)	day	7,080	341,000
	Air compressor (3.5 ~ 3.7 m3/min)	day	2,410	104,000
	Wagen (3x17m)	day	31,740	
	Conveyor belt (10m)	day	980	
	Concrete pump (boom type 90 ~ 110m3/hr)	hr	5,330	78,000
	Truck mixer $(3.0 \sim 3.2\text{m}3)$	hr	1,030	57,000
	Submergible pump (Φ 200 mm ,pump head 15m)	day	1,150	37,000
	Submergible pump (Φ 200 mm, pump head 20m)	day	1,430	
	Grout pump 15 - 30 L/min	day	820	
	Grout mixer (200Lx2)	<del></del>	960	
		day	420	
	Grout mixer (100Lx1)	day		_
	Winch (1.0 t x 40 m/min)	day	1,000	
	Grout mixer (200 liter x 1)	day	600	
	Hammer drill (38mm)	day		7.42.000
	Barge with crane (crawler crane 40 ton, barge 300 ton)	day	35,520	342,000
	Barge (steel 300 ton)	day	17,220	254,000
	Barge (steel 100 ton)	day	6,900	254,000
	Barge with engine (100m3)	day	25,760	1,048,000
-	Tug boat (steel 200 ps)	hr	2,490	222,000
-	Tug boat (steel 100 ps)	hr	1,310	120,000
	Tension jack and pump (130 ton)	day	1,920	
	Bulldozer (11 ton)	hr	3,030	76,000
	Dump truck (6~7 ton)	hr	1,180	52,000
79	Concrete mixer (0.3 ~ 0.6 m3)	day	4,530	
80	Tired roller (11 ~ 30 ton)	hr	2,420	51,000
81	Asphalt distributor ( 2000 liter)	day	8,340	168,000
82	Air compressor ( 7.5 m3/min )	hr	4,660	43,000
83	Submergible pump (Φ 100 mm, pump head 15m)	day	470	· · · -
1	Diesel hammer (1.3ton)	hr	1,960	
85	Erection girder	day	28,200	<u> </u>
86	Girder suspension equipment	day	22,100	· · · · · · -
87	Girder side loading equipment	day	15,700	
88	Girder drawing out equipment	day	15,900	
89	Tool for erection	day	5,570	<u> </u>
90	Instruments for transient of PC Girder	day	24,600	
91	Barge with crane (crane 25 ton; barge 200 ton)	day	21,900	302,000
92	Line marker (Hand guided type)	hr	190	-
93	Melting tank (200 ~350 kg x2)	hr	510	1,000
94	Guard rail post driving machine	hr	2,140	31,000
95	Chain block (5 ton)	day	100	-
96	Tower crane (Fixed type 60 t.m; h=50m)	day	18,780	90,000
97	Tractor shovel (1.2 m3)	hr	1,500	59,000
98	Concrete Plant (45 m3/hr)	hr	8,760	
99	Concrete pump (pipe setting type 90~100m3/hr)	hr	4,930	61,000

### SUMMARY OF UNIT COST OF EQUIPMENT OWNING AND OPERATION (3)

			Cost		
No.	Equipment	Unit	FC Pertion	LC Portion	
			(J.YEN)	(VND)	
100	Truck crane (25 ton)	hr	4,250	60,000	
101	Truck with crane (2 ton truck, 2 ton hanging load)	hr	670	41,000	
102	Sand pile driver (leader length 45 m)	hr	38,640	58,000	
103	Water jet for vibrohammer (55KW)	hr	2,510	-	
104	Sand pile driver (leader length 30 m)	. hr	23,760	50,000	
105	Large - sized breaker (1300 kg)	day	10,860	-	
106	Generator (20KVA)	day	1,980	50,000	
107	Generator (35KVA)	day	2,320	85,000	
108	Three wings bit (Φ 1500~2000 mm)	day	2,140	-	
109	Hammer grab (Φ 1200)	day	8,520	-	
110	Hammer grab (Φ 2000)	day	18,360	-	
111	Hammer crown (more than Φ 1300)	day	2,680	-	
112	Hydraulic press-in pile driving and extractor (Ф1200)	day	23,460	_	
113	Hydraulic press-in pile driving and extractor (Φ1480)	day	24,780	-	
114	Hydraulic press-in pile driving and extractor (Ф2250)	day	26,460	-	
115	Slushtank ( 10m³)	day	500		
116	Slushtank ( 20m³)	day	640	-	
117	Slushtank (30m³)	day	1,060		
118	Grantry crane (3.0 ton)	day	2,850	-	
119	Asphalt finisher (1.6m~3.0m)	hr	3,580	40,000	
120	Dump truck (2 ton)	hr	400	38,000	
121	Tension jack and pump (225 ton)	day	3,060	-	
122	Tension jack and pump (130 ton)	day	1,920	-	
123	Tension jack and pump (95 ton)	day	1,520	-	
124	Generator (350 KVA)	day	13,560	748,000	
125	Plactic board driver	hr	_11,270	78,000	
126	Truck (2 ton)	hr	490	42,000	
127	Line maker (Hand guided type)	hr	130	-	
128	Air compressor (17 m3 / min)	day	8,400	84,000	

### **PROCESS COST**

### LIST OF PROCESS COST

### LIST OF PROCESS COST

Number of P/C	Description							
1	Transportation of excavated soil							
2	Transportation of excavated rock							
3	Transport of soil excavation of pier							
4	Excavation (for common excavation)							
5	Excavation of soil (dry)							
6	Excavation under the ground water (soil back hoe,bulldozer)							
7	Excavation in rock							
8	Excavation (water work, soil, clamshell bucket)							
9	Hand excavation							
10	Transportation of excavation soil (Stock piling)							
11	Transportation of excavation soil (unsuitable)							
12	Back-filling work (used excavated soil)							
13	Back-filling work (used excavated rock)							
14	Back-filling work (used excavated soil in river)							
15	Hand backfill							
16	Site clearing							
17	Bedding work							
18	Bedding work							
19	Bedding work with back hoc							
20	Cut off plate setting work							
21	Concrete plant operation							
22	Transportation of concrete							
23	Setting of concrete curb (W 260xH230xL1000)							
24	Filling clayey material for cofferdam (by hand)							
25	Temporary cofferdam work for pile							
26	Soil pitching for solid sodding							
27	Solid sodding work							
28	Concrete placing (less than 50 m3/day, R.C structure except RC Slab, Cross beam)							
29	Concrete placing (50 m3-100m3/day,concrete pump, R.C structure except RC Slab, Cross beam)							
30	Concrete placing (100m3-300m3/day,concrete pump, R.C structure except RC Slab, Cross beam)							
31	Concrete placing (300m3-600m3/day,concrete pump, R.C structure except RC Slab, Cross beam)							
32	Concrete placing (300 ~ 600m3, pipe setting type concrete pump)							
33	Concrete placing (100 ~ 300m3, pipe setting type concrete pump)							
34	Concrete placing with chute							
35	Scaffolding (h<4m) substructure							
36	Scaffolding (h>=4m) substructure							
37	Timbering (4 <b<8 for="" substructure<="" td="" vm2)=""></b<8>							
38	Form work ( wooden form,RC structure, height<4 m)							
39	Form work (wooden form,RC structure, height>4 m)							

Number of P/C	Description
40	Form work ( wooden form,RC structure,)
41	Form work (Cylindrical wooden form,height<4m)
42	Form work (Cylindrical wooden form,height>4m)
43	Form work (Cylindrical wooden form)
44	Bridge Drain pile setting work
45	Concrete anchor setting work for bridge drain pipe
46	Drain pipe (D = 15 cm) setting
47	Drain pipe (D = 20 cm) setting
48	Drain box setting work for PC I Girder
49	Drain box setting work for box Girder
50	Road marking . Type - A (General Application)
51	Sub-grade work (CBR=6) (including material)
52	Sub-grade work (CBR=6) (excluding material)
53	Sub-grade work (CBR>6)
54	Sub-grade preparation
55	Blinding concrete work with chute
56	Blinding concrete work
57	Fabrication and setting of the settlement measuring devices
58	Setting work of the line and level checking stakes
59	Construction joint work
60	Reinforcement work (Diameter less than 13mm)
61	Reinforcement work (Diameter 13mm ~ 28mm)
62	Reinforcement work (Diameter 13mm ~ 28mm)
63	Reinforcement work (Diameter 29mm ~ 32mm)
64	Reinforcement work (Diameter 29mm ~ 32mm)
66	Excavation (back hoe 0.35 m3)
67	Cement mortar(for concrete brick work)
68	Cement mortar(for stone work)
69	Cement mortar M75 (for brick 220x105x60nm work )
70	Setting and removal of floor plate
71	Non-shrinkage mortar
72	Bridge deck water proofing
73	Sand fill
74	Excavator operation (bored pile Φ 1000 mm; L = 8.5 m)
75	Excavator operation (bored pile Φ 1000 mm; L = 10 m)
76	Excavator operation (bored pile $\Phi$ 1000 mm; L = 16.0 m)
77	Excavator operation (bored pile Φ 1000 mm; L = 19.5 m)
- 78	Excavator operation (bored pile Φ 1000 mm; L = 20.0 m)
79	Excavator operation (bored pile Φ 1000 mm; L = 21 m)
80	Excavator operation (bored pile Φ 1000 mm; L = 22.0 m)
81	Excavator operation (bored pile Φ 1000 mm; L = 25.0 m)

Number of P/C	Description							
82	Excavator operation (bored pile $\Phi$ 1000 mm; L = 26.5 m)							
83	Excavator operation (bored pile Φ 1000 mm; L = 28.5 m)							
84	Excavator operation (bored pile Φ 1200 mm; L = 21.0 m)							
85	Excavator operation (bored pile $\Phi$ 1200 mm; L = 21.5 m)							
86	Excavator operation (bored pile Φ 1200 mm; L = 24 m)							
87	Excavator operation (bored pile $\Phi$ 1200 mm; L = 26.5 m)							
88	Excavator operation (bored pile Φ 2000 mm; L = 10.5 m)							
89	Excavator operation (bored pile Φ 2000 mm; L = 18.5 m)							
90 .	Excavator operation (bored pile Φ 2000 mm; L = 20.0 m)							
91	Excavator operation (bored pile Φ 2000 mm; L = 22.5 m)							
92	Excavator operation (bored pile $\Phi$ 2000 mm; L = 24.5 m)							
93	Excavator operation (bored pile $\Phi$ 2000 mm; L = 28.0 m)							
94	Excavator operation (bored pile Φ 2000 mm; L = 29.5 m)							
95	Excavator operation (bored pile Φ 2000 mm; L = 36.0 m)							
96	Removal of Existing tree (Root dia < 200mm)							
97	Removal of Existing tree (Root dia. > 200)							
98	Removal of old Pavement							
99	Mat gabion setting work							
100	Stone masonry backfill material throw in work (pitching work)							
101	Removal and transportation of mud soil							
102	Replacement with sand							
103	Placing work with geo-textile sheet							
104	Placing work with geo - textile sheet (non woven fabric)							
105	Soil bag setting							
106	Stone masonry (250*250) for retaining wall							
107	Guard rail setting work							
108	Mortared stone work (type- A)							
109	Mortared stone work (for U - Ditch)							
110	Mortared stone work (for head wall)							
111	Piling work (bored pile, Φ1000mm, pile length L = 8.5 m, reverse circulation drill method)							
112	Piling work (bored pile, Φ1000mm, pile length L = 10.0 m, reverse circulation drill method)							
113	Piling work (bored pile, Φ1000mm, pile length L = 16.0 m, reverse circulation drill method)							
114	Piling work (bored pile, Φ1000mm, pile length L = 19.5 m, reverse circulation drill method)							
115	Pilling work (bored pile φ1000mm, pile length L = 20m, reverse circulation drill method)							
116	Piling work (bored pile, Φ1000mm, pile length L = 21.0 m, reverse circulation drill method)							
117,	Piling work (bored pile, Φ1000mm, pile length L = 22.0 m, reverse circulation drill method)							
118	Piling work (bored pile, Φ1000mm, pile length L = 25.0 m, reverse circulation drill method)							
119	Piling work (bored pile, Φ1000mm, pile length L = 26.5 m, reverse circulation drill method)							
120	Piling work (bored pile, Φ1000mm, pile length L = 28.5 m, reverse circulation drill method)							
121	Piling work (bored pile, $\Phi$ 1200mm, pile length $L = 21.5$ m, reverse circulation drill method)							
122	Piling work (bored pile, Φ1200mm, pile length L = 23.0 m, reverse circulation drill method)							
123	Piling work (bored pile, Φ1200mm, pile length L = 24.0 m, reverse circulation drill method)							

Number								
of P/C	Description							
124	Piling work (bored pile, Ф1200mm, pile length L = 26.5 m, reverse circulation drill method)							
125	Piling work (bored pile, Φ2000 mm, pile length L = 10.5 m, reverse circulation drill method)							
126	Piling work (bored pile, $\Phi$ 2000mm, pile length $L = 20.0$ m, reverse circulation drill method)							
127	Piling work (bored pile, Φ2000mm, pile length L = 18.5 m, reverse circulation drill method)							
128	Piling work (bored pile, Φ2000mm, pile length L = 22.5 m, reverse circulation drill method)							
129	Piling work (bored pile, Φ2000mm, pile length L = 24.5 m, reverse circulation drill method)							
130	Piling work (bored pile, Φ2000mm, pile length L = 28.0 m, reverse circulation drill method)							
131	Piling work (bored pile, Φ2000mm, pile length L = 29.5 m, reverse circulation drill method)							
132	Piling work (bored pile, Φ2000mm, pile length L = 36.0 m, reverse circulation drill method)							
133	Granular back-filling work							
134	Permeable back-filling work							
135	Filling work with suitable excavation soil (for common excavation)							
136	Vertical sand drain (L=24.5m)							
137	Vertical sand drain (L=23.5 m)							
138	Vertical sand drain (L=17.0 m)							
139	Sand compaction pile							
140	Pump setting and removal (for drainage)							
141	Pump setting and removal (for drainage)							
142	Pump setting and removal (for drainage; sheet pile cofferdam)							
143	Pump operation(Whole day)							
144	Pump operation(Whole day)							
145	Pump operation (working time)							
146	Pump operation (working time)							
149	Concrete (A-1, A-2; A-3: $\sigma_{ck} = 400 \text{kg/cm}^2$ )							
150	Concrete (class B-1, $\sigma_{ck} = 350 \text{kg/cm}^2$ )							
151	Concrete (Class C-1; C-2; $\sigma_{ck}$ =290kg/cm <sup>2</sup> )							
152	Concrete (class Y $\sigma_{ck}$ =290kg/cm <sup>2</sup> for cast in place concrete pile)							
153	Concrete (Class D-1; $\sigma_{ck}$ =240 kg/cm <sup>2</sup> )							
154	Concrete (Class E-1; E-2; σ <sub>ck</sub> =210 kg/cm <sup>2</sup> )							
155	Removal of stone masonry							
156	Concrete (Class G, $\sigma_{ck}$ =80kg/cm <sup>2</sup> )							
157	Concrete (class F, $\sigma_{ck}$ =130kg/cm <sup>2</sup> )							
158	Granular sub-base course (t= 40 cm)							
159	Granular sub-base course (t= 15 cm)							
160	Aggregate base course (t=25cm)							
161	Aggregate base course (t=10cm)							
162	Asphalt pavement (binder course t=7cm)							
163	Asphalt pavement (surface course t=5cm)							
164	Asphalt pavement (surface course t=5cm;pavement width less than 5 m))							
165	Asphalt pavement (surface course t=5cm;by hand))							
166	Asphalt pavement (surface course t=7.5cm; for bridge surface pavement)							
167	Asphalt cement							

Number of P/C	Description
168	Asphalt cement
169	Asphalt cement(Bridge surface pavement)
170	Bituminous prime coat
171	Bituminous tack coat
172	Regulatory and Warning signs setting work, Type - B
173	Regulatory and Warning signs setting work, Type - C
174	Regulatory and Warning signs setting work, Type - D
175	Demolition of RC structure
176	Demolition of RC structure (concrete breaker)
177	Disposition of concrete trash (back hoc)
178	Disposition of concrete trash (back hoe)
179	Mortared brick work (220x105x60 mm) thick <=11cm
180	U - Ditch (DS - 1)
181	U - Ditch (DS - 2)
182	U - Ditch (DS - 3)
183(1)	R.C pipe (D-75 cm); Type - A1 setting work
183(2)	R.C pipe (D-75 cm); Type - A2 setting work
184	R.C pipe (D-100 cm);Type - A setting work
185	R.C pipe (D-125 cm);Type - B setting work
186	R.C pipe (D-200 cm);Type - C setting work
187	R.C. Pipe(2D=125cm ) TypeB - Setting work for headwall
188	R.C. Pipe(3D=200cm ) Type C - Setting work for headwall
189	Catch basin (DC-1)
190	Catch basin (DC-2)
191	Headwall DH-5-inlet ; 2 x Φ 1.25m
192	Headwall DH-12-inlet; 3x Φ2.0 m
193	Headwall DH-5-outlet ; 2 x Φ 1.25m
194	Headwall DH-12-outlet; 3x φ 2.0m
195	KM indicator post setting work
196	Traffic post setting work
197	Marker fabrication and setting (100x100x600)
198	Excavation and backfilling of duck track
199	Arrangement bricks on duct track of underground cable
200	Street lighting Pull box (type - A)
201	Distribution panel - type SS
202	Distribution panel - type MDB
203	Street lighting Panel; (type - DB)
204	Underground cable 4 ° x 25 mm <sup>2</sup>
205	Underground cable 4 ° x 16 mm <sup>2</sup>
206	Underground cable 4 ° x 10 mm <sup>2</sup>
207	Cable 4 ° x 16 mm <sup>2</sup>
208	Cable 4 ° x 10 mm <sup>2</sup>

Number	Description
of P/C	Description
209	Grounding Wire BCC 6 mm2
210	PVC conduit D=50 mm
211	Duct bank PVC 2 x F 100 mm
212	Grounding systems setting work
213	Filled up ground work
214	Aggregate surface course (t=15cm) for construction road of bridge
215	Sub-grade work CBR = 5 (including material)
216	Backfill (Open cut,max backfill width W>4m)
217	Transporting of excavated soil (Temporary work)
218	Excavated for unsuitable material (Temporary work)
219	Filling work at ponds
220	Fabrication yards of PC I girders (with 2 track; W = 3.5m; t = 15 cm)
221	Access road for bridge work
222	Steel lighting pole setting work (type - A1)
223	Steel lighting pole setting work (type - A)
224	Street lighting pole (type - A1)
225	Street lighting pole (type - A)
226	Manhole 1220x1220x1500 mm (under ground)
227	Form work ( Wooden form, small-sized continuos structure)
228	Form work (Wooden form, small-sized continuos structure)
229	Concrete placing ( Chute, plain Concrete Structure)
230	Retaining wall work (H = 1.0 m; H1 = 2.0m)
231(1)	Traffic control and safety
231(2)	Traffic control and safety
232	Form Work ( Wooden form; small-sized scattered structure)
233	Concrete curb setting work
234	Back fill (open cut, max backfill width 1m <w<4m)< td=""></w<4m)<>
235	Dry riprap work
236	Plastic board drain work
237	Transportation of materials
238	Transportation of equipment
239	RC pipe (D=75 cm) - Type B setting work for catch basin
240	RC pipe (D=100 cm) - Type B setting work for catch basin
241	Back fill work W>4 m  Road marking type A (Special Application)
242	Monitoring settlement and lateral flow
301	Wagen assemble and disassemble work
302	Wagen removal and setting work
303	Wagen climbing work
304	Wagen pull back work
305	Frame square sets work (5 t/m2;H=5m) for cantilever erection bridge
306	Inner form setting and removal work for cantilever

Number							
of P/C	Description						
307(1)	Scaffolding work for tower crane foundation work						
307(2)	Suspended timbering for tower crane foundation work						
308	Bracket setting work						
309	Timbering on the bracket						
310	Timbering of deck slab (overhanging)						
310(2)	Timbering of deck slab (overhanging)						
311	Inner timbering of pier head						
312	Frame square sets work (simple box bridge)						
313	Pedestal work for prefabricated						
315	Timbering for bottom of side span						
315 (2)	Timbering for bottom of side span (3.6 Vm2;L=10m;H=13.6m)						
316	Timbering of deck slab (overhanging) of side span (1.6t/m2;L=10m;H=2.5m)						
317	Suspended scaffolding for center closing						
318	Suspended timbering for center closing						
319	Inner timbering for center closing						
320	Vertical pre-stressing steel bar setting work (Φ32,SBPR 930/1180)						
321	Vertical pre-stressing steel bar anchorage work (Ф32,SBPR 930/1180)						
322	Vertical pre-stressing steel bar tensioning work (Φ32,SBPR 930/1180)						
322(2)	Vertical pre-stressing steel bar tension releasing work (Φ32,SBPR 930/1180)						
323	Miscellaneous work for vertical pre-stressing steel work						
323(2)	Depreciable value of tools for Φ 32 SBPR 930 / 1180						
324(1)	Inner form fabrication setting and removal work for pier head						
324(2)	Inner form fabrication for pier head						
325	Inner form setting and removal work for pier head						
326(1)	Outer form fabrication setting and removal work for pier head						
326(2)	Outer form fabrication for pier head						
327	Outer form setting and removal work for pier head						
328(1)	Bottom form fabrication setting and removal work for pier head						
328(2)	Bottom form fabrication for pier head						
329	Bottom form setting and removal work for pier head						
330	Killed mold work for picr head						
331	Outer timbering (2.0 t/m2) of cantilever						
332	Inner timbering (2.0 t / m2 ) of side span						
333	Scaffolding work for box girder (L=60m x 3)						
334	Concrete work for approach slab						
335(1)	Parapet and railing (PC I girder, abutment)						
335(2)	Parapet and railing (Box girder)						
336(1)	Outer form fabrication, setting and removal work for side span						
336(2)	Outer form fabrication for side span, center closing						
337	Inner form setting and removal work for side span ,box girder						
337(2)	Outer form setting and removal for center closing						
338(1)	Inner form fabrication setting and removal for side span						

Number	
of P/C	Description
	Inner form fabrication for side span
1	Inner form setting and removal work for side span
	Inner form setting and removal work for center closing
	Bottom form fabrication, setting and removal work for side span
	Bottom form fabrication for side span and box girder
	Bottom form setting and removal work for side span,box girder
	Bottom form setting and removal work for center closing
1	Edge form, setting and removal work
	Edge form work
343(1)	Pressure pipe setting and removal for pier head
343(2)	Pressure pipe setting and removal for center closing
343(3)	Pressure pipe setting and removal for cantilever erection area
343(4)	Pressure pipe setting and removal for pier concrete
343(5)	Pressure pipe setting and removal for pier footing concrete
344	Front side of pier head scaffolding work
345(1)	Front side of pier head scaffolding work
345(2)	Bridge side scaffolding
346	Bridge surface guardrail work
347(1)	Dead head cost of concrete pump (pipe setting type 90~100m3/hr)
347(2)	Dead head cost of concrete pump (boom type 90 ~110 m3/hr)
347(3)	Dead head cost of concrete pump (boom type 55 ~60 m3/hr)
348	Concrete work for pier head
349	Concrete work for side span
350	Concrete work for center closing
351	Concrete work for cantilever erection area
352	Timbering base for box girder
352 (2)	Setting and removal of timbering for box girder (L=60m)
353	Outer form fabrication work for box girder
354	Outer form setting and removal work for box girder
355	Timbering of deck slab ( overhanging ) for box girder
356	Inner timbering of box girder
357	Tower crane foundation work
358	Setting and removal work of tower crane
359	Inner form fabrication work for box girder
360	Inner form setting and removal work for box girder
361 (1)	Steel sheet piling work (type IV,L=19m)
361(2)	Removal of steel sheet piling
362(1)	Setting and removal of brace and wale
362(2)	Depreciable value and expenses of wale and brace
363	Scaffolding work for pier

Number						
of P/C	Description					
364	Tower crane cost					
364(2)	Tower crane cost					
365	Track way work for erection girder					
366	Equipment depreciable value for erection work by crection girder					
367	Main girder erection with erection girder					
368	Truck crane cost for assembling and disassembling of erection girder facility					
369	Assembling and disassembling of erection girder facility					
370	Movement of crection girder frame					
371	Anchor work for erection girder work					
372	Transportation of crection girder facility					
373 (1)	Prevention work against overturning of main girder					
373(2)	Transient placing of PC 1 girder					
374(1)	Equipment depreciable value of fabrication work (PC I girder)					
374(2)	Equipment depreciable value of fabrication work (PC I girder)					
375	Track way work for gantry crane					
376	Setting and removal of gantry crane					
377	Breaking work with Large - sized breaker (1300 kg)					
377(2)	Breaking work with Large - sized breaker (600~800 kg)					
378	Concrete placing (with gantry crane)					
379	Temporary access road for transportation and erection					
380	Truck crane (120 t) assembling and disassembling					
381(1)	Erection and setting of main girder (Truck crane)					
381(2)	Main girder erection (Truck crane)					
382	Transportation of main girder					
383(1)	Production cost of steel form (PC I Girder)					
383(2)	Install forms and strip form (Steel form)					
384(1)	Production cost and depreciable value of steel form (PC I Girder)					
384(2)	PC I Girder form work (steel form)					
384(3)	PC I Girder form work (steel form)					
384(6)	Reinforcement steel work (PC I Girder)					
385	Bottom plate subcontract fabrication cost					
386	Main girder fabrication stand (Steel form)					
387	Rehabilitation of fabrication stand					
388	Steel rib material fabrication cost by subcontract for cantilever form					
389	Steel rib material fabrication cost for cantilever form					
390	Outer form fabrication (metal form) for cantilever					
391	Outer form setting and removal work for cantilever					
392(1)	Inner form fabrication setting and removal work for cantilever					
392(2)	Inner form fabrication for cantilever					
393	Inner form setting and removal work for cantilever					
394	Scaffolding for setting and removal of branket					
395	Inner timbering for cantilever					

Number	Decemberton						
of P/C	Description						
397	uring of concrete work for cantilever						
398	uring of concrete work for pier head and side span						
398 (2)	uring of concrete work for substructure concrete and others						
399	lain girder construction joint roughening work						
400	ongitudinal pre-stressing setting steel work (SWPR 7B,12T12-7) (Cantilever erection bridge)						
401	Perpendicular pre-stressing setting work (SWPR 7B;7,T12.7) (Cantilever erection bridge)						
402	Longitudinal pre-stressing steel anchorage work (Cantilever erection bridge)						
403 (1)	Longitudinal pre-stressing steel tensioning work (Cantilever erection bridge)						
403(2)	Longitudinal pre-stressing steel tensioning work (Cantilever erection bridge)						
404	Perpendicular pre-stressing steel anchorage work						
405	Perpendicular pre-stressing steel tensioning work						
406 (1)	Depreciable value of equipment and tools for erection (rigid frame bridge and side span)						
406 (2)	Depreciable value of equipment and tools for tensioning (rigid frame bridge)						
407	Concrete work for simple box girder (L = 60m)						
408	Longitudinal pre-stressing steel setting work (SWPR 7B;12T15.2) (box girder,L = 60m)						
409	Longitudinal pre-stressing steel tensioning work (box girder, L = 60m)						
410	Longitudinal pre-stressing steel tensioning work (box girder,L = 60m)						
411	Perpendicular pre-stressing steel setting work (SWPR 7B; 7T12.7) (box girder, L = 60m)						
412	Perpendicular pre-stressing steel tensioning work (box girder, L = 60m)						
413 (1)	Depreciable value of tension jack and pump during transportation (box girder)						
413 (2)	Depreciable value of tension jack and pump during transportation (box girder)						
414	Reinforcement steel work for box girder						
415	Reinforcement steel work for cantilever erection bridge						
416	Longitudinal pre-stressing steel setting work (PC I Girder)						
417	Concrete work for fabrication of PC I Girder						
418	Longitudinal pre-stressing steel tensioning work (PC I Girder)						
419	Reinforcement steel work for side span						
421	From work of cross beam						
422	Concrete of cross beam						
423	Suspended scaffolding under PC I girder						
424	Grout material for PC 1 girder						
425	Perpendicular pre-stressing steel setting work (PC I Girder; L=33m)						
426	Perpendicular pre-stressing steel work (PC I Girder; L=33m)						
427(1)	Depreciable value of Perpendicular pre-stressing work (PC 1 Girder; L=33m)						
427(2)	Depreciable value of Perpendicular pre-stressing work (PC I Girder; L=33m)						
428	Reinforcement steel work for cross beam (PC I Girder)						
428(2)	Reinforcement steel work for deck slab (PC I Girder)						
429(1)	Diaphragm concrete work PC I Girder (L=66m x 2)						
429 (2)	Diaphragm concrete work PC I Girder (L=99m x 2)						
430(1)	Setting work of rubber bearing (less than 60 kg / each)						
430(2)	Setting work of rubber bearing (60~100 kg / cach)						
430(3)	Setting work of rubber bearing (100~500 kg / each)						

Number of P/C	Description						
430(4)	Setting work of rubber bearing (more than 500 kg / each)						
431 (1)	Setting of rubber bearing (Box girder) - fix 1110*1260*122						
431 (2)	Setting of rubber bearing (Cantilever) - mov 860*1010*143						
431 (3)	Setting of rubber bearing (Box girder) - mov 610*810*110						
432 (1)	Setting of rubber bearing (PC I girder - L = 99m; L = 66m) - fix 510*310*56						
432 (2)	Setting of rubber bearing (PC I girder - L = 99m) - mov 500*330*63						
432 (3)	Setting of rubber bearing ( PC I girder - L = 99m; L = 66m) - mov 500*300*59						
433 (1)	Fabrication of joint steel plate for connecting pontoons						
433(2)	Setting and removal pontoons						
434	Supporting facility for pressure pipes in river						
435	Expansion joint work, type A						
436	Expansion joint work , type B						
437	Expansion joint work, type C						
438	Expansion joint work , type D						
439	Main girder construction joit roughening work						
440	Bottom form fabrication for box girder						
441	Outer form fabrication for box girder						
442	Inner form fabrication for box girder						
443 (1)	Setting and removal temporary ladder (height 10 m)at the bridge pier						
443(2)	Setting and removal temporary ladder (height 12 m)at the bridge pier						
443(3)	Setting and removal temporary ladder (height 15 m)at the bridge pier						
444	Reinforcement steel work for deck slab						
445	Timbering work for box culvert						
445(2)	Timbering work for box girder						
446	Concrete work for box culvert (Class E2)						
446(2)	Concrete work for box culvert (Class E2)						
448	Concrete work for name plate						
449	Name plate setting work						
450	Boring including undisturbed sampling and standard penetration test						
451(1)	Testing Bridge area						
451(2)	Testing at embankment area						
453 (1)	Deck slab concrete work (PC I Girder, L=66m)						
453 (2)	Deck slab concrete work (PC I Girder , L=99m)						
454	Fabrication of Pre-cast panel for PC I girder						
455	Transportation of Pre-cast panel						
456	Unloading pre-cast concrete panel						
457	Setting of pre-cast concrete panel						
458	Joint work for pre-cast concrete panel						
459	Footing concrete work (Abutment and piers)						
460	Footing concrete work						
461	Wall concrete work (Abutment, height > 4 m)						
462	Wall concrete work (Piers, height < 4 m)						

Number of P/C	Pescription						
463	Wall concrete work (Piers, height	> 4 m)	<u> </u>				
464	Wall concrete(class D1) work			·			
465	Wall concrete(class B1) work						
466	Beam concrete work						
467	Beam concrete work	<u> </u>					

### **PROCESS COST**

**Process Cost Nonumber (1 - 243)** 

Transportation of excavated soil Per: 100 m3 (Hauling distance 1.0 km)

					Imit	Init Price	A	Amount	
À				. :		2211	1	1	Pemarks
Ż	Description	Standard	Chit	Quantities	Foreign	Local	roreign		Neilland
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Bools hoo	0.6 m3	Ę	1.52	2,560	92,000	3,891	139,840	Equipment - 6
- ,		11 ton	Ŀ	435	1.650	67.000	7,178	291,450	Equipment - 33
		FIO. 11	111	200		009.08		20 150	0.1*2.5
ጥ	Common labor		person	0.23		00000	0,0	777	
	Total				-		11,069	451,440	
	Per 10m3	[3					111	4.514	
	Workshility of hack hoe (0.6 m3)	(1,6 m3)					$Q = (3600*q*f_1*E)/C_s$	f,*E)/C,	
							T = 100/Q		
. '					r	(2,2)	O (m2 / hr)	T (br/100m3)	
	q <sub>0</sub> (m3)	¥	(£m) b	$\mathbf{I}_1$	บ	CS (Sec.)	לוווו / חווו) א	T (IIII: LOOKING)	
	9.0	86:0	0.59	0.71	0.70	16	0.99	1.52	
	q : Standard bucket capacity			f <sub>1</sub> : Soil conversion factor	rsion factor				
	K: Bucket factor			C <sub>s</sub> : Cycle time	v				
:	Workshility of dump truck (11 ton)	ck (11 ton)					Q = (60 * qt * f*E) / Cm	*f*E)/Cm	
							Cm=bL+a;	$Cm=b L + a ; T=100/Q ; q = n^*q_o^*K$	**x
	L (km)	q	8	Cm (min)	q t (m3)	4-1	<b>Ξ</b>	Q (m3/hr)	T (hr / 100m3)
		8 4	5.0	10.8	5.88	0.71	6.0	23.0	4.35
	L: Transport distance (Km)		a : Worki	a : Working factor	f : Soil conversion factor	ersion factor		E: Efficiency of work	ork ne one dump truck
	b: Factor of transport condition	ලි			CIII . Cycle	) 		9	•

Transportation of excavation rock Per: 100 m3 (transport distance 1.0 km)

								Ī												ኍ
	Remarks		Equipment - 6	Equipment - 33	0.1*2.5													T (hr / 100m3)	8.68	E: Efficiency of work
Amount	Local	(VN. D)	285,200	281,560	20,150	, ,-	886,910	4,00	8,869	f,*E)/C,		T (hr/100m3)	3.20			*f*E)/Cm	T = 100/Q	Q (m3/hr)	11.5	sion factor
A	Foreign	(J.YEN)	7,936	14,322	-		22.258		223	$Q = (3600*q*f_1*E)/C_s$	T = 100/Q	Q (m3 / hr)	31.27			Q = (60 * qt * f * E) / Cm	Cm = b L + a ; T = 100/Q	E	6.0	f : Soil conversion factor
Unit Price	Local	(VN. D)	92.000	67.000	80.600							Cs (sec)	22					J	0.65	
Cn.	Foreign	(J.YEN)	2.560	1.650	ı				· d			Э	0.70	f <sub>1</sub> : Soil conversion factor	ne			q t (m3)	4.2	a: Working factor
	Quantities	'	3.1	89.8	0.25	3						£	0.65	f <sub>1</sub> : Soil conve	C <sub>4</sub> : Cycle time			Cm (min)	12.8	a: Working factor
	Chrit		h	Ę	norec	ioe io						q (m3)	0.42					60	8.0	a : Work
	Standard		0.6 m3	11 ton						(0.6 m3)		쏘	0.7			ok (11 ton)	(mar 11) was	2	8 4	
	Description		Doolshoo	Dack HOC	Dump unck	Common labor	E	10621	Per 1.0m <sup>3</sup>	. Workability of back hoe (0.6 m3)		q o (m3)	90	q : Standard bucket capacity	K · Bucket factor	Work shills, of dumn truck (11 ton)	. Work about of damp of	(ma)		L : Transport distance (Km)
	2	5	-	، ا	4	اه														

Transportation of soil excavation of pier Per.: 100 m3 (transport distance 1.0 km)

1					Unit	Unit Price	An	Amount	
	Standard	P	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
	- 13 	14		,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	0.6 m3	3	'n	2.74	2,830	89,000	7,754	243,860	Equipment - 13
	1 ton	-	Į.	4.48	1,650	67,000	7,392	300,160	Equipment - 33
			person			80,600	-	80,600	2*0.2*2.5
1							:		
1º	Total						15,146	624,620	
Ē	Per 1.0m³	1					151	6,246	
Workability of clamshell	ıell								
1.	K		о <sub>р</sub>	Ţ	ы	C <sub>s</sub> (sec)	ò	T(hr/100m3)	$Q = (3600*q_0*f_1*E)/Cs$
-	0.85		0.51	0.71	0.7	25	36.5	2.74	]T = 100 / Q
ac	q : Standard backet capacity (0.6 m3)			K: Backet factor	ctor				
E: Efficiency of work				C <sub>m</sub> : Cycle time	ne				
OIL.	Work ability of dump truck (11 ton)							Q = (60 * qt * f* E) / Cm	* E)/Cm
•	•						•	Cm = b L + a ; T = 100/Q	= 100/Q
	q		8	Cm (min)	q t (m3)	f	ш	Q (m3/hr)	T (hr / 100m3)
	4.8		10.0	14.8	6.1	1.0	6.0	22.3	4.48
L : Transport distance (Km)	n)		a : Workin	a : Working factor	-		f : Soil conversion factor	sion factor	E : Efficiency of work
COL	b : Factor of transport condition		qt: Loan	q t: Loanding volume one dump truck	one dump truc	×	Cm: Cycle time	ue	
								-	

Excavation (for common excavation) Per:  $100 \, \text{m}_2$ .

	Remarks		42,300 Equipment - 3	117,760   Equipment - 6	20,150 0.1*2.5	180,210	1,802		f * E)/Cm	+0.15				T (hr/100m3) $Q = (3,600*q*f*E)/Cs$	T = 100/Q; q=qo * K	
Amount	Local	(VN. D.		117.	20,			1	, b , 09) = O	$C_{\rm m} = 0.03 * L \pm 0.15$	T = 100 / Q				1.28	E: Efficiency of work
,	Foreign	(J.YEN)	1,485	3,277	,	 4,762	48	4	$Q(m3/h)$ $T(hr/100m3)$ $Q = (60 * q * f_1 * E) / C_m$	0.94		of work		Q (m3 / hr)	78.3	E: Efficiency of work
Unit Price	Local	(VN. D)	45,000	92,000	80,600				Q (m3 /h)	106.0		E: Efficiency of work		C <sub>s</sub> (sec)	61	
5	Foreign	(J.YEN)	1,580	2,560	1				C <sub>m</sub> (min)	1.35	f <sub>1</sub> : Soil conversion factor	time		<u>a</u>	0.7	tor
	Quantities		0.94	1.28	0.25				L(m)	40	f <sub>1</sub> : Soil con	C <sub>m</sub> : Cycle time		<b></b>	1.00	f <sub>1</sub> : Soil conversion factor
	Unit	:	Ė	Æ	person				Ш	0.85				5	0.59	f <sub>i</sub> : Soil conversi
	Standard		15 ton	0.6 m3			n <sub>3</sub>	(15ton)	f	1	ng) per one cycle	ance	(0.6 m3)	×	86.0	
	No. Description		Bulldozer	2 Back hoe	3 Common labor	Total	Per 1.0m <sup>2</sup>	. Workability of bulldozer (15ton)	g (m3)	2.81	q : Execution volume (pushing) per one cycle	L: Average soil pushing distance	. Workability of back hoe (0.6 m3)	q o (m3)	0.50	q.: Standard bucket capacity

Excavation of soil (dry)
Per: 100 m3(stock pile use to backfill)

	ιΔ		9-	-3													
	Remarks		Equipment - 6	Equipment - 3	0.1*2.5				Cs .	¥				} / C <sub>m</sub>	ı		
Amount	Local	(VN. D)	97,520	141,960	20,150	259,630	2,596		T (hr/100m3) Q = (3,600*q*f*E) / Cs	T=100/Q; q=qo * K	vork	q: Excavation volume per one cycle		$T(h\tau/100m3)$ Q = $(60 * q * f_1 * E) / C_m$	$C_m = 0.027^* L + 0.78$	T=100/Q	
γw	Foreign	(J.YEN)	2,714	487'9	•	6,000	06		T (hr/100m3) Q	1.06 T	E: Efficiency of work	q: Excavation vol		T(hr/100m3) Q	1.56 C,	T	work
Unit Price	Local	(VN. D)	92,000	000'16	009'08				Q (m3 / hr)	93.9				Q (m3 /h)	60.4		E: Efficiency of work
Uni	Foreign	(J.YEN)	2,560	4,030					C <sub>s</sub> (sec)	16	ır			C <sub>m</sub> (min)	1.59	ersion factor	
	Quantities		1.06	1.56	0.25				ш	8.0	f <sub>1</sub> : Soil conversion factor	time		L(m)	40	f1: Soil conversion factor	Cm: Cycle time
	Unit		hr	μ	person				+	8.71	f <sub>1</sub> : Soil con	C,: Cycle time		ш	8.0		
	Standard		0.6 m3	15 ton			£	0.6 m3)	Х	0.98			15ton)	f	1	g) per one cycle	nce
	Description		Back hoe	Bulldozer	Common labor	Total	Per 1.0m <sup>3</sup>	. Workability of back hoe (0.6 m3)	q <sub>0</sub> (m3)	09:0	qo: Standard bucket capacity	K : Bucket factor	. Workability of buildozer (15ton)	g (m3)	2.81	q: Execution volume (pushing) per one cycle	L: Average soil pushing distance
	ģ		-	2	3									لب			

Excavation un der the ground water (soil,back hoe,bulldozer)

Per: 100 m3 (Temporary storage near by excavation, use to backfill)

										Γ
					Chi	Unit Price	Aı	Amount		
2	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks	
2					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
-	D - 1- 1- 0-	0.6 m3	Ŀ	1.73	2,560	92,000	4,429	159,160	Equipment - 6	1
	-	15 ton	<u>.</u>	1.57	4.030	91.000	6.126	138,320	Equipment - 3	
~	Bulldozer	101 01	=	761	2					
							10 664	007 700		Γ
	Total						10,554	004,169		T
										T
	Por 1 0m3					-	106	2,975		
	TO TO							O = (3600*a*f1*E) / Cs	E)/Cs	
	. Work ability of back noe (0.0 m3)	0.0 m.э.)	:					T=100/O: a=ao*K	× 0	
								(2000)		
	0.0 (m3)	×	Ţ	ш	Cs (sec)	q (m3)	Q (m3 / hr)	T (hr/100m3)		
	0.60	0.98	1.08	09.0	27.00	0.59	57.90	1.73	-	
	virgenes tedond brokens			f1: Soil conversion factor	ersion factor	1	E: Efficiency of work	of work		
	40. Stational courses cupacity			Cs: Cycle time	2		q: Excavation	q: Excavation volume per one cycle	le	
	N. Ducket lactor	7		•						
	. Work ability of buildozer (15ton)	(ISton)						O = (60 * a *f1 * E)/Cm)	E)/Cm)	
							70 00 17 17 17		, or	
	g (m3)	Ę	ш	L(m)	Cm (min)	Q (m3 /h)	i (hr/ [00m3)	CIN = 0.02/ L + 0./0	0/	
÷.	2.920	0.710	0.600	20.000	1.320	66.000	1.520	T = 100 / Q		
	a. Execution volume (pushing) per one cycle	) per one cycle		f1 : Soil conversion factor	rersion factor		E: Efficiency of work	of work		
	The second of th			Cm . Cycle time	me					
	L : Average soil pusning distance	<b>3</b> 2			· · · · · · · · · · · · · · · · · · ·					

Excavation in rock
Per: 65m3

<del></del>	ga (N2) 430 560	Quantities Foreign (J.YEN) (J.YEN) 5.5 6,430 2.36 2,560 2.5	(J.Y.
(3.YEN) (3.365 (3.00 (3.365 (3.00 (3.365 (3.70 (3.365 (3.70 (3.365 (3.70 (3.365 (3.70 (3.365	(N) (430 (560	5.5 2.36 2.5 2.5	5.5 2.36 2.5 2.5
35,365 6,042 - - 41,407 637 637 T (hr/100m3) 2.36	,430	5.5 2.36 2.5	5.5 2.36 2.5 2.5
35,365 6,042 - 41,407 637 637 T (hr/100m3) 2.36	,430	5.5 2.36 2.5	5.5 2.36 2.5
6,042 - 41,407 637 T (hr/100m3) 2.36	,560	2.36	2.36
41,407 637 T (hr/100m3) 2.36			
41,407 637 T (hr/100m3) 2.36			
637 T (hr/100m3) 2.36			
637 T (hr/100m3) 2.36			
T (hr/100m3) 2.36		_	
T (hr/100m3) 2.36			
$\vdash \vdash \vdash$			
	ec)	E Cs (sec)	
	00	0.70 25.00	-
r E: Efficiency of work	cto	fl: Soil conversion factor	fl: Soil conversion facto

Excavation (water work ;clamshell)
Per: 100 m3

L					un N	Unit Price	٧	Amount	
No	). Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	Clamshell	0.6 m3	14	2.48	2,830	000'68	7,018	220,720	Equipment - 13
7	Pontoon	50 ton	day	0.85	•	200,000		000,071	
<u></u>	Tugboat	100 ps	hī	0.27	1,310	120,000	354	32,400	Equipment - 75
4	Barge	100 ton	day	0.92	006'9	254,000	6,348	233,680	Equipment - 72
~	Foreman		person	0.50	ī	183,300	•	91,650	0.2*2.5
9	Common labor		person	0.5	-	80,600	_	40,300	0.2*2.5
	Total						13,720	788,750	
	Per 1.0m <sup>3</sup>	13					137	7,888	
	. Workability of clamshell								
	A*p=0p	×	f	Э	C, (sec)	δ	T(hr/100m3)	$T(hr/100m3)$ Q = $(3600*q*K*f_1*E)/Cs$	*E)/Cs
٠.	0.48	0.8	.,	0.7	30	40.3	2.48	T = 100 / Q	
	q : Standard backet capacity (0.6 m3)	0.6 m3)		K: Backet factor	ctor				

CB-28

Hand excavation
Per: 10 m3

							•		
	44,330	:						Per 1.0m	
	443,300	,						Total	
	000 011								
2.2*2.5	443,300	•	80,600	-	5.5	person		Common labor	-
	(VN. D)	(J.YEN)			לתשוויווני	5	Stational	Description	Š.
Remarks	Amount	1	Unit Price Local	Foreign	I Init Ouantities	I Init	Stondard		7 4

Transportation of excavation soil (Stock piling)

Per: 100 m3 (transport distance 1.0 km)

				Unit	Unit Price	¥,	Amount	
Description	Standard	Carit	Quantities	Foreign	Local	Foreign	Local (VN, D)	Remarks
•				(Z) X (C)	(7 ) (7	200		Foundament - 33
	11 44.	hr	3.02	1.650	62,000	4,983		בל יוייטיוולייואר
Jump truck	uoi i i					i		
				-		4,983	707,340	
Total						03	5000	
						20		
Per 1.0m							-	

Dump truck operation time per one pile

T\*(desing excavation volume per one pile) /100m3

Work ability of dump truck (11 ton)

CE = 0 L + 2 · 1 - 100 K	and / (3 * 3 * * * * * * / / /	1117 / (3 1 1b 10e) = 7		CH. Cycle time			
		33.0	2:22	a: working factor		Et: Efficiency of work	
« ·	1)	0.5	0.7	L. Cooker of transmost condition	of raciol of natispost condition	S. C. at seminarion factor	I : Soil Collection Idea: I
	1	\(\frac{1}{2}\)	1.0	0.1	1 . Transnort distance	L'Hensport Comice	o. I canding volume one dump truck

Transportation of excavation soil (unsuitable) Per: 100 m3 (transport distance 1.0 km)

		8	_	T			T		
	Remarks	Equipment - 33	ı	- 1					
Amount	Local (VN. D)	339,690	021.00	001,02		000 036	332,040	3,598	
Am	Foreign (J.YEN)	├	ļ.	•		2200	8,300	84	
Unit Price	Local (VN. D)	67 000		80,600					
Unit	Foreign	1.650	2,5,1	,					
	Quantities	5.03	5.5	0.25			-		
	Unit	1	3	person					
	Standard		I TON					6	
	Description		Dump truck	2 Common labor	Contained 1800		Total	£ 0	rer 1.0m
	Š		_	c	]٠				_

. Work ability of dump truck (11 ton)

Et Cmt (min) Q T Cm = b L + a; T = 100/Q 0.9 14.8 22.3 4.48 Q = (60 \* qt \* f\*E) / Cm C=n\*q\*K (n: frequency of loading; 10, q: bucket capacity of backhoe; K: bucket factor; 0.98) D=4.8; a=10 Cm = b L + a; T = 100/Q Q = (60 \* qt \* f\*E)/CmC(m3)

C: Transport quantity od a dump truck

Et: Efficiency of work

f : Soil conversion factor

Cmt: Cycle time (b: factor of transport condition, working factor)

Backfilling work (used excavated soil)
Per: 100 m3

					4:1-1	Truit Dailon	An	Amount		
					TILO	נונב				
		7	Timit	Onantities	Foreign	Local	Foreign	Local	Kemarks	
Š	Description	Standard	5	) )	(NHVI)	(VN. D)	(J.YEN)	(VN. D)		
					7.7.7.7.	000.0	2 700	85 540	Equipment - 3	
		15 ton	μ	0.94	4,030	91,000	007.0	2,00		_
<b>.</b>	Buildozer	103							T*0.5=0.54; Equipment -	
			•	7.7	0 250	92 000	1,382	49,680	9	
٠,	Back hoe	0.6 m3	hr	0.34	2,300	200,000	950	70 170	Eouipment - 39	
1		0.8 ~ 1.1 ton	hr	2.73	350	000,67	220	0.0.0.0	Danisament 42	
2	vioraulig louci	1001	1000		019	191,000	67	21,010	Equipment	
4	Tamper	60 ~ 100 Kg	Č			009 08	,	403,000	2.0*2.5	
ľ	-		person	^		60,000				
v.	Common labor						6,193	638,400		
L	Total									
										γ
							62	6,384		
L.	Per 1.0m3	m3						O = (60 * 0 * f! * F)/Cm	* E ) /Cm )	
]	Work ability of bulldazer (15ton)	r (1Ston)							100	
	WOLN AUTHUNIA	14	μ	[ (m)	Cm (min)	Q (m3 /h)	T(hr/100m3)	CH = 0.02 / L + 0.18	6/-	•
	g (m3)			0000	1 23	106 20	0.94	T = 100 / Q		
	2.92	1.00	0.80	20.00	7	2		E . Efficiency of work	vork	
	Execution wellime (pushing) ner one cycle	no) ner one cycle			fl : Soil conversion factor	ersion factor		בי בוווכוכווכו בי		
	d . Execution comme (press.	, , , , , , , , , , , , , , , , , , , ,		:	Cm · Cycle time	ne				
	a history and anching distance	tance								

Backfilling work (used excavated rock)
Per: 100 m3

					Chi.	Unit Price	Ā	Amount	
2	Decomption	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
į					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Th. 11 Leave	15 ton	14	0.94	4.030	91,000	3,788	85,540	Equipment - 3
-	Buildozer								T*0.5=0.54; Equipment -
r	C C C C C C C C C C C C C C C C C C C	0.6 m3	ä	0.65	2,560	92,000	1,664	59,800	9
4 (	Villantia caller	0.8 ~ 1.1 ton	į, į	3.24	350	29,000	1,134	93,960	Equipment - 39
1	-1	60 ~ 100 kg	day	0.11	019	191.000	19	21,010	Equipment - 42
4	T	54 001 00	3	303		\$0.600		503 750	2.5*2.5
S	Common labor		person	67.0		000,00		000,000	
	Total						6,653	/64,000	
							29	7.641	
	Per 1.0m3	n3							
	Work ability of bulldozer (15ton)	r (15ton)						Q = (60 * q * 11 * t.) / cm	(E)/Cm)
:	0 (m3)	Į.	ш	L(m)	Cm (min)	Q (m3 /h)	T(hr/100m3)	Cm = 0.027 L + 0.78	.78
* ;	2.62	1.00	0.80	20.00	1.32	106.20	0.94	T = 100 / Q	
	a · Execution volume (oushing) per one cycle	ng) per one cycle			fl : Soil conversion factor	ersion factor		E: Efficiency of work	vork
:	1 - Average soil mishing distance	lance			Cm: Cycle time	me			
	0		-						

Backfilling work (used excavated soil in river)
Per: 100 m3

Description Standard Unit Common labor person	Quantities 2.5	Foreign L			1000	Domonto
Standard Standard	Quantities 2.5	Foreign				
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2.5		Local	Foreign (1 YEN)	(VN. D)	Not let no
0.6 m3	2.5	(J. Y.C.N.)	(413.17)	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	201 500	10*25
5 6 7 9 9	4::3	1	80,600	•	000,102	
0.6 m3			000	10.726	337.310	Equipment - 15
_	3.79	2,830	000,68	10,120		
		000	000 550	4 209	154,940	Equipment - 72
100 to	0.61	0,800	4.74,000		0000	7. + mo one of
	, ,	0121	120.000	79	1,200	בלבוולווופוור
100 26	90:0	01.5.1	22,221		000 6.	
+	70.0		200 000	•	12,000	
50 ton day	0.00			0,000	717 050	
				clu;cl	114,730	
10tal			-			
				01.	7 2 2 0	
				150	1,150	
Dow 1 0m2						

Hand backfill Per: 10 m3

							•	******	
						Unit Price	An	Amount	
5	Description	Standard	Chit	Ouantities	Foreign	Local	Foreign	Local	Remarks
?				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Common labor		nerson	0.5		80.600		40,300	0.2*2.5
-[	Collision labor								5 hrs/day*1/4;1 day=8 hrs
C	Tommer	$60 \sim 100 \text{ kg}$	dav	0.16	610	191.000	86	30,560	
1	raniper	0							
							00	098 02	
	Total						7.0	000,07	
								, , , ,	
	Por 1 0m3	<u>~</u>					01	7,086	

Site clearing Per: 100 m2

Ì					Unit	Unit Price	An	Amount	
Š	Description	Standard	Cmit	Quantities	Foreign	Local	Foreign	Local	Remarks
						(VN. D)	(J.YEN)	(VN. D)	
	Bulldozer	15 ton	붜	0.21	4,030	000,16	846	19,110	19,110   30/100*T;Equipment - 3
2	Foreman		person	0.08		183,300	•	14,664	30/100*0.1*2.5
<u></u>	Common labor		person	0.15		80,600	•	12,090	30/100*0.2*2.5
4	Miscellaneous expenses	(Labor cost )*4%	set	1	ı	-	•	1,070	
	Total						846	46,934	
	Per 1.0m <sup>2</sup>	12					80	469	
I									

q *f * E )/Cm	r = 1.00			
* 09) = O	$0.72$ $C_{in} = 0.03*L + 0.2$	T = 100/C	96.0*°P=p	
T(hr/100m3)		dth of blade	fwork	
$C_m(min) = Q(m3/h) = T(hr/100m3) = Q = (60 * q *f * E)/C_m$	139.7	q: Effective width of blade T = 100 / Q	E: Efficiency of work	
C <sub>m</sub> (min)	1.1			
Э	8.0	q .: Standard blade capacity	C <sub>m</sub> : Cycle time	
£	1	q .: Stand	C: Cycle	
q (m3)	2.91			
L(m)	30	L: Excavation and pushing distance	f : Soil conversion factor	

Bedding work Per: 10m3

1					5	Unit Price	¥	Amount		
Ž	Description	Standard	Chit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
									1+K;k=+0.2;	
-	Concherrin		m3	12	•	89,000		1,068,000	Material - 111	_
٠ ر	Foremen		person	0.75		183,300	1	137,475	0.3*2.5	T
1 6	Skilled labor		person	1.75	•	170,100	•	297,675	0.7*2.5	
7	Common labor		person	3.75		80,600	1	302,250	1.5*2.5	
r	Miscellaneous expenses	(Labor cost )*4%	Set					29,496		
$\cdot$	Company of the company	2000 0000								
	Total							1,834,896		г
	Per 1.0m3	13						183,490		

Bedding work Per: 10m3

					r-	τ	7	_	_	7				r	_	٦
	Remarks	1+K;k=+0.2;	Material - 111	0.3*2.5	0.7*2.5	1 C*O C	J. 2. C. 1		Fourinment - 70	a simulation	0.02xT;T=3.63;	Equipment - 75				
Amount	Local (VN. D)		1,068,000	137 475	579 700	0.0000	504,230	29,496	010	0+0,0		8,400		1 850 136	185.014	ריסיים
¥	Foreign (1 YEN)		. •			,	ı	•		21/	-	92		600	700	20
OCIO + CO	Local	(7:::)	89 000	102 200	100,000	1/0,100	80,600		000	342,000 [		120 000				
	Foreign	(7.1 21.4)			ı		1			35.520		1 3.10	21,1			
	Quantities		:	17	0.75	1.75	3.75	<u>-</u>	-	200		200	0.0			
	Unit			Ë	person	person	nercon	1105 100	set	700	uay		υL			
	Standard								(Labor cost)*4%	100	40 100		100ps			2
	Description			Crusher run	Foreman	Skilled labor	ONINCA IMPO	Common labor	Miscellaneous expenses		Barge with crane		Tug boat		Total	Day 1 Am2
	Š.				7	1	,	4	1,5	,	9		1			T

Bedding work with back hoe Per: 10m3

					Chii	Unit Price	Aī	Amount		
č	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
<b>\</b>				,	(J.YEN)	(VN, D)	(J.YEN)	(VN. D)		
									1+K;k=+0.2;	
10 Ac. 12			33	12		89,000	1	1,068,000	Material - 111	
ting party			nercon	0.75	ı	183,300	ı	137,475	0.3*2.5	
Coreman			nercon	1.17	1	170,100	٠	199,017	0.7*50/150*2.5	
Skilled labor	10 11		person	2.5	1	80,600	-	201,500	1.5*50/150*2.5	
Common labor	noi	/1 of an and 14/0/	100170	-			1	21.520		
Miscellane(	Miscellaneous expenses	(Labor cost ) 470	אַנו	-					100/150*1/T·T=4.0 ·	
1 t t		0.35 m3	ļ	0.17	1.460	64.000	248	10,880	Equipment -7	
Dack noc		2000								
							240	1 628 957		
÷	Total						04.7	470,000.		-
	Per 1.0m3	n3				-	25	165,839		
		)								

Cut off setting work Per: 10m

_					_				_	 _	٠,		٠,	
		Remarks	Material - 66	2 0#3 0	0.5*2.5									
Amount		Local (VN. D)	ŀ		139,625	2022	5,50			0.0 27.	140,410	1.62.1.1	1.76.1	
ATH		Foreign (J.YEN)	7 380	1	•		•				085"/	220	007	
1 1 to 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ויוויי	Local (VN. D)			111.700	,								
		Foreign	220	00/	•						-			
		Quantities		2	1 25	رغد ا								
	-	Unit		E	1	Detsoil	to's							
		Standard		W=200mm			(I obor cost )*4%	(Labor cost)					ŗ	2
		Description		Cut off nate	Car Oil France	Carpenter	11	Miscellaneous expenses				Total	C	Tel 1.0
	-	No.			-	7	†	ำ			1		T	

Concrete plant operation

Concrete plant (forced mixing) 45m3/hr x 0.7 x 5.67 hr/day = 178.6 m3/day.

Per 178.6.m3/day

•	معاسية عندن الأراد							***		
					Chii	Unit Price	A	Ашопп	7.	
3	Description	Standard	Unit	Quantities	Foreign	Local	Foreign (LYEN)	Local (VN. D)	Keillains	
					(J.YEN)	(414. 7)				
T									1=850/150=5.67;	
1	Concrete plant Depreciable		7 .	,	0760		49,669	1	Equipment - 98	
1	value of Equipment	45m3/hr	된	5.6/	9,700				5.67/8=0.71; Equipment -	
			•	1	4 100	230,000	2,911	163,300	000	
7	Generator	100 KVA	gay	0.71	22.1			i .	50.5*1;1*5.0;	
				. (	3 2 7 0	29 000	5,108	132,750	Equipment -11	
	Tractor shove	1.4m3	늄	2.25	2,2/0				2*5.67/8=1.42;	
٦	Tractor area				Ö		1 392	•	Equipment - 59	
	tien roway neit	10m	day	1.42	980				2*5.67/8=1.42:	
+	Court of court					000	1 775	49.700	<u>й</u>	
		10 KVA	day	1.42	1,250	000,00				
۸	Cenerator		nerson	2.5	,	183,300	•	150 250	1.0 * 2.5	
9	Foreman			25		183,300	•	0.7004		
1	Plant operator		DCISOIL	2.5		111,700	1	279,250		
∞	Assistant operator		person	5.5		80,600		201,500	0,1	
0	Common labor		person	2.7			60,854	1.743,000		
	Total						341	9,759		
	Per 1.0m3	n3						:		

Transportation of concrete(go and back time form plant to construction site 30 minuter)

Per 10 m3

						1.1.1	4	4 mount		
					E	Lruce		100		
	Decomption	Standard	Chiit	Quantities	Foreign	Local	Foreign	Local	Remarks	
ġ.				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	-	
-		20 3 2 m3 .	1,	2.7	1.030	57.000	2,781	153,900	Equipment - 61	_
_	I ruck mixer	2.5-05	6111	1	200		ac	1 520		
1	2 Miscellaneous expenses	sum above)*1%	set		-	•	87	456,1		Т
1	200000000000000000000000000000000000000									
							0000	155 430		_
	Total						406,2	133,437		Ţ
	10.01									
										Т
l	0 7 - 6						781	15,544		
	rer 1.0 m5	no								
	Truck mixer operation time		1 1							
	Loanding capacity of concrete		C 3.0m3							-
j.	Go back time from plant to site	ite	X1:30min							
	Loanding and waiting time		T1: 8min							
	Stand by time		T3: 10min							
	Coeficiency of road surface condition	condition	X2: 1.0							

Stand by time

Coeficiency of road surface condition

X2: 1.0

Operation tiome per 1.0 m3=(T1+X2+T3)/(C3\*60\*X2)=(8+30+10)/(3\*60\*1)=0.27 hrs m3

Setting of concrere curb (W260\*H230\*L1000) Per: 10m

		—ı	_	•	_	·		7		 		<del></del>
	Remarks		Processcost - 233	Processcost - 154	Processcost - 229	Processcost - 228	Dropper A8	riocesscost - 00	Material - 86			
Amount	Local	(VN. D)	246,300	263,859	39,462	380,466	15.074	4/4,01	287,000	1,233,060		123,306
An	Foreign	(J.YEN)	1	259	-	,		•	•	259		26
Unit Price	Local	(VN. D)	24,630	382,404	57.191	82,710	22, 33,	319,477	28,700			
Unit	Foreign	(J.YEN)		376	1			1	1			
	Quantities		10.00	69.0	69 0	46	2:	0.05	10			
	Unit		E	33	E E	2 2	3	m3	E			
	Standard	-		F see F	2000			for curb	260*230*1000			
	Description		Congrete curb cetting	Concrete	Complete	Concrete placing	FOITH WOLK	Cement mortar	Concrete curb	Total	10141	Par 1.0 m
	c		-		4/~	٦,	4	Ś	ع			

Filling clayed material for cofferdam(by hand) Per. 100 m3

(J.YEN) (VN. D) Material - 114 - 1,500,400 Material - 114 - 3,828,500 19*2.5 - 191,425 - 191,425 - 5,520,325	iii
1,500,400 3,828,500 191,425 5,520,325	Unit Quantities Foreign
3,828,500 191,425 5,520,325	1
3,828,500 - 191,425 - 5,520,325	1
- 555	
5,520,325	
- 5,520,325 - 55,203	
5,520,325	
5,520,325	_
55,203	
55.203	_
55.203	
55.203	
1001110	

Temporary cofferdam work for piers Per: 1set

Foreign   Local   Foreign   Local   Remarks     (1.YEN)   (VN. D)   (1.YEN)   (VN. D)     13,640   - 3,456,240   Material - 114     9		
9 - 13,640 - 3,456,240 9 - 20,005 - 64,396,095 - 67,852,335	l	Quantitie
9 - 20,005 - 64,396,095 - 64,396,095 - 67,852,335 - 67,852,335	+	
20,005 - 64,396,095 - 67,852,335 - 67,852,335		255.55
	19	3.2
- 67,852,335 - 67,852,335	-	
- 67,852,335 - 67,852,335		
- 67,852,335 - 67,852,335	L	
. 67.852,335	1	
- 67,852,335		
- 67,852,335		
		Quantities 253.39 3.219

Soil pitching for solid sodding <u>Per 100 m2</u>

_	_				r -		_	-				-	т		7	-	'n
		Remarks		Transportation cost	> 0*0	7.4.7			Faminment - 42	1							
Amount		Local	(VN. D)	327,600	403 000	405,000	0908	0,000	22.875	0.000		363 672	/04,333			7 625	0.000
¥		Foreign	(J.YEN)	1				•	37	2		ì	0/				+
I fait Daice	11100	Local	(VN. D)	10 920	2000	80,600		1		191,000							
1		Foreign	(J.YEN)			ı		•	4.5	010							
		Ouantities	,	Vc.	20	'n	,	<b>,</b>		0.125							
		Unit		ŗ	JE	nerson		set		day							
		Standard						(labor cost)*7%	(1800) 5001)	60~100 kg							m2
		Documention	Describation		Organic soil	1-1	Common labor	A Contract of the Contract of	Wilscellancous cypellacs	Tommer	Lamper		Total	10141			Per 1.0 m2
	_		ġ.	1	_	,	~	,	<b>~</b>	_	r						

Solid sodding work Per 100 m2

					1.1	C	4	Amount	-
				•	5	Unit Price	Ċ	nio din	,
No.   Description Standard Unit Or	Chrit		Õ	Ouantities	[	Local	Foreign	Local	Remarks
			,		(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
24	# # # # # # # # # # # # # # # # # # # #	7,6	1.	100		4,545	1	454,500	
Lawn						183 300	•	274.950	0.6*2.5
Foreman	person	person	_	J.:	•	200.001		000,000	A 0*0 A
Common labor	person	person		10	ı	80,600	•	800,000	C:-3 C:-t
/07#\\	ļ.	1 2	L	-			•	61,418	
Miscellaneous expenses (Sum of above) 470 set	_	100	4	-					
			_						
								1 596.868	
Total			_						
			┖						
D 10 3			_				•	12,909	
7 III (1)	7111								

PROCESS COST - 28

Concrete placing (Less than 50m3/day, concrete pump, R.C structure except RC slab, cross beam)

Per 10m3

			_			г-			rŦ	т		r	_		1	_	
	Remarks	0.15*2.5	1 0100	0.4272.5	0.64*2.5			Equipment - 60	10/400	Process cost - 547(2)	ļ						
Allouit	Local (VN. D)	40 654	100,00	178,605	096 871	33.45.2		71.760	***	39,180	4.882			493 640		49,304	
7	Foreign (1 YEN)		'	•		•		4 904	. 2 / 6 .	2,665	92	2		7 644	1,004	764	
Init Price	Local	(414. D)	183,300	170.100	00000	000,08		1000	20000	156.718							
	Foreign	(J. Y EIN)	.,			1		CCC	055,0	10,660	10,000						
	Quantities		0.38	100	3.	9	2		0.92	36.0	0.23						
	Unit		הפדפת		person	norcon	7513011		, =		day	set					
	Standard							Boom type 90 ~ 100	m 2/hr	1157/211	dun	(Sum of above)*1%					93
	Description			Foreman	Skilled labor		Common labor			4 Operation of concrete pump	5 Dead head cost of concrete pump	According overses	Miscellalicous expenses			Total	Per 1.0m3
	ó				,	,	<u>س</u>		_	4	w.	Ţ	D		T		Γ

PROCESS COST - 29

Concrete placing (50-100m3/day,concrete pump, R.C structure except RC slab, cross beam)

Per: 10m3

					_	_		<del>-,-</del>	_		<b>-</b>				-			-		1
		Kemarks		0.11*2.5	1 477 1 4	0.36*2.5	C 4740			Equipment - 60	Eduipinem - 00	Drocess cost - 347(2)	FIOCESS COST - 241(=)						-	
Amount		Local	(VN. D)	51 324	- 400	153,090	202 205	74,703		C C C	53,040	17010	146,12	3 741			177 841	11-04/1C	37.784	
An		Foreign	(J.YEN)			1		1		;	3,624		1,492	1.5	10		071.3	2,100	217	
17.14 Day	7711	Local	(C 25)	700 001	005,581	170.100	201,01	20,600			78,000		156.718							
7.1.		Foreign	(I VEN)	(3.1.2)	1		•	,			6 3 3 0	2226	10.660	,,,,,,						
		Ouantities			0.28	3	6,0	1175	1:1/2		870	00	710		-	L				
		Linit	)		Derson		person	-	Delad	•	1	II	401	Cay	set					
		Standard	Clandar							Boom type 90 ~ 100		IU/cm		ump	(Sum of above)*1%					n3
		6	Description			Foreman	Skilled labor		Common labor			Oneration of concrete pump		Dead head cost of concrete pump	Miscellaneous expenses				I OTAL	Per 1.0m3
Ī	Г	1	ö	-4	ľ			ĺ	_	1			٦		L	Ţ		1	1	

PROCESS COST - 30

Concrete placing (100-300m3/day, concrete pump, R.C structure except RC slab, cross beam)
Per 10m3

~~		Ť	_1		T	7			٦		Т		Τ	7		T		1
	Remarks		0.07*2.5	0.28*2.5	3 0 % 1 0 0	0.3172.3		0 V	Equipment - oc	Process cost - 347(2)	(-)							
Amount	Local	(VN. D)	32,078	119 070	0,0	95,868			33,540	0 403	201.1	2.570			350 578	0404/07	25 953	22,722
₹	Foreign	(1.YEN)	,			•			2,292	077	0+0	000	1		170.0	106,2	206	067
Unit Price	Local	(VX D)	183,300	170 100	1/0,100	80,600			78,000	012/21	156,718							
Chi	Foreign	(J.YEN)	,		•				5.330		0990							
	Quantities		0.175		0.7	0.78		٠.	0.43		90.0		Ī					
	C.	÷	recon	1000	person	20100	100 120		h	111	dav		set					
	Standard							Boom type 90 ~ 100	3/27	mych	- Lucia		(Sum of above)*1%					
	Description			Foreman	Skilled labor		Common labor			Operation of concrete pump	Don't hand oper of contrate n	ותבשם זובשם בחזרו בחובו ביב התייה	Miscellaneous expenses			T. 4.2.1	10121	Dor 1 0m2

PROCESS COST - 31

Concrete placing (300-600 m3/day,concrete pump, R.C structure except RC slab, cross beam)

Per 10m3

	<del>.</del>				1		· [	_	_			Т		Т	-	I	7		Т		1
	Demarks	Nettingens		0.04*2.5	3:1	0.27*2.5	2 040 0	0.7.7.0		•	Equipment - 60		Process cost - 347(2)							_	
Amount		Local	(VN. D)	055.81	000.61	114.818		40.300			10.501	2227	4 702	- C - C - C - C - C - C - C - C - C - C	1.976			969 001	070,761	19 963	2000
Ą		Foreign	(J.YEN)		•			,			1133	1,000	120	040	17		,	022 1	1,009	191	/01
I fait Price	221	Local	(C N S	(200	183,300	170 100	1/0,100	80,600	2000		10 000	18,000	016 231	100,/10							
Ē		Foreign	(NEAT)	(7.1.5)	,						1	0,55,0	0,,,	10,000							
		Ouantities	y		0.1	12, 3	0.6/5	40	C.O			0.75		0.03		1					
		1 mit			Therson		person		person			Ė	:	ďav		set					
		Standard	בייונים כ							Boom 100 90 - 100	מסיי מל מללה וווססת	m3/hr		ווייוי		Sum of above)*1%					
		4	Description			Foreman	Skilled labor	Chines have	Common labor			Charles of congrete minns	Operation of college purify	Dood head cost of concrete nimn	Dean Head cost of complete	Miscellaneous expenses			1-7-65	10031	5 mg 1 0 mg

Concrete placing (300-600 m3/day,pipe setting type concrete pump)

Per. 10m3

						Unit Price	Ϋ́	Amount	
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign (J. YEN)	Local (VN. D)	Remarks
					(7.17.7)	7		102201	₹ C*FO O
			nerson	0.1	,	183,300	1	16,330	7:4 +0.0
	Foreman		1000	97.0		170 100	ı	115,668	0.27*2.5
6	Skilled labor		person	0.00	'	201601		40.300	0.2*2.5
1	10,10,10		person	0.5	ı	80,600	•	000°0	
^	Common tago								
_		Boom type 90 ~ 100	•	Ċ	4 030	61 000	1.233	15,250	Equipment -
7	4 Oneration of concrete pump	m3/hr	'n	0.43	J.7.7	201.0		070 01	Process cost - 3
+	Spending of the second	,	-12	1	,	1,006	•	10,000	I locess cost
'n	Pressure pipe setting and removal	ıoval		2			1.2	966 1	
Ì	_	(Sum of above)*1%	set		1	ŀ	7,		4
ام		(		60.0	10,660	156.718	320	4,702	Process cost - 3
7	Dead head cost of concrete pump	ump	пау	0.03	10,000	114010	400	1 148 180	Process cost -
ŀ	Supporting facility for pressure nines	re nines	m3	01	69	114,010	020	20210111	
0						-	_		
							2266	1,354,486	
	-+				_				
	10121						225	135,449	
L	Por 1 fm3		••••						

Concrete placing (100-300 m3/day, pipe setting type concrete pump) Per. 10m3

-			т					···1			r	T	<u>-</u> -	 1		1
		Remarks		0.04*2.5	0.27*2.5	0.2*2.5		2 pump; Equipment - 99	Process cost - 343(4)			Process cost - 347(2)	Process cost -434			
	Amount	Local	(V.N. D)	18,330	115,668	40,300		30,500	22,440	0100	7/7/7	20,373	1,148,180	1,398,064	908-681	2006/201
	¥	Foreign	(J.YEN)	•	-	,	-	2,465	1		. 25	1,386	069	4,565	457	
	Unit Price	Local	(VN. D)	183,300	170,100	80,600		61,000	2.244		1	156,718	114,818			
	Chit	Foreign	(J.YEN)	,	-	,		4.930			ı	10,660	69			
		Quantities		0.1	0.68	0.5		0.5	01		-	0.13	10			
		Unit		nerson	nerson	person		Ė	m3	1111	set	day	m3			
		Standard					Boom time 90 ~ 100	200 - 20 3/11 m3/hr	-	Cvai	(Sum of above)*1%	aur	re pipes			
		Description		Evremen	Stilled lebor	Common labor		Onerstion of concrete minn	Description of contract parties	riessure pipe settilig and leillova	Miscellaneous expenses	Dead head cost of concrete pump	Supporting facility for pressure pipes	Total	T T	Per 1.0m3
	1		Š	- 1		.1	1		.1.	_	۱. ۔	1.	1	1	ŀ	

Concrete placing with chute Per 10 m3

Scaffolding (h<4 m) for substructure Per 100 multiplied m2

5	1
Ę	,
7	1
1	1
ģ	
=	1

											T		-	
	Remarks	3 0 % 1 0	7.1.7	3.7*2.5	0 0 1 0 1	5.3*2.5								
Amount	Local	(v.v.)	962,325	1 417 100	2016/1261	1,067,950	002 122	00C,1CC		230000	3,998,933		39.990	
∢	Foreign	(J.YEN)			,	•					-		•	
Unit Price	Local	(VN. D)	183,300	000 03.	123,200	80,600	20,00							
Chic	Foreign	(J.YEN)	1		-			,						
	Quantities		565		9.25	12.75	رع.د :	_						
	Unit		חפינים		person		person	set						
	Standard							(Labor cost)*16%						0.7
	Description		Ţ.	Foreman	Bioger	129901	Common labor	Miscellaneous expenses	יאוופרוומווכסתי בעלבוופרי		Total			Per 1.0m2
	 9		1.		2	,	m	Ļ	,	<u> </u>	Γ	1		

Scaffolding (h>=4 m) for substructure Per 100 multiplied m2

al Remarks D) 2.1*2.5 595.725 2.1*2.5 532.000 3.7*2.5 806,000 5.3*2.5 170,940 Equipment 18 558,840 663,505 3.6.635
Foreign Local (J.YEN) (VN. D) 595.725 - 1,532.000 - 806.000 9,573 170.940 - 1,723 558,840 1,723 558,840 1,723 558,840 11,296 3,663.505
(VN. D) 595.725 1,532.000 806.000 3 170.940 53 558.840 6 3,663,505
3,663,505 3,663,505 3,663,505 3,663,505 3,663,505
1,532,000 806,000 170,940 558,840 3,663,505
1,532,000 806,000 170,940 558,840 3,663,505
\$06,000 170,940 558,840 3,663,505
3,663,505
3,663,505 3,663,505
\$58,840 3,663,505 36,635
3,6
3,6
3,6
3,6
0,6

Timbering(4<B<8 t/m2) for substructure Per 100 air m3

		•								_						
		Remarks		2*2.5	2.8*2.5	6.1*2.5	2 040 0	6.2.7.0	1.4*T;T=4.44;Equipment	18						
*****	Amount	Local	(VN. D)	916,500	781,900	005 355 6	000000000000000000000000000000000000000	1,249,300		341,880	301 105	1,101,455	1000	6,807,315		68,073
	ζ.	Foreign	(J.YEN)		1			•		19,145	. 00	4,021		23,166		232
	Onit race	Local	(VN. D)	183,300	111.700	000 031	100,000	80.600		55.000						
	בוונה כ	Foreign	(J.YEN)		•		1	•		3.080		'				
		Ouantities		2.00	7		15.25	15.5		9129	,	1				1
		Unit		nerson	To To To	המפוזה	person	person		Ė		set				
A		Standard								Hydraulic 15.16 ton	Try diamite 12-13 to:	(sum of above)*21%				
		Description	Total Maria	<u>u</u>	roremail	Carpenter	Rigger	Common labor	Commission in the commission i	F	Truck crane	Miscellaneous expenses		Total		Par 1 0m2
1			5	١,	_   ,	١,	N	۱,,	١.	٠,	+	S		1	1	1

Form work (wooden form,RC structure, height<4 m)
<p>Per 100m2

					Uni	Unit Price	¥	Amount		ŗ
ò	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
1	Foreman		person	7.5	•	183,300	1	1,374,750		T-
2	Carpenter		person	37.5	•	111,700	ı	4,188.750		т-
3	Common labor		person	28	1	80,600		2,256,800	11.2*2.5	Т
4	4 Miscellaneous expenses	(Labor cost)*11%	set	-	1		ı	860,233		_
										·
	Total							8,680,533		<del></del>
										·
	Per 1.0m2	12						86.805		,

Form work (wooden form,RC structure, height>4 m)

<u>Per 100m2</u>

			· 			т		r		ī				_	т		Γ-	7	
	D. company	Kemarks		2.5*2.5	A C*O AT	13.0.2.3	9.0*2.5			( ) ·	1.0-1	T=4.44;Equipment - 18							
Amount		Local	(A.X. D)	1.145.625	00000	4,132,900	1 813 500	2000001	780 123			390.500		017 474 0	8,202,048			82.626	
An		Foreign	(NEX.C)			ı		,				21.868			21,868			219	
I Init Drice	11 3 1100	Local	(C NV)	102 300	100,000	111,700		20.500				000 \$\$							
1	5	Foreign	(NHV )	(3,115)	•			t				3.080	2,000						
		Ouantities	,		6.25	2.2	)	22.4				,	-				_	-	
		Unit			person		person	400	Delegi	set		•	اء						
		Standard								(1 abor cost)*11%	200 (200)		hydraulic 15-16 t						m2
		, to 100 C	Description		2	roreman	Carpenter		Common labor	11	Miscellaneous expenses		Truck crane			Total			Per 1.0m2
	Ī		ò	i.	,	_	2	1	<u>س</u>	Ţ.	4		<u>ا</u>				T		

Form work (wooden form,RC structure) Per 100m2

		r		<u>_</u>	r	-۲				<b>-</b> T	7		· -	7	
	Remarks	2.5*2.5	15.0*2.5	9.0*2.5			Equipment -91	1×T-T=3.63:	10000 16101	Equipment -/2					
Amount	Local (VN. D)	1.145,625	4,132,900	1813.500	201.001	/80,123	302.000			435,600	8,609,748		10000	86.097	
Αm	Foreign	7 (2.5)	•			•	21 900			4,755	26.655			267	
Linit Drice	Local	183 300	100,000	20,500	20,000		202 000	202,000		120.000					
Timit	Foreign	(J. X EIN)	,	,	1	1	000	71,300		1 310	27.61				
	Quantities		6.25	37/	22.5	-	-	_1		1 63	5.03				
	Unit		person	person	person	1	las Sei	day			E				
	Standard					701.47	(Labor cost)*11%	25 ton		,	100ps				V.
	Description		Foreman	Camenter	Carlohor	COMMINDIA 14001	Miscellaneous expenses	Borge with crane	שוצר אווו כומווכ		6 Tug boat	Total			Por 1 0m2
.s	, o		-	2	1,	` `	ব	ų	7	- 1	9		1		-

Form work (Cylindrical wooden form,height<4m)
Per\_100m2

			— 1			,		_		_	-т		7-		_		
		Remarks		3.9*2.5	5 0*0 00	20.7	18.7*2.5										
	Athonn	Local	(VN. D)	1.787,175	300 300 3	7,050,5	2 768 050	2,,00,,00	1.139.155			12 530 785	50 / 60 CC64 Y		1000	125,307	
•	₹	Foreign	(J.YEN)	1		•		,	•				-			1	
	Unit Price	Local	(V.N. D)	183 300		11.70	00000	20,000			•						
	5	Foreign	(LYEN)	, ,				•									
	Quantities			27.0	()./	52.25		46.75	-								
		Chit		2000	ing ind	nerson		person	1	1es							
		Standard						700 1977	(Labor cost) 10%						Ç	1	
		Description			Foreman	0	Carpenter	Common labor	Continuity	Miscellaneous expenses			Total			Comp 1 con	101 131
	Γ		ġ	,	_	,	7	3	7	4				1		T	_

Form work (Cylindrical wooden form,height>4m) Per 100m2

_	_		—-r		r	7		r			-1	1		-	<u>-</u> -1		1		1
Remarks			5.7*2.5	00 A*O 5		14,5*2.5	1*T · T*1		Equipment -18										
-	Dent	Local	(VN. D)	2.612.025	000 350 3	0,2,55,50	2.921.750	000 640	744,200			1,178,898			13,212,073			132,121	
Amount	7	Foreign (J.YEN)		1		•	,		13,675			•			13,675			137	
	t Face	Local	(VN. D)	183 200	000,001	111,700	80.600	2000	55,000										
	5	Foreign	(I VEN)	( )	•	1		-	3.080		-								
		Quantities		30 71	14.23	56	2000	20.43	444	:		ı	*						
		Unit			person	person		person	hr	:		*65	138						
		Standard							oilonbask	anima mism	15~16 ton	/00/#/**	(Labor cost) 1070						n2
		100	Description		Foreman		Carpenter	Common Japor		Truck crane			Miscellaneous expenses			Total			Per 1.0m2
			ġ Z			1	7	'n	,	4		T	'n						

Form work (Cylindrical wooden form for Piers) Per 100m2

		· · · · · ·				1	٠	<del></del> -		-γ	· · · ·	 _
	Remarks		5.7*2.5	22.4*2.5	14.5*2.5		Equipment -91	1xT;T=3.63;	Equipment -75			
Amount	Local	(VN. D)	2,612,025	6,255,200	2.921,750	1.178,898	302,000		435,600		13,705,473	137,055
Am	Foreign	(J.YEN)		•	-	,	21,900		4,755		26,655	267
Unit Price	Local	(VN. D)	183,300	111,700	80,600		302,000		120,000			
Uni	Foreign	(J.YEN)	-		1	1	21,900		1,310			
	Quantities		14.25	56	36.25	1	1		3.63			
	Unit	:	person	person	person	set	dav		hr			
	Standard					(Labor cost)*10%	25 ton		100ps			12
	Description		Foreman	Camenter	Common labor	Miscellaneous expenses	Barce with crane		6 Tug boat		Total	Per 1.0m2
	ź		-		1 6	4	T	,	9			

Bridge drain pipe setting work Per\_10m

	- C	Кетатку	0.3*2.5	0.425	():	0.6*2.5										
Amount		Local (VN. D)	137.475	307 705	202./20	120.900		25.644			666.744			1 1 / / / /	4/0.00	
⋖		Foreign (1 YEN)			•			•								
Trit Dailo	נוזרכ	Local	102 200	102,500	170.100	000 00	000,00			-						
1.11		Foreign	(3.1.5(N)	-	1		•		,							
		Quantities		0.75	226	7.77	5.	-	-							
		Cmit		person	norcon	0013011	person		set							
		Standard							(Labor cost)*4%							=
		Description		Foreman		2 Skilled labor	John Johan	Common labor	Miscellaneous expenses			Total	100			Dor 10 m
		S.		-	.[	7	,	<b>1</b>	V	١						

Concrete anchor setting work for bridge drain pipe Per 100 anchor

	· ——			_				<u> </u>		_		т~		r	 	7-		<b>-</b> 1
	Remarks		0.9*2.5	0 1*O A	4:1 4:2	1.8*2.5	Material 102	Injaicijai 102	Fourtheat - 69		Equipment - 53							
Amount	Local	(VN. D)	412,425	1 140 175	1,148,173	362.700	000 001	102,200		1	43 200	2077	76.932		2 211 632	100611464	71.00	27,110
Ą	E .	(J.YEN)			•	,		1	901	170	663	770	•		770	740	-	_
Init Price	Local	(XX, D)	183 300	2071	170.100	80.600	22.50	1.682		-	000 * 0	74,000						
114	Foreign		7		1			1	ļ	110	000	067						
	Ouantities	,	200	6.43	6.75	3 7	Ţ.	 		 		 8:	-	-				
	Unit			DELISOIL	person		person	hase	.	dav		day		set				
	Standard	3						2134	14.14	ի 38mm		2 KVA	707 47	(Labor cost)*4%				f
	Documenton	Description		Foreman	Chilled labor	Skilled labol	Common labor		Concrete anchor	Commer daili	האחווות שנחו	Generator		Miscellaneous expenses		Total		D 1 200

Drain pipe (D= 15 cm)
Per 10m

		-			<b>Un</b>	Unit Price	Ar	Amount		
Š.	Description	Standard	- Ziit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN D)	(J.YEN)	(VN. D)		~
-	Drain pipe setting work		ш	10	•	66,674	•	666,740	Process cost - 44	_
7	Drain pipe	PVC \$150	m	10	-	73,091	•	730,910	Material - 140	r
										_
	Total						•	1,397,650		·
	Per 1.0 m	u					_	139,765		-

Drain pipe (D=20cm) setting Per\_10m

					Γ-	Т	~-1		т		1	-1	_	Τ	т	_	Τ	7	l
		Kemarks		Process cost - 44	Material - 141	ווימוניו ומי	Process cost - 45	Material - 16		Material - 17	00 1000	Marenai - 20	Material - 21						
Amount		Local	(V.N. D)	666 740	022 020	914,130	270,036	77.030	000.4	64.020		12,875	201 200	201,100	4,201,731			226.173	
υ ♦		Foreign	(J YEN)	,		f	85		1	•		,			ŝ			-6	
I mit Duice	ווור	Local	(O N)	128 821	+ (0,00	97,273	22 116		005,10	000 85	007,00	51 500	2001	33,000					
		Foreign	(I VEN)	7.17.2	1	•	7	-	1		-			1				i L	
		Ouantities	,	٠	01	01	12.21	17:71		,		300	0.43	6.1					
		Linit	)		Е	E		each	each	,	each		eacu	each			_		
		Standard				PVC 0 200	0.5	M12	T1(200-160)	(22, 22);;	T2-200	0000	750-700	ф 200					E
		Document	Description		Drain pipe setting work	Contract of the Contract of th	Diain pipe	Concrete anchor	7,000	1 ees	Tess	7.50	Pipe joint	Hanger	1	(043)			Per 1.0 m
		7	o Z,		1	,	7	m	Г	+	10	,	9	7				1	_

Drain box setting work for PC I girder <u>Per Leach</u>

1						Unit Price	<b>1</b>	Anionin		
			1	Ougatities	Foreign	Local	Foreign	Local	Remarks	
့်	Description	Standard	<u></u>	Carmina		(C N)		(V.N. D)		
					(3.1 1.14)	72:::		30034	0.1*2.5	
			50000	760	•	183,300	•	45,623	0.1 2.2	
,	Foreman		DELSOIT	7.7		001.071		30.618	0.07*2.5	
1			הפדפח	0.18	1	1/0,100	1	0.00		
N	Skilled labor					009 V8	•	100,750	0.5*2.5	
1	Common labor		person	1.25	,	000,000				
•	COMPLICIT ISOUR					-	,	•		
١,	The second secon	Clabor cost)*4%	Set		,				10 cm 4 cm 4 cm 4 cm	
4	Miscellaneous expelled								0.15 1; 1 = 4.55; Equipmen	
l							. :	097.70	101	
			1	0.65	670	1.000	436	76,650	101-1	
'n	Truck with crane	2t;2t hanging load	E	20:0	,	201 400		291 400	Material - 23	
ŀ		200*200*500mm	each		•	291,400				
0	Drain box	200					-			
							,	676 907		
							430	C47,074		
	Total									

Drain box setting work for box girder Per\_Leach

							*		
						Unit Price	ξ.	AlliQuin	•
						,		I ocal	Remarks
		41.50	÷.	Ouantities	Foreign	Local	רסנכוציי		
Š	Description	Standard	5	,	CATAL	25	(LYEN)	(SX. D)	
					(J. I EIN)	72:22		300 31	A C*! O
				300	,	183,300	ı	42,047	
-			person	C7.U		26.20		30.618	0.07*2.5
	rotetitali			010	•	170,100		010,00	
,	Clailed labor		person	0.10				100 750	0.5*2.5
-1	SKINCH IADOI			30.1	ı	80.600	ı	001,001	
۱	Common labor		person	1.4.					
7	Common tabol			-			ı	*	
,	Missellaneous expenses	(Labor cost)*4%	set	_					0 15*T:T=4,33:Equipmen
†	INTERCEITATIONS CAPCILLORS								
					ţ	71 000	436	26,650	101-1
		24-2+ hanging load	'n	0.65	0/0	41,000		00000	Motorial - 24
Ś	5 Truck with crane	ביילרו וומווסווים	-		<u>'</u>	358.200	•	328.200	ואומוכוומו
,	Design Box	300*200*600mm	each	-					
٥	Drain box			Ĺ		•			
							436	\$62.043	
							201	26-26	
1	Total								

Road marking Type - A (General application) Per 150.m2

					Chit	Unit Price	An	Amount		
Description		Standard	Umit	Quantities	Foreign	Local	Foreign	Local	Remarks	
•					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
Foreman			person	2.5	1	183,300		458,250	1.0*2.5	
Skilled labor			person	5.75	1	170,100		978,075	2.3*2.5	
Common labor			person	7.5	-	80,600	-	604,500	3.0*2.5	
		hand guided capacity								
Line marker		80-120 kg	Ħ	4.69	190	-	891	_	T=610/130;Equipment -92	
Melting tank		cepacity 200 kg	ь	4.18	510	000'1	2,132	4,180	T=610/170; Equipment -93	
Truck		4-4.5 ton	Ą	4.69	850	21,000	3,987	239,190	Equipment-35	
Miscellaneous expenses	S	Sum of above *6%	set	1			421	137,052		
Total							7,430	2,421,247		T
	Per 1.0 m	E					50	16,142		

Subgrade work (CBR = 6)(including material) Per  $100m^3$ 

			T		F	т-	Τ-	~	_T-	7		1												
	Remarks		Percent of swell and shrinkage	1/0.9 = 1.1 - Material - 115	Equipment - 3	Equipment - 41	0.05*2.5					T. = 100/O	<b>y</b>						$T_{\rm R} = 100/{\rm O}$					
Amount	Local	(VN.D)		007.155,1	40,040	40,500	10,075		1.621.815	Croft Total	16,218	$Q_{\lambda} = (W * V_{1} * D * f_{1} * E_{1})/N_{1}$	1 .	0.44	++:0	spreading(m)			$Q_B = (W * V_2 * D * f_3 * E_2)/N_3$ , 7	T	0.81		rk (times)	Townson All
Ą	Foreign	(J.YEN)		-	1,773	1,612			3.385	1	34	$\star$ ' $(W * V) *$	0	227.4	1.777	W <sub>1</sub> : effetive spreading width per one time spreading(m)	speed (m/hr)		$\lambda_{\rm B} = (W * V_2 * I)$	50	124.2	effective compaction width per one time of compaction work (m)	N: numbers of compaction work (times)	· · · · · · · · · · · · · · · · · · ·
Unit Price	Local	(VN.D)	12 030		91,000	50,000	80,600						z		,	spreading widi	$V_1$ : spreading and grading speed (m/hr)	fl: soil conversion factor		ź	8	r one time of co	$N_2$ : numbers of	
Ē	Foreign	(J.YEN)			4,030	1,990							丏	0.7		w <sub>1</sub> : effetive	V <sub>1</sub> : spreadin	fl: soil conv		E <sub>2</sub>	9.0	tion width pe	۔ ند	
	Quantities		110	21.	0.44	0.81	0.125						Ţ	1/1.25						f	1/0.87	tive compac	efficiency of work.	f2 : soil conversion factor
<u></u>	Unit		Ě	<u>.</u>	Ė	ji,	person						Ω	0.2			(F			Ω	0.2	W <sub>2</sub> : effec	E,: effic	f2 : soil co
	Standard			1.6.4	io ton	8 ~ 20 ton	-			, c			. V.	2100	madina monte (ma)	Blaching work (in /nr)	D: finish thickness (m)	I grading work (times)		$V_2$	4000	n³/hr)	(L	
	No. Description		Filling material	2 Bull dozer			4 Common labor		Total	Per 1.0m	1X/x.1. at 23.4. at 3	work ability of bull dozer	W	2.9	O. allantity of sureading and anading models (m3/h2)	As seeming of spicauning and	E <sub>1</sub> : efficiency of work.	N1: number of spreading and grading work (times)	Work ability of tired roller	W <sub>2</sub>	1.8	Q <sub>B</sub> quantity of compaction (m <sup>3</sup> /hr)	V <sub>2</sub> : compaction speed (m/hr)	D: finish thickness (m)
			1 Filling material	F '					Total		12/2-1 1:0: 6:1	WORK ability of by		2.9	O. Quantity of spre	- A : 4-million of april	E <sub>i</sub> : efficiency of w	NI: number of spr	Work ability of ti	W <sub>2</sub>	1.8	QB: quantity of com	V <sub>2</sub> : compaction st	

Subgrade work (CBR = 6)(excluding material) Per  $100m^3$ 

	Standard	Unit	Quantities	Unit	Unit Price		Amount	Remarks
		,		(1.YEN)	(VN.D)	(J.YEN)	Z. 2.	Constant 2
	15 ton	٤	0.44	4,030	91,000	1,773		C-mondina
	10.01	: 1	180	1 990	50,000	1,612	40,500	Equipment - 41
	8 ~ 20 ton	ä	0.01	22.61	80,600		570,01	0.05 * 2.5
		person	0.122					
						3,385	\$19,06	
						34	906	
Per 1.0m						V * W	. D * £ * E, 1/ N.	T, = 100/Q
. :								
	ν,	Ω	ţ	ய	Z	5	¥1	
	0020	0.2	1/1,25	0.7	. 5	144.3	0.69	
grad	2.50 2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.0	1 .		W <sub>1</sub> : effetive	$W_1$ : effetive spreading width per one time spreading(m)	th per one time	spreading(m)	
4	QA; quantity of spicading and gracing	(E		V, : spreadin	V, : spreading and grading speed (π/hr)	speed (m/hr)		
: : :	All Sit Little Africa	· :		fi soil conv	fl soil conversion factor			
ध्यव	N1: number of spreading and grading work (times)					$O_{x} = (VV * VV)$	$O_{*} = (W * V_{*} * D * f_{*} * E_{*})/N_{2*}$	$T_{B} = 100/Q$
		·				, as		
	V,	Ω	đ;	<u>п</u>	$\sum_{i,j}$	2	E I	
	3500	0.2	1/0.87	0.5	10	72.4	1.38	
	2000	;[		ar dthing	as width ner one time of compaction work (m)	compaction wo	rk (m)	
QR. quantity of compaction (m2/hr)		₩ <sub>2</sub> : effe	scrive compac	אל וווסוו איוסוו:	o out mino of		(money / shanon)	
V.: compaction speed (m/hr)		E <sub>2</sub> : eff	efficiency of work.		N <sub>2</sub> : numbers of compaction work (unites)	or compaction	work (unics)	
		f2: soil	: soil conversion factor	tor				

ograde work (CBR > 6)

					Unit	Unit Price	An	Amount	
ż	o. Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
									Percent of sweil and shrinkage
	Filling material	from Borrow pit	m3	110 11		13,920		1,531,200	1/0.9 = 1.1 - Material - 115
7	П	15 ton	hr	69.0	4,030	91,000	2,781	62,790	Equipment - 3
3	Tired roller	8 ~ 20 ton	ħ	1.38	1,990	50,000	2,746	69,000	Equipment - 41
4	Common labor		ретѕоп	0.125		80,600		10,075	0.05*2.5
_									
	Total						5,527	1,673,065	
L					!				
	Per 1.0m	- Lu					55	16,731	
	Work ability of bull dozer						$Q_A = (W * V_1 * I)$	$Q_A = (W * V_1 * D * f_1 * E_1)/N_1,$	$T_A = 100/Q$
	W <sub>1</sub>	Λ'	Ω	ا د	μĪ	ž	ð	TA	
	2.8	2300	0.2	1/1.25	9.0	5	124	0.81	
	QA: quantity of spreading and grading work (m3/hr)	l grading work (m³/hr)			$W_1$ : effetive	spreading wid	$W_1$ : effetive spreading width per one time spreading (m)	preading (m)	
	E <sub>1</sub> : efficiency of work.	D: finish thickness (m)	я (ì		$V_i$ : spreadin	$V_1$ : spreading and grading speed (m/hr)	speed (m/hr)		
	N1: number of spreading and grading work (times)	1 grading work (times)	• .		fl : soil-conv	fl : soil conversion factor			
	Work ability of tired roller						$Q_{B} = (W * V_{2} * I)$	$Q_B = (W * V_2 * D * f_2 * E_2)/N_2,$	$T_{\rm B} = 100/Q$
: :	W <sub>2</sub>	$V_2$	a	£	E <sub>2</sub>	ž	Q <sub>B</sub>	Тв	
	1.8	3500	0.2	1/0.87	0.5	10	72.4	1.38	
	QB; quantity of compaction (m³/hr)	n³/hr)	W2: effe	ctive compac	tion width pe	r one time of c	2: effective compaction width per one time of compaction work (m)	(m)	
	V <sub>2</sub> : compaction speed (m/hr)	ıı)	E2: effi	efficiency of work.		N2: numbers o	N2: numbers of compaction work (times)	ork (times)	
	D: finish thickness (m)		f2 : soil co	: soil conversion factor	tor	:	:		

Subgrade preparation Per: 100 m2

					,		<b>.</b>	,		
	Remarks		0.13*2.5	Equipment - 14	Equipment - 40	Equipment - 41	Equipment - 44			
Amount	Local	(VN. D)	26,598	15,080	7,200	7,500	4,620	866,09		610
Ar	Foreign	(J.YEN)	-	741	302	299	135	1,476		15.
Unit Price	Local	(VX).	80,600	58,000			42,000			
Chit	Foreign	(J.YEN)	1	2,850	2,010	066 1	1.230	2		
	Quantities		0.33	0.26	0.15	0.15	0 11			
	Unit	:	person	Ē	Ę	, <u>t</u>	į			
	Standard			3.1m	maradam 10-12 ton	8-20 ton	5500 6500 1	10000-0000		
	Description		Common Jahor	Motor grader	Dood toller	Tries a sellen	integroller	Koad sprinkier	100	Per 1 0m <sup>2</sup>
	5		-	ء ،	1 4	۰ ۰	<b>ժ</b> և	n .		

Blinding concrete work with chute Per\_10\_m3

			 ]				-			
	Remarks		Process cost - 156	0.41*2.5	0.78*2.5	1.23*2.5		Process cost - 398(2)		
Amount	Local	(VN. D)	2,870,420	188,799	331,695	248,248	30,750	39,780	3,709,692	370,969
ШĊ	Foreign	(J.YEN)	3,760	1	•	-	•	-	3,760	376
Unit Price	Local	(VN D)	287,042	183,300	170,100	80,600		3,978		
Cont	Foreign	(J.YEN)	376	1	1	•		1		
	Quantities		10	1.03	1.95	3.08		10		
	Cmt		£m1	person	person	person	set	m3		
	Standard		Class G				(Labor cost)*4%			13
	Description		Concrete	Foreman	Skilled labor	Common labor	+ Miscellaneous expenses	5 Curing	Total	Per 1.0m <sup>3</sup>
	9		6	-	2	m	7-1	Š		

Blinding concrete work Per: 10m3

Description         Standard and Description         Unit Price         Unit Price         Vmit (V.N. D)         Local (J.YEN)         Foreign (V.N. D)         Local (J.YEN)         Foreign (V.N. D)         Local (J.YEN)         Foreign (V.N. D)         Local (J.YEN)         Local (J.YEN)			Remarks		7.420 Process cost - 156			178,605 0.42*2.5	78 960 0.64*2.5		15,250 Equipment -99		10,060 Process cost - 343(5)		32,729		39 180 Process cost - 347(2)		8 180 Process cost -434		4,493,038	140 304	7,704
Description         Standard         Unit         Quantities         Foreign (J.YEN)         Local (J.YEN)           s         Class G         m3         10         376         287,042           abor         n         person         0.38         -         183,300           abor         person         1.05         -         170,100           abor         m3/hr         hr         0.25         4,930         61,000           m of concrete pump         m3/hr         hr         0.25         4,930         61,000           pipe setting and         m3/hr         n         -         1,006           ad cost of concrete         day         0.25         10,660         156,718           ng facility for         m3         n         -         -         1,006           pipes         m3         n         69         114,818	Amount	Amount						178	128				- 10						: :				7
Description         Standard         Unit         Quantities         Foreign           e         Class G         m3         10         3           n         class G         m3         10         3           abor         person         0.38         1.6           abor         m0 person         1.65         4,5           n of concrete pump         m3/hr         hr         0.25         4,5           pipe setting and         m3         10         10           ad cost of concrete         (Sum of above)*1%         set         1           ad cost of concrete         day         0.25         10,6           pipes         m3         10         10,6           mg facility for         m3         10         10,6	4	ьпсе		_	287.042	21,07	183,300	170,100	00,600	00,000	61 000	2,2,2	1.006				156 718	100,710	910 711	114,010			
Description Standard Unit  Class G m3  Class G m3  abor  abor  Alabor  Boom type 90 ~ 100  m3/hr  person  m3/hr  pipe setting and  meous expenses  ad cost of concrete  mg  mg  mg  mg  mg  mg  mg  mg  mg  m		C <sub>n</sub>	ــــــــــــــــــــــــــــــــــــــ		720	2/0	•				4 030	252.4					10.550	10,000	(	60			_
Description Standard  Class G  abor  n labor  Boom type 90 ~ 100  m of concrete pump pipe setting and aneous expenses ad cost of concrete  ing facility for pipes  Total			Quantities	,		01	0.38	1 05		0.1	200	0.43	<u></u>	2		-	( (	0.70		0.			
Description  abor  abor  n labor  pipe setting and  pipe setting and  maneous expenses  ad cost of concrete  ing facility for  pipes  Total			Unit		,	m3	person		Delad	ретѕоп		E	,	213	ţ	าลเ		day		m3			
Description  Concrete Foreman Skilled labor Common labor Common labor Pressure pipe setting and removal Miscellaneous expenses Dead head cost of concrete pump Supporting facility for pressure pipes			Standard			Class G					Boom type $90 \sim 100$	mɔ/hr			70.00	(Sum of above)*1%							· ·
0 - CI W + W D IV 80 0						Concrete		roreman	Skilled labor				1 .	removal		Miscellaneous expenses	Dead head cost of concrete	dund	Supporting facility for	,		Total	

Fabrication and setting of the settlement measuring devices

Unit   Quantities   Foreign   Local   Foreign   Local   Foreign   Local   Foreign   Local   Foreign   Local   Foreign   Local   Loca	1				1	Drive	Aı	Amount	
Unit         Quantities         Foreign         Local         Foreign         Local           kg         100         37         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           kg         100         37         3,800         -         532,000           kg         140         -         7,070         -         535,920           each         10         -         3,600         -         36,000           person         1.0         -         183,300         -         9,639           person         0.5         -         111,700         -         483,600           person         6.0         -         80,600         -         28,910           set         1.0         80,600         -         28,910           set         1.0         -         28,500           set         1.0         -         28,500           set         1.725,219					5	ו גוורכ		1	D compared
kg         100         37         V.Y.L.Y.         V.Y.L.Y.         -         532,000           kg         140         -         3,800         -         532,000           m3         56         -         7,070         -         35,920           each         10         -         3,600         -         36,000           person         1.0         -         183,300         -         9,639           person         0.5         -         111,700         -         55,850           person         6.0         -         80,600         -         483,600           set         1.0         -         28,910           set         1.0         -         28,910           3,737         1,725,219           374         1,725,22	Standard		Unit	Quantities		Local	Foreign	Local (VN D)	Reillarks
kg         100         37         3,800         -         532,000           kg         140         -         7,070         -         35,000           each         10         -         3,600         -         36,000           set         1         -         183,300         -         9,639           person         0.5         -         111,700         -         55,850           person         6.0         -         80,600         -         483,600           set         1.0         -         28,910           set         1.0         -         28,910           set         1.725,219           374         1,725,22					(J.YEN)	(VN. D)	(3.1.1.0)		Material - 1
kg         140         -         3,800         -         55,000           m3         56         -         7,070         -         35,000           each         10         -         3,600         -         36,000           person         1.0         -         183,300         -         9,639           person         0.5         -         111,700         -         55,850           person         6.0         -         80,600         -         483,600           set         1.0         -         28,910           set         1.725,219           3,737         1,725,219	500*500*5		kg	100	37		3,700	000 000	Materia] - 8
Kg         140         -         7,070         -         395,920           each         10         -         3,600         -         36,000           person         1.0         -         111,700         -         55,850           person         6.0         -         80,600         -         483,600           person         6.0         -         80,600         -         28,910           set         1.0         -         3,737         1,725,219           172,522		T	1	140	 	3.800	ì	552,000	o minimini
m3         56         -         7,070         -         36,000           each         10         -         3,600         -         36,000           person         1.0         -         183,300         -         183,300           person         0.5         -         111,700         -         483,600           person         6.0         -         80,600         -         28,910           set         1.0         -         28,910           set         1,725,219           3,737         1,725,219           172,522	<b>\$</b> 20		ξģ.	0+1		020 5		395.920	Material - 60
each         10         -         3.600         -         36,000           set         1         -         -         183,300         -         183,300           person         0.5         -         111,700         -         55,850           person         6.0         -         80,600         -         483,600           set         1.0         -         28,910           set         1.0         -         1,725,219           3,737         1,725,219	φ 50		m3	26	•	0/0'/		00000	Material - 175
set         1         -         -         37         9,639           set         1         -         183,300         -         183,300           person         0.5         -         111,700         -         55,850           person         6.0         -         80,600         -         483,600           set         1.0         -         28,910           set         1.0         -         28,910           3,737         1,725,219           374         172,522		Γ		C.		3.600	1	36,000	ואזמורוומו
1.0 - 183,300 - 183,300 0.5 - 111,700 - 55,850 6.0 - 80,600 - 28,910 1.0 - 3,737 1,725,219	PVC		eacn	2				9.639	
1.0     -     183,300     -     183,300       0.5     -     111,700     -     55,850       6.0     -     80,600     -     483,600       1.0     -     28,910       1.0     -     3,737     1,725,219       3,737     1,725,222	(Sum of above)*1%		set		,			000	シ C*ア O
6.0     -     111,700     -     55.850       6.0     -     80,600     -     483,600       1.0     -     28,910       3,737     1,725,219       3,737     1,725,219				-		183,300	,	183,300	C.7 1.0
6.0     -     80,600     -     483,600       1.0     -     28,910       3,737     1,725,219       3,737     1,725,219			person	2.		000		55.850	0.2*2.5
6.0     -     80,600     -     483,600       1.0     -     28,910       3,737     1,725,219       374     172,522			Derson	0.5	1	11,700	,		V 0** 0
1.0 3,737 3,737		- 1	1000170			80,600	•	483,600	2.4"4.3
3,737			person	0.0				28 910	
3,737	1 obor cost #40%		Set	0.1					
	anni cost	1							
							3.737		
							274		
				1			2/4		

Setting work of the line and level checking stakes Per. 6. stakes (15\*15\*200cm)

	Remarks		Material - 132	0.1*2.5	0.4*2.5			
Amount	Local	(VN. D)	119,214	45,825	80,600	5,057	250.696	41,783
Aī	Foreign	(J.YEN)	•	•	1	-	-	
Unit Price	Local	(VN. D)	1,324,600	183,300	80,600			
Chit		(J.YEN)	1	1	-			
	Quantities	:	0.09	0.250	1.00	1.0		
	Unit		m3	person	person	set		
	Standard					Labor cost *4%		Ke
	Description		Timber	Foreman	3 Common labor	Miscellaneous expenses	Total	Per 1stake
	Ž		_	,	ې له	4		

Construction joint work Per 100 m2

	_		Ť	7		Т	-	_	Т	_	Γ			7	_	7	
		Remarks					4.1*2.5										
d monint	Odlik	Local		ı			1.144.925	1000	43,797			1,190,722			11 907	11,001	
± 0	110	Foreign		162,360	17.0	/#7.0	•		•			165,607			727 (	1 0001	
	Unit Frice	Local	(VN. D)	٠		,	111.700	77.1									
4. LA	ווויס	! ~		1.476		,											
		Quantities		110		, <i>,</i>	30.01	10.23	-								
		Unit		CIE	3	set		person	set								
		Standard		+=20mm	1-2011111	(sum of above)*2%			(lahor cost)*4%	/2132 (2021)						-	
		Description		3 1	Asphalt Joint miler	Curriementa material	Supplemental marchine	3   Carpenter	Missellensone ovnences	4 ivilaccitations experies			Total			Dar -1 m	
		Z	}			۲	1	'n	-	ŧ							

Reinforcement work (Diameter less than 13mm)
Per one ton

				,- <b></b>	Γ		_	T	Т			٦	
	Remarks		0.6*.25	4.0*2.5	0 C#O C	3.0"2.3		00 1-1-00/ 100-1-1	loss 5% Maierial - 20				
Amount	Local	(VN. D)	274,950	1.117.000	000,100	604,500	99.823				410,000	2,096,2/3	
A	Foreign	(J.YEN)	1	t		-		000	24,720			24,720	
Unit Price	Local	(VN. D)	183,300	111,700		80,600					<u> </u>		
Chit	Foreign	(J.YEN)	1			1			24,000				
	Quantities		5.1	0.5	2	7.5	-		1.03				
	Unit		person	norcon	1000	person	+03	126	ton				
	Standard					,	/10100 00001 + 50/	(iaudi cost) 278					
	Description Standard Unit Quantities Foreign Foreign		Loromon	r Orellian	Steel worker	Common labor		Miscellaneous expenses	Reinforcement			Total	
1	Standard Unit Quantities Foreign Local Foreign Local	;	1 -	-16	7	1	י ן ר	4	l w	1			

Reinforcement work (Diameter 13mm  $\sim 28$ mm) Per one ton

				*~				-			4
Remarks		0.5*2.5	3.5*2.5	1) CHU C	2.572.5		loss 3% Material - 29				
Local	(VN. D)	229,125	977,375		503,750	85,513				1,795,763	The Control of the Co
Foreign	(J.YEN)	1				1	03 50	0,0,0		009 86	272674
Local	(VN. D)	183,300	111,700	22.16.2	80,600						
Foreig	(J.YEN)	,			1		33,000	72,000			
Onit Pr Quantities Foreign	,	1.25	8.75	2,:5	6.25		50.1	1.05			
Cuit		person	norecon	100.30	person	Set		ton			
Standard						(labor cost)*5%	(2000 1000)				
Description		Lorensen	1 010111	Steel Worker	Common labor	Missellandons expenses	ייווארכיוומוויסמא בעסבווארא	Reinforcement			lotal
	Standard Unit Quantities Foreign Local Foreign Local	Unit Quantities Foreign Local Foreign Local (J.YEN) (VN. D) (J.YEN) (VN. D)	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           nerson         1.25         -         183,300         -         229,125	Inition         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           person         1.25         -         183,300         -         229,125           narrow         8.75         -         111,700         -         977,375	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           (J.YEN)         (VN. D)         (J.YEN)         (VN. D)         (VN. D)         (VN. D)           person         1.25         -         183,300         -         229,125           ker         person         8.75         -         111,700         -         977,375	Tription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           1.YEN         (VN. D)         (J.YEN)         (VN. D)         (VN. D)         (VN. D)           1.YEN         (VN. D)         (VN. D)         (VN. D)         (VN. D)           1.YEN         (VN. D)         (VN. D)         (VN. D) <td>Experient continuor         Standard person         Unit person         Quantities (J.YEN)         Foreign (VN. D)         (J.YEN)         (J.Y</td> <td>ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           0.1 YEN)         (J.YEN)         (V.N. D)         (J.YEN)         (V.N. D)           0.1 YEN)         (V.N. D)         (J.YEN)         (V.N. D)           0.2 29,125         -         111,700         -         977,375           0r         person         6.25         -         80,600         -         503,750           s expenses         (labor cost)*5%         set         1         1,02         -         85,513</td> <td>ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           0.1.YEN         (VN. D)         (J.YEN)         (VN. D)         (VN. D)         (VN. D)         (VN. D)           0.1.YEN         (VN. D)         (VN. D)</td> <td>ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           0.7 EN)         (J.YEN)         (V.N. D)         (J.YEN)         (V.N. D)           0.7 EN         1.25         -         183,300         -         229,125           0.7 EN         person         8.75         -         111,700         -         977,375           0.7 EN         person         6.25         -         80,600         -         503,750           s expenses         (labor cost)*5%         set         1         85,513         -           nt         ton         1.03         23,000         -         85,513         -</td> <td>ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           G1.YEN         (J.YEN)         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           person         1.25         -         183,300         -         229,125           or         person         8.75         -         977,375           or         person         6.25         -         80,600         -         977,375           s expenses         (labor cost)*5%         set         1         85,513         -         85,513           nt         ton         1.03         23,000         23,690         1,795,763</td>	Experient continuor         Standard person         Unit person         Quantities (J.YEN)         Foreign (VN. D)         (J.YEN)         (J.Y	ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           0.1 YEN)         (J.YEN)         (V.N. D)         (J.YEN)         (V.N. D)           0.1 YEN)         (V.N. D)         (J.YEN)         (V.N. D)           0.2 29,125         -         111,700         -         977,375           0r         person         6.25         -         80,600         -         503,750           s expenses         (labor cost)*5%         set         1         1,02         -         85,513	ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           0.1.YEN         (VN. D)         (J.YEN)         (VN. D)         (VN. D)         (VN. D)         (VN. D)           0.1.YEN         (VN. D)         (VN. D)	ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           0.7 EN)         (J.YEN)         (V.N. D)         (J.YEN)         (V.N. D)           0.7 EN         1.25         -         183,300         -         229,125           0.7 EN         person         8.75         -         111,700         -         977,375           0.7 EN         person         6.25         -         80,600         -         503,750           s expenses         (labor cost)*5%         set         1         85,513         -           nt         ton         1.03         23,000         -         85,513         -	ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           G1.YEN         (J.YEN)         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           person         1.25         -         183,300         -         229,125           or         person         8.75         -         977,375           or         person         6.25         -         80,600         -         977,375           s expenses         (labor cost)*5%         set         1         85,513         -         85,513           nt         ton         1.03         23,000         23,690         1,795,763

Reinforcement work (Diameter 13mm  $\sim 28 mm)$  Per one ton

	_		<sub>1</sub>		- <del>-</del>					_	_r	_	٦.					_	-		T		1
		Remarks		05*25		3.5*2.5	2 5*2 5			1000 20% Notemin 20	1055 370 Material - 23	Fourinment -91		0.2*T:T=3.63	1. The state of th	Equipment - / 2							
Amount		Local	(N. D)	201000	777,777	977,375	050 203	202,120	85.513		•	6.040	0,010	<u> </u>		19,200		1	1,821,003			1 871 003	COCKETON
ATT	****	Foreign	(I.YEN)			ı			•		23,690	420	904			210			24,338			24 228	25004.7
T Lake Dailon	rilee	Local	(N. D.	000 001	102,500	111.700		80,600				000	302,000			120,000							
47 T	Coll	Foreign	(I VEN)	, , , ,		•		1			23.000		21,900			1.310							
		Ouantities			1.25	27.8	6, 0	6.25		-	1 03		0.02			0.16	2						
		Unit			person	2000	person	person		set	ţ	3	780			ķ	=						,
	-	Standard								(lapor cost) 2%			25 ton	103.67		1002	10003						no
		Contraction	Description		Lorenzon	r Ol Ciliali	Steel worker	Comment labor	COIDINI Japon	Miscellaneous expenses		Kernforcement		Barge with crane			Fug boat			Total			Per :1 ton
			<u> </u>		-	-	~	,	٦	4	1	<u>~</u>	ł	9		1	7		T		Γ		Γ

Reinforcement work (Diameter  $29\,\mathrm{mm} \sim 32\,\mathrm{mm})$  Per one ton

			:	Unit	Unit Price	A	Amount		
Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
		-			(VN. D)	(J.YEN)	(VN. D)		
Foreman		person	0.75		183,300	1	137,475	0.3 * 2.5	
Steel worker		регѕоп	7.5	,	111,700	•	837,750	3*2.5	—
Common labor		person	5	-	80,600	,	403,000	2*2.5	
Miscellaneous expenses	(labor cost)*5%	set	_			-	68,911		
Reinforcement		ton	1.03	24,000	-	24,720	•	loss 3% Material - 30	···
Total						24,720	1,447,136		

Reinforcement work (Diameter  $29\,\mathrm{mm}\sim32\,\mathrm{mm})$  Per one ton

				Unit	Unit Price	Aı	Amount		
ş	Standard	Cnit	Quantities	Foreign	Local	Foreign	Local	Remarks	
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
		person	0.75	1	183,300	•	137,475	0.3 * 2.5	<u> </u>
		person	7.5	_	111,700	-	837,750	3*2.5	Γ'''
		person	5	-	80,600	-	403,000	2*2.5	
(lab	(labor cost)*5%	set	I	-	-	-	68,911		
		ton	1.03	24,000	•	24,720	-	loss 3% Material - 30	
	25 ton	day	0.02	21,900	302,000	438	6,040	Equipment -91	
								0.2* T; T=3.63	
	100ps	hr	0.16	1,310	120,000	210	19,200	Equipment -75	1
						25,368	1,472,376		1
									r
Per:1 ton						25,368	1,472,376		
									1

Excavation (back hoe 0.35 m3) Per: 100 m3.

			-		Unit	Unit Price	Aı	Amount		
Ż	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
-	Back hoe	Hydraulic 0.35 m3	hr	0.03	1,460	64,000	44	1,920	Equipment - 7	7
										_
	Total						44	1,920		
:	Per 1.0m <sup>3</sup>	9					44	1,920		$\neg$
	. Workability of back hoe (0.6 m3)	0.6 m3)								
٠.	q <sub>0</sub> (m3)	Ж	Ь	بو	Ξ	C <sub>s</sub> (sec)	Q (m3 / hr)	T (hr/100m3)	T (hr/100m3) $Q = (3.600*q*f*E) / Cs$	
	0.35	0.98	0.34	1.00	0.7	27	31.7	0.03	T = 100/Q; $q = qo * K$	
	q.: Standard bucket capacity		f; Soil co	Soil conversion factor	or		E: Efficiency of work	fwork		
	K : Bucket factor		Cs: Cycle time	time		:	q : Excavation v	q : Excavation volume per one cycle	le	

Cement mortar ( for concrete brick work ) Per : 1 m3

-					т	_	7-			-1		т		T		٦,	
		Remarks		Material - 71		Material - 106											
1	Amount	Local	(VN D)	316 316	0.2,010	000 05	20,000		11 (4)	10,987			566 556	577.116	277 223	C77,//C	
-	An	Foreign	(I.YEN)		•		•			ŀ				1		•	
	Unit Price	Local	(VN. D)		0/9	00000	ວດຕາດຕ										
		Foreign	(I.YEN)		•		1										
		Ouantities	,		361												
		Unit			ğ		ш3			Set							
		Standard	) )		PC 40					(Sum of above) *3%	(accom to time)	-					2
		Description			Campat	Collicia	7 Fine aggregate	2 22		Africa Incomplete	Miscellancous expenses			Total	10141	Dor 1 m2	2 C1 T 13
			Ž			_]	C	•		r	ኅ						

Cement mortar ( for concrete stone work ) Per : 1 m3

		319,477	1					13	Per 1 m3	į.
		319,477	ı						Total	
								:		
		9,305	1			-	Set	(Sum of above) *3%	Miscellaneous expenses	
							:			
	Material - 106	50,000	-	50,000	•		m3		Fine aggregate	1~1
	Material - 71	260,172	•	876	1	297	kg	PC 40	Cement	l :
		(VN. D)	۱.	- 1	(J.YEN)				•	
	Remarks	Local	Foreign	Local	Foreign	Quantities	Unit	Standard	Description	9
_		Amount	Ar	Unit Price	Unit					

Cement mortar M75 ( for brick 220x105x60mm work ) Per: 1 m3

			7	-1		 Т		T		_	7	
	Remarks	Material - 71	201 6-1-1	Waterial - 100								
Amount	Local (VN. D)	198 852	10000	26,500		7,661			263,013	263 633	503,013	
An	Foreign (J.YEN)			•		 ī			•			
Unit Price	Local (VN D)	320	0/0	20.000							-	
Cun	Foreig		1	,								
	Quantities		777	1 13	1:15	_	•				_	
	Unit		A SO	4	CIE	, a						
	Standard		PC 40			Norma of above 3#3%	(Suit of account)					5
	Description		Cement		Fine aggregate		Miscellaneous expenses			Total	G	rer i mo
	ž		-		C1	·	Ç					

Setting and removal of floor plate Per 100 sand piles

					Unit	Unit Price	Aī	Amount		
2	Description	Standard	Unit	Quantities	Foreig		Foreign	Local	Remarks	
<u>.</u>	÷.		-		(J. YEN)	(VN D)	(J.YEN)	(VN. D)		
-	II ( T C T C T C T C T C T C T C T C T C T		person	10		1	1	1,833,000	4*2.5	,
- ,	Tolchian		10000	17.5		170 100		2.976.750	7*2.5	
N	2 Skilled Jabor		person	C. / I		201,01		100		
۳,	Common Jabor		person	12.5		80,600	•	1,007,200	3.7.3	
, -	Mineral Transport	1 abor cost #16%	ţ	-			,	930,760		
1	+ Miscellalicous expellses	Capel Cost 1979	3							
	Total						•	6,748,010		
	rer i sand blie	Dire				1				,

Non - shrinkage mortar Per 1.0m3

				Τ		Γ	7		Τ		Τ	_	1
	Remarks		Material - 72			3 0*0 2	0.0 4.3						
Amount	Local	(VN. D)	17 272 900	11,42,42,	518,187	000,000,	1,209,000			19,000,087	1200000		
Am	Foreign	(1.YEN)			,		1			-	'		
Unit Price	Local	(VN. D)	1000	7,0%			80,600						
[Jni	Foreig			-	•		,						
	Unit Quantities			300		-			-				
				χ ευ	***	SCL	Thercon	200					
	Standard				707 - 1	3% above							n3
	Doggraption			Non chrinkage	2000	Sub material		Common labor			Total		Per 1.0m3
		o Z		-	-	N	1	'n					

Bridge desk water proofing Per 100 m2

					-			_							٦,
	Remarks		Material -148	0.5*2.5	7:14 (1)	1.2*2.5	ソの米ワン	C.1. V.O							
Amount	Local	(VN. D)	-	320 026	677,123	510,300	111000	141,050	01036	217,00		100	915,694	731.0	7,13/
An	Foreign	(J.YEN)	008'6			•		1	707	740	,		10,192		701
Unit Price	Local	(VN. D)		00000	183,300	170,100		80,600							
Cni	Foreign	(J.YEN)	49		•	1		٠							
	Quantities	-	200		1.25		,	1.75		1					
	Unit		40		person	חפדפת	200	person	-	Set					
	Standard									Sum of above *4%					
	Description		A multiple system properties	Asphair water probling	Foreman	Clailed Johns	Skilled labor	Common Jahor		Miscellaneous expenses			Total		Dar I Am
	Z		-	-	7	۲	n	4	-	'n					

Sand fill Per 100m3

					Unit	Unit Price	Ar	Amount	
ŝ	Description	Standard	Unit	Quantities	Foreign	Local (VN D)	Foreign (J.YEN)	Local (VN. D)	Remarks
					(3)				0.44 * 4 layers ; Equipment
		7	į.	1.76	3.880	000,16	6.829	160,160	-4
	Swamp bulldozer	10.01						-	100*(1+K), K=0.3, Material -100,
		47.13 com		130	•	50.000		6,500,000	K:correction factor
_	2 Sand	reliow saild	2					130 000	
-	Miscellaneous cost	Material cost *2%	Set				•	20,001	
-									
					L	·	6.829	6,790,160	
	I otal						89	67.902	
	Dow 1 0m2				_	-	22		

N/(11*11*0*/*M) = 0		0.59 = 100 / Q	
7	ŭ	0.50   4.00	
	D TI	0.25 1/1.15	3./k)
	>	1700 00	1,700,00
	M	000	3.70

Q: Spreading and grading volume per one hour (m3/h)
V: Veracity of work (m/hr)
D: Finished thickness of sand mat (m)
f1: Soil conversion factor
E: Efficiency of work
N: Numbers of compaction work
W: Effective compaction width per one time of spreading and grading and compacting work (m)

Excavator operation (bored pile  $\varphi$  1000 mm; L=8.5~m)

per one hour

		:			Unit	Unit Price	An	Amount	
2	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
,					(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction							
	Reverse circulation drill	using together type	ħ		5,470		5,470	-	Equipment 29
6	Three-wings bit	ф 800-1200mm	day	0.18	1,510	ŀ	272	1	$D/(N*T_2)$ ; Equipment-30
"	Hammer grab	ф 1000mm	day	0.18	8,100	ı	1,458	1	$D/(N^*T_2)$ ; Equipment-31
2 4	Hammer crown	\$ less than 1300mm	day	0.18	1,990	1	358	•	D/(N*T <sub>2</sub> ) : Equipment-32
ır	Generator	200KVA	day	0.18	7,920	464,000	1,426	83,520	D/(N*T <sub>2</sub> ); Equipment-48
ء ،	Miscellaneous expenses		set	_			3	480	
,									
	Total						8,987	84,000	
	per: one hr	hr					8,987	84,000	

D. Duration for Bored pile work; 40 days
N: Total numbers of Bored pile; 126 each
T<sub>2</sub>: Excavation time; 1.81 hrs

Excavator operation (bored pile  $\phi 1000 \text{ mm; L} = 10 \text{ m}$ )

per one hour

					Unit	Unit Price	Ar	Amount	
		Standard	Imit	Ouantities	Foreign	Local	Foreign	Local	Remarks
 0 Z.	Describitoti			,	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
+		air lilt pump suction		-	5.470		5.470	r	Equipment 29
	Reverse circulation drill	using together type	≣	1	2/1/2		250		D/N×T.) · Fanipment - 30
2	Three-wings bit	\$200-1200mm	day	0.17	1,510	•	707		
  -	Hammer orah	ф 1000mm	day	0.17	8,100	ı	1,377		D/(N*12) : Equipment-51
Т	Training Erro	A less than 1300mm	, , , ,	0.17	1 990	1	338	•	$D/(N*T_2)$ ; Equipment-32
4	Hammer crown		Hay	,				000 00	7///*T ) - Equipment 48
٧	Generator	200KVA	day	0.17	7,920	464,000	1,346	78,880	בייום וולווים ובו אולוו אולוו
							~	120	
9	Miscellaneous expenses		set				,		
T									
$\dagger$	10401						8,791	79,000	
+	1 0141								
								0 0 0	
+	ritod eno rec	home					8,791	79,000	

D: Duration for Bored pile work; 40 days N: Total numbers of Bored pile; 126 each

T<sub>2</sub>: Excavation time; 1.92 hrs

Excavator operation (bored pile  $\phi$  1000 mm; L = 16.0 m) per one hour

					Unit	Unit Price	Ar	Amount	
ž.	No. Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction							
ī	I Reverse circulation drill	using together type	E	-	5,470		5,470	•	Equipment 29
7	Three-wings bit	ф 800-1200mm	day	0.11	1,510	•	166	1	D/(N*T <sub>2</sub> ); Equipment - 30
[	3 Hammer grab	ф 1000mm	day	0.11	8,100	,	168	•	$D/(N^*T_2)$ ; Equipment-31
4	Hammer crown	φ less than 1300mm	day	0.11	1,990	•	219	•	$D/(N*T_2)$ ; Equipment-32
[ <u>"</u>	Generator	200KVA	day	0.11	7,920	464,000	871	51,040	D/(N*T <sub>2</sub> ); Equipment-48
٥	6 Miscellaneous expenses		set	-			2	096	
	Total						619,7	52,000	
	per one hour	)ur					7,619	52,000	

D: Duration for Bored pile work; 40 days
N: Total numbers of Bored pile; 126 each
T<sub>2</sub>: Excavation time; 2.88 hrs

Excavator operation (bored pile  $\phi$  1000 mm; L = 19.5 m) per one hour

		ks			nt 29	nment - 30		ripment-31	20	ייםויםויולוי	ipment-48						
		Remarks			Equipment 29	D/N*T.) · Farinment - 30	-t- : (7: \c)/a	$D/(N*T_2)$ ; Equipment-31	T. ( 11. ( 11. ( 1). ( 1	U/(N*12); Equipment-32	D/(N*T.): Equipment-48						
	Amount	Local	(VN.D)		. 1		•	1		ı	41.760	20111	240		42,000	000 00	>>>****
,	An	Foreign	(I.YEN)		5.470	, , ,	130	729		179	615	(17)	2		7.229	CCCF	T 277'/
	Unit Price	Local	(C NV)	/			,			•	000	464,000					
	1 mit	Foreign	NEW !	7.7.7.	0,70	0,4,0	1.510	00100	8,100	1 990	27.76	7,920					
		Ougatities	Qualitics		•		600	53.5	0.03	00.0	0.02	60.0		-			
		• • • • • • • • • • • • • • • • • • • •			•	hr	كول	day	day	1	day	day		Set			Ĺ.
			Standard		air lift pump suction	using together type	& \$00-1200mm	# 000-1500m	ф 1000mm	1300	φ less than i 300mm	200KVA					
			Description			Reverse circulation drill		2 Three-wings bit	Hammer orah	Hammer Gran	Hammer crown	10,000	Generator	Miscellaneous expenses		Total	
			Š.			_		7	,	,	4	-	<u> </u>	9			

D: Duration for Bored pile work; 40 days N: Total numbers of Bored pile; 126 each T<sub>2</sub>: Excavation time; 3.51 hrs

Excavator operation (bored pile  $\phi$  1000 mm; L = 20.0 m) per one hour

						т	<u>.</u>		г			
	Remarks		. (	Equipment 29	$D/(N*T_2)$ ; Equipment - 30	D/(N*T <sub>2</sub> ); Equipment-31	D/(N*T <sub>2</sub> ); Equipment-32	D/(N*T <sub>2</sub> ); Equipment-48		¥		
Amount	Local	(VN.D)			•	•	1	41,760	240		42,000	42,000
An	Foreign	(J.YEN)		5,470	136	729	621	713	2		7,229	7,229
Unit Price	Local	(VN.D)		1	ı			464,000				
Unit	Foreign	j		5,470	1,510	8,100	1,990	7,920				
	Ouantities			1	0.09	0.09	0.09	0.09	-			
	Unit			hr	day	day	day	day	set			
	Standard		air lift pump suction	using together type	ф 800-1200mm	ф 1000mm	\$ less than 1300mm	200KVA				our
	Description			Reverse circulation drill	Three-wings bit	Hammer grab	Hammer crown	Generator	6 Miscellaneous expenses		Total	per one hour
	Z	,		_	2	m	4	\ \	٥			

D: Duration for Bored pile work; 40 days N: Total numbers of Bored pile; 126 each T<sub>2</sub>: Excavation time; 3.59 hrs

Excavator operation (bored pile  $\phi$  1000 mm; L = 21 m) per one hour

							- Y	1	-
					Cait	Unit Price	AT	Amount	•
:		7 - 47	ţ.	Ouantities	Foreign	Local	Foreign	Local	Remarks
ģ	Description	Standard		) )	(I VEN)	(Q.N.V)	(J.YEN)	(VN.D)	
		air lift pump suction	<u>ا</u> گ	-	5 470	•	5,470	1	Equipment 29
_	Reverse circulation drill	using together type	111	1	, ,		76.		D//N*T.) - Equipment - 30
1	1 T	♠ 800-1200mm	dav	0.0	1,510		130	٠	
7	I hree-wings on						CCL		D/N*T.): Equipment-31
Ľ	11	# 1000mm	day	0.09	8,100	1	(7)	_	
.J	Hammer grap						170		D/(N*T,): Equipment-32
[		d less than 1300mm	dav	60.0	1,990		2/1		
4	Hammer crown	-				000 131	712	41.760	D/N*T <sub>2</sub> ): Equipment 48
ľ		200KVA	dav	60.0	7,920	404,000	C1 /	20111	
^	Generator	221220					2	240	
٧	Miscellaneous expenses		Set						
	-+								
							4 220	42 000	
							1,447	200171	
	lotai						7 229	42,000	
	per one hour	lour					, , , , , , , , , , , , , , , , , , ,		

D: Duration for Bored pile work; 40 days N: Total numbers of Bored pile; 126 each T<sub>2</sub>: Excavation time; 3.59 hrs

Excavator operation (bored pile  $\phi$  1000 mm; L = 22.0 m)

 	<u>.,.</u>	_				T		Γ		Γ			T	_		T			
	Remarks			Equipment 29	D/NI*T.) · Fournment - 30	D((14 12) : Equipment	D/(N*T <sub>2</sub> ); Equipment-31		D/(N*T <sub>2</sub> ); Equipment-32		D/(N*T <sub>2</sub> ) : Equipment-48								
Amount	Local	(VN.D)		1		1			,		37.120	31,673	880			38,000	000 86	20,000	
Απ	Foreign	(I VFN)		6.470	2/1	121	077	010	1 50	201	123	+50	8			7.040	3.3	7,040	
Ilmit Price	Local	(0.16)	(0.2.7)			1		1		1		464,000							
ilmii	Foreign	]`	(J.YEN)	1	5,470	1 510	21,1	8,100		066		7.920							
	100	לחשנווונו			pure	8	0.00	800	33.5	800	3	800	22.5						
		Chil			Ė		day	7000	Udy	Joy	Cay	day	ray	set					
		Standard		air lift pump suction	using together type	26. 330	\$ 800-1200mm	4 1000mm	¢ 1000mm	1300mm	o less than 1500ium	A 7 X 7 7 00 C	200KVA						7170
		Description			[[#[V #0]***]	Reverse circulation dilli	Three-wings bit		Hammer grab		Hammer crown		Generator	A Miscellangons expenses	iviisce in contractivi		1000	. 1	THOU PAGE POST
		Ž					7	į	"		4		'n	4	5	_		1	

D: Duration for Bored pile work; 40 days
N: Total numbers of Bored pile; 126 each
T<sub>2</sub>: Excavation time; 3.91 hts

Excavator operation (bored pile  $\phi1000~\text{mm}$ ; L = 25.0 m) per one hour

					Chit	Unit Price	Απ	Amount	-
Decorintion		Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
10114	:			,	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction	-		027.5		\$ 470	,	Equipment 29
Reverse circulation drill	_	using together type	ıı		3,4/0		21.50		
Three wings bit		ф 800-1200mm	day	0.07	1,510	•	106	-	D/(N*1 <sub>2</sub> ); Equipment - 30
Usmmer mah	1	ф 1000mm	dav	0.07	8,100	t	567	•	$D/(N*T_2)$ ; Equipment-31
		A lees than 1300mm	100	0.07	1 990	,	139	ŀ	D/(N*T <sub>2</sub> ); Equipment-32
Hammer crown		, (CC)	Lay	5	2000				D 1
		200KVA	day	0.07	7,920	464,000	554	32,480	D/(N+12): Equipment-48
Miscellaneous expenses	U		set				3	520	
2000	,† ,								
								4 4 4	
Total						-	6,839	33,000	
1	ner one hour						6,839	33,000	

D: Duration for Bored pile work; 40 days
N: Total numbers of Bored pile; 126 each
T<sub>2</sub>: Excavation time; 4.32 hrs

Excavator operation (bored pile  $\phi$ 1000 mm; L = 26.5 m) per one hour

					- Christ	Unit Price	Απ	Amount	
Ž	Description	Standard	Umit	Ouantities	Foreign	Local	Foreign	Local	Remarks
2				,	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction							
-	Reverse circulation drill	using together type	тц	1	5,470	,	5,470	L	Equipment 29
2	Three-wings bit	ф 800-1200mm	đay	0.07	1,510	•	106	1	$D/(N^*T_2)$ ; Equipment - 30
	Hammer grab	\$ 1000mm	day	0.07	8,100	•	567	-	D:(N*T <sub>2</sub> ); Equipment-31
7	Hammer Crown	\$ less than 1300mm	day	0.07	1,990		139	-	D/(N*T <sub>2</sub> ); Equipment-32
·	Generator	200KVA	day	0.07	7,920	464,000	554	32,480	$D/(N*T_2)$ : Equipment-48
م ا	Miscellaneous expenses		Set				В	520	
	Total						6,839	33,000	
	ner one hour	our					6,839	33,000	

D: Duration for Bored pile work; 40 days
N: Total numbers of Bored pile; 126 each
T<sub>2</sub>: Excavation time; 4.64 hrs

Excavator operation (bored pile  $\phi$  1000 mm; L = 28.5 m) per one hour

	Remarks			Equipment 29	D/(N*T2); Equipment - 30	D/(N*T2); Equipment-31	D/O(*T.) · Equipment-37	7(1x 12), repulping 12	D/(N*T2); Equipment-48							
Amount	Local	. (VN.D)		4	-	1			32,480	520		33 000	20000		33,000	
Am	Foreign	(J.YEN)		5,470	9/1	945		767	554	m	-	7 201	100%		7,381	
Unit Price	Local	(V.N.D)		•	.1				464,000							
Ċij	Foreign	(J.YEN)		5,470	2,520	13,500	3,0	3,310	7,920							_
	Ouantities	,		-	0.07	0.07		0.07	0.07							-
	Unit	٠,		E	day	dav		day	day	set						
	Standard		air lift pump suction	using together type	ф 800-1200mm	ф 1000mm		ф less than 1300mm	200KVA						1100	
	Decemption			Reverse circulation drill	Three-wings hit	Lamer mah	Liaminet grad	Hammer crown	Generator	Miscellaneous evnences	ואוואררוומווררווא בעליכווארו		Total		and one root	
	ž	2			- ^	1 6	٠	4	٧	,   4	2			Ŀ		

D: Duration for Bored pile work; 40 days
N: Total numbers of Bored pile; 126 each
T<sub>2</sub>: Excavation time; 4.72 hrs

Excavator operation (bored pile  $\phi$  1200 mm ; L=21.0 m) per one hour

					Unit	Unit Price	An	Amount	
°	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
				,	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction							
	Reverse circulation drill	using together type	Ļ	_	5,470	•	5,470	ı	Equipment 29
<b>C1</b>	Three-wings bit	ф 800-1200mm	day	0.07	2,520	-	176	•	$D/(N*T_2)$ ; Equipment - 30
'n	Hammer grab	ф 1200mm	day	0.07	14,200	1	994	•	$D/(N^*T_2)$ ; Equipment-109
-+	Наттет стомп	ф less than 1300mm	day	0.07	3,310	-	232		D/(N*T <sub>2</sub> ); Equipment-32
٠,٠	5 Generator	200KVA	day	0.07	7,920	464,000	554	32,480	D/(N*T2); Equipment-48
9	Miscellaneous expenses		set				4	520	
	Total						7,431	33,000	
	per one hour	our					7,431	33,000	

D: Duration for Bored pile work; 25 days
N: Total numbers of Bored pile; 73 each
T<sub>2</sub>: Excavation time; 5.06 hrs

Excavator operation (bored pile  $\varphi$  1200 mm ; L = 21.5 m)

										_	·-						
	Remarks		Formament 20		$D/(N^*T_2)$ ; Equipment - 30	D/(N*T.) · Fauroment-109		D/(N*T,); Equipment-32		D/(N*T.); Equipment-48							
Amount	Local	(VN.D)						,		32.480	000	070		000 66	33,000	33,000	
An	Foreign	(J.YEN)		3,470	106	705	0,60	130	76.	455		4		100	0.870	6.870	2,2,2
I lait Drice	Local	(VN.D)		•			,		•	464 000	000°+0+						
1 lai	Foreign	(J.YEN)		5,470	1510	2126	8,520	,	J. 20	1 020	076,/	-					
	Onsartities	Samming The Control of the Control o			0.07	70.0	0.07	12,	0.07	200	0.07	_					
	1	5		'n	40.1	uay	day		day		day	Şet					
	7	Standard	air lift pump suction	using together type	+ 800 1200mm	# 600-1200HIII	ф 1200mm	-	p less than 1300mm		200KVA						ino
		Description		n control original drill	Reverse circulation civil	Three-wings bit	I Tours on Carolin	nammer grav	Lommon Onomin	Haiting Clown	Generator	1 6 11	Miscellaneous expenses			lotai	ner one hour
		Šo.			-	7	r	ኅ	-	+	'n	,	٥				L

D: Duration for Bored pile work; 25 days
N: Total numbers of Bored pile; 73 each
T<sub>2</sub>: Excavation time; 5.14 hrs

Excavator operation (bored pile  $\phi$  1200 mm ; L=24.0 m) per one hour

					Ç	Unit Price	Aī	Amount	
Ž	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
:				,	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction				N .			
_	Reverse circulation drill	using together type	þĻ	1	5,470		5,470		Equipment 29
6	Three-wings bit	\$ 800-1200mm	day	90.0	1,510	,	16	•	D/(N*T2); Equipment - 30
۳	Hammer grab	ф 1200mm	day	90.0	8,520	1	511	•	D/(N*T <sub>2</sub> ); Equipment-109
4	Hammer crown	ф less than 1300mm	day	90.0	1,990	•	611	•	D/(N*T <sub>2</sub> ); Equipment-32
'n	Generator	200KVA	day	90.0	7,920	464,000	475	27,840	D/(N*T <sub>2</sub> ); Equipment-48
9	Miscellaneous expenses		set	-			9	160	
				-					
	Total						6,672	28,000	
-							;		
	ner one hour	our					6,672	28,000	

D: Duration for Bored pile work; 25 days
N: Total numbers of Bored pile; 73 each
T<sub>2</sub>: Excavation time; 5.35 hrs

Excavator operation (bored pile  $\phi$  1200 mm; L=26.5~m)per one bour

				7						·		_	· · ·	
	Remarks			Equipment 29	$D/(N^*T_2)$ ; Equipment - 30	D/(N*T2); Equipment-109	$D/(N*T_2)$ ; Equipment-32	D/(N*T <sub>2</sub> ) : Equipment-48						
Amount	Local	(VN.D)			,	•	•	27,840	160		28,000		28,000	
Aī	Foreign	(J.YEN)	:	5,470	16	511	119	475	9		6,672		6,672	
Unit Price	Local	(VN.D)		•		ı		464,000						
Uni	Foreign			5,470	1,510	8,520	1,990	7,920						
	Ouantities	,			90:0	90.0	90.0	90.0	-					
	Unit			E	day	day	day	day	set					
	Standard		air lift pump suction	using together type	ф 800-1200mm	ф 1200mm	d less than 1300mm	200KVA					OHE	
	Description			Reverse circulation drill	_		Hammer crown	Generator			Total		ner one hour	מוס ווס ווס
	Ź	-	_	_			4		ی ر	1				

D: Duration for Bored pile work; 25 days
N: Total numbers of Bored pile; 73 each
T<sub>1</sub>: Excavation time; 5.67 hrs

Excavator operation (bored pile  $\phi$  2000 mm; L = 10.5 m) per one hour

L					Unit	Unit Price	An	Amount	
ģ	o. Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks
	***************************************			•	Li	(VN.D)	(J.YEN)	(VN.D)	
L_		air lift pump suction	1						
_	Reverse circulation drill	using together type	μį	1	5,470	•	5,470	•	Equipment 29
7	Three-wings bit	ф 1500-2000mm	day	0.11	2,140	•	235	•	D/(N*T <sub>2</sub> ); Equipment - 108
$\mathbb{L}$	Hammer grab	ф 2000mm	day	0.11	18,360	1	2,020	•	D/(N*T <sub>2</sub> ): Equipment-110
4	Hammer crown	ф more than 1300mm	day	0.11	2,680	•	295	•	D/(N*T2); Equipment-111
<u>ر</u>	Generator	200KVA	day	0.11	7,920	464,000	871	51,040	D/(N*T <sub>2</sub> ) : Equipment-48
$\mathbb{L}^{\circ}$	6 Miscellaneous expenses		set	1			10	096	
	Total		-				8,901	52,000	
	per one hour	our					8,901	52,000	

D: Duration for Bored pile work; 45 days
N: Total numbers of Bored pile; 94 each
T<sub>2</sub>: Excavation time; 4,44 hrs

Excavator operation (bored pile  $\varphi$  2000 mm ; L = 18.5 m) per one hour

				 				<b>,</b>	~~-7		_		,			-	-1		٦.
		Remarks		Equipment 29	D//N*T.) - Fournment - 108	in the first that	D/(N*T <sub>2</sub> ); Equipment-110	111 **********************************	D/(N 12); Equipment-111	D/OX+T.) · Fourinment 48									
A months	Dunt	Local	(VN.D)				•		1	079 540	040,12	160			28.000			000 86	2000
*	2	Foreign	(J.YEN)	5,470	961	170	1 102	20161	[9]	27.5	C/4				7227		<u> </u>	7227	/55,/
	Unit Price	Local	(VN.D)	1		•			•	000	464,000						•		
		Foreign	1	\$ 470		2,140	10250	18,500	2.680		7,920								
		Ouantities	<b>y</b>			90.0		00.0	0.06		90:0	-	-						
		[ Init		,	1	day	,	day	,,,,,	(18)	day	ļ	set						
		C+ondard	Statiliais	air lift pump suction	using together type	\$ 1500-2000mm	0000	ф ZUUUmm	A more than 1300mm	William Communication	200KVA								our
			Describtion		Reverse circulation drill	Three mings hit	micc-wings on	Hammer grab		Hammer crown	•	Octiciator	Miscellaneous expenses	+-		Total			ner one hour
			ż		<b>.</b>	,	7	ተኅ		4	4	n l	9						

D: Duration for Bored pile work; 45 days
N: Total numbers of Bored pile; 94 each
T<sub>2</sub>: Excavation time; 7.48 hrs

Excavator operation (bored pile  $\phi$  2000 mm; L=20.0 m) per one hour

					Unit	Unit Price	An	Amount	
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction							
	Reverse circulation drill	using together type	hr	. [	5,470	-	5,470		Equipment 29
2	Three-wings bit	ф 1500-2000mm	day	0.07	2,140	•	150	•	D/(N*T <sub>2</sub> ); Equipment - 108
	Hammer grab	ф 2000mm	day	0.07	18,360	,	1,285	•	$D/(N*T_2)$ ; Equipment-110
4	Hammer crown	ф more than 1300mm	day	0.07	2,680	1	188	-	$D/(N*T_2)$ ; Equipment-111
~		200KVA	day	0.07	7,920	464,000	554	32,480	D/(N*T <sub>2</sub> ); Equipment-48
9	-		set	1			3	520	
_				:					
<u> </u>	Total						059'L	33,000	
Ŀ	per one hour	our					7.650	33,000	

D: Duration for Bored pile work; 45 days N: Total numbers of Bored pile; 94 each T<sub>2</sub>: Excavation time; 7.10 hrs

Excavator operation (bored pile  $\varphi$  2000 mm; L=22.5 m) per one hour

					1,11	, T	×	Amount	
					וווור	rnce	IIIC	Cant	
Ž	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
				,		(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction	7					•	
-	Reverse circulation drill	using together type	h	_	5,470	•	5,470	1	Equipment 29
7	Three-wings bit	ф 1500-2000mm	day	0.05	2,140	•	107	ı	$D/(N^*T_2)$ ; Equipment - 108
l m	Hammer grab	ф 2000mm	day	0.05	18,360	1	816	•	D/(N*T <sub>2</sub> ); Equipment-110
4	Hammer crown	ф more than 1300mm	day	0.05	2,680	,	134	ı	$D/(N^*T_2)$ ; Equipment-111
ر. ا	Generator	200KVA	day	0.05	7,920	464,000	396	23,200	D/(N*T <sub>2</sub> ); Equipment-48
9	Miscellaneous expenses		set	1			6	800	
						:			
	Total						7,034	24,000	
					: "	-			
	per one hour	our					7,034	24,000	

D: Duration for Bored pile work; 45 days
N: Total numbers of Bored pile; 94 each
T<sub>2</sub>: Excavation time; 9.0 hrs

Excavator operation (bored pile  $\phi$  2000 mm; L = 24.5 m)

į					47 1	2	Ì	Amount	
-					בונים ביים	Unit Price	77.7		•
	•	Ctondord	Init	Onantities	Foreign	Local	Foreign	Local	Kemarks
9	резсприоп	Stalltard	<u>.</u>	· .	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
-†									
		air lift pump suction	1		5 470	1	5,470	•	Equipment 29
_	Reverse circulation drill	using together type	111	•	37, 6		101	1	D/(N*T.) : Equipment - 108
2	Three-wings bit	ф 1500-2000mm	day	0.05	2,140	1	721		011 +400
Т	11	6 2000mm	dav	0.05	18,360	•	816	•	D/(N-12); Equipment to
_	Flammer grap								D/N*T.) : Equipment-111
Г	Usumost ortoller	d more than 1300mm	day	0.05	2,680	•	154	<b>B</b>	3-k- (7- 11)
_	ו ושטים וויים				68.4	000 101	306	73.200	D/(N*T <sub>2</sub> ) : Equipment-48
4	Generator	200KVA	day	0.05	076'/	404,000	320	204,04	* * * * * * * * * * * * * * * * * * * *
	Concience			-			O	800	
9	Miscellaneous expenses		Set	-					
Г									
7							7.034	24,000	
-	Total								
Г									
7							7.034	24,000	
_	ner one hour	lour							

D: Duration for Bored pile work; 45 days
N: Total numbers of Bored pile; 94 each
T<sub>2</sub>: Excavation time; 9.76 hrs

Excavator operation (bored pile  $\varphi$  2000 mm; L=28.0 m)

			_1		1		Τ	T	_	T		Γ	Т		-	Т		Τ		ĺ
	•	Remarks			Equipment 29	1.3*D/(N*T.): Equipment - 108	OLD 40011111111111111111111111111111111111	1.3-U(U-1.3); Equipment-110	1 3*D/O/*T.) : Equipment-[1]		1.3*D/(N*T.); Equipment-48								:	
Amount	- 1	Local	(VN.D)		ı			1			27.840	0.7.	IOO		00000	78,000	-		28,000	
An		Foreign	(J.YEN)		5,470	128	2 .	1,102	191	101	475					7,337			7337	
1-i+ D-ice	race	Local	(VN.D)		•		1	t		•	764 000	200,								
*;-[.1		Foreign		7, 1, 2, 1, 2, 1	5 470		2,140	18,360	(3)	7,080	7 000	0.25,1								_
	-	Onantities	,			, ,	0.00	90.0		0.06	700	000	-			ļ		·-		
		110	; )		, <del>.</del>	117	day	dav		day		day	t d'o							
		Otomoto	טומויושור ב		air lift pump suction	using together type	♦ 1500-2000mm	4 2000mm	,	d more than 1300mm		200KVA								- unu
			Description			Reverse circulation drill	Three-wings bit	-	Hammer grap	Llammer orosith	namine clown	5 Generator	+	Miscellaneous expenses		1 - 1 - 1	10121			ner one hour
			ģ			_	7	1	ኅ	5	1	'n	1	٥						

D.: Duration for Bored pile work; 45 days
N: Total numbers of Bored pile; 94 each
T<sub>2</sub>: Excavation time; 11.09 hrs

Excavator operation (bored pile  $\phi$  2000 mm; L = 29.5 m) per one hour

I					Chit	Unit Price	An	Amount	
		Standard	l'init	Ouantities	Foreign	Local	Foreign	Local	Remarks
ġ	Description	אוואקן כ	<u> </u>	,	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
		air lift pump suction		•	027.5		5 470		Equipment 29
_	Reverse circulation drill	using together type	12	-	0,4,0		200		D/(N*T.) · Foundment - 108
,	Three-wings bit	\$ 1500-2000mm	day	0.04	2,140	•	80		10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	10000	ф 2000mm	dav	0.04	18,360	•	734	•	$D/(N*T_2)$ ; Equipment-110
n	namine glau						t C		D/CN*T.) · Equipment-111
4	Hammer crown	\$ more than 1300mm	day	40.0	2,680	1	/01		
-		111111111	7-7	700	7 070	464 000	317	18,560	$D/(N*T_2)$ : Equipment-48
V	Generator	200KVA	day	0.0	7,720	222,5	t	0.8.5	
v	A Miscellaneous expenses		set	-				0+	
,	Taring on the contract of the								
							1673	10 000	
	Total						0,121	2027	
T						,	6.721	19,000	
	per one hour	Inon							

D: Duration for Bored pile work; 45 days
N: Total numbers of Bored pile; 94 each
T<sub>2</sub>: Excavation time; 11.66 hrs

Excavator operation (bored pile  $\varphi$  2000 mm; L=36.0 m)

o.         Description         Standard         Unit         Quantities         Foreign         Local         Foreign           1         Reverse circulation drill         air lift pump suction         hr         1         5,470         -         5,470           2         Three-wings bit         φ 1500-2000mm         day         0.05         2,140         -         918           3         Hammer grab         φ 2000mm         day         0.05         18,360         -         918           4         Hammer crown         φ more than 1300mm         day         0.05         2,680         -         134           5         Generator         200KVA         day         0.05         7,920         464,000         396	(VN.D)	xEN) (VN.D) 5,470 918	Remarks   Equipment 29   1.5*D/(N*T <sub>2</sub> ); Equipment - 108   1.5*D/(N*T <sub>2</sub> ); Equipment - 108   1.5*D/(N*T <sub>2</sub> );
Reverse circulation drill         air lift pump suction         hr         l         5,470         -         5           Three-wings bit         \$\phi\$1500-2000mm         day         0.05         2,140         -         5           Hammer grab         \$\phi\$2000mm         day         0.05         18,360         -         -           Hammer crown         \$\phi\$ more than 1300mm         day         0.05         2,680         -         -           Generator         \$200KVA         day         0.05         7,920         464,000         -	(GNN)	070	Equipment 29 1.5*D/(N*T <sub>2</sub> ); Equipment - 10 1.5*D/(N*T <sub>2</sub> ); Equipment-110
air lift pump suction         hr         1         5,470         -         5,470           \$\psi \text{sing together type}   \$\phi \text{1500-2000mm}   \$\pri \text{day}   \$0.05         2,140         -         -           \$\phi \text{2000mm}   \$\phi \text{2000mm}   \$\pri \text{day}   \$0.05         18,360         -         -           \$\phi \text{more than 1300mm}   \$\pri \text{day}   \$0.05         2,680         -         -           \$200KVA   \$\pri \text{day}   \$0.05         7,920         464,000	5,470 - 2,140 - 18,360 - 2	5,470 - 107 - 918	Equipment 29 1.5*D/(N*T <sub>2</sub> ); Equipment - 10 1.5*D/(N*T <sub>2</sub> ); Equipment-110
using together type         hr         1         5,470         -         5,470           \$\phi\$ 1500-2000mm         day         0.05         2,140         -         -           \$\phi\$ 2000mm         day         0.05         18,360         -         -           \$\phi\$ more than 1300mm         day         0.05         2,680         -         -           \$200KVA         day         0.05         7,920         464,000	2,140 18,360	5,470 - 107 - 918	Equipment 29 1.5*D/(N*T <sub>2</sub> ); Equipment - 10 1.5*D/(N*T <sub>2</sub> ); Equipment-11(
φ 1500–2000mm day 0.05 2,140 φ 2000mm day 0.05 18,360 φ more than 1300mm day 0.05 2,680 200KVA day 0.05 7,920 464,000	2,140 - 18,360 -	- 701	1.5*D/(N*T <sub>2</sub> ); Equipment - 10 1.5*D/(N*T <sub>2</sub> ); Equipment-110
φ 2000mm day 0.05 18,360 φ 2000mm day 0.05 2,680 200KVA day 0.05 7,920 464,000	18,360	- 816	1.5*D/(N*T <sub>2</sub> ); Equipment-11(
φ 2000mm day 0.05 18,500 - 6 more than 1300mm day 0.05 2,680 - 6 200KVA day 0.05 7,920 464,000	18,360	210	
φ more than 1300mm day 0.05 2,680 - 200KVA day 0.05 7,920 464,000	- CO. C		
200KVA day 0.05 7,920 464,000	7,080	134	1.5*D/(N*1 <sub>2</sub> ); Equipment-111
200KVA day 0.03 (,720 TO,700)		396 23.200	1.5*D/(N*T <sub>2</sub> ); Equipment 48
190			1
Maiscellaneons expenses		6	
A Mischalland or Commission of the Commission of			
1034		7.034	
Total			
7,034		7,034 24,000	

D: Duration for Bored pile work; 45 days
N: Total numbers of Bored pile; 94 each
T<sub>2</sub>: Excavation time; 14.13 hrs

Removal of Existing tree (Root dia < 200mm)
Per 10 trees

			т			ī	7	7		7	Ť	_	
	Remarks		0.1 * 2.5	0.8*2.5	0.8*2.5								
Amount	Local	(VN. D)	45,825	340,200	161 200		43,778		200 103	590,195		29,100	
Y	Foreign		,	1			•					,	
Unit Price	Local		L	170,100	80,600	200,00							
Cn	Foreign			•									
	Quantities		0.25	2		7	_						
	Unit	1	person	nerson		person	set						
	Standard						(sum of above)*8%				-		
	Description		Horeman	Stalled lebox	Shiffed labor	Common labor	Miscellaneous expenses			Total		Per one tree	2011 2010 121
	Š.		-	- -	1	·r,	4	-					

Removal of Existing tree (Root dia. > 200) Per 10\_trees

	(S		5		'n	ı.	0			- 1							
	Remarks	. '	0.1 * 2.		0.8*2.5	0 0	0.8*2			Fornament - 7	1211412						
Airlouir	Local	(VN. D)	75854	110.01	340.200		161.200	CII CY	45,7,8	000 13	000.40		100 200	655,003		65.500	
¥	Foreign	(J.YEN)		t			1		,	077 1	1,400			1,400		146	2
Unit Price	Local	(Q. X.X.)	107 200	185,500	170 100	1/0,100	80.600	222		000	04,000						_
 Cnit	Foreign	CLYFN	(1.00)	,		,	•			,	1,460						
	Ouantities	·	,	0.25	,	7	r	7									
	iu.	· · ·		person		person	1	Derson	tas	,	14						
	Standard								%X*(anotofomic)	(Sulli of goods)	0.35 m3						
	G.	Describnon		1	roreman	Skilled Jabor		Common labor	11	Miscellaneous expenses	Dool hos	Dack Hoe		7.401	10121		D 1 O America
	. ;	Š.		-	-	C	ľ	m	1	4	4	,		Ī		1	

Removal of old Pavement Per 100m2

							•			-
					Unit	Unit Price	Aı	Amount		
Ž	Description	Standard	Umit	Quantities	Foreign	Local	Foreign	Local	Remarks	
2	1				(J.YEN)	(V.N. D)	(J.YEN)	(VN. D)		
-			norcon	0.27	•	183,300		49,491	(1.7/8)* 0.5 * 2.5	
-	roreman		1555	,		001.021		180 306	(17/8) *2.0 * 2.5	
~	Skilled labor		person	1.00	,	1/0,100	-	200,001	U ( + 0 (+ (9) t · ·	Τ
۲	3 Common labor		person	1.06	•	80,600	ı	85,436	(1.//8) *2.0 * 2.3	7
٠.	Colinion race	0.63	1	1.7	0 560	92 000	4.352	156,400	Equipment - 6	
4	Back hoe	O.Orius		,;	4,200	2006	1000	000 611	D	Γ-
٧.	Dump truck	11 ton	Ħ	1.7	1,650	67,000	2,805	113,900	בל ב זויםווולווחלים	7
,	Camp cace									•
-								784 404		Γ
	Total				7		7,157	585,533		Т
										Т
1	Dor 1 Am	20					72	5,855		7
	101 101	777					1111	350 05		
	Dor 1 0m2 = total//100*0 15	//100*0.15)					//#	35,050		7

Mat gabion setting work Per 10 m

										_
					[Jnit	Unit Price	¥	Amount		
Z	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
-					(J.YEN)	(VN. D)	(J.YEN)	(VN D)		
1		150 to 200mm	m3	18.2	,	63,000	-	1,146,600	Material - 109	
_	Copple stone	יייייייייייייייייייייייייייייייייייייי								
		100*100;width			:	000		7 486 000	Material - 18	
C	2 Vat gabion	1,200mm	E	113	,	22,000		2,460,000	יאימיניו ואי	T
1	0	Sum of								-
	10.10.000	%1 0*(avode	set		•	1	1	30,340		
າ	3 Suomateriais	a0010) 0:1/0		(		183 300		366.600	0.8*2.5	
4	Foreman		person	7.0	,	100,000			A C#C C	
ľ	+		חסדיםת	8.0	•	170,100	r	1,360,800	3.272.3	
n'	Skilled		100	?		007.00		564 200	2.8*2.5	
9	Common labor		person	7.0		90,000		201100		
) [	Microsilence overences	(I ahor cost )*4%	set	1.0	r		1	+00'16		T
	$\dashv$	(2002 10000)	,	-	2.830	89.000	2.830	89,000	Equipment - 13	
∞	Clamshell	o.omo	#	?	2004					
								1		I
							2.830	6,141,190		
	LOUZH						283	614,119		
_	Per 1.m = $total / 10$	tal / 10					2			
		00.1					8	204,706		
_	Dor 1 11 1013   413									

Stone masonry backfill material throw in work (pitching work) Per 10m3

	Last Day			
				•
ĺ			١	Ç
			•	
		-		٠
				•
	Ī			
	┞		-	
-	-	_		-
-	١			
	١			
	ļ			
		-		~
-				

					-	. 6				-
Γ					E Carr	Unit Price	T.C	Amount		
ġ	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
5					(J.YEN)	(VN. D)		(VN. U)		T
1.	0		nerson	2.5		80,600	1	201,500	1.0*2.5	T
_	Common labor							0908		
7	2 Miscellaneous expenses	(labor cost)*4%	set			1	,			T
			L				•			1
										T
								095 606		_
_	Total							2021		
T										
								950 06		
	Dar 1 0 m2							201102		]
,	A 1917 A 11									

Removal and transpostation of mud soil

Per 100m3\_

					Unit	Unit Price	Am	Amount	
Z	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks
;					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	-
,	2 Back hos	Hvdraulic 1.0 m3	Ę	2.16	2,560	92,000	5,530	198.720	Equipment -6
1 -	Dum trick	11 ton	'n	8.6	1,650	67,000	16,170	656,600	Equipment - 33
- -	Camp times		person	0.5	-	80,600		40,300	0.2*2.5
t	Common facol						21,700	895.620	
	Total						20,442	2000	
							,		
	Per 1.0 m3						217	8,956	

Work ability of back hoe (1.0 m3)

						( / ( ) district decision (	
X X	<b>.</b>	ш	ర	0	Т	$Q = \frac{3600^40^4 \text{K}^{11} \text{E}}{2}$	
0.60	0.71	0.70	0.70 22.00	46.40	2.16	T=100/Q	
O: Onaptity of excavation (m3/hr)		K: Bucket factor	factor		Cs: Cycle time	Cs: Cycle time of one excavation (sec.)	
qo: Standard bucket capacity (m3)		f: Soil con	f: Soil conversion factor		E: Efficiency of work	fwork	
Workability of dump truck (11	k (11 ton)				0	Q = (60 * qt * f * E) / Cm; a=6; b=4.8	

. Workability of dump truck (11 ton)

n: Frequency of loading per one dump truck 9.80 Cm: Cycle time Q (m3/hr) 10.2 Cm t 25.0 E: Efficiency of work f: Soil conversion factor ជ 6.0 L: Transport distance (Km) L (km)

Cm=b L +a ; T=100/Q; q,=n\*q,\*K

Q: Quantity of hauding work (m3/hr) C: Capacity of loaded volume per one truck

Replacement with sand

Per 100m3

					Chrit	Unit Price	Am	Amount	-
Š.	Description	Standard	Gnit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Swamp bulldozer	16 ton	E	0.74	3,880	000,16	2,871	67,340	Equipment - 4
6	Back hoe	Hydraulic 1.0 m3	¥	0.63	4,010	131,000	2,526	82,530	T/5; Equipment -5
									100*(1+K);K=0.3
ľ	3 Sand	Black sand		130		26,300	1	3,419,000	Material - 101
4	4 Common labor		person		,	80,600	•	10,478	1*2.5
	Total						5,398	3,579,348	
	Per 1.0 m3						54	35,793	

. Work ability of Swamp bulldozer (16 ton)

0.740 qo: Execution volume (pushing ) per one cycle 135.40 f: Soil conversion factor 0.940 S 20.0 E 0.70 L. Average soil pushing distance (m)

Work ability of back hoe (1.0 m3) Q: quantity of pushing work (m3/hr)

Q = (60 \* q \* f \* E) / Cm C m = 0.037L + 0.2 = 0.57

E: Efficiency of work Cm: Cycle time T=100/Q(hr/m3)

Q = (3600\*q0\*K\*f\*E)/Cs T=100/Q Cs: Cycle time of one excavation (sec.) E: Efficiency of work 2.16 46.40  $\circ$ f: Soil conversion factor 22.00 K; Bucket factor S 0.70 щ 0.71 Q; Quantity of excavation (m3/hr) qo: Standard bucket capacity (m3) 0.95 9.0

Placing work with geo - textile sheet Per 100 m2

D) overlapping width =0.5 m; 18,202 Material - 149 74,950 2*0.3*2.5 55,450 2*0.9*2.5 43,300 2*1.1*2.5 52,229 2*1.1*2.5 54,131	Finit Price Amount
Foreign Local (I.YEN) (VN. D)  - 2,018,202 - 274,950 - 765,450 - 765,450 - 252,229 - 3,754,131	Cilit Files
(I.YEN) (VN. D)  - 2,018,202 - 274,950 - 765,450 - 443,300 - 252,229 - 252,229 - 3,754,131	Unit Quantities Foreign Lo
- 2,018,202 - 274,950 - 765,450 - 443,300 - 252,229 - 3,754,131	(J.YEN)
2,018,202 - 274,950 - 765,450 - 443,300 - 252,229 - 3,754,131 37,541	
- 274,950 - 765,450 - 443,300 - 252,229 - 3,754,131 37,541	m2   111   -
- 765,450 - 443,300 - 252,229 - 3,754,131 37,541	
- 443,300 - 252,229 - 3,754,131 37,541	
- 252,229 - 3,754,131 37,541	1
3,754,131	
3,754,131	set 1
3,754,131	•
37,541	
37,541	

Placing work with geo - textile sheet (non woven fabric)  $_{\rm Per}$   $100~{\rm m}2$ 

							÷			_		
	Remarks		overlapping width =0.4 m;	Material - 57	0.3*2.5	0.9*2.5	14 C#+ +	1.1.4.3				
Amount	Local	(VN. D)		319,000	137,475	382,725	427.00	050,122	126,115		1,186,965	13,239
Aı	Foreign	(J.YEN)		ı		•		-				
Unit Price	Local	(VN D)		2,900	183,300	170 100		80,600				
	Foreign	(J. YEN)		ı	,	-		,	1			
	Quantities			110	0.75	200	1	2.75	-			
	Cnit			m2	nerson		20017	person	set			
	Standard		t=0.2mm. width	4 m					(labor cost)*17%			
-	Description			Con _ textile sheet	Roteman	1 Oleman	Skilled labol	Common labor	Miscellaneous expenses		Total	Der 10 m2
	Ž				1_	110	ኅ	4	5			

Soil bag setting Per 100 bags (size 62cm\*48cm\*25 cm)

1					Chit	Unit Price	Am	4 mount		
	Description	Standard	Chit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
ć				,	C.YEN	(V.N. D)	(J.YEN)	(VN. D)		
],	John Police		nerson	15	-	80,600	t	1,209,000	3*2.5	-1
۰۱،	Common labor	K7*/8#75cm	t oe a	100	1	4.545	ŀ	454,500	Material - 142	
şŀ,	Bag	10 70 70	200	201		13 640		101,482		
~	Clayed maternal		CEL	1.						Γ
										Т
ĺ	Total	,						1,764,982		<u>-</u> T
1	Per 1.bag	Žī.						0.63/1		7

Stone masonry (250\*250) for retaining wall Per: 1.0 m3

	Remarks		1+K;K=+0.2;	Material - 109	Material - 110	1+K·K≈+0.2.	6710	Process cost - 68	0.05*2.5	4 C#0 C	0.3 2.3	0.5*2.5				
Amount	Local	(VN. D)		75,600	4,868			134,180	23,829	0.00	C76,17	100,750	6,100		373,252	373,252
An	Foreign	(1.YEN)						•	1		1	-	-		ŧ	
Unit Price	Local	(VN. D)		63,000	85,400			319,477	183,300		111,700	80,600				
Unit	Foreign	(J.YEN)		. •	1			•			•	ı				
	Quantities				0.057			0.42	0.13		0.25	1.25				
	Chit	٠		ш3	E E			1 113	nercon	100100	person	person	set			
	Standard			75cm*?5cm	4cm*6cm	iiio iiio							(Lahor cost )*4%	(1000 10000)		-
	Description			Cobble gross	-	Crusher stolle		Cement mortar	Conton morning	Foreman	5 Block worker	Common labor	Missellaneous expenses	ויינוסכים בהספוים ביואו	Total	Par 10m
	Ž	?		. ,	- -	7		"	1	<u>†</u>	v	مارد	,	-	 1_	

Guard rail setting work Per: 100 m

-		_			Т				1			Т	٦-		T		Г	٦
	Remarks		0.8*2.5	A 0*0 5	C.2 O.F	1 set=4.32m;	Materiasi - 138	Material - 139	Maichai - 127	1*T;T=4.68;	70 taoman	בלקטוויםווי - אד						
Amount	Local	(VN. D)	366,600	000 308	000,000		•				000 27 1	143,080	11,726			1,329,406	400 0.	15,294
Am	Foreign	(J.YEN)	•		-	-	89,500					10,015	•			99.515	200	566
Init Price	Local	(V.V. D)	183.300	000	80,600	į.	•		,			31,000	•					
[m]	Foreign				ı		895		,			2,140	•					
	Ouantities		2.0	2	10.0		001		52			4.68	-					
	Unit		Dorecton	100120	person		£		each			щ	Set					
	Standard											400 - 600 kg	(1 abor cost )*4%	200 (2000 (0000)				
	Total Control of Contr			Foreman	Common labor		÷	Guard rail	Customed and Procet	Oualu Ian post		5 Post driving machine	Miles of the contract of the c	Miscellalicons cypellses			l otal	Par 1 0m
		o Z		_	0	1	(	7)	,	1		v	,	0				

Mortared stone work (type - A) Per: 10 m2 (thickness 20 cm)

				Umi	Unit Price	Ą	Amount	
	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
_				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
		m3	2.30	,	63,000		144,900	Material - 109
		m3	0.40	•	319,477	•	127,791	Process cost - 68
		m3	1.05	7	183,490	٠	192,665	Process cost - 17
		person	0.50	-	183,300	_	91,650	0.2*2.5
$\neg$		person	1.75	1	111,700	,	195,475	0.7*2.5
		person	3.00		80,600	-	241,800	1.2*2.5
	(Labor cost)*4%	set	1			1	21,157	
Total						•	1,015,437	
$Per 1.0m^2$	12					_	101,544	
Per 1.0m <sup>3</sup>							507,719	

Mortared stone work (For U-ditch) Per: 10 m2 (thickness 20 cm)

Description         Standard         Unit         Quantities         Foreign (J.YEN)         Local (J.YEN)         Foreign (J.YEN)         Local (J.YEN)         Remarks           Foreman         Foreman         0.50         183.300         91,650         0.2*2.5           Block worker         person         1.75         111,700         195,475         0.7*2.5           Common labor         person         3.00         80,600         124,900         Material - 109           Cobble stone         m3         0.30         155,000         144,900         Material - 109           Cement mortar         m3         0.30         15,477         15,157         Process cost - 68           Miscellaneous expenses         (Labor cost )*4%         set         1         21,157         790.825           Per 1.0m³           Per 1.0m³         -         790.83         -           Per 1.0m³					*** 1	Drive	An	Amount		
ption         Standard         Unit         Quantities         Foreign         Local         VN. D)         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)         (VN. D)         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)         91,650         91,65					100	נווכב			i	
Color   Colo	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks	
expenses         (Labor cost)*4%         set         1 <td>•</td> <td></td> <td></td> <td>1.</td> <td>(I.YEN)</td> <td>(VN. D)</td> <td>(J.YEN)</td> <td>(VIN. D)</td> <td></td> <td>Т</td>	•			1.	(I.YEN)	(VN. D)	(J.YEN)	(VIN. D)		Т
expenses         (Labor cost)*4%         set         1 <td></td> <td></td> <td>noreon</td> <td>0.50</td> <td></td> <td>183,300</td> <td>•</td> <td>91,650</td> <td>0.2*2.5</td> <td>-7</td>			noreon	0.50		183,300	•	91,650	0.2*2.5	-7
expenses         (Labor cost)*4%         set         1         790.825           Per 1.0m²         Per 1.0m²         1.73         1.73         1.73         2.30         -         241,800           expenses         (Labor cost)*4%         set         1         2.30         -         95,843           Fer 1.0m²         -         51,157         -         790.825           Per 1.0m³         -         79,083           Por 1.0m³         -         395,413	oreman		100	175		111 700	,	195,475	0.7*2.5	
expenses         (Labor cost)*4%         set         1         50.805         -         241,000           expenses         (Labor cost)*4%         set         1         -         319,477         -         95,843           Total         -         319,477         -         95,843           Total         -         95,843           Total           Total           Per 1.0m³           Dox 1.0m³           Per 1.0m³           Dox 1.0m³	ock worker		person	C/:-		00000		000 170	A C*C :	-
expenses         (Labor cost)*4%         set         1         53.000         -         144,900           expenses         (Labor cost)*4%         set         1         -         95,843           Total         -         21,157           Per 1.0m³         -         790,825           Por 1.0m³         -         79,083           Por 1.0m³         -         395,413	1.1.4.4.4		person	3.00	1	80.600		741,800	0.4 4.1	Т
expenses         (Labor cost)*4%         set         1         -         95,843           Total         Total         -         21,157         -         21,157           Per 1.0m³         -         790,825         -         790,825           Por 1.0m³         -         79,083         -           Por 1.0m³         -         395,413	mmon tagos			0000		000 59	•	144,900	Material - 109	
expenses (Labor cost)*4% set 1 - 519,41/ - 21,157  Total - 790,825  Per 1.0m <sup>3</sup> Doy 1.0m <sup>3</sup> Set 1 - 790,825  - 790,825	bble stone		SE.	770		22.0.0		50000	Process cost - 68	Γ-
expenses         (Labor cost )*4%         set         1           Total         Per 1.0m³         -         -			m3	0:30	i	119.4//	-	77,040	ו וסברים בספר	7
(Labor cost )*4% set 1  otal  1.0m <sup>3</sup>	ment mortal			,			•	21 157		
otal	iscellaneous expenses	(Labor cost)*4%	set	-						Τ
										1
							t	790.825		
	Total									Γ-
	0 1100	63					•	79,083		Т
	rer 1.01	11						20% 413		
	Dar 1 Or						-	C14,CKC		٦

Mortared stone work (For head wall) Per. 10 m2 (thickness 25 cm)

					Imit	Unit Price	Ar	Amount	
Ž	Description	Standard	tie C	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Cobble stone		m3	2.88		63,000	1	181,440	Material - 109
۔ ر	Cement mortar		m3	0.40	-	319,477	•	127,791	Process cost - 68
1 ر	Lorenon Loren		nerson	0.50		183,300		91,650	0.2*2.5
٦	Diock worker		nerson	1.75	,	111,700	1	195,475	0.7*2.5
# V	Common Johor		Derson	3.00		80,600		241,800	1.2*2.5
۱	Missellangus exhanses	(1 ahor cost )*4%	set	_				21,157	
٥	ועווארפווימווכטתא בעליבווארא	(דמנים במפר)							
								515 050	
	Total						-	616,466	
	Per 1.0m <sup>3</sup>	F. (1					. 1	85,931	
	Par 1 0m	£.						343,725	

PROCESS COST - 111

Piling work (bored pile,  $\Phi1000$ mm, pile length L=8.5 m, reverse circulation drill method) Per: one pile

T,\*0.9; Equipment - 13 848.728 30,439 166.520 471,177 274,800 145,070 3,561,412 413,025 ,041,938 1,306,299 8,990,411 507,741 (N V) Local Amount 14,428 100,256 4,634 4,613 711 096 22,763 5,449 17,798 2,861 26,041 Foreign (I.YEN) 92,000 60,000 80,600 89,000 170,100 153,200 ,447.136 3.598 183,300 .795,763 467,991 (V.N. D.) Local Unit Price 23,460 2,560 4,970 2,830 640 376 23,690 24,720 84 (J.YEN) Foreign Quantities 5.54 4.58 2.77 2.77 ... 1.63 0.23 0.72 2.77 1.81 7.61 8.46 5. person person person регѕоп Unit day day ~E set F E Ė Ë (sum of above)\*17% Dump truck 11 ton Φ.13 ~ 28 mm  $\Phi$  29  $\sim$  32 mm Crawler 0.6 m<sup>3</sup> Standard Ф 1200  $V = 20 \text{ m}^3$ 0.6 m<sup>3</sup> 40 ton class Y Fransportation of excavated Hydraulic clamshell bucket Miscellaneous expenses Hydraulic press - in pile Reinforcement work Reinforcement work Rigger (hammerman) Description driving and extractor Total Common labor Crawler crane Skilled labor Slush tank Concrete Back hoe Foreman 4 Š. œ o,

Tr \* 1/7 \*T; T=4.55

Equipment - 6

Equipment - 23

Equipment - 112

Tr\*1/t; 1=6.36;

1\*Tr\*1/t\*2.5

1\*Tr\*1/t\*2.5 2\*Tr\*1/t\*2.5

1\*Tr\*1/t\*2.5

Remarks

Process cost - 152

Process cost - 61

Process cost - 63

Process cost - 11

Equipment - 116

t = 700/110 = 6.36 (per operation day)  $Tr = T_1 + T_2 + T_3 = 7.05;$  $T_3 = 2.1 + 0.11 *L = 3.04$  $T_2 = 0.45 + L_2*(0.22D-0.06) = 1.81$ T,= 2.2;

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) Where

D: pile diameter (m): L: design pile length (m) L2: excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 7.61 m^3$ ;

1=10.8 m; L=8.5 m;  $L_2=8.5 \text{ m}$ ; D=1.0 mQe =  $p/4 \times D^2 \times 1 (m^3) = 8.46 m^3$ Qe: Volume of Excavated soil

## PROCESS COST - 112

Piling work (bored pile,  $\Phi1000mm$ , pile length  $L=10.0\,m$ , reverse circulation drill method) Per one pile

					Cari	Unit Price	Aı	Amount	
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN D)	(J.YEN)	(VN. D)	
	Foreman		person	2.88	1	183,300	,	527,904	1*Tr*1/4*2.5
7	Skilled labor		person	2.88	ı	170,100	Į	489,888	1*Tr*1/t*2.5
n	Rigger (hammerman)		person	5.76	•	153,200	1	882,432	2*Tr*1/t*2.5
4	Common labor		person	2.88	1	80,600	•	232,128	1*Tr*1/t*2.5
	Hydraulic press - in pile								Tr*1/t; t=6.36;
5		Φ 1200	day	1.15	23,460	1	26,979		Equipment - 112
9			Į	1.92	2,560	92,000	4,915	176,640	Equipment - 6
	Crawler crane								Tr * 1/7 *T; T=4.55;
7		40 ton	h	4.76	4,970	000'09	23,657	285,600	Equipment - 23
S	Hydraulic clamshell bucket	Crawler 0.6 m	hr	1.73	2,830	000*68	4,896	153,970	T2*0.9; Equipment - 13
6	Concrete	class Y	î.	8.95	376	467,991	3,365	4,188,519	Process cost - 152
2	Reinforcement work	Ф 13 ~ 28 mm	4	0.24	23,690	1,795,763	5,686	430,983	Process cost - 61
Ξ	Reinforcement work	Φ 29 ~ 32 mm		69:0	24,720	1,447,136	17,057	998,524	Process cost - 63
	Transportation of excavated								
17	12 soil	Dump truck 11 ton	E	99.6	84	3,598	811	34,757	Process cost - 11
13	Miscellaneous expenses	(sum of above)*17%	set	1			14,852	1,428,229	
14	14 Slush tank	$V = 20 \text{ m}^3$	day	5.1	640		096		Equipment - 116
	Total						103,179	9,829,574	

 $Tr = T_1 + T_2 + T_3 = 7.32$ ; t = 700/110 = 6.36 (per operation day)  $T_3 = 2.1 + 0.11 *L = 3.2$  $\Gamma_2 = 0.45 + L_2*(0.22D-0.06)=1.92$  $T_1 = 2.2$ ;

Where

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile)

D: pile diameter (m): L: design pile length (m) L2: excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m}^3) = 8.95 \text{ m}^3$ :

I=12.3 m; L=10.0 m;  $L_2=9.2 \text{ m}$ ; D=1.0 mQe =  $p/4 \times D^2 \times 1 (m^3) = 9.66 \text{ m}^3$ Qe: Volume of Excavated soil

PROCESS COST - 113

Piling work (bored pile,  $\Phi1000$ mm, pile length L = 16.0 m, reverse circulation drill method)

Per: one pile

																						F			_	
	Remarks		1*Tr*1/t*2.5	1*T**1/1*2.5	0 ** ** 1 ** C	2-11-1/1-2.3	]*[r*]/t*2.5	Tr*1/t; $t=6.36$ ;	Equipment - 112	Equipment - 6	T- * 1/1 *T. T-7 46.	, CC+-1, 1-1/1 11	Equipment - 23	T.*0.9:Equipment - 13	4	Process cost - 152	Process cost - 61	Process cost - 63		Decrees cost 11	FIOCESS COST - 11		Equipment - 117	and the second second		ration day)
Amount	Local	(VN. D)	643,383	507 051	100,100	1,0/5,404	282,906		i	264.960			348,600	230 510	22,25	6,701,631	538,729	1 201 123	(71,107,1	201 100	21,702	2,029,130		007 400	061,006,61	t = 700/110 = 6.36 (per operation day)
Am	Foreign	(J.YEN)	1		t	-			33.079				28,876	7 230		5,384			20,010		1,07,1	18,848	1 500	1,390	131,311	
I Inst Drice	Local	(VN. D)	183 300	001.021	1/0,100	153,200	80,600			000 00	32,000		900'09		000.68	467,991	1 795 763	75, 57, 57	1,44/.130	(	3,598	•		•		$Tr = T_1 + T_2 + T_3 = 8.94$ ;
1 [25.62	Foreign	(J. YEN)		1	-	1	•		23.460	200	7,300		4,970	0.00	2,830	376	22 690	22,0,23	24,720		84			1,060		98
	Ouantities	,	7.61	2.31	3.51	7.02	3.51		<u></u>	14.1	7.88		5.81		2.59	14.32	020	0.30	0.83		14.37	-		1.5		$T_3 = 2.1 + 0.11 * L = 3.86$
	I Juit	<u> </u>	1	регѕоп	person	person	person		-	uay	hr				4	TE		١.		•	E	şeş		day		$T_3 = 2.1$
	Standard								0001	0071			40 ton	÷ ; ; 3	Crawler 0.6 m	class Y	30 00	Ф 13 ~ 28 mm	Φ 29 ~ 32 mm		Dump truck 11 ton	%1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Suil Of Account)	$V = 30 \mathrm{m}^2$		$T_{*}=0.45+L_{*}(0.22D-0.06)=2.88$
		Description		Foreman	Skilled labor	Digger (hammerman)	Night (manning)	Common labor	Hydraulic press - in pile	5 driving and extractor	Back hoe		Crawler crane		Hydraulic clamshell bucket	Concrete	, and the second	Reinforcement work	Reinforcement work	Transportation of excavated	12 601	Minellanders agreement	Miscellancous expenses	Slush tank	Total	$T_{c} = 2.2$ : $T_{c} = 0.45 + L_{c} * (0.45 + L_{c}) * $
	;	 8			2	T	Τ"	1	3 t	5	9	Ī	ľ	-	90	, ,	7	0	=		1,2		?	14		

 $T_2 = 0.45 + L_2 * (0.22D-0.06) = 2.88$   $T_3 = 2.1 + 0.11 *L = 3.86$  $T_1 = 2.2;$ 

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>: excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) Where

D: pile diameter (m): L: design pile length (m) L2: excavation length (except excavation length by hammer grab) (m);

 $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 14.32 m^3$ ; Q : Concrete volume;

Q e: Volume of Excavated soil

Qe =  $p/4 \times D^2 \times 1 (m^3) = 14.37 m^3$  1=18.3 m; L = 16.0 m; L<sub>2</sub>=15.2 m; D = 1.0 m

## PROCESS COST - 114

Piling work (bored pile,  $\Phi 1000$ mm, pile length L=19.5 m, reverse circulation drill method) Per: one pile

Description Standard Foreman Skilled labor Rigger (hammerman) Common labor Hydraulic press - in pile driving and extractor	Unit person person person person	Quantities	Foreign			1 0001	Demorks
e i	person person person person	,		Local	roreign	Local	NCI III NO
9	person person person		(J. YEN)	(VN. D)	(J.YEN)	(VN. D)	
1]e	person person person	3.92		183,300	•	718,536	1*Tr*1/t*2.5
1]1	ретѕоп	3.92		170,100	•	666,792	1*Tr*1/t*2.5
ile	person	7.84		153,200	,	1,201,088	2*Tr*1/t*2.5
13e		3.92	1	80,600		315,952	1*Tr*1/t*2.5
					1		Tr*1/t; t=6.36;
	dav	1.57	23,460		36,832		Equipment - 112
	Įį	3.51	2,560	92,000	986'8	322,920	Equipment - 6
							Tr * 1/7 *T; T=4.55;
40 ton	тq	6.47	4,970	000'09	32,156	388,200	Equipment - 23
Hydraulic clamshell bucket Crawler 0.6 m <sup>3</sup>	hr	3.16	2,830	000'68	8,943	281,240	T.*0.9;Equipment - 13
class Y	E <sub>E</sub> E	17.45	376	467,991	6,561	8,166,443	Process cost - 152
Reinforcement work $\Phi$ 13 ~ 28 mm	1	0.83	23,690	1,795.763	19,663	1,490,483	Process cost - 61
Transportation of excavated					-		
Dump truck 11 ton	Ë	18.21	84	3,598	1,530	65,520	Process cost - 11
12 Miscellaneous expenses (sum of above)*17%	set	1	_		19,494	2,314,920	
	day	2.0	1,060	,	2,120		Equipment - 117
Total					136,284	15,932,093	

 $T_r = T_1 + T_2 + T_3 = 9.96$ ; t = 700/110 = 6.36 (per operation day) T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>: excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile)  $T_3 = 2.1 + 0.11 *L = 4.25$  $T_{2} = 0.45 + L_{2} * (0.22D - 0.06) = 3.51$  $T_1 = 2.2;$ Where

D: pile diameter (m): L: design pile length (m) L2: excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m}^3) = 17.45 \text{ m}^3$ ;

Q e: Volume of Excavated soil

Qe =  $p/4 \times D^2 \times 1(m^3) = 18.21m^3$  l = 23.2 m; L = 19.5 m;  $L_2 = 19.1 \text{ m}$ ; D = 1.0 m

## PROCESS COST - 115

Piling work (bored pile,  $\Phi1000$ mm, pile length L=20 m , reverse circulation drill method)

Per: one pile

			-т	_			T	7					<u> </u>	·	T	-T						Γ	1
		Remarks		1*Tr*1/t*2.5	1*Tr*1/t*2.5	ひ*↓\***********************************	7 11 11 7	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 112	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T,*0.9:Equipment - 13	3	Process cost - 152	Process cost - 61		Process cost - 11		Equipment - 117	3.5	veration day)
Amount	nount	Local	(VN. D)	727.701	675,297	007 710 1	1,210,400	319,982		:	330,280		393,600	287 470	2/1,107	8,377,039	1,526,399		66,923	2.366.587		283 787 31	100
	An	Foreign	(J.YEN)				1	ı		37.301	061.6		32,603	1710	7,141	6,730	20,137		1,562		0010	07170	136,010
1	Unit Price	Local	(NY. D)	183 300	00,001	1/0,100	153,200	009 08			000 65	224	000'09		89,000	467,991	1 795.763		3 598				£
	Chit	Foreign	(1 VEN)	: : : : : : : : : : : : : : : : : : :		-	1			23.460	25,72	2,200	4 970	21761	2,830	376	099 86	2,2,2	84	5	•	1,060	
		Quantities	,		3.97	3.97	7.94	2 0.7	12.5	14	YC. 1	3.39	75.7	00	3.23	17.90	200	Co.5	07 01	10.00		2.0	
		Unit			person	person	nerson	100	person		day	툅		ii.	'n	F .		-	m	٤	set	day	
		Standard									Φ 1200			40 ton	Crawler 0.6 m	V Jace V	- Comin	Ф 13 ~ 28 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	
		Description			Foreman	Stilled labor	SAIIICE INCOL	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket		Concrete	10 Reinforcement work	Transportation of excavated	soil	Miscellaneous expenses	Slush tank	Total
٠.	ŀ	;	è Ž		-	c	+	3 F	4		5	9		1			6	.0		=	12	13	

 $T_r = T_1 + T_2 + T_3 = 10.09$ ; t = 700/110 = 6.36 (per operation day)  $T_3 = 2.1 + 0.11 *L = 4.3$  $T_2 = 0.45 + L_2*(0.22D-0.06) = 3.59$  $T_i = 2.2;$ 

T; preparation time (hr/pile); T2; excavation time (hr/pile); T3: working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m) Where

L2: excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m}^3) = 17.90 \text{ m}^3$ ;

Q e: Volume of Excavated soil

Qe = p/4 x D<sup>2</sup> x l (m<sup>3</sup>) = 18.60 m<sup>3</sup> 1=23.7 m; L = 20 m; L<sub>2</sub>= 19.6 m; D = 1.0 m

Piling work (bored pile,  $\Phi 1000mm$ , pile length  $L=21.0\,m$ , reverse circulation drill method) Per: one pile

jon         Standard         Unit         Quantities         Foreign (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (V.N. D)         (J.YEN)         (J.YEN)         (V.N. D)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)         (J.YEN)										~											
Description         Standard         Unit         Quantities         Foreign (J.VEN)         (J.VEN)         (VN. D)           Skilled labor         Standard         Unit         Quantities         Foreign (VN. D)         (J.VEN)         (VN. D)           Skilled labor         Rigger (hammerman)         person (4.00 - 170,100 - 153,200 - 153,		Remarks		1*Tr*1/t*2.5	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 112	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T <sub>2</sub> *0.9;Equipment - 13	Process cost - 152	Process cost - 61	Process cost - 63		Process cost 11		Equipment - 117	
Description         Standard         Unit Price         Unit Price         Foreign         Local         Foreign           Foreman         Foreman         (J.YEN)         (VN. D)         (J.YEN)           Skilled labor         Skilled labor         183,300         -           Skilled labor         Person         4.00         -         170,100           Rigger (hammerman)         person         4.00         -         170,100         -           Rigger (hammerman)         person         4.00         -         170,100         -           Rigger (hammerman)         person         4.00         -         170,100         -           Rigger (hammerman)         person         4.00         -         153,200         -           Hydraulic press - in pile         person         4.00         -         80,600         -           Ariving and extractor         person         hr         3.59         2,560         92,000         9,19           Crawler crane         40 ton         hr         3.23         2,830         89,000         9,14           Concrete         Concrete         Φ 13 ~ 28 mm         t         0.35         24,720         1,447,136         22,74	nount	Local	(VN. D)	733,200	680,400	1,225,600	322,400			330,280		397,800	287,470	8,793,551	646,475	1,331,365		65,232	2,518,341		17,332,114
Description         Standard         Unit Price         Unit Price           Foreman         G.1 YEN)         (VN)           Foreman         Skilled labor         4.00         -         1           Skilled labor         Rigger (hammerman)         person         4.00         -         1           Rigger (hammerman)         person         4.00         -         1           Common labor         person         4.00         -         1           Hydraulic press - in pile         Φ 1200         day         1.60         23,460           Back hoe         -         40 ton         hr         3.59         2,560           Crawler crane         40 ton         hr         3.59         2,560           Hydraulic clamshell bucket         Crawler 0.6 m³         hr         3.23         2,830           Concrete         class Y         m³         18.79         24,970           Reinforcement work         Φ 13 ~ 28 mm         t         0.92         24,720         1,4           Reinforcement work         Φ 29 ~ 32 mm         t         0.92         24,720         1,4           Reinforcement work         Φ 29 ~ 32 mm         t         0.92         20         1,000	Ar	Foreign	(J.YEN)	•	-	-	•		37,536	9,190		32,951		7,065	8,528	22.742		1,523	21.875	2,120	152,672
DescriptionStandardUnitQuantitiesForeigForemanPerson4.00	Price	Local	(VN. D)	183,300	170,100	153,200	80,600		•	92,000		60,000	000'68	467,991	1,795,763	1,447,136		3,598	ŀ	r	
Foreman Skilled labor  Rigger (hammerman)  Rigger (hammerman)  Rigger (hammerman)  Common labor  Common labor  Hydraulic press - in pile  driving and extractor  Crawler crane  Hydraulic clamshell bucket  Concrete  Concrete  Concrete  Concrete  Concrete  Reinforcement work  Concrete  Co	Unit	Foreign	(J.YEN)	1	•	1	•		23,460	2,560		4,970	2,830	376	23,690	24,720		84	-	1,060	
Foreman Skilled labor Rigger (hammerman) Common labor Hydraulic press - in pile driving and extractor Back hoe Crawler crane Hydraulic clamshell bucket Concrete Conc		Quantities		4.00	4.00	8.00	4.00		1.60	3.59		6.63	3.23	18.79	0.36	0.92		18.13	1.00	2.00	
Foreman Skilled labor Rigger (hammerman) Common labor Hydraulic press - in pile driving and extractor Back hoe Crawler crane Crawler crane Hydraulic clamshell bucket Concrete Reinforcement work Transportation of excavated soil Miscellaneous expenses Slush tank Traval		Unit	·.	person	person	person	person		day	ĮĘ		Ą	hr	E H	+	+		Ē	set	day	1
		Standard							Φ 1200			40 ton	Crawler 0.6 m <sup>3</sup>	class Y	Φ 13 ~ 28 mm	Φ 29 ~ 32 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	
		Description		Foreman	Skilled labor	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket	Concrete	Reinforcement work	Reinforcement work	Transportation of excavated	Soil	Miscellaneous expenses	Slush tank	Total
		ģ	_	-	T	1	1			٩		7	_	0	1	=				4	

 $T_1 = 2.2;$   $T_2 = 0.45 + L_2*(0.22D-0.06) = 3.59$   $T_3 = 2.1 + 0.11*L = 4.41$   $Tr = T_1 + T_2$ 

11  $Tr = T_1 + T_2 + T_3 = 10.20$ ; t = 700/110 = 6.36 (per operation day)

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) Where

D: pile diameter (m): L: design pile length (m)  $L_2$ : excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m3)} = 18.79 \text{ m}^3$ ;

 $1=23.1 \,\mathrm{m}$ ;  $L=21.0 \,\mathrm{m}$ ;  $L_2=19.6 \,\mathrm{m}$ ;  $D=1.0 \,\mathrm{m}$ Qe =  $p/4 \times D^2 \times I (m3) = 18.13 \text{ m}^3$ Q e: Volume of Excavated soil

Piling work (bored pile,  $\Phi 1000$ mm, pile length L=22.0 m, reverse circulation drill method) Per: one pile

																								-
	Remarks		A C*+/ L*+ L	7 V V V V V V V V V V V V V V V V V V V	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	T+*1/1. += 6 36.	Fourtent - 112		Equipment - o	15 + 1// +1; 1=4.55;	Equipment - 23	T.*0 9-Equipment - 13	6. amain har (10 5)	Process cost - 152	Process cost - 61		Drocess to the state of the sta	1100000011		Equipment - 117		
Amount	Local	(VN. D)	766 104	100,151	711,018	1,280,752	336.908				327,750		414,600	313 280	010,000	9,407,213	1,634,144		00000	070,07	2,600,003		17 894 515	100761 7761 4
4	Foreign	(J.YEN)			-				30 178	22,170	10,010		34,343		7,702	20,773	21,558				23,370	2,120	163 062	1405,441
	Unit rrice	(V.V.)	000 001	183,500	170,100	153,200	00908	200,00			92,000		60,000		39,000	477,766	1.795.763			3,3%	•	1		
		roreign (I VFN)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,	,		,	0)7 66	73,400	2,560		4.970		2,830	1,055	23.690		27.	84	•	1.060		
	(	Quantities		4.18	4.18	8 26	00.0	4.18	!	1.67	3.91		69		3.52	19.69	100			19.63	~	2.0		
	;	tin C		person	person		1106150	person		day	hr		1		hr	E	٠	-		Ē	set	day		
	•	Standard								Ф 1200			40 ton	10101	Crawler 0.6 m	class Y	A 12 30 mm	12 ~ 20 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	111 00 - 1	
		Description		Foreman	1 Ordinal	SKIIIEG IADOI	Rigger (hammerman)	Common labor	Hydraulic press - in pile	5 driving and extractor	6 Back hoe	0.000	Crawler crane		Hydraulic clamshell bucket	Concrete		Reinforcement work	Transportation of excavated	Soil	Wiscellaneous expenses	Chich tonk	Studii tairin	Total
		è.		ļ.		╗	3	4	<del>                                     </del>	٠,	٧	,		I	00	1	7	10		Soil	5	1	5	ľ

 $Tr = T_1 + T_2 + T_3 = 10.63$ ; t = 700/110 = 6.36 (per operation day)  $T_3 = 2.1 + 0.11 *L = 4.52$  $T_2 = 0.45 + L_2*(0.22D-0.06) = 3.91$  $T_1 = 2.2;$ 

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>: excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m) Where

L2: excavation length (except excavation length by hammer grab) (m);

 $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m3)} = 19.69 \text{ m}^3$ Q : Concrete volume;

Qe =  $p/4 \times D^2 \times 1 \text{ (m3)} = 19.63 \text{ m}^3$  1 = 25.0 m; L = 22.0 m;  $L_2 = 21.6 \text{ m}$ ; D = 1.0 mQ e: Volume of Excavated soil

Piling work (bored pile,  $\Phi 1000$ mm, pile length L=25.0 m, reverse circulation drill method) Perione pile

r						1	γ			٠,					<sub>T</sub>		-r	<u>-</u> -		
		Remarks		1*Tr*1/t*2.5	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 112	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T2*0.9; Equipment - 13	Process cost - 152	Process cost - 61		Process cost - 11		Equipment - 117	
	Amount	Local	(VN. D)	819,351	760,347	1,369,608	360,282			397,440		443,400	346,210	10,687,625	1,903,509		76,529	2,917,931		20,082,233
	Aπ	Foreign	(J.YEN)	,	1		ı		41,993	11,059		36,728	11,009	23,600	25,111		1,787	25,719	2,120	179,127
	Unit Price	Local	(VN. D)	183,300	170,100	153,200	80,600		•	92,000		60,000	89,000	477,766	1,795,763	:	3,598	1	1	
	Cart	Foreign	(J.YEN)	1	,	,	1		23,460	2,560		4,970	2,830	1,055	23,690		84	•	1,060	
		Quantities		4.47	4.47	8.94	4.47		1.79	4.32		7.39	3.89	22.37	1.06		21.27		2.0	
		żi. C		person	person	person	person		day	Ę		Æ	hr	Ę	-		Ē	set	dav	
		Standard							Φ 1200			40 ton	Crawler 0.6 m <sup>3</sup>	class Y	Φ 13 ~ 28 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30  \text{m}^3$	
		Description		Foreman	Skilled labor	Rioger (hammerman)	Common labor	Hydraulic press - in pile	5 driving and extractor	Back hoe	Constitution	Clawici Claire	Hydraulic clamshell bucket	Concrete	10 Reinforcement work	Transportation of excavated	soil	Miscellaneous expenses	13 Slush tank	Total
	-	Ž	<u>.</u>	-	,			1	2	, ,		7	- - - - - -	0	02			12	2	?

 $T_1 = 2.2$ ;  $T_2 = 0.45 + L_2 * (0.22D - 0.06) = 4.32$   $T_3 = 2.1 + 0.11 * L = 4.85$ 

 $T_r = T_1 + T_2 + T_3 = 11.37$ ; t = 700/110 = 6.36 (per operation day)

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>: excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) Where

D: pile diameter (m): L: design pile length (m) L2: excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m3)} = 22.37 \text{ m}^3$ 

Qe =  $p/4 \times D^2 \times 1 \text{ (m3)} = 21.27 \text{ m}^3 = 1=27.1 \text{ m}$ ; L = 25.0 m; L<sub>2</sub> = 24.2 m; D = 1.0 mQ e: Volume of Excavated soil

PROCESS COST - 119

Piling work (bored pile,  $\Phi 1000$ mm, pile length L=26.5 m, reverse circulation drill method) Per: one pile

<u></u>					·	<del></del>			·-··			· 			Т					
	Remarks		1*Tr*1/t*2.5	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 112	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T <sub>2</sub> *0.9;Equipment - 13	Process cost - 152	Process cost - 61	Process cost - 63		Process cost - 11		Equipment - 117	
Amount	Local	(VN. D)	854,178	792,666	1,427,824	375,596			426,880		462,600	372,020	11,096,067	772,178	2,025,990		82,754	3,177,088		21,865,841
Am	Foreign	(J.YEN)	,	i	•	•	-	43,636	11,878		38,319	11,829	8,915	10,187	34,608		1,932	27,422	2,120	190,845
Unit Price	Local	(VN. D)	183,300	170,100	153,200	80,600		•	92,000		60.000	89,000	467,991	1,795,763	1,447.136		3,598	•	ŀ	
Uni	Foreign	(I.YEN)	1	,				23,460	2,560		4,970	2,830	376	23,690	24,720		84	-	1,060	
	Quantities		4.66	-	-	4.66		1.86	4.64		7.71	4.18	23.71	0.43	1.40		23	, ,	2.0	
	Cnit		nerson	nerson	nerson	person		dav	Ł		h	hr	E H	-	4		<u>_</u> E	set	day	
	Standard							Φ 1200			40 ton	Crawler 0.6 m <sup>3</sup>	class Y	Ф 13 ~ 28 mm	Φ 29 ~ 32 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	
	Description		Toromon	Civilad labor	Digger (hammerman)	Common Jahor	Understille masse in nile	Ariging and extractor	Back hoe	Cash not	Crawler craine	Hydraulic clamshell bucket	Concrete	Reinforcement work	Reinforcement work	Transportation of excavated	soil	Miscellaneous expenses	Slush tank	Total
	Z		-	٠,	1	7 4		٧	,		1	×	0	2	=		12			

 $T_1 = 2.2;$   $T_2 = 0.45 + L_2*(0.22D-0.06) = 4.64$   $T_3 = 2.1 + 0.11*L = 5.02$  Tr= $T_1$ 

Where

 $Tr = T_1 + T_2 + T_3 = 11.86$ ; t = 700/110 = 6.36 (per operation day)

T; preparation time (hr/pile); T2; excavation time (hr/pile); T3; working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m) L2: excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m3)} = 23.71 \text{ m}^3$ ;

Q e: Volume of Excavated soil

Qe =  $p/4 \times D^2 \times I$  (m3) = 23.0 m<sup>3</sup> 1=29.3 m; L = 26.5 m; L<sub>2</sub> = 26.2 m; D=1.0 m

PROCESS COST - 120

Piling work (bored pile,  $\Phi 1000$ mm, pile length L=28.5 m, reverse circulation drill method) Per: one pile

		1		7	_	т					т	T	1		·		-т	-т	1-		
	Remarks		1*Tr*1/t*2.5	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 112	Equipment - 6	Tr * 1/7 *T; T=4.55:	Equipment - 23	T <sub>2</sub> *0.9;Equipment3	Process cost - 152	Process cost - 61	Process cost - 63		Process cost - 11		Equipment - 117	Equipment - 115	
Amount	Local	(VN. D)	876,174	813,078	1,464,592	385,268		-	434,240		474,000	378,250	11,933,771	826,051	1,794,449		83,330	3,308,744			22,771,946
Απ	Foreign	(J.YEN)	•		•	1		44,809	12,083		39,263	12,028	9,588	10,897	30,653		1,945	27,415	2,120	1,000	191,801
Init Price	Local	(VN. D)	183,300	170,100	153,200	80,600		•	92,000		000'09	000'68	467,991	1,795,763	1,447,136		3,598	1	•	1	
ini	Foreign	(J.YEN)			,	1		23,460	2,560		4,970	2,830	376	23,690	24,720		84	_	1,060	200	
	Quantities		4.78	4.78	9.56	4.78		1.91	4.72		7.90	4.25	25.50	0.46	1.24		23.16	1	2.0	2.0	
	Unit		person	person	person	person		day	h		Ħ	hr	E	1	ţ		E.	set	day	day	
	Standard							Ф 1200			40 ton	Crawler 0.6 m <sup>3</sup>	class Y	Φ 13 ~ 28 mm	Φ 29 ~ 32 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{m}^3$	$V = 10  \text{m}^3$	
	Description		Foreman	Skilled labor	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket	Concrete	Reinforcement work	Reinforcement work	Transportation of excavated	soil	Miscellaneous expenses	14 Slush tank	15 Slush tank	Total
	Š		-	7	۳	4		45	9		7	8	6	10	=		12	13	14	15	

t = 700/110=6.36 (per operation day)  $T_r = T_1 + T_2 + T_3 = 12.16$ ;  $T_3 = 2.1 + 0.11 *L = 5.24$  $T_2 = 0.45 + L_2*(0.22D-0.06) = 4.72$  $T_1 = 2.2$ ;

T<sub>1</sub>; preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>; working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m) Where

 $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 25.50 m^3$ L2: excavation length (except excavation length by hammer grab) (m); Q: Concrete volume; Q e: Volume of Excavated soil

Qe =  $p/4 \times D^2 \times 1(m^3) = 23..16 \, m^3$   $l = 29.5 \, m$ ;  $L = 28.5 \, m$ ;  $L_2 = 26.7 \, m$ ;  $D = 1.0 \, m$ 

Piling work (bored pile,  $\Phi$ 1200mm, pile length L = 21.5 m, reverse circulation drill method) Per: one pile

							4	Amount	
				-	בובט	Unit race	č	Cattle	. !
	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
	Description				(J.YEN)	(N. D)	(J.YEN)	(VN. D)	
			100	4 64		183,300	1	850,512	1*Tr*1/t*2.5
낊	Foreman		חפופת	1:01	•	170,100		789,264	1*Tr*1/t*2.5
춫	Skilled labor		person	40.4		153 200		1 421 696	2*Tr*1/t*2.5
12.5	Rigger (hammerman)		person	9.28		155,00		100 CEC	いつ*ナー*・1**
1,8	Common Jahor		person	4.64	•	80,600	ı	273,704	C:7.1/1.1
₹[.	mileti iacoli								1r*1/t; t=6.36;
ž	Hydraulic press - in pile	087.	792	1 86	24.780	•	46,091		Equipment - 113
[	5 driving and extractor	01100		21.4	2 560	92.000	13,158	472,880	Equipment - 6
38	Back hoe		111	1	220				Tr * 1/7 *T: T=4.55:
Ç	Crawler crane	40.00	ì	7.68	4 970	000.09	38,170	460,800	Equipment - 23
		+0 (0)	<u>.</u>		0000	000 00	13 103	412 070	T,*0.9:Equipment - 13
Ž.	Hydraulic clamshell bucket	Crawler 0.6 m	hr	4.03	7,630	000,50			
5	Concrete	class Y	E <sub>EE</sub>	27.71	376	467,991	10,419	12,968,031	Process cost - 152
	for company arrows	⊕ 13 ~ 28 mm	+	1.87	23,690	1,795,763	44,300	3,358,077	Process cost - 61
5	Keinforcement work	21							
Trai	Transportation of excavated			27.60	84	3 508	2.326	99,629	Process cost - 11
11 soil		Dump truck 11 ton	ш	20.72	5	2,1,2		3 605 180	
Σ̈́	Miscellaneous expenses	(sum of above)*17%	set		•	t	004,07	2,000,000	7
Sign	13 Slush tank	$V = 30 \text{ m}^3$	day	2.0	1,060		2,120		Equipment - 117
ļ. ·	Total						198,173	24.812,122	
	I Otal					1	1101.	* = 700/110=6 36 (ner operation day)	neration day)

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile)

 $T_2 = 0.45 + L_2*(0.22D-0.06) = 5.14$   $T_3 = 2.1 + 0.11*L = 4.47$ 

 $T_1 = 2.2;$ Where

 $T_t = T_1 + T_2 + T_3 = 11.81$ ; t = 700/110 = 6.36 (per operation day)

D: pile diameter (m): L: design pile length (m)

 $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m3)} = 27.71 \text{ m}^3$ L2: excavation length (except excavation length by hammer grab) (m); Q : Concrete volume;

Q e: Volume of Excavated soil

1=24.5 m; L=21.5 m;  $L_2=23.0 \text{ m}$ ; D=1.2 mQe =  $p/4 \times D^2 \times 1 \text{ (m3)} = 27.69 \text{ m}^3$ 

Piling work (bored pile,  $\Phi1200$ mm, pile length L=23.0 m, reverse circulation drill method)

Per: one pile

								· 										~	<u></u>	-		
	Remarks	1*Tr*1/t*2.5	1*T-*1/+*2.5	U 775 - 1 1 1 1 1	Z*1T*1/0.2	1*Tr*1/t*2.5	Tr*1/t; 1=6.36;	Equipment - 113	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T,*0.9; Equipment - 13			Process cost - 61		Process cost - 11		30m3*1; Equipment - 117		eration day)	:-:(
Amount	Local (VN. D)	856.011	775 105	174,001	1,430,888	376,402		•	465,520		463,800	104,950		13,871,253	3.052.797		104,126	3,709,419		25.529.534	t = 700/110 = 6.36 (per operation day)	
Amo	Foreign (1 VFN)		!	-	•			46.339	12.954		38,418			11,145	40.273		2,431		2 120	194,509		
I Init Price	Local	(V.N. D)	183,300	170,100	153 200	009 08	200		000 00		000 09		000,88	161 467 991	-		3.598			000	T+ T+ T- T	11 = 1, 1, 1, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
111	Foreign	(J.YEN)		•		-	1	CO T	74.70	7.360	7 010	1,7,7	2,830	375		069,67			•   •	000,1		4,63
	Quantities		4.67	467		45.7	4.6/	ţ	1.8/	5.06		1./3	4.55	1000	<b>*</b> 0.67	0/-1	Š	78.34		2.0		$T_3 = 2.1 + 0.11 *L = 4.63$
	Ç		person	10000	0013011	person	person		day	ĮĮ.		JI.	Ę		E	+		٤	Set	day		$T_1 = 2.1$
	Standard								Φ 1480			40 ton	Crawler 0.6 m <sup>3</sup>		class Y	Φ 13 ~ 28 mm		Dump truck 11 ton	(sum of above)*17%	V=30 m <sup>3</sup>		T = 0.45 + 1.*(0.22D-0.06) = 5.06
	Description			Foreman	2 Skilled labor	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		U.dramiic clamshell bucket	חישות כומוויייי כייייי	Concrete	Reinforcement work	Transportation of excavated	11 soil	Miscellaneous expenses	Slush tank	Total	T - 22. T = 0.45+1.*
	2				7		7	1	~		·	7		<b>x</b> 0	0	0		=======================================	12	_		إ

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>: excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile)  $T_2 = 0.45 + L_2*(0.22D-0.06) = 5.06$   $T_3 = 2.1 + 0.11*L = 4.63$  $T_1 = 2.2;$ 

D; pile diameter (m):  $\ L;$  design pile length (m)  $L_2$ : excavation length (except excavation length by hammer grab) (m); Where

 $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 29.64 m^3$ ; Q : Concrete volume;

Q e : Volume of Excavated soil

PROCESS COST - 123

Piling work (bored pile,  $\Phi1200$ mm, pile length L=24.0 m, reverse circulation drill method)

Per: one pile

								,				—-т						T				<u>.</u>	7
	Remarks		> C*+/ L*+ T*+	1 11 1/1 4:2	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 113	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T.*0.9:Equipment - 13	J T C C	Process cost - 152	Process cost - 61	Process cost - 63		Process cost - 11		Community 117		ation day)
Amount	[ oca	(VN. D)	022 300	800,000	821,583	1,479,912	389.298		,	492,200		479,400	020 864	410,700	14,474,962	1,095,415	3 371 827		109,811	4 084 884			.37,424 28,113,010 - 700/110=5 36 (ner operation day)
Am	Foreign	(J.YEN)		1	1		1		47,825			39,710		15,041	11,630	14.451	\$05.25	0/26/0	2 564		(01,F)	2,120	7
Tinit Dune	Ten	(C N.)	(2)	183,300	170,100	153 200	007,00	90,000		000 00		000.09		000,68	467.991	-		001./##,1	3 508			-	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
7 7		Foreign	7	•				,	24.780	2 660	2,300	4 970	2,1,1	2,830	376	73 600	20,07	74,720	0	to	•	1,060	
		Quantities		4.83	1 83	500	7.00	4.83	1 03	1.93	5.35	7 00	/.22	4.82	30.03	55.00	10.0	2.33		30.32	1	2.0	
		Chrit		nerson		Deladi	person	person	1	cay	Ħ		Ħ	E	1	15	-	1	m	E	set	day	
		Standard								Φ 1480			40 ton	Crawler 0.6 m	V sacla	Class 1	Ф 13 ~ 28 mm	Φ 29 ~ 32 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	
		Description			Foreman	Skilled labor	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket		Concrete	Reinforcement work	Reinforcement work	Transportation of excavated	soil	13 Miscellaneous expenses	14 Slush tank	Total
		Š				7	3	4		5	9		7	٥	-	6	10	11		12	13	1.4	

 $T_r = T_1 + T_2 + T_3 = 12.29$  t = 700/110 = 6.36 (per operation day)  $T_3 = 2.1 + 0.11 *L = 4.74$  $T_2 = 0.45 + L_2*(0.22D-0.06)=5.35$  $T_1 = 2.2$ ;

T; preparation time (hr/pile); T2; excavation time (hr/pile); T3: working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m) Where

 $L_2$ : excavation length (except excavation length by hammer grab) (m);

 $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 30.93 m^3$ ; Q: Concrete volume;

Qe =  $p/4 \times D^2 \times 1 \text{ (m}^3$ ) = 30.52 m<sup>3</sup> 1=27.0 m; L=24.0 m;  $L_2$  = 24.0 m; D = 1.2 m Q e: Volume of Excavated soil

PROCESS COST - 124

Piling work (bored pile,  $\Phi1200$ mm, pile length L=26.5 m, reverse circulation drill method) <u>Per one pile</u>

r							r			<del>,</del>		<del>,</del>				_						
		Remarks		1*Tr*1/t*2.5	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 113	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T <sub>2</sub> *0.9;Equipment - 13	Process cost - 152	Process cost - 61	Process cost - 63		Process cost - 11		Equipment - 117	Equipment - 115	
	Amount	Local	(VN. D)	931,164	864,108	1,556,512	409,448			521,640		502,800	453,900	15,981,893	1,185,204	3,588,897	<u>;</u>	116.323	4,439,021			30,550,910
	An	Foreign	(J.YEN)		•	1	ŀ		50,303	14,515		41,649	14,433	12,840	15,635	908,19		2,716	36,278	2,650	1,250	253,575
	Unit Price	Local	(VN. D)	183,300	170,100	153,200	80,600		•	92,000		60,000	89,000	166,794	1,795,763	1,447,136		3,598	•		l	
	Unit	Foreign	(I.YEN)	•	1	,	-		24,780	2,560		4,970	2,830	376	23,690	24,720		84	-	1,060	200	
		Quantities		5.08	5.08	10.16	5.08		2.03	5.67		8.38	5.10	34.15	99.0	2.48		32.33	1	2.5	2.5	
		Unit		person	person	person	person		day	E		h	hr	m <sup>2</sup>	-	1		ິ∈	set	day	day	
		Standard							Ф 1480			40 ton	Crawler 0.6 m <sup>3</sup>	class Y	Φ 13 ~ 28 mm	Φ 29 ~ 32 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	$V = 10 \text{ m}^3$	
		Description	•	Foreman	Skilled labor	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket	Concrete	Reinforcement work	Reinforcement work	Transportation of excavated	soil	Miscellaneous expenses	Slush tank	Slush tank	Total
•		ž		Ŀ	2				'n	1		7	∞	6	2	Ξ		2	13	14	15	

 $T_r = T_1 + T_2 + T_3 = 12.89$  t = 700/110 = 6.36 (per operation day)  $T_3 = 2.1 + 0.11 *L = 5.02$  $T_2 = 0.45 + L_2*(0.22D-0.06)=5.67$  $T_1 = 2.2;$ 

Where

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile)

D: pile diameter (m): L: design pile length (m)  $L_2$ : excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 34.15 m^3$ 

Qe =  $p/4 \times D^2 \times 1 (m^3) = 32.33 \text{ m}^3$  i = 28.6 m; L = 26.5 m; L<sub>2</sub> = 25.5 m; D = 1.2 mO e: Volume of Excavated soil

Piling work (bored pile,  $\Phi2000$  mm, pile length L=10.5 m, reverse circulation drill method)

Per: one pile

				r					· 		·		<u> </u>			1			<b>1</b>	T			· 1	
	Remarks		I*Tr*1/t*2.5	1*T+*1 /**	U 0 * 7 * * 1 * 0	Z-1L-1/L-Z-3	1*Tr*1/t*2.5	Tr*1/t; $t=6.36$ ;	Equipment - 114	Equipment - 6	Tr * 1/7 *T: T=4.55:	Equipment - 23		1,2	Process cost - 152	Process cost - 61		Process cost - 11		35.0	30m + 1; Equipment -11/	20m2*1; Equipment - 116		
Amount	Local	(VN. D)	713,037	681 680	700,100	1,191,896	313,534			408,480		386,400	000 220	356,000	17,591,782	4,525,323		171 733	A 474 270	0/0"#/#/#		•	30,794,251	
Am	Foreign	(I.YEN)			*	-	1		41,278	11.366		32,007		11,320	14,134	669'65		4 000		045,540	2,120	1,280	192'907	
Unit Price	Local	(VN D)	183 300	00.00.	1/0,100	153,200	80,600	-		92,000		000.09		89,000	467,991	1,795,763		3 508			1			
5	Foreign	(J.YEN)	,			-	1		26.460	0 560	2000	4 970		2,830	376	23.690		70	10	•	1,060	640		
	Quantities	•	3 80	70.0	3.89	7.78	3.89		1.56	7 77	ř	6 44		4.00	37.59	2.52		7	47.73	~	2.0	2.0		
	Unit		500	051 5011	person	person	person		day.	1	≝	ż	1	hr	Ę	+	,		E	set	day	dav		
	Standard								₩ 2250	2000			40 1011	Crawler 0.6 m <sup>2</sup>	class Y	⊕ 13 ~ 78 mm	W 15 ~ 20 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	$V = 20 \text{ m}^3$		
	Decompton	Cesculpinon	-	Foreman	Skilled labor	Picaer (hammerman)	Carried Internation	Common tagos	Hydraulic press - in pile	o driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket	Concrete	3 . 4	Keintorcement work	Transportation of excavated	soil	Miscellaneous expenses	13 Slush tank	14 Slush tank		Lotal
	2		1	,_	7		7	4		^	٥		7	8	c	۲ :	2		=	12	2	5 5	-	

 $Tr = T_1 + T_2 + T_3 = 9.90$  t = 700/110 = 6.36 (per operation day)  $T_2 = 0.45 + L_2*(0.22D-0.06) = 4.44$   $T_3 = 2.1 + 0.11*L = 3.26$  $T_1 = 2.2$ :

T<sub>i</sub>; preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>; working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m) Where

L2: excavation length (except excavation length by hammer grab) (m);

 $Q = p/4 \times D^2 \times L \times 1.14 (m3) = 37.59 \text{ m}^3$ ; Q: Concrete volume;

Q e: Volume of Excavated soil

Qe =  $p/4 \times D^2 \times 1 \text{ (m3)} = 47.73 \text{ m}^3$  1=15.2 m; L=10.5 m;  $L_2 = 10.5 \text{ m}$ ; D = 2.0 m

PROCESS COST - 126

Piling work (bored pile,  $\Phi 2000$ mm, pile length L=20.0 m, reverse circulation drill method) Per one pile

secription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           or         0.7         1.7 EN)         (I.YEN)         (VN. D)         (I.YEN)         (VN. D)           or         1.3 Exp.         1.3 Exp.         1.3 Exp.         1.3 Exp.         995.319           or         1.2 Exp.         1.3 Exp.         1.3 Exp.         1.3 Exp.         1.4 Exp.           or         1.3 Exp.         2.17         2.6 Exp.         - 153,200         - 1563,522           abor         1.6 Exp.         - 153,200         - 1563,722         - 153,530         - 1563,538           person         5.43         - 153,200         - 1563,643         - 1563,638           person         5.43         - 153,200         - 1563,643         - 1563,638           person         5.43         - 153,200         - 1560,000         - 151,149         6.88,160           ane         40 ton         hr         6.73         2,560         92,000         19,046         538,900           class Y         m²         66.22         376         467,991         7,129,179         1129,179           inon of excavated         Dumm truck 11 ton         m²	ſ			_	7		1	1		· ·				· · · · · ·	1	· · ·			<del></del>			
secription         Standard         Unit         Price         Amount           or         Unit         Quantities         Foreign         Local         Foreign         Local           or         Derson         5.43         -         183,300         -         1,7EN)         (VN. D)           or         Derson         5.43         -         170,100         -         -           abor         person         10.86         -         153,200         -         11,790           abor         person         5.43         -         80,600         -         1,795,418           1 extractor         day         2.17         26,460         -         57,418           1 extractor         hr         8.98         4,970         60,000         44,631           ane         40 ton         hr         6.73         2,830         89,000         19,046           class Y         m³         66.22         376         467,991         24,899         30,           nent work         Φ 13 ~ 28 mm         t         3.97         23,690         1,795,763         94,049         7,           tion of excavated         Diamo tractavated         Diamo tractavated			Remarks		1*Tr*1/t*2.5	1*Tr*1/t*2.5	2*Tr*1/t*2.5	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 114	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T2*0.9;Equipment - 13	Process cost - 152	Process cost - 61		Process cost - 11		30m3*1; Equipment -117	20m3*2; Equipment - 116	
secription         Standard         Unit         Quantities         Foreign         Local         Foreign           or         183.300         -         183.300         -           or         5.43         -         170,100         -           mmerman)         person         5.43         -         170,100         -           abor         person         10.86         -         153,200         -           abor         person         5.43         -         80,600         -           sextractor         dextractor         hr         7.48         2,560         92,000         19,144           ane         40 ton         hr         6.73         2,560         92,000         19,144           clamshell bucket         Crawler 0.6 m³         hr         6.73         2,830         89,000         19,044           class Y         m³         66,22         376         467,991         24,89           nent work         Φ 13 ~ 28 mm         t         3,59         1,795,763         94,045           prion of excavated         Dimmortanted         m³         69,39         84         3,598         5,823		nount	Local	(VN. D)	995,319	923,643	1,663,752	437,658			688,160		538,800	598,970	30,990,364	7,129,179		249,665	7,516,637	4		727 727 13
Standard         Unit         Quantities         Foreign         Lo           or         5.43         -         -           or         person         5.43         -           or         person         5.43         -           or         person         5.43         -           abor         abor         2.17         26,460           extractor         hr         7.48         2,560           ane         40 ton         hr         8.98         4,970           class Y         m³         66,73         2,830         1,7           nent work         Φ 13 ~ 28 mm         t         3.97         23,690         1,7           hon of excavated         Dumn truck 11 ton         m³         69,39         84		An	Foreign	(J.YEN)		ŧ	Ľ	•		57,418	19,149			19,046	24,899	94,049		5,829	45,053	2,650	3,200	1215 074
secription         Standard         Unit         Quantities         Foreign           or         5.43         -           or         person         5.43         -           or         person         5.43         -           abor         person         10.86         -           abor         person         5.43         -           abor         person         5.43         -           abor         person         10.86         -           abor         day         2.17         26,4           stractor         hr         7.48         2.           ane         40 ton         hr         8.98         4,6           clamshell bucket         Crawler 0.6 m³         hr         66.73         2,8           class Y         m³         66.22         23,6           hon of excavated         Drimm truck 11 ton         m³         69.39		t Price	Local	(VN. D)	183,300	170,100	153,200	80,600		•	92,000		:	89,000	166,794	1,795,763	- the second	3,598		-		
secription Standard Unit  or mmerman) person  abor person  abor person  abor person  abor person  berson  abor person  abor person  berson  abor person  abor person  berson  berson  abor person  berson  berson  abor person  berson  abor person  throwing person		Unit	Foreign	(J.YEN)	1	1				26,460	2,560		4,970	2,830	376	23,690		84	•	1,060	640	
or mmerman) abor press - in pile 0 40 ton clamshell bucket class Y nent work 0 13 ~ 28 mm ton of excavated Durnn truck 11 ton			Quantities		5.43	5.43	10.86	5.43		2.17	7.48		8.98	6.73	66.22	3.97		66.39	1.00	2.50	00.5	
or mmerman) abor press - in pile l extractor ane ane ane the work tion of excavated			Unit		person	person	person	ретѕоп		day	Ę		ΨĘ	hr	E	1		E	set	day	day	
Description  The standard of excavated lation of excavated lation			Standard							Ф 2250			40 ton	Crawler 0.6 m	class Y	Φ 13 ~ 28 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	$V = 20 \text{ m}^3$	
Foremar Skilled la Skilled la Common Hydrauli Hydrauli Hydrauli Concrete Concrete Reinforc Transpor			Description		Foreman	Skilled labor	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket	Concrete	Reinforcement work	Transportation of excavated	soil	Miscellaneous expenses	Slush tank	14 Slush tank	
S - 7 & 4 & 6 5 8 9 0 =			2 Z		-			4			9				<del> </del>	┼	Ĺ		12	13	14	

 $T_1 = T_1 + T_2 + T_3 = 13.82$  t = 700/110 = 6.36 (per operation day)  $T_2 = 0.45 + L_2 * (0.22D - 0.06) = 7.48$   $T_3 = 2.1 + 0.11 * L = 4.14$  $T_1 = 2.2;$ 

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) Where

D: pile diameter (m): L: design pile length (m) L2: excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m}^3) = 66.22 \text{ m}^3$ ;

Qe: Volume of Excavated soil

Qe =  $p/4 \times D^2 \times 1(m^3) = 69.39 \text{ m}^3 = 1 = 22.1 \text{ m}$ ; L = 18.5 m;  $L_2 = 18.5 \text{ m}$ ; D = 2.0 m

PROCESS COST - 127

Piling work (bored pile,  $\Phi2000$ mm, pile length L = 18.5 m, reverse circulation drill method)

nt Pro
Quantities Foreign Local
(J.YEN) (VN. D)
5.28
5.28
10.56
5.28
2.11 26,460
7.10 2,560
8.74 4,970
6.39 2,830
66.22 376
3.93 23,690
66.25 84
0.1
2.5

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m)  $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 66.22 m^3$ L2: excavation length (except excavation length by hammer grab) (m);  $T_2 = 0.45 + L_2*(0.22D-0.06) = 7.10$  $T_1 = 2.2;$ Where

 $T_3 = 2.1 + 0.11 *L = 4.14$ 

 $T_r = T_1 + T_2 + T_3 = 13.44$  t = 700/110 = 6.36 (per operation day)

Q e: Volume of Excavated soil Q : Concrete volume ;

1=21.1 m; L=18.5 m;  $L_2=17.5 \text{ m}$ ; D=2.0 mQe =  $p/4 \times D^2 \times 1 (m^3) = 66.25 m^3$ 

Piling work (bored pile,  $\Phi 2000$ mm, pile length L=22.5~m, reverse circulation drill method) Per: one pile

									<b></b> ,											·			
	Remarks	1*Tr*1/t*2.5	2 5 + 1 + 1 + 1	V C#7 F# (145)	7.1/1.17	1*Tr*1/t*2.5	Tr*1/t; t=6.36;	Equipment - 114	Equipment - 6	Tr * 1/7 *T; T=4.55;	Equipment - 23	T.*0 9-Fourinment - 13	Co.	Process cost - 152	Process cost - 61		Process cost - 11		30m3*3 · Fanipment - 117	103*1 . Equipment - 115	וסננו ני בלתוחווווו		
Amount	Local (VN. D)	1 136 460	1.054.620	020,400,1	1,899,680	499,720		1	828,000		615,600	000 002	740,200	37,691,995	8,745,366		338,932	9.100.316				62,631,589	
Am	Foreign (1 YEN)	, , ,			•			65.621	23.040		50.992		77,77	30,283	115,370	2 2 2 2	7.913		0.7.0	9,540	1,500	380,926	
Unit Price	Local (U NV)	100 200	105,000	170,100	153.200	80.600	200,000		000 00	22,000	000 09		000.68	467.991	-	1,72,102	3.598						
Unit	Foreign	(3.17.4)						26.460	20,400	2,300	4 070	2/2	2,830	376	009 60	020,020	84	b	1	1,060	200		
	Quantities		6.2	6.2	12.4	1.71	7.0	0 70	0+.7	0 6	30.01	10.20	8.1	80.54	100	4.8/	5	7.14.7	0	9.0	3.0		
	Unit		person	person	1	person	person		day	티		E	r Tr	7		-	r,	E	Set	day	dav		
	Standard								0577. <b>0</b>			40 ton	Crawler 0.6 m	V seels	1 20012	Ф 13 ~ 28 mm		Dump truck 11 ton	(sum of above)*17%	$V = 30 \text{ m}^3$	$V = 10 \text{ m}^3$		
	Description		Foreman	Chillod lobor	ווובת ומססו	Rigger (hammerman)	Common labor	Hydraulic press - in pile	driving and extractor	Back hoe	Crawler crane		Hydraulic clamshell bucket	0.00	Concrete	Reinforcement work	Transportation of excavated	soil	Miscellaneous expenses	Slush tank	Shish tank	- [	Total
-	, Š		-	1	2 7	3 R	4 C	工	5 dr	6 B		7	×	_	9	10	Ι-	11	12	13 S	3	4	

 $T_r = T_1 + T_2 + T_3 = 15.78$  t = 700/110 = 6.36 (per operation day) T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile)  $T_3 = 2.1 + 0.11$ \*L = 4.58  $T_2 = 0.45 + L_2*(0.22D-0.06)=9.0$  $T_1 = 2.2$ 

Where

D: pile diameter (m): L: design pile length (m)

 $L_2$ : excavation length (except excavation length by hammer grab) (m);

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 \text{ (m}^3) = 80.54 \text{ m}^3$ 

Qe =  $p/4 \times D^2 \times 1 (m^3) = 94.2 \text{ m}^3$  l = 30.0 m; L = 22.5 m; L  $_2 = 22.5 \text{ m}$ ; D = 2.0 m Qe: Volume of Excavated soil

Piling work (bored pile,  $\Phi 2000$ mm, pile length L=24.5~m, reverse circulation drill method)

Per: one pile

Vo.         Description         Standard         Unit         Quantities         Foreign (VN. D)         Foreign (VN. D)         Local         Foreign (VN. D)         Local         Remarks           1         Foremun         1         Foreign (VN. D)         1								Count	
Standard Unit Quantities Foreign Local Foreign (VN. D) (VN. D) (J.YEN) (J.YEN				.:	Cait	Рпсе	1		
1.75   1.75	cription	Standard	Umit	Quantities	Foreign	Local	Foreign	Local	Kemarks
Person 6.59				·	(J.YEN)	(2 Z Z)	(J. Y CIN)	(7.7.4)	ひで乗りたが「おっ
Person   6.59   -			noren	6 59		183,300	•	1,207,947	1 - 1 - 1 (1 - 7.2.3
Person   13.18   - 153,200   - 2,019,176			100130	6.50	,	170.100	,	1,120,959	1*Tr*1/t*2.5
person   13.18	با		person	20.0	:	153 200	'	2,019,176	2*Tr*1/t*2.5
bor         bor         cot,000         -         69,854         -           extractor         extractor         -         69,854         -         69,854         -           extractor         hr         9.76         2,560         92,000         24,986         897,920           ane         40 ton         hr         9.76         2,560         92,000         24,986         897,920           lamshell bucket         Crawler 0.6 m³         hr         8.78         2,830         89,000         24,847         781,420           lamshell bucket         Class Y         m³         87.70         376         467,991         32,975         41,042,811           nent work         Φ 13 ~ 28 mm         t         4.75         23,690         1,795,763         112,528         8,529,874           ion of excavated         Dump truck 11 ton         m³         91.06         84         3,598         7,649         9,709,090           cous expenses         (sum of above)*17%         set         1.060         -         9,540         -         9,540           v = 30 m³         day         9.0         1,066         -         9,540         -         9,540	nmerman)		person	13.18		007,001		531.154	1*Tr*1/t*2.5
ress - in pile	bor		person	6.59		00000			Tr*1/t: t=6.36;
extractor	ress - in pile	•		77.	26.460		69,854		Equipment - 114
ane 40 ton hr 10.89 4,970 60,000 54,123 653,400 class Y m³ 87.70 376 467,991 32,975 41.042,811 class Y m³ 87.70 376 467,991 32,975 41.042,811 ion of excavated Dump truck 11 ton m³ 91.06 84 3,598 7,649 3,598 7,649 327,634 0,709,090 clus expenses (sum of above)*17% set 1.0 - 9,540 - 9,540 clus expenses V = 30 m³ day 9.0 1,060 - 9,540 clus expenses V = 30 m³ day 9.0 1,060 - 9,540 clus expenses V = 30 m³ day 9.0 1,060 clus expenses V = 30 m³ day 9.0 1,060 clus expenses V = 30 m³ day 9.0 1,060 clus expenses V = 30 m³ day 9.0 1,060 clus expenses V = 30 m³ day 9.0 1,060 clus expenses V = 30 m³ day 9.0 clus expenses V = 30.08,086 e6.821.385	extractor	Ф 2250	day	70.7	025,02	000 65	24,986	897,920	Equipment - 6
ane         40 ton         hr         10.89         4,970         60.000         54,123         653,400           slamshell bucket         Crawler 0.6 m³         hr         8.78         2,830         89.000         24,847         781,420           class Y         m³         87.70         376         467,991         32,975         41.042,811           ion of excavated         bump truck 11 ton         m³         91.06         84         3,598         7,649         327,634           cous expenses         (sum of above)*17%         set         1.0         -         55,584         9,709,090           v = 30 m³         day         9.0         1,060         -         9,540         66,821,385		-	Ħ	2.70	7,700	2001			Tr * 1/7 *T; T=4.55;
lamshell bucket Crawler 0.6 m³ hr 8.78 2,830 89,000 24,847 781,420 1.042,811	ane		]	08.01	4 970	000 09		653,400	Equipment - 23
lamshell bucket Crawler 0.6 m² hr 8.78 2,830 69,000 27,977 41,042,811 class Y m³ 87.70 376 467,991 32,975 41,042,811 non of excavated Dump truck 11 ton m³ 91.06 84 3,598 7,649 327,634 9,709,090 cous expenses (sum of above)*17% set 1.0 - 9,540 - 9,540 cous expenses V = 30 m³ day 9.0 1,060 - 9,708,086 66.821,385		40 ton		20.01	0.00			781 420	T,*0.9:Equipment - 13
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	lamshell bucket	Crawler 0.6 m²	hr	8.78	2,830		7+0,47	110 670.11	Denograph 157
nent work $\Phi$ 13 ~ 28 mm         t $4.75$ $23,690$ $1,795,763$ $112,528$ $8.529,874$ sion of excavated         Dump truck 11 ton         m³ $91.06$ 84 $3,598$ $7,649$ $327,634$ sous expenses         (sum of above)*17%         set $1.0$ - $55,584$ $9,709,090$ v = $30 \text{ m}^3$ day $9.0$ $1,060$ - $9,540$ -           solution of excavated $0.0$ $0.0$ $0.0$ $0.0$ $0.0$		class Y	~E	87.70	376	467,991	32,975	41.042,811	Process cost - 152
ion of excavated Dump truck 11 ton m³ 91.06 84 3.598 7,649 327,634 9,709,090    Ous expenses (sum of above)*17% set 1.0 - 55,584 9,709,090    V = 30 m³ day 9.0 1,060 - 9,540 - 9,540    And the sum of above and the sum of above are sum of above and the sum of above are sum of above and the sum of above are sum of above and the sum of above are sum of above and the sum of above are sum of above and the sum of above are sum of above and the sum of above are sum of above and the sum of above are sum of above are sum of above and the sum of above are sum of above and the sum of above are sum of above are sum of above are sum of above and the sum of above are sum of	ment work	Ф 13 ~ 28 mm	₽	4.75	23,690	1,795.763	112,528	4/8,670,8	ירוטכבאט בטאר - טיו
Output ruck 11 ton         m³         91.06         84         3,398         7,949         527,030           cous expenses         (sum of above)*17%         set         1.0         -         55,584         9,709,090           V = 30 m³         day         9.0         1,060         -         9,540         -           40,703,086         66,821,385         -         66,821,385	tion of excavated					(		127 162	Drocess cost - []
cous expenses $(\text{sum of above})^*17\%$ set 1.0 - 55,584 9,703,090 - 55,584 9,703,090 - 9,540		Dumo truck 11 ton	E E	91.06	84	3,598			
V=30 m <sup>3</sup> day 9.0 1,060 - 9,540 66.821.385	360 Louis Sire	(sum of above)*17%	set	1.0	•	ı	55,584		i_
V = 30 m day 5.0 1,000 300 300 086	Ous cypenises	Series and the series		C	1 060	,	9.540		30m2*3; Equipment - 11
		V == 30 m	day	2.0	1,000		307 086		

 $T_2 = 0.45 + L_2*(0.22D-0.06) = 9.76$   $T_3 = 2.1 + 0.11*L = 4.8$  $T_1 = 2.2$ ;

 $T_T = T_1 + T_2 + T_3 = 16.76$  t = 700/110 = 6.36 (per operation day)

 $T_3$ : working time from stand pipe press-in to concrete placing (hr/pile) D: pile diameter (m): L: design pile length (m) T<sub>1</sub>; preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); Where

L2: excavation length (except excavation length by hammer grab) (m);

 $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 87.7 m^3$ ; Q : Concrete volume;

Qe: Volume of Excavated soil

Qe = p/4 x D<sup>2</sup> x l (m<sup>3</sup>) = 91.06 m<sup>3</sup> 1 = 29.0 m; L = 24.5 m; L<sub>2</sub> = 24.5 m; D = 2.0 m

Piling work (bored pile,  $\Phi 2000$ mm, pile length L=28.0 m, reverse circulation drill method) Per: one pile

					4,11	Chair Bains	4	Amount	
					Cuit	Luce	7	Joann	
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
				.*	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Foreman		person	7.26		183,300	•	1,330,758	1*Tr*1/t*2.5
\	Skilled labor		person	7.26		170,100	ı	1,234,926	1*Tr*1/t*2.5
1 ("	Rioger (hammerman)		person	14.52		153,200	•	2,224,464	2*Tr*1/t*2.5
4	Common Jabor		person	7.26	1 1 1	80,600	,	585,156	1*Tr*1/t*2.5
	Hydraulic press - in nile								Tr*1/t; t=6.36;
Ŋ	5 driving and extractor	Ф 2250	day	2.9	26,460	•	76,734	•	Equipment - 114
9	Back hoe		T-L	11.09	2,560	92,000	28,390	1,020,280	Equipment - 6
									(10*Tr)*3/(60*T);
t-	Barge with crane	40 ton ;300t barge	day	2.54	35,520	342,000	90,221	868,680	T=3.63: Equipment - 70
∝	Tue boat	steel 200ps	Į	12.32	2,490	222,000	30,677	2,735,040	2.54*4.85; Equipment - 74
,									(10*Tr)*3/(60*T);
0	Barge with crane	25 ton :200 t barge	day	2.54	21,900	302,000	55,626	767,080	T=3.63; Equipment - 91
≘	Tug boat	100ps	hr	12.32	1,310	120,000	16,139	1,478,400	2.54*4.85; Equipment - 75
=	Hydraulic clamshell bucket	Crawler 0.6 m <sup>3</sup>	h	86.6	2,830	89,000	28,243	888,220	T <sub>2</sub> *0.9;Equipment - 13
2	Concrete	class Y	E.F.	100.23	1,055	477,766	105,743	47,886,486	Process cost - 152
13	Reinforcement work	Ф 13 ~ 28 mm	1	1.91	23,690	1,795,763	45,248	3,429,907	Process cost - 61
14	Reinforcement work	Φ 29 ~ 32 mm	Ţ	4.33	24,720	1,447,136	107,038	6,266,099	Process cost - 63
	Transportation of excavated	7	- 1	100.48	78	3 508	8 440	361.527	Process cost - 11
2 2	SOII	ישבודי איזויות איזויים איזייים איזייים איזייים איזייים איזיייים איזייי	111	21.001		20.60		12 083 094	
ا2	Miscellaneous expenses	(sum of above)+1/%	SCI	2:1	•		21.1007		
17	Slush tank	$V = 30 \text{ m}^3$	day	10.5	1,060		11,130	•	30m <sup>2</sup> *3; Equipment -117
18	Slush tank	$V = 20 \text{ m}^3$	day	7.0	640	t	4,480	•	20m3*2; Equipment -116
	Total						708,834	83,160,117	

t = 700/110=6.36 (per operation day)  $Tr = T_1 + T_2 + T_3 = 18.47$  $T_3 = 2.1 + 0.11 *L = 5.18$  $T_2 = 0.45 + L_2*(0.22D-0.06) = 11.09$  $T_1 = 2.2;$ 

T<sub>1</sub>: preparation time (hr/pile); T<sub>2</sub>; excavation time (hr/pile); T<sub>3</sub>: working time from stand pipe press-in to concrete placing (hr/pile) Where

D: pile diameter (m): L: design pile length (m)  $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 100.23 m^3$ ; L2: excavation length (except excavation length by hammer grab) (m); Q: Concrete volume;

Qe =  $p/4 \times D^2 \times 1 (m^3) = 100.48 \text{ m}^3 = 1=32.0 \text{ m}$ ; L = 28.0 m;  $L_2 = 28.0 \text{ m}$ ; D = 2.0 mQ e: Volume of Excavated soil

PROCESS COST - 131

Piling work (bored pile,  $\Phi 2000 mm$ , pile length L=29.5~m, reverse circulation drill method) Per: one pile

					Chit	Unit Price	Aī	Amount	
2	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	i.		nercon	7.55	1	183,300		516,585,1	1*T*1/1*2.5
	roreman			7.55		170 100		1.284.255	1*Tr*1/t*2.5
2	Skilled labor		person	رن./		2000		2 212 320	いっきシュギリギロ
3	Rigger (hammerman)		person	15.1	ı	153,200	1	076,616,7	C.2.1/1.17
4	Common labor		person	7.55	•	80,600	-	608,530	]*Tr*]/t*2.5
	Undramite press - in mile								$Tr^*!/t$ ; $t=6.36$ ;
u	invalue press - in price	⊕ 2250	dav.	3.02	26.460		79,909		Equipment - 114
	GIIVIII AIIU CALIACIOI		1	11 66	2.560	92,000	29,850	1,072,720	Equipment - 6
٥	Dack noe								Tr*1/7*T: T=4.55;
٦	Crowler crops	40 ton	h	12.49	4,970	900,000	62,075	749,400	Equipment - 23
$\overline{}$	Clarated chance	5 7 7 7		4	2 630	000 08	787 00	019 226	T.*0.9:Equipment - 13
∞	Hydraulic clamsheil bucket	Crawler 0.0 m	μ	10.49	7,030	000,000	47,007	0.000	
0	Concrete	class Y	: E	105.60	376	467,991	39,706	49,419,850	Process cost - 152
νĒ	Reinforcement work	Φ 13 ~ 28 mm	-	5.35	23,690	1,795,763	126,742	9,607,332	Process cost - 61
	Transportation of excavated								
=	lios II	Dump truck 11 ton	Ē	111.47	84	3,598	9,363	401,069	Process cost - 11
2]:	12 Miscellaneous expenses	(sum of above)*17%	set	1.0		•	64,146	11,521,580	
1,	13 Slush tank	$V = 30 \text{ m}^3$	day	17.5	1,060	1	18,550		30m3*5; Equipment - 117
	Total						460,028	79,295,581	

t = 700/110 = 6.36 (per operation day)  $T_T = T_1 + T_2 + T_3 = 19.21$  $T_3 = 2.1 + 0.11 *L = 5.35$  $T_2 = 0.45 + L_2*(0.22D-0.06)=11.66$ 

Q: Concrete volume;  $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 105.60 m^3$ ;

Q e : Volume of Excavated soil

Qe =  $p/4 \times D^2 \times l(m^3) = 111.47 \text{ m}^3$ ; l=35.5 m; L=29.5 m;  $L_2=29.5 \text{ m}$ ; D=2.0 m

T = 690/190 = 3.63

Piling work (bored pile,  $\Phi$ 2000mm, pile length L=36.0 m, reverse circulation drill method)

Per: one pile		ſ				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	+1110	
					Unit Price	Att	Amount	•
Description	Standard	Unit	Quantities	Foreign	Local	Foreign (1 YEN)	Local (VN. D)	Remarks
		- Comp.	8 8	(3. 4. 4.1.4)	183 300		1,613,040	1*Tr*1/t*2.5
Foreman		Delison	0.0		170 100	1	1.496,880	1*Tr*1/t*2.5
Skilled labor		person	0.0		153 200		2,696,320	2*Tr*1/t*2.5
Rigger (hammerman)	-	person	0./1	•	007,00		700 280	1 * 1 * 1 * 1 * 1
Common labor		person	8.8	-	80,600	'	007*/0/	Tr*1/+ + 1=6 36
Hydraulic press - in pile	A 2250	, S	3.57	26.460		93,139	•	Equipment - 114
driving and extractor	0077	ĝ <u>,</u> =	14.13	2,560	92,000	36,173	1,299,960	Equipment - 6
								· 5.7 5.11 - 7. (1.#.0.7)// 6.*(*-1.#.0.1.)
				1	77	100 403	1 053 360	(10-11) 2/(00-1-7, 1
Barge with crane	40 ton ;300 t barge	day	3.08	35,520	342,000	109,401	1,000,000	2 00*4 06.0
Tug boat	steel 200ps	hr	14.94	2,490	222,000	37,201	3,316,680	3.08 *4.83;Equiprileilt -
								(10*Tr)*3/(60*T); T=2 53:
	ented + 000, 200	, ic	30%	21 900	302,000	67,452	930,160	Equipment - 91
9 Barge with crane	100-1 100-1		70 71	1 310	120.000	19.571	1,792,800	3.08*4.85; Equipment 3
lug boat	TOUDS	3	1	200		000 36	1 123 000	T.*0 9.Fournment = 13
Hydraulic clamshell bucket	Crawler 0.6 m	hr	12.72	2,830	89,000	33,448	1,132,000	٠١.
Concrete	class Y	E <sub>EE</sub>	128.87	1,055	477,766	135,958	61,569,704	Process cost - 152
Jacobs to the control	⊕ 13 ~ 28 mm		2.26	23,690	1,795,763	53,539	4,058,424	Process cost - 61
Designation of the Property and It	Φ 29 ≈ 37 mm		5.25	24,720	1,447,136	129,780	7,597,464	Process cost - 63
Remiolicement work		,						
Transportation of excavated	Dumm truck 11 ton	~E	125.6	84	3,598	10,550	451,909	Process cost - 11
llanovic occupance	/cim of above)*17%	r <sub>P</sub>	1.0	1	,	123,890	15,252,070	
Miscellalicous cypelises	(Suit Of Guore)					0 & AAO		30m <sup>3</sup> *6 : Equipment - 1
Siush tank	V = 30  m	day	24.0	1,000	•	070 003	104 070 137	3
Total						•	10450/Cat	5
$T = 2.2$ : $T = 0.45 + L_2*(6)$	$T_{*}=0.45 + L_{*}*(0.22D-0.06)=14.13$	$T_3 = 2.1$	$T_1 = 2.1 + 0.11 *L = 6.06$	9	$T_1 = T_1 + T_2 + T_3 = 22.39$		t = 700/110 = 6.36 (per operation day)	eration day)

 $Tr = T_1 + T_2 + T_3 = 22.39$  $T_3 = 2.1 + 0.11 *L = 6.06$  $T_2 = 0.45 + L_2*(0.22D-0.06)=14.13$ Total  $T_1 = 2.2;$ 

Qe =  $p/4 \times D^2 \times l(m^3) = 125.60 \text{ m}^3$ ; l = 40.0 m; L = 36.0 m;  $L_2 = 36.0 \text{ m}$ ; D = 2.0 mT = 690/190 = 3.63 $Q = p/4 \times D^2 \times L \times 1.14 (m^3) = 128.87 m^3$ ;

Q e : Volume of Excavated soil

Q : Concrete volume;

Granular back-filling work Per 100 m3

							ν .	Amount		
					JIMO .	Unit Price	1		ţ.	
		Ctondard	Imit	Ouantities	Foreign	Local	Foreign	Local	Kemarks	
ė Ž	Description	Scalical	,		(1 VEN)	(VN. D)	(J.YEN)	(VN. D)		
									1+K:K=+0.2;	
								000 000	Material - 110	
			m3	120	1	85,400	. <b>-</b> .	10,240,000	Machan IIV	
-	Crushed stone		1	700	4.030	000 16	3.788	85,540	T1 : Equipment - 3	
~	Bulldozer	not C1	1 .	t	2000	000 00	1 203	43 240	T1*0.5 : Equipment - 6	
7	Back hoe	0.6m3	hr	0.47	7,560	72,000	CV2,1	0.04.00	TO Education 38	
1	Dack Hoc	3~4ton	hr	2.15	1,400	36,000	3,010	/ /,400	12, Equipment - 50	
4	Vibrating roller	1001		60	619	191 000	122	38,200	Equipment - 42	
5	Tamper	60~100 Kg	day	7.0	210	200,100		403.000	2.0*2.5	
	Common labor		person	5.		80,600	•	200500		
٥	COMMISSION (ADD)						8,123	10,895,380		
	Total						٥	108 054		
	Per 1.0 m3	n3					10	100,000		
		11-17 4 40-1								
	Work ability of vibrating roller (3-4 toll)	roller (3~4 toll)				£	c	(O/0017cT	O = (W*V*D*D*E)/P	
٠,	W (m)	V(m/hr)	Ω	12	ш	2.	2	(X)001)71	)	
	(31)	1800	0.25	0.95	09.0	8.00	16.03	2.15	) 1 2 = 100 / V	
	1.45	Tool	3.5	,			T. Definition of more	of mork		
	W. Effective width of roller		D: Depth	D: Depth of one layer			E : Emerency	A TOW TO		
			F) . Co.!	to . Soil conversion factor	tor		P : Time of compaction	ompaction		
	V : Speed of compaction		2 300 . 71	מון וייין מון וייין						
	Work ability of bulldozer (15ton)	r (15ton)								
,									( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	
		τ	Ü	[(m)]	Cm (min)	Q (m3 /h)	Tich	T1(hr/100m3)	Q = (60 * q * 11 * E)/Cm)	
	q (m3)	11		, , ,	, ,	106.30		0.94	$C_{\rm m} = 0.027  \rm L + 0.78$	
:	2 92	1:00	0.80	20.00	126	100.20				
	T. Control of the Con	שנייים מחי שמר (מת		fl: Soil con	fl : Soil conversion factor	×	E: Efficiency of work	/ of work	7 / 001 = 11	
i .	d: Execution volune (pushing) per circ of circ	וואל לא מונא מאל (אוו		Cm . Cycle time	time					
} } -	L : Average son pushing distance	ance		Ciii. Cycic						

Permeable back-filling work Per 100 m3

					Uni	Unit Price	¥	Amount	
Ž	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
1								-	
_	Crished stone		m3	120	1	89,000	ı	10,680,000	1+K;K=+0.2;Material -111
-	2000								T1*0.7;T1=1.08;
C	Bulldozer	15 ton	hr	0.94	4,030	91,000	3,788	85,540	Equipment -3
1									T1*0.5;T1=1.08;
	Rack hoe	0.6m3	þ	0.54	2,560	92,000	1,382	49,680	Equipment - 6
۵	Vibrating roller	3~4ton	Į	2.15	1,400	36,000	3,010	77,400	T2=2.15; Equipment - 38
·   v	7 Tamber	60-100 kg	dav	0.2	610	191,000	122	38,200	Equipment - 42
ی اد	6 Common labor	9	person	5		80,600	ŀ	403,000	2.0*2.5
,									
1	5 + 8						8 303	11 333 820	
	lotai								
	Per 1.0 m3						83	113,338	

Filling work with suitable excavation soil (for common excavation) Per  $100\,\mathrm{m}3$ 

					1 120	Init Drice	Ā	Amount		
-						2711	1		4	
~~~~~	Description	Standard	Cmit	Quantities	Foreign	Local (VN, D)	Foreign (J.YEN)	Local (VN. D)	Kemarks	
					1	000	1.054	41.960	Foundament -3	
	D. 11 Jones	15 ton	4	0.46	4,030	91,000	1,854	000,14	a mandinbi	T
	Duridozei	8 ~ 20 ton	14	1.07	1,990	50,000	2,129	53,500	Equipment - 41	T
	Tred roller	1701 07 - 0	TO STOR	0.25	,	80.600		20,150	0.1*2.5	
	Common labor		DCI SOII	٥.٠٠						
							1,083	115,510		
	Total						35.55	1 155		
+	Per 1.0 m3	n3					04	0011		
1	Workshility of hulldozer (15ton)	(15ton)						1		٠.
	11/1-1	V (m/hr)	H(m)	ш	Ę	P (time)	٥			
	w(m)	2.00	0.20	0.70	0.80	3.00	216.50	0,46		
	2.90	7.00	7.50	2			U. Donth cmr	oding.		,
	W : Efficiency width of blade	]e		fl : Soil conversion factor	version facto	Ļ.	n. Deput spicating	n: Deput spicacing b · Number of smeading (time)		
	E: Efficiency of work			V: Spreading velocity	s velocity		T - Ladilloci C	/ S		
	Workability of tired roller (8~20 ton)	er (8~20 ton)						-	0/\4*\*\*\*\*\*\*\*\	
	W (m)	[ V(m/hr)	D(m)	ш	12	P(time)	2	7.1		
	1.70	4.000	0.20	09.0	1.15	10.00	93.80	1.07	17 = 100 / <b>ረ</b>	
	W. Effective compaction width per one time of compaction work	ith per one time of cor	mpaction wo	) Xio	V: compaction speed	ion speed	D: Finishing thickness	thickness		
	E - Efficiency of work		•		f2: Soil cor	nversion facto	P : Number o	f2 : Soil conversion facto P : Number of compaction work		
	L' Filleleney or cris									

Vertical sand drain (L=24.5 m)

Per: each

					Uni	Unit Price	A	Amount		
ž	Description	Standard	Chrit	Quantities	Foreign	Local	Foreign	Local	Remarks	
;					(J.YEN)	(VX, D)	(1.YEN)	(VN. D)		
1.	S.		nerson	0.12		183,300	1	21,996	{Tc/(60*t)}*0.8*2.5	
_ ,	rotettan		2000	0.12		170.100	1	20,412	{Tc/(60*t)}*0.8*2.5	
اد	Skilled labor		person	700		80,600		19.344	{Tc/(60*t)}*1.6*2.5	
~	Common labor		person	77.0		2000		000 131	Material - 100	
4	Sand	vellow sand	m3	3.08	1	50,000	•	134,000	Ivacular 100	
	Sand mile driver	leader length 45 m	<b>3.</b>	0.38	38,640	58,000	14,683	22,040	Tc/60; Equipment - 102	
- 1	Canta Olic direct	9								
ď	A ir commessor	17.0 m3 / min	dav	0.06	8,400	84,000	504	5,040	Tc/(60*t); Equipment - 128	
J	ייים בסוויונים ווע									
		350 KVA	dav	0.06	13.560	748,000	814	44,880	Tc/(60*t); Equipment -124	
ہ ۔	Tental and	1.2 m3	hr	0.38	1.500	59,000	570	22,420	Tc/60; Equipment - 97	
اہ		2007					700	18 608		
ο.	Miscellaneous expenses	(sum of above)*6%	set				177	2000		
1	Total						17,565	328,/40		
	Per 1 0 m = Total/24.5	otal/24.5					717	13,418		
	177 0-7	C. 144.1								

To: Executing time for one sand pile of 24.5 m; Tc = 0.93\*L=22.8 min

t: Operation hours per one operation day; 670/110=6.09 hr/day D: Diameter of sand pile; 0.4 m L: Design length of sand pile; 24.5 m

Vertical sand drain (L=23.5 m) Per: each

	-		
		•	
9			
3			
1			
•			

							*	1	
					Chit	Unit Price	ξ	Amount	
	-	Standard	1)uit	Ouantities	Foreign	Local	Foreign	Local	Remarks
Š	Describtion		}	,	(I VEN)	(N. D)	(J.YEN)	(a)	
						162 300		966 14	(Tc/(60*t)}*0.8*2.5
-	Foreman		person	0.12	•	105,500		0:: 30	V C*0 C* ~~*C7/-1-
-	Loichian		2000	0.17	1	170,100		20.412	(10/00.1) 0.0 2.3
7	Skilled labor		Delson	71.0		002.00		19 344	{Tc/(60*t)}*1.6*2.5
٦	Common labor		person	0.24	1	20,000		001 44	100
1	Colimon races	11	رسر	20.0	,	50,000		147.500	Ivialeriai - 100
4	Sand	yeilow sand	Cill	2.2.7	0,700	20 000	14 207	21.460	Tc/60; Equipment - 102
v	Sand pile driver	leader length 45 m	hr	0.37	38,040	39,000	17761		
·	Т				-				
		17.0 22 / 200	750	000	8 400	84,000	504	5,040	Tc/(60*t); Equipment -128
9	6 Air compressor	11.0. / cm.0./1	day	20.0	5				
						٠.		•	7000
÷		250 17.17	200	900	13.560	748,000	814	44,880	10/(60-t); Equipment = 12+
	Generator	24 A 000	uay			20 000	555	21.830	Tc/60 : Equipment - 97
~	Tractor shove	1.2 m <sup>3</sup>	hr	0.37	1,500	23,000		01.01	
		%9*(a)(of of min)	test	. L	•		0/6	18,146	
σ.	Miscellaneous expenses	(Suil of above) 0/8	351				17 140	320 610	
<u> </u>	Total						ALT' / I		
							729	13,643	
	Per 1.0 m = Total/23.5	otal/23.5							

Tc: Executing time for one sand pile of 23.5 m; Tc = 0.93\*L=21.9 min t: Operation hours per one operation day; 670/110=6.09 hr/day D: Diameter of sand pile; 0.4 m L: Design length of sand pile; 23.5 m

Vertical sand drain (L=17 m)
Per.each

					<u> </u>	Unit Price	Aı	Amount		
	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks	
į					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		-1
	i.		nercon	0.08	, -	183.300	ı	14,664	{Tc/(60*t)}*0.8*2.5	
_[,	roreman garita dan		noreon	80 0	,	170,100	-	13,608	{Tc/(60*t)}*0.8*2.5	
7 (	Skilled labor		100100	0.17	ļ.	80,600		13,702	{Tc/(60*t)}*1.6*2.5	
ړ	Common labor		יוספוא	7.5		000 03		107 000	Material - 100	Γ
4	Sand	yellow sand	m3	2.14	'	20,000		000 51		· 
1	Sand pile driver	leader length 30 m	hr	0.26	23,760	50,000	6,178	13,000	_1	-1-
, ,	TO STATE OF THE PARTY OF THE PA	10 5-11 0 m3/min	dav	0.04	7.080	341,000	283	13,640	Tc/(60*t); Equipment -55	
ا	All compressor	* 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	20.0	7 000	464 000	317	18.560	Tc/(60*t) : Equipment	
·	Generator	ZUUKVA	day	0.04	7,720	101,000		004 0		r -
∞	Tractor shovel	0.8m3	hr	0.26	1,130	48,000	294	12.480	TCOO: Eduipinent - 12	_
6	Miscellaneous expenses	(sum of above)*6%	set	1			424	12,399		7
	Total						7,496	219,053		
:										
1	Per 1.0 m = Total/17m	otal/17m		•			441	12.885		·]
			4							

Tc: Executing time for one sand pile of 17.0 m; Tc = 0.93\*L=15.8 min t: Operation hours per one operation day; 670/110=6.09 hr/day D: Diameter of sand pile; 0.4 m L: Design length of sand pile; 1.7 m

Sand compaction pile Per: 1 pile (L=17m)

No.         Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local         Remarks           1         Sand         yellow sand         m3         6.54         50,000         -         267.486         Material - 100           2         Sand         person         0.25         -         170,100         -         47,216         A*1*2.5           3         Skilled labor         person         0.25         -         170,100         -         48,132         A*2*2.5           5         Sand pile driver         leader length 30 m         hr         0.62         23.760         50,000         24,552         33,480         B; Equipment - 104           5         Sand pile driver         leader length 30 m         hr         0.62         23.760         50,000         24,552         33,480         A*Equipment - 82           6         Air compressor         7.5-7.6 m3/min         day         0.1         7.920         464,000         1,172         33,240         B; Equipment - 48           7         Generator         0.8 m3         hr         0.62         1,130         48,000         1,172         32,480         B; Equipment - 8 <tr< th=""><th></th><th></th><th></th><th></th><th></th><th>,</th><th></th><th>*</th><th>*</th><th></th></tr<>						,		*	*	
Description         Standard         Unit         Quantities         Foreign         Local         Local           Sand         yellow sand         m3         6.54         -         50,000         -         267,486           Foreman         person         0.25         -         183,300         -         56,374           Skilled labor         person         0.25         -         170,100         -         47,216           Skilled labor         Common labor         person         0.25         -         170,100         -         48,152           Sand pile driver         leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Arit compressor         7,5~7,6 m3/min         day         0,1         4,660         43,000         1,320         46,400           Arit compressor         200 KVA         day         0,1         7,920         464,000         1,172         32,240           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Miscellaneous expenses         (sum of above)*6%         set         1         29,489         587,715           Per 1 m = Total/17.0m					**	E Cal	Рпсе	K	mount	-
Sand         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           Sand         yellow sand         m3         6.54         -         50,000         -         267,486           Foreman         Foreman         person         0.25         -         170,100         -         47,216           Skilled labor         Common labor         person         0.25         -         170,100         -         48,152           Sand pile driver         leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Air compressor         7,5~7.6 m3/min         day         0.1         7,920         464,000         1,320         46,400           Air compressor         200 KVA         day         0.1         7,920         464,000         1,172         32,240           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Miscellaneous expenses         (sum of above)*6%         set         1         1,735         29,489         587,715           Per 1 m = Total/17.0m         Rectuing time for one sand compaction pile of 17 m; Tc = 2.18*17=37.06 min         A:Total         1,735         34,571	2		Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
Sand         yellow sand         m3         6.54         -         50,000         -         267,486           Foreman         Person         0.25         -         183,300         -         47,216           Skilled labor         Derson         0.25         -         170,100         -         47,216           Common labor         Derson         0.5         -         80,600         -         48,152           Sand pile driver         leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Air compressor         7,5-7.6 m3/min         day         0.1         4,660         45,000         1,320         46,400           Generator         0.8 m3         hr         0.62         1,130         48,000         1,172         32,40           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Miscellaneous expenses         (sum of above)*6%         set         1         29,489         587,715           Total         Total         1,735         29,489         587,715         1,735         34,571           Ac: Executing time for one sand compaction pile of 17 m; Tc = 2.18*17=37.06 min	2				*. •	(J.YEN)	(VN. D)	(J.YEN)	(V. D)	
Send         Send         Send         -         183,300         -         56,374           Skilled labor         Skilled labor         -         170,100         -         47,216           Common labor         Derson         0.25         -         80,600         -         48,152           Sand pile driver         Leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Air compressor         7.5-7.6 m3/min         day         0.1         4,660         43,000         1,320         46,400           Generator         0.8 m3         hr         0.62         1,130         48,000         1,172         32,40           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         584,39           Africal meous expenses         (sum of above)*6%         set         1         1,669         584,715           Africal meous expenses         (sum of above)*6%         set         1         29,489         587,715           Action         Trotal         1,735         29,489         29,489         87,71		7	bass wollen	m 3	6 54		50,000	1	267,486	Material - 100
Foreman         Person         0.23         -         170,100         -         47,216           Skilled labor         Common labor         0.55         -         170,100         -         48,152           Sand pile driver         leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Air compressor         7,5~7.6 m3/min         day         0.1         4,660         45,000         1,320         46,400           Generator         Compressor         0.8 m3         hr         0.62         1,130         48,000         1,172         32,240           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Miscellaneous expenses         (sum of above)*6%         set         1,735         29,489         587,715           Total         Per 1 m = Total/17.0m           Per 1 m = Total/17.0m         A:75.           Per 1 m = Total/17.0m         A:75.         A:75.           B:Tc/(60*t)=0.10           B:Colspan="2">A:75.           A:75.         20,489         587,715           B:Colspan="2">A:75. <td>-</td> <td>Sand</td> <td>yellow same</td> <td>) }</td> <td>30.0</td> <td></td> <td>182 200</td> <td></td> <td>56 374</td> <td>A*1*2.5</td>	-	Sand	yellow same	) }	30.0		182 200		56 374	A*1*2.5
Skilled labor         Derson         0.25         -         170,100         -         47,216           Common labor         Derson         0.5         -         80,600         -         48,152           Sand pile driver         leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Air compressor         7.5-7.6 m3/min         day         0.1         4,660         43,000         1,320         46,400           Generator         Cenerator         0.8 m3         hr         0.62         1,130         48,000         1,172         32,240           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Miscellaneous expenses         (sum of above)*6%         set         1         29,489         587,715           Total         Per 1 m = Total/17.0m           Per 1 m = Total/17.0m         A:Total           Total           Per 1 m = Total/17.0m         A:Total           A:Total           B:Total           A:Total           B:Total           A:Total <td>C</td> <td></td> <td></td> <td>person</td> <td>C7.0</td> <td></td> <td>100,000</td> <td></td> <td>1,0,00</td> <td></td>	C			person	C7.0		100,000		1,0,00	
Sand pile driver         leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Sand pile driver         leader length 30 m         hr         0.62         23,760         50,000         24,552         33,480           Air compressor         7.5-7.6 m3/min         day         0.1         4,660         43,000         1,320         46,400           Generator         Cenerator         0.8 m3         hr         0.62         1,130         48,000         1,172         32,240           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Miscellaneous expenses         (sum of above)*6%         set         1         29,489         587,715           Total         Per 1 m = Total/17.0m           Per 1 m = Total/17.0m         A:Total           Total         A:Tot(60*t)=0.10           Ber 1 m = Total/17.0m           A:Total           B:Total/17.0m	1 0			person	0.25	1	170,100		47,216	A*1*2.5
Common labor         Common labor         Common labor         Common labor         Common labor         Common labor         Assistance	ο,			nercon	0.5	,	80.600	1	48,152	A*2*2.5
Sand pile driver         leader length 30 m         hr         0.62         23.760         50,000         24,532         35,460           Air compressor         7.5-7.6 m3/min         day         0.1         4,660         43,000         776         23.100           Generator         200 KVA         day         0.1         7,920         464,000         1,320         46,400           Tractor shovel         0.8 m3         hr         0.62         1,130         48,000         1,172         32.240           Miscellaneous expenses         (sum of above)*6%         set         1         29,489         587,715           Total         Per 1 m = Total/17.0m         1,735         34,571         A:Tc/(60*t)=0.10           Tc : Executing time for one sand compaction pile of 17 m; Tc = 2.18*17=37.06 min         B:Tc/60=0.62	4			100	21.5		000	694 86	797 66	D. Equipment 104
Air compressor         7.5-7.6 m3/min         day         0.1         4,660         43,000         776         23,100           Generator         200 KVA         day         0.1         7.920         464,000         1,320         46,400           Tractor shovel         0.8 m3         hr         0.62         1,130         48,000         1,172         32.240           Miscellaneous expenses         (sum of above)*6%         set         1         29,489         587,715           Miscellaneous expenses         (sum of above)*6%         set         1         29,489         587,715           Total         Per 1 m = Total/17.0m         1,735         34,571           Tc : Executing time for one sand compaction pile of 17 m; Tc = 2.18*17=37.06 min         B:Tc/60*t)=0.10	~	Sand pile driver	leader length 30 m	h	0.62	23,760	20,000	74,557	33,480	בארו ביוואווולויהארד ים
Continuous Section   Continu	1		7.5~7.6 m3/min	dav	0.1	4,660	43,000	776	23,100	A; Equipment - 82
Generator   200 KVA   day   0.1   7.520   404,000   1,172   32.240   33,267   1,130   48,000   1,172   32.240   33,267   1,504   1,669   33,267   1,504   1,669   1,173   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,569   1,	٥					200 5	464 000	1 320	46 400	A: Forniament - 48
Tractor shovel         0.8 m3         hr         0.62         1,130         48,000         1,172         32.240           Miscellaneous expenses         (sum of above)*6%         set         1         1,669         33,267           Total         Total         29,489         587,715           Tc : Executing time for one sand compaction pile of 17 m; Tc = 2.18*17=37.06 min         A:Tc/(60*t)=0.10	7	Generator	200 KVA	day	0.1	076"/	404,000	0.25.1	or of	G
Miscellaneous expenses   (sum of above)*6%   set   1   1,669	0	Tractor chove	0.8 m3	hr	0.62	1,130	48,000	1,172	32,240	B; Equipment - 12
Miscellaneous expenses	۰	Hadol shote	(mm of oboto)*60/	100	-			1.669	33,267	
1,735 of 17 m; Tc = 2.18*17=37.06 min	Σ,	Miscellaneous expenses	(suil of apove) 070	ו נו				007.00	344 400	
1,735 of 17 m; Tc = 2.18*17=37.06 min		Total			٠			79,489	20/1/12	
of 17 m; Tc = 2.18*17=37.06 min										
of 17 m; Tc = 2.18*17=37.06 min		F	177.0					1.735	34,571	
of $17 \text{ m}$ ; $Tc = 2.18 * 17 = 37.06 \text{ min}$		rer I m = 100					J		0.0 (**0)// 2.	
		Tc : Executing time for one	sand compaction pile of	17 m; Tc	= 2.18*17=3	7.06 min			A:1c/(b0*t)=0.10	
									B:Tc/60=0.62	

Tc: Executing time for one sand compaction pile of 17 m; Tc = 2.18\*17=37.06 min t: Operation hours per one operation day

D: Diameter of sand pile; 0.7 m

L: Design length of sand pile; 17 m

Pump setting and removal (for drainage) Per: one place

Unit Price	Unit Price	Linit Price	L'Init Price	Unit Price	Price		⋖	Amount
			Saltino	CHILLING	?			
Description Standard Unit Quantities Foreign	Unit Ouantities Foreign	Ouantities Foreign	Foreign	Foreign	_	Local	Foreign	Local
(J.YEN)	(J.YEN)	(J.YEN)	(J.YEN)	(J.YEN)		(VN. D)	(J. YEN)	(V.N. D)
, 500 more				1	1	183 300		45,825
	6.5.0	6.5.0						0000
Cammon Jahor 0.5			0.5	1		80,600	•	40,300
		+						3 115
Miscellaneous expenses (Jabor cost)*4% set	٠.	Set 1		-			1	2,44,0
							•	89,570
lotal					1			
					ı			
F							1	89.570
Per : One Diace	Diace		1	-	ļ	+		

Pump setting and removal (for drainage)
Per one place

						•		4 1		_
į					5	Unit Price		Amount	•	
5	Description	Standard	Umit	Quantities	Forei	Local	Foreign	Local (VN D)	Remarks	
į					(J.YEN)	(V.S. U.)	1	200	0.1*0.4	Γ
				300		183 300	•	45,825	0.1.4.3	7
-	Loremon		person	0.43		(0)		40 300	0.2*2.5	
-	Dominan		הסדפת	0.5		80,000	1	2020		r
~	Common labor		00000				1	3,445		7
1		(labor cost)*4%	set	_					01*T · T-444	
ርኅ	Miscellaneous expenses	(1000, 2001)				-			tr.t   ' ' ' ' ' ' '	
			•		1 250	46.000	550	20,240	Equipment -20	-
₹	A Truck crane	hydraulic 4.8-4.9 t	'n	U.44	00.7.1					
1	וותרא כומוזכ									Γ
							550	109,810		Т
	Total									
										Т
							550	109,810		7
	Per : one place		_							
							-			

Pump setting and removal (for drainage;sheet pile cofferdam) <u>Per: one place</u>

						4	******	
				5	Unit Price	¥	Аттоши	
	Standard	i ii.	Ouantities	Foreign	Local	Foreign	Local	Remarks
Describition			,	(I VEN)	(VN D)	(J.YEN)	(VN. D)	
			300		183 300		45,825	0.1*2.5
		person	0.43	'	2000		0000	7 0 3 4 7 5
		Derson	0.5	1	80,600		40,300	0.2 4.0
						'	3,445	,
3 Miscellaneous expenses	(labor cost)*4%	set	-1				001.00	Ecuinment -01
	25 ton	dav	60.0	21,900	302,000	1,9/1	701,120	יין אייין
	101							0.2*T; T=3.63
		: 	7	1 210	120 000	926	87,600	Equipment -75
	100ps	ŧ	0.0	1,710	20,027			
	,						CLC FOR	
		İ	<u></u>			2,977	DCC+07	
						7000	204 350	
Dom : one nlace		_				176,7	200,107	

Pump operation (whole day) Per: one day

					,		*	1 11 1		_
						Unit Price	¥	Amount		
Ž	Description	Standard	Cnit	Quantities	Foreign	Local	Foreign	Local	Remarks	
ģ			**		(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		<sub>1</sub>
			norcon	0.6	'	17,100	1	10,260	0.24*2.5	_
_	Skilled labor		100100	2	i.		Q F V			
۱,	2 Submerged nump	100mm;head 15m	day	_	470	,	0/4		co - maindinha	-
1	1000							-	Modified unit running	
		15 KVA	dav	· .	085,1	45,000	1,580	45,000	cost;Equipment - 2	
'n	Cenerator		)					235		
4	Miscellaneous expenses	(sum of above)*1%	set				17	CCC		-1-
-										
							120 0	55 013		
ŀ	Total						1,0,7	53,613		
		_						1		7
	Don't can don't						2,071	55,813		1
	rer : One uzy									

Pump operation (whole day) Per: one day

					5	Unit Price	₹.	Amount		
Ž	Description	Standard	Cnit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
	10 1 d 1 d 1 d 1 d 1 d 1 d 1 d 1 d 1 d 1			,	(I.YEN)	_	(J.YEN)	(VN. D)		
	11.11.11.11.11		nercon	1.2		170,100		204,120	2*0.24*2.5	
<u>''</u>	Skilled labor		100						2 pumps*1 day;	
		0.200mm.head 15m	, , , , , , , , , , , , , , , , , , ,	2.0	1 150	•	2,300	•	Equipment - 62	
21	2 Submerged pump	4 ZOOIIIII,IICAU I OIII	1	Si i					Modified unit running	
		60 KVA	200	1.0	3.100	143,000	3,100	143,000	cost;Equipment - 1	
2]	Ocilei aloi	- 1					22	3 471 20		
_	Miscellaneous expenses	(sum of above)*1%	set				ţ	A7:17:17		the same of
L										-
┸	Total						5,454	350,591		
┺.								!		
ᆚ							5 454	350.591		_
	Der one day									

Pump operation (working time) Per..one.day

					Г	7		•••	Т	-	Ť		_	Т		Γ	٦
		Remarks		0.16*2.5	Downson+ 02	Co - manidipha	Modified unit running	C transmitted	cost, Equipment = 2								
Amount		Local	(VN. D)	68.040		•		14050	UC&,43	000	(70		02 710	07,17		11.00	85,/19
Ą	· ·	Foreign	(J.YEN)	-	1 4	CC1			175	1	,	•	607	000			683
I fait Duice	2011				2016	•			45,000								
1 [20]	5	Ĭ	(J.YEN)		'	470			1.580								
		Quantities		70	t.	0.33			0.33								
		Chrit			person	dav	ì		dav		set						
		Standard				100mm.bead 15m	Toolini, manager		15 KVA	27.31.61	(sum of above)*1%						
		Description			Skilled labor	7 - 1	Submerged pump			Cenerator	Adical angula pynenses	Miscellances expenses		Total	A Utal		
		2	3	-	_	,	7		,	ኅ	-	+					

Pump operation (working time) Per: one day

				Uni	Unit Price	Ą	Amount	
Description	Standard	Unit	Quantities	Foreign	Local	Foreign		Remarks
				(J.YEN)	(V. D.	(J.YEN)	(VN. D)	
		ретѕоп	8.0	٠	1	-	080'9£1	2x0.16*2.5
								2 pumpsx1 day;
	Ф 200mm;head 15m	day	99.0	1,150	•	759	•	Equipment - 62
			1					Modified unit running
	60 KVA	day	0.33	3,100	143,000	1,023	47,190	cost;Equipment - 1
Miscellaneous expenses	(sum of above)*1%	set	_			18	1,833	
						1,800	185,103	
Per : one day						1,800	185,103	

Concrete (A-1, A - 2; A - 3: sck = 400kg/cm2)

Per 10m3

						-	\ \	Amount	
					5	Unit Price	τ	inount.	
	Decrintion	Standard	Cuit	Ouantities	Foreign	Local	Foreign	Local	Remarks
j						(VN D)	(J.YEN)	(V. D.)	
	·	Dortland	12	4500	,	876	1	3,942,000	Material - 71
	Cement	רטועווט	200	7222				100 (1)	Material - 104
6	Course aggregate	crushed stone	ton		1	58,444		450,740	ואומוריו ומו - זמל
4	Coarse aggingare	4	15.	7.2		50.000	1	360,000	Material - 106
ന	Fine aggregate	Sand	3	7:,			41, 6	000 00	Decogn cont 31
	Constitutions on or or or or or or or or or or or or or	45m3/hr	m3	01	341	9,759	3,410	085./8	FTOCESS COSt - 21
1	Concrete plant operation			,	3	15 5 4 4	2010	155 440	Process cost - 22
4	Transportation of concrete	truck mixer	m3	10	781	10,044	7,010	Ott. CCI	2000
,		3.0 ~ 3.2m3							
		0.0					6.730	5 197 914	
	Total,						24460		T-1 30/ 1 into 2000
									Take 2% loss thio account
							634	530,187	at concrete placing
1	Per 1.0m3								

Concrete (class B-1, sck = 350kg/cm2)
Per 10m3

					Uni	۵	- 1	Amount	
No. Description Standard	Standard		Cnit	Quantities	Foreign	-	Foreign	Local	Kemarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
Cement Portland	Portland		kg	4080		928	•	3,574,080	Material - 71
Coarse aggregate crushed stone	crushed stone		ton	10.79	,	58,444		630,611	Material - 104
Fine aggregate sand	sand	-	ton	7.65	•	50,000		382,500	Material - 106
Concrete plant operation 45m3/hr	45m3/hr	<del>-</del>	m3	10	341	9,759	3,410	97,590	Process cost - 21
Transportation of concrete truck mixer	truck mixer	_	m3	10	281	15,544	2,810	155,440	Process cost - 22
3.0 ~ 3.2m3	3.0 ~ 3.2m3								
Total							6,220	4,840,221	
									Take 2% loss into account
Per 1.0m3		_					634	493,703	at concrete placing

Concrete (class C-1;C-2; sck=290kg/cm<sup>2</sup>) Per 10m<sup>3</sup>

			,							-1	•	~		····				1
		Kemarks		Material - 71		Material - 104	Material 106	iviate i ai - 100	Process cost - 21	100000000	Process cost - 22				- 1	Take 2% loss into account	at concrete placing	
Amount		Local	(V. D)	3 206 160		610,155	002.004	402,200	005 20	050.16	155 440	011001		248 974 A	1,4/0,012		456 842	
AI	ı	Foreign	(J.YEN)					1	017 6	014.0	010 0	7,010		0000	077'0		634	1
I Init Price	2	Local	(VN. D)	728	2/2	58 444	, ,	20,000	0.00	45/6	777	15,544						
1 141		Foreign	(I VEN)					,	]	341	1	781						
	-	Quantities		9,7,6	2000	10.44	10.	× 10				0						
		Unit			×.		ton	4		<b>E</b>		m3						
		Standard			Portland		crushed stone	P 4000	541)0	45m3/hr	401110	truck mixer		3.0 ~ 3.2m3				
		Description	Dendi Dead		Coment	Collicate	Coarse aggregate	X-X	Fine aggregate		Concrete plant operation	Transportation of concrete	Hallsportation of constant		Total	I ULAI		Do- 1 0m2
			į		r-	_	~	۱,	'n		4	v	$\langle  $					

Concrete (Class Y; sck=290kg/cm2 for cast in place concrete pile) Per\_10m3

r					5	Unit Price	Y	Amount	
	Decomption	Standard	Chiit	Ouantities	Foreign	Local	Foreign	Local	Remarks
o o	rescribinou			,		(VN, D)	(J.YEN)	(VN. D)	
1		Doctord	3	3090		876	 	3,495,240	Material - 71
	Cement	rotifatio	S V	2				822 705	Material - 104
_	Charce agoregate	crushed stone	ton	10.04	,	58,444	•	0///000	
,,	Compa 1995	pues	tot	7.86	•	50,000	,	393,000	Material - 106
· ^	Fine aggregate	Salic	3					003 500	Propers post - 71
,	Concrete n out operation	45m3/hr	m3	10	341	4,739	3,410	066.18	1100030001
,	College plant operation		,	,	100	15 644	0186	155 440	Process cost - 22
···	Transportation of concrete	truck mixer	m3	01	197	10,01	2,010		
1		30~32m3							
1							6.220	4,728,048	
	Total								Tale 30, less into account
Γ									ייים מאכי ביים וחופס וווונס מבכיסתווו
							634	482,261	at concrete placing
	- EE EE								

Concrete (Class D-1; sck=240kg/cm2)

<u>Per 10m3</u>

							•	-		
					[ Jaji	[ Init Price	Ŕ	Amount		
			*-	-				10001	Permarks	
	1	Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Carolina de Caroli	Init	Ouantities	Foreign	Local	roreign	Local		
0	Description	Staticalo		<b>y</b>		(C) NS	(J.YEN)	(S.Y. D)		
					(0.1 1.0)			7 705 600	Material - 71	
		L 10 10 10	1/2	3180	•	876	•	7,700,000	ייום ואומיניום	
	Cement	Portland	Ş	2010		777		608 402	Material - 104	
.[		oroto bodo	ţ	1041		08, <del>44</del> 4	•	201,000		
C	Coarse aggregate	Crusned stolic	3			2000		430 000	Material - 106	
		***************************************	401	8.6	,	20,000		2000		
(4)	Fine aggregate	Salid				0.100	017 6	07 590	Process cost - 21	
		A C 3 A	Ě	2	341	٧٥/,٧	211.0	010:1		
4	Concrete plant operation	4.0111.57111.	315			****	0100	155 440	Process cost - 22	
		To serve of a second	4	9	781	15,544	7,010	0.1	11 2000 00000 1	
ç	Transportation of concrete	TUCK THIXE	3	,						
,		20.32m3								
		3.0 ~ 3.41613					6.220	4.077.112		
	Tr. + 1						2		, , , ,	
	LOCAL								Take 2% loss into account	
									Privo   1 04000 100 100	
			•			:	634	415,865	at concrete practing	
	Per 10m3									
	-									

Concrete (Class E-1;E-2; sck=210kg/cm2)

Per 10m3

١							Α,	Amount	
		-			iiio	Ontr Price	Ċ		
	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
	Cescubing			,	(I.YEN)	(SN. D)	(J.YEN)	(VN. D)	
-+		£ 1.4[m 0	2/1	2 050	,	876		2,584,200	Material - 71
	Cement	Foruand	מג	4,730				20000	Motorial 104
+	O como o como conto	crushed stone	ton	10.39		58,444	1	607,233	Malcilai - 104
+	Coarse aggicgate			000		\$0.00	•	444 500	Material - 106
_	Fine aggregate	sand	ton	0.09		2000		0.00	7
+-		45m3/hr	£m.	10	341	9,759	3,410	97,590	Process cost = 4.1
	Concrete plant operation	III CITICE				1 1 1	010 0	077 551	Process cost - 22
<del>-</del> -	Transnortation of concrete	truck mixer	m3	0	281	15,544	7,810	0++,001	100000000000000000000000000000000000000
-t-		20.20.2							
_		5.0 ~ 0.4					02.6	2 000 063	
Η.	Total						077.0	2,000,703	
-1-	1000								Take 2% loss into account
							634	396,674	at concrete placing
_	Dor 1 0 m 2		_						

Removal of stone masory
Per: 100 m2(thickness 30cm)

					Chit	Unit Price	An	Amount	
ž	Description	Standard	Unit	Quantities	Foreign	Local	Foreign (1.YEN)	Local (VN. D)	Remarks
				000	2 550	000 60	947	34,040	T1*(30/100); Equipment - 6
	Back hoe	0.6 m3	Ŀ	0.57	7,200	000,27	,	21.762	(1/T1)*(30/100)*2.5
6	Common labor		person	0.27	<u> </u>	00,000	30000	1 208 510	*C-
1 4	Dumm trick	11 ton	hr	19.53	1,650	67,000	27,26	010,000,1	200000000000000000000000000000000000000
	Daily Luck								
							33,172	1,364,312	
	Total						223	13 643	
	Per 1 0m²	•					332	0 to 1	
		(0.6 3)							
	. Work ability of back noe (0.0 ms)	-1		4	٥	ر (دهر)	O(m3/hr)	T (hr/100m3)	Q = (3.600*q*f*E)/Cs
	g , (m3)	¥	Ь.	L	u l	(325)	, , ,	1	X * 00=0
		0.80	0.50	00.1	9.0	19.0	0.4.0	1.63	11 100 4 4 A A
	0.00			f. Soil conversion factor	reion factor		C.: Cycle time		
	q,: Standard bucket capacity			1. 3011 collect			a - Excavation	a : Excavation volume ner one cycle	olo/cle
	K : Bucket factor			E: Efficiency of work	y of work			O = (60 * a * f * F)/C_	E)/C_
 :	Work ability of dump truck (11 ton)	ck (11 ton)							
					: : : : : : : : : : : : : : : : : : : :			C = D L+a; 12 = 100/C;	= 100/Q;
•					l.,	4	ú	O (m <sup>3</sup> /hr)	T2 (hr / 100m3)
	[ (km)	٠ •	ď	C <sub>m</sub> (mm).	. (сш) b	7	)	, , , , , , , , , , , , , , , , , , ,	10 53
٠. 	(::::)	10	01	58	5.5		6.0	5.12	
	1.0	4.0			out ownlass	dum truck		E: Efficiency of work	vork
	L: Transport distance (Km) a: Working factor	a: Working factor	• • • • • • • • • • • • • • • • • • • •	q : Loancing	d: Loancing voluine one cump week	ממוואל וו מבוו			
	h : Factor of transport condit C: Cycle time	C Cycle time		f : Soil conv	: Soil conversion factor				
		•							

Concrete (Class G;; sck=80kg/cm2)
Per 10m3

<del></del>	•		-	_	-		T	1	tut	_
Remarks	Netitalina	Material - 71	Material - 104	Material - 106	Process cost - 21	Process cost - 22			Take 2% loss into account	at concrete placing
Amount	(VN. D)	1,559,280	693,730	448,000	97,590	155,440		2,954,040		301,312
`1	(J.YEN)	a a	-	1	3,410	2,810		6,220		634
Unit Price	(VN. D)		58,444	50,000	651.6	15,544				
Cui.	(J.YEN)		1	-	341	281				
(	Quantities	1,780	11.87	8.96	10	10				
	1 1 1 1 1	Š	ton	ton	m3	m3				•
	Standard	Portland	crushed stone	sand	45m3/hr	truck mixer	3.0 ~ 3.2m3			
	Description	Cement	Coarse aggregate	Fine aggregate	Concrete plant operation	Transportation of concrete		Total		Per 1.0m3

Concrete (Class F;; sck=130kg/cm2)
Per 10m3

							~	Amount	
					<u></u>	Chit Price	(	HOURT	
				Outontities	Foreig	Local	Foreign	Local	Remarks
ģ	Description	Standard	5	Chantings		(C X X	(J.YEN)	(VN. D)	
					(7.1.514)	(	,	1 044 720	Material - 71
-		7 1 7 1 7 6	1	2 220		876	•	1,944,720	
	Cement	Fortiand	N.S.	277.7		7,70		648 728	Material - 104
-		oroto Ladama	+	-	•	08,444	ŀ	27, 520	
c	Coarse aggregate	crustica stolic	3			000		453 000	Material - 106
1	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	pues	ton	90.6	•	20,000	•	3334	
m	Fine aggregate	Salla			.,,	0.750	3 410	97.590	Process cost - 21
١		45m3/hr	£	2	34.	7,132	011.0		CC
4	Concrete plant operation	11100111		\\\.	100	15 544	2.810	155,440	Process cost - 77
١,	The section of concrete	truck mixer	m3	2	107	1,0,0	2.7.		
<b>^</b>	Transportation of concrete								
		$3.0 \sim 3.2 \text{m}_3$					466	2 200 470	
1							077'9	3,4,4,6	
	Total								Take 4% loss into account
				•••					
							647	343,146	at concrete placing
	Dor 1 0m3								

Granular sub - base course ( t = 40 cm ) Per  $10\text{m}^3$ 

				, T.	* D-100	- γ	Amount	
				S	Onli Price	Ì	iiouii.	
No. Description	Standard	Cait	Quantities	Foreign	Local	Foreign	Local (V.V.)	Remarks
				(7.1.7.)	(7.11)			
Crusher-run	correct factor = 0.28	m3	54.4		88,000		4,787,200	K = +0.36, Material - 108
								T = (40/100) *Tm;
2 Motor grader	3.1m	'n	0.34	2,850	58,000	696	19,720	19,720 T = 1.05; Equipment - 14
+	macadam 10~12 ton	μ	0.46	2,010	48,000	925	22,080	Tr = 0.23; Equipment - 40
		hr	0.32	1,990	50,000	637	16,000	Tt = 0.16; Equipment - 41
5 Road sprinkler	5500 ~ 6500 1	hr	0.32	1,230	42,000	394	13,440	T = 2*Tt; Equipment - 44
6 Common labor		person	0.43		80,600		34,658	0.17 * 2.5
7 Miscellaneous expenses	(labor cost) * 4%	set	I				1,386	
Total						2,924	4,894,484	
Per 1.0m <sup>2</sup>						29	48,945	
Workability of motor grader (width 3.1)	ler (width 3.1)					.*	3	
(m) (m)	H(m)	T.	ш	ď	Cm (min)	Q (m3)	Tm	Q = (60*W*L*H*f1*E)/P*(
50 2.8	0.2	0.87	9.0	4	1.92	114.2	0.88	$Cm = L/V_1 + L/V_2 = 280.5 = 1$
W : Effetive width of blade		H: Spread heigth	l heigth		E : Effeciency	E: Effeciency work; Cm: Cycle time	ycle time	V <sub>1</sub> : Working speed
L: Working length of one time	me	f <sub>i</sub> : Soil co	f <sub>i</sub> : Soil conversion factor	or	P: Times of spread out	pread out		V2: Returning speed (m/min
Workability of road roller (10 ~12 ton)	(10~12 ton)							
W (m)	V (m/hr)	Э	d	A (m2)	Tt		A = (W * V * E)'	Δ,
2.08	3,200	9.0	6	444	0.23		Tr = 100/A	
W: Effective width of roller		V : Speed	V : Speed of compaction	Ę	日 日	E: Efficieccy of work	ork	
P: Time of compaction		A: Compa	A: Compacted are per one hour	one hour				
Workability of tired roller (8 ~ 20 ton)	$(8 \sim 20 \text{ ton})$							
W (m)	V (m/hr)	Ξ	പ	A (m2)	Tt		A = (W * V * E)/P	<u>م</u>
2.3	4,000	9.0	6	613	0.16		Tt = 100/A	
W: Effective width of roller		V : Speed	V : Speed of compaction	t t	ш	E: Efficieccy of work	ork	
P: Time of compaction		A: Compa	A: Compacted are per one hour	one hour				

Granular sub-base course (t = 15 cm) Per  $100\text{m}^2$ 

					L.	I init Price	Ar	Amount		
		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		Ougnities	Foreign	Local	Foreign	Local	Remarks	
o Z	Description	Standard		) }	(J.YEN)	(V. U.	(J.YEN)	(V.N. D)		
									t * 100m <sup>2</sup> * 1.36,	
		300-2003	3	20.4		88,000	4	1.795,200	K = +0.36, Material - 108	
	Crusher-run	כפודפנו ומכוסו – ס.בס							$T = (40/100)^{*}Tm$ ;	
•		7.	Ł	0.16	2,850	58,000	156	9,280		
-1	Viotor grader		غـ ا	6.0	2.010	48,000	797	11,040		
15	Road roller	macadani 10-12 (01)	٤	0.16	1.990	50,000	318	8,000	Tt = 0.16; Equipment - 41	
-+	lired roller	1000 0000		0.16	1.230	42,000	161	6,720	T = Tr: Equipment - 44	
'n	Road sprinkler	1 00ca ~ 00cc		200	22-6	80,600		34,658	0.17 * 2.5	٠.
Ó	Common labor		person	C+:0		22,020		1 386		т
7	Miscellancous expenses	(labor cost) * 4%	set				7 67	F8C 990 1		· 
	Total						+0+1	10160001		т
	Per I Om						7	18,663		1
.	Wartshilly of motor grader (width 3.1)	er (width 3.1)			1				1	
	W(m)	H(m)	ų.	ш	۵	Cm (min)	(m3)	Тт	Q = (60*W*L*H*fl*E)/P*(	<b>-</b> .
נ			100	.,	্ব	1 92	55.2	1.05	$Cm = L/V_1 + L/V_2 = 280.5 = 1$	_
9	2.8	0.2	. 0.0	00	-					
	W : Effetive width of blade		H : Spread heigth	d heigth		E: Effeciency	E: Effeciency work; Cm: Cycle time	ycle nme	( referred to the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the con	
	1: Working length of one time		f <sub>i</sub> : Soil o	f1: Soil conversion factor	101	P : Times of spread out	pread out		V <sub>1</sub> : working speed (italifil)	-
	Workability of road roller (10~12 ton)	(10~12 ton)							V2: Returning speed (m/min	æ
	W (m)	V (m/hr)	ш	d,	A (m2)	Ţ		A = (W * V * E)/P	0,1	٠.
	2.08	3,200	9.0	6	444	0.23		Tr = 100/A		
	W : Effective width of roller		V : Speed	V : Speed of compaction	<u>.</u>	ш ш	E : Efficieccy of work	ork		
	P: Time of compaction		A:Comp	A: Compacted are per one hour	one hour					
	Workability of tired roller (8 ~ 20 ton)	(8 - 20  ton)						•		
	W (m)	V (m/hr)	ш	Q.	A (m2)	Ţ		$A = (V \cdot * V \cdot \pi) \cdot P$		
	2.3	4,000	9.0	6	613	0.16	, ,	!t = 100/A		
	W : Effective width of roller		V : Speed	V : Speed of compaction	ц	<del>п</del> )	E: Efficieccy of work	/ork		
	P: Time of compaction		A: Comp	A: Compacted are per one hour	one hour					

Granular sub-base course (t = 25 cm) Per  $100\text{m}^2$ 

					,	-	, V	wount.	
					5	Unit Price	ζ	Aillouin	
ž	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
<u>;</u> .					(J.YEN)	(N. D.	(J.YEN)	(VN. D)	
									t * 100m <sup>2</sup> * 1.36,
-	Section 1		m3	34		88,000		2,992,000	Υ <u>Υ</u>
-	Clusifet-1 uti								T = (40/100) *Tm;
,	Motor grader	3.1m	ħ	0.22	2,850	58,000	627	12,760	
1 6	Dood roller	macadam 10~12 ton	hr	0.29	2,010	48,000	583	13,920	
7	Thed roller	8 ~ 20 ton	Ę	0.2	1,990	50,000	398	10,000	۳
- 0	Road enrinkler	5500~6500 1	Ę	0.16	1,230	42,000	197	6,720	T=T
, 4			Derson	0.55		80,600		44,330	0.17 * 2.5
ا د		(1cher 000+) * 10/	tos	-				1,773	
-	Miscellaneous expenses	(1900) COSt) +70	301	•			1 805	3 081 503	
	Total						1,000	CO COY COLO	
	Per 1.0m <sup>2</sup>						18	30,815	
	Workshility of motor grader (width 3.1)	er (width 3.1)							
<b>,</b>	W (m)	H(m)	4-	ω	d,	Cm (min.)	Q (m3)	Tm	Q = (60*W*L*H*f1*E)/P*C
S	2.8	0.2	0.87	9.0	4	1.92	114.2	0.88	$Cm = L/V_1 + L/V_2 = 280.5 = 1$
	W : Effetive width of blade		H: Spread heigth	d heigth		E: Effeciency	E : Effeciency work ;Cm : Cycle time	ycle time	V1: Working speed (m/min)
·. ···.	L: Working length of one time	ne	f <sub>1</sub> : Soil co	f <sub>1</sub> : Soil conversion factor	ō	P: Times of spread out	pread out		V2 : Returning speed (m/min
	Workability of road roller (10~12 ton)	(10~12 ton)							
	W (m)	V (m/hr)	ш	P	A (m2)	#		A = (W * V * E)/P	
	2.08	3,200	9.0	6	444	0.23		Tr = 100/A	
	W: Effective width of roller		V : Speed	V : Speed of compaction	E	Щ 	E: Efficieccy of work	ork	
	P: Time of compaction		A:Comp	A: Compacted are per one hour	one hour				
	Workability of tired roller $(8 \sim 20 \text{ ton})$	$(8 \sim 20 \text{ ton})$						*	
÷.	W (m)	V (m/hr)	щ	А	A (m2)	ŧ,		A = (W * V * E)/P	Δ.
	2.3	4,000	9.0	6	613	0.16		Tt = 100/A	
	W : Effective width of roller		V : Speed	V : Speed of compaction	II.	ш	E: Efficieccy of work	ork .	
	P: Time of compaction		A:Comp	A : Compacted are per one hour	one hour				

Aggregate base course (t = 10 cm) Pcr  $100\text{m}^2$ 

						<b>,</b>	<b>-</b> r				•		т.			_	
		Remarks	Equipment - 38	oc moundinbo	Equipment - 42	いつまっ	5 4.3										
	Amount	Local	000 20	39,000	70.670	000 100	004,400	001 100	74,100			735 350			7000	1,504	
	Ą	Foreign		1,400	900		1					1636	070,1			9	
	Unit Price	Local	(N. D)	36,000	101 000	171,000	80.600										
	<u></u>	Foreign	(J.YEN)	1.400		010			_								
	_	Quantities		1		0.37	1. 1.	٠.,	-	-							
1		Unit		h,	117	day		person	,	ш	_						
		Standard		144 % C	3-4 1011	60 - 100 kg				(labor cost)*4%							
		Description			Vibrating roller		гаттрет	Common labor	COMMISSI 1900	Miscellaneous expenses				I otal			Dar 1 Am <sup>2</sup>
		Ş	2	Ì		,	7	7	'n	7	-						

Asphalt pavement (Binder course, t = 7 cm) Per  $100\text{m}^2$ 

	Standard	Unit	Quantities	Uni Foreign	Unit Price n Local		Amount Local	Remarks
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
		ton	17.388	. <b>.</b>	134,114		2,331,974	2,331,974 100m <sup>2</sup> * t * 2.30 t/m <sup>3</sup> * 1.08
crawler type		hr	0.330	8,700	44,000	2,871	14,520	0.33*1 course
2.4 ~ 5.0 m	$\dashv$							Equipment - 43
macadam		 Łų	0.330	2,010	48,000	663	15,840	0.33*1 course
$10 \sim 12 \text{ ton}$								Equipment - 40
								0.165*1 course;
8 ~ 20 ton		hr	0.165	1,990	50,000	328	8,250	Equipment - 41
		person	0.100		183,300		18,330	0.04 * 2.5 * 1 course
		person	0.530	•	170,100	•	90,153	0.21 * 2.5*1 course
	'	person	0.530	•	80,600	-	42,718	0.21 * 2.5 * I course
(labor cost)*4%		set	1				6,048	
						3,863	2,527,833	
						39	25,278	
1						235	153,668	

Asphalt pavement (surface course, t = 5 cm) Per  $100 \text{m}^2$ 

		 						,						
	Remarks	1,758,834 100m <sup>2</sup> * t * 2.35 t/m <sup>3</sup> * 1.08	0.33 *1 course	Equipment - 43	0.33*1 course	Equipment - 40	0.165*1 course; Equipment -		0.04 * 2.5*1 course	0.21 * 2.5*1 course	0.21 * 2.5 * 1 course			
Amount	Local (VN. D)	1,758,834	14,520		15,840			11,000	18,330	90,153	42,718	6,048	1,1	166,591
A	Foreign (J.YEN)		2,871		699			438					3,972	338
Unit Price	Local (VN. D)	138,600	44,000		48,000			50,000	183,300	170,100	80,600			
5	Foreign (J.YEN)		8,700		2,010			1,990					-	
	Quantities	12.690	0.330		0.330			0.220	0.100	0.530	0.530	.1		
	Unit	ton	į	:	hr			j,	person	person	person	set		
	Standard		crawler type	2.4 ~ 5.0 m	macadam	$10 \sim 12 \text{ ton}$		8 ~ 20 ton	-			(labor cost)*4%		-
	Description	Asphalt mixture	Asphalt finisher		3 Road roller			4 Tired roller	Foreman	Skilled labor	Common labor	Miscellaneous expenses	Total	Per 1.0 ton
	Š.		,	1	~	,		4	'n	ی ا	7	∞		

PROCESS COST - 164

Asphalt pavement (surface course,  $t=5^{cm}$ , pavement width less than 5 m) Per  $100m^2$ 

					I'mi	I fait Price	▼	Amount	
Ž	Description	Standard	Cait	Ouantities	Foreign	Local	Foreign	Local	Remarks
;				, ,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
									100 <sup>m2</sup> * t * 2.30 <sup>vm3</sup> * 1.08;
<u>.</u>	Asphalt mixture		ton	12.420		185,934	E	2,309,300	Material - 94
7	Asphalt finisher	crawler type 1.6-3.0 t	hr	0.560	3,580	40,000	2,005		22,400 0.56*1 course Equipment-119
									,
	Dumn truck	2.0 ton	ļ	0.560	400	38,000	224	21.280	0.56*1 course: Equipment-120
									0.22*1 course*3;
ব	4 Vihrating roller	3 - 4 ton	ļ	1.120	1,400	36,000	1,568	40,320	Equipment - 38
- ~	Foreman		person	0.225		183,300		41,243	0.09*2.5
م ر	Skilled labor		person	1.875		170,100		318,938	0.75*2.5
,	Common Jabor		person	0.475		80,600		38,285	0.19*2.5
∞	Miscellaneous expenses	(labor cost)*2%	set		1			7,969.30	
	Total						3,797	2,799,735	
	Per 1.0m <sup>2</sup>						38	27,997	-
1	(Per 10m <sup>3</sup> )				1 1		759	559,947	

Asphalt pavement (surface course, by hand)
Per 100m<sup>2</sup>

				_		Т	-т				Т	1
	Remarks		2 day*1 cuorse	0.4*2.5	0.2*2.5	4 C#C +	1.5-2.3			-		
Amount	Local	(VN. D)	382,000	183,300	85,050	050.00	006,102	21,212	933,512	9.335		186,702
Am		(I.YEN)	1,220						1,220	12		244
Unit Price	Local	(VN. D)	191,000	183,300	170,100		80,600					
Chrit	Foreign	(J.YEN)	919									
	Quantities		2.000	1.000	0.500		3.250					
	Unit		day	person	nerson	1755	person	set				•
	Standard	: :	60-100 kg	<b>)</b>				(labor cost)*4%				
	Description		Tamper	Foreman	Shilled labor	Skilled labol	Common labor	Miscellaneous expenses	Total	N 1 0 2	rer I.um	(Per 1.0m <sup>3</sup> )
	. S	,	-	, ,	۱ ۲	n	4		,			

Asphalt treated base course (t = 20cm) Per 100m<sup>2</sup>

			···							_,		_	-т-		
	Remarks			$100^{m2} + t * 2.35^{vm3} * 1.08$	0.33*2 <sup>course;</sup>	Equipment-43	0.33*2course:	Equipment-40	0.33*2 course						
Amount	Local	(VN. D)		6,758,186		29,040		31,680	33,000	36,660	173.502	21.0	717,70		7,155,975
Ā	Foreign	(J.YEN)				5,742		1,327	1,313						8,382
Unit Price	Local	(VN. D)		133,140		44,000		48,000			170 100	2016	80,600		
Unit	Foreig	(J.YEN)				8,700		2.010	1 990						
	Quantities		100	50.76		0.66		99.0	990	200	5	70.1	1.02	1	
	Unit		m2	tot		, 14		.* , <b>E</b>	i	יווי	700	person	person	set	-
	Standard		t=20cm		A C Gant relucery	50 m		Macadam 10-	10.21	107-0				(labor cost)*4%	
	Description		A sphalt treated base course	A cahalt mixture		A carbolt finicher	Aspirate among	D and an 1100	Road folici	Tired toller	Foreman	6 Skilled labor	Common labor	Miscellaneous expenses	Total
	Š.		, i	-	-		1	·	٠ ا	4		9	1	∞	

Asphalt Cement Per 100m<sup>2</sup>

ırks			2)*0.05579;	ւլ - 93		•
Remarks			(16.1 t/100m2)*0.05579;	Material - 93		
	Local	(VN. D)		2,074,888	2,074,888	20,749
	Foreign	(J.YEN)				* 1
	Local	(VN. D)		2,310,000		
	Foreign	(J.YEN)				
	Quantities Foreign			0.89822		
_	Unit			ton		
	Standard					
	Description	•		Binder course	Total	Per 1.0m <sup>2</sup>
	Š			_		

Asphalt Cement Per 100m<sup>2</sup>

					Unit	Unit Price	Y	Amount	
ģ	Description	Standard	Unit	Quantities	Foreign				Remarks
					(J.YEN)	(J.YEN) (VN. D)	(J.YEN)	(VN. D)	
									(16.1 t/100m2)*0.060573;
-	Binder course		ton	0.69659		2,310,000		1,609,123	Material - 93
	Total							1,609,123	
	Per 1.0m <sup>2</sup>							16091	

Asphalt Cement (Bridge surface pavement) Per  $100 \mathrm{m}^2$ 

					Imit	Linit Price	Ą	Amount	
2	Decomption	Standard	Unit	Quantities Foreign	Foreign	Local	Foreign	Local	Remarks
į					(J.YEN)	(J.YEN) (VN. D)	(J.YEN)	(VN. D)	
			-						(17.25 t/100m2)*0.060573-
		-						(1)	Section (Section )
-	000000000000000000000000000000000000000		ton	1.04488		2,310,000		2,413,67	Matenal - 53
-1	Surface course								
								2712 672	
	Total							7,0,014,7	
								721 72	
	Der 1 Am2							/C114-7	

Bituminous prime coat Per 100 m<sup>2</sup>

		<del></del>	—т		ı			т	
	Remarks		Material - 97						
Amount	Local	(VN. D)	336,000	13,440	210 440	044,440	3,494		3,494
A	Foreign	(J.YEN)							
Unit Price	Local	(J.YEN) (VN. D)	3,360						
Chi	Foreign	(J.YEN)							
	Unit Quantities		100	-					
	Chiit		ķ	9					
	Standard		1.0 kg/m <sup>2</sup>	(eum of ahove)*40%	(Series of Goods)				
	Description		Prime coat	Missellesser respected	Miscellalicous cypelises	Total	Per 1.0m <sup>2</sup>		Dor 1 O lea
	Ŷ		  -		V				

Bituminous tack coat Per 100 m<sup>2</sup>

							<b>,</b>	· ·			
	· · · · · · · · · · · · · · · · · · ·	Kemarks	Material - 98								
41	Amount	Local (VN. D)	168 000	0000	5,040	173 040	2, 2,67	1,730		3,461	
•	A	Foreign (I VEN)									
	Unit Price	Foreign Local	(4.14.2)	3,350							
	C.	Foreign	(J. I EIN)								
		Quantities		20		-					
		Unit		83	0	set					
		Standard		0.5 1/20/2022	111 AN C.O	(sum of above)*3%					
		Description			Tack coat	Mary avapage	Miscellaneous cypensos	Total	Per 1.0m <sup>2</sup>		Per 1 () kg
		9	<u>-</u>	T	_	. [	7				

Regulatory and Warning signs setting work, Type - B Per: 10.set

			1	-		۲	- <sub>T</sub>	_,	_	_		τ-	1			7			7
	Remarks	0.8*2.5	4 C*7 C	6.2.0.2	Material - 70	Material - 68	So lateral	Process cost - 66	Droppes onet = 15	ווחררים בחייו	Process cost - 38	Description sout 154	FIOCESS COSt = 124	Process cost - 34				,	
Amount	Local (VN. D)	366 600	000 000	523,900	1.618.180	1 900 010	1,070,1	46,848	150 776	130,720	1,388,880	1000	/93,348	159.624	710 110 7	0,047,010		COLVO	034,/02
ΑĦ	Foreign (1 YEN)			•	t		'	1.074	100	577		1	1,268	•	1/1	995,2		1	/27
Unit Price	Local	102 200	102,200	80,600	161 919	101,010	189,091	1 920	2 2 2 2	7,086	300 70	00,000	396,674	70.013	710,27				
	Foreign (1 VEN)	7.1.3		1		'	ı	44		10		•	634		1				
	Quantities		7	6.5		2	2	74.0	4.42	22.4		2	2		7				
	Unit		person	TOPTOT		each	each	,	CILI	m3	[	m2	m3	,	m?				
	Standard				1	Φ 80	006*006*006	200 11 1 11	Hydraulic 0.35				Class F	T COMIC					set
	Description		Foreman	1.1.	Common labor	Traffic sign pole	Traffic cim hoard	Hallic sign come	Excavation	11-21-21-51	Maria Dackilli	Form work		Concrete	Concrete placing	Total	Lorar		Per: 1s

Regulatory and Warning signs setting work, Type - C

																· •			<b>-</b>			~	
		Remarks		0.8*2.5	F (47)	2.6*2.5	Material - 70	ואימיניומו	Material - 69	Drocess cost - 66	Liberta coat	Process cost - 15	000	Process cost - 56	Process cost - 154		Process cost - 34						-
******	Amount	Local	(VN. D)	366 600	200,000	523,900	036 360 6	3,430,300	8,145,456	202.00	950,690	317.453		3,144,256	1 596 606	0,000,000	319,248	17 733 665	200001411		1 772 366	1,17,300	
1	AT	Foreign	(J.YEN)	,	_	,		,	1		7,14/	448	2		2030	2,330	,	E 131	3,131	-	7	515	
	Unit Price	Local	25	000 001	000,00	80 600		161,818	814 546	21.21.0	1,920	7007	060,1	98 2 28		396,674	70.812	1 2 26 2 7					
	5	Foreign	(I VEN)	(7.1.1.7)	1			ı			4		01			634							
		Onantities	y		7	3 3	0.0	20	-	2	48.8		8.4	22	32	4	_	1					
		l Ini			person		person	4769		each	7.73	Civi	щ3	ſ	7W	m3	,	E CE					
		Cton down	Stalluaru					08 €	200	1000*1600	T11	Hydraune 0.55				Tase F	Canio					4	et
			Description		Ç	roreman	Common labor		Traffic sign pole	Traffic sign board	8:00:001	Excavation	1110-4 5007511	ווווייים חווצעוו	Form work		Concrete	Concrete placing	Total	10121			rer: 1 set
	1		o.		١.	_	_	١,	~	-	- 1		L	_1		J.	امة	0		-		1	

Regulatory and Warning signs setting work , Type - D Per: 10 set

		····	1		_т		7			$\overline{}$	$\neg \tau$	Т	7	T	
	Remarks		0.8*2.5	2.6*2.5	Material - 70		Material - 67	Process cost - 66	Process cost - 15	Process cost - 38	Process cost - 154	Process cost - 34			
Amount	Local	(VN, D)	366,600	523,900	1,618,180	:	3,072,730	46,848	158,726	1,388,880	793,348	159,624	8,128,836		812,884
Aı	Foreign	(J.YEN)	•		ı		•	1,074	224		1,268	1	2,566	-	257
Unit Price	Local	(VN. D)	183,300	80,600	161,818		307,273	1,920	7,086	86,805	396,674	79,812			
Uni	Foreign	(J.YEN)						4	10	•	634				
	Quantities		2	6.5	10		10	24.4	22.4	16	2	2			
	Unit	-	ретѕоп	person	each		each	m3	m3	m2	m3	m3			
	Standard				08 Φ	width 900mm	octagonal	Hydraulic 0.35			Class E				set
	Description		Foreman	2 Common labor	Traffic sign pole	\ \ \	Traffic sign board	5 Excavation	Hand backfill	Form work	Concrete	Concrete placing	Total		Per: 1 set
	Š		-		m		4	S	و	1		٥			

Demolition of RC structure
Per.: 10 m3 (with large sized hydraulic more than 5.0m3)

					Γ	T	T		T				••			-	T	1
	Remarks		0.5*2.5	0.5*2.5	0.5*2 5	7 0.0	1.0*2.5		Process cost - 5// (2)			Process cost - 177	4.0*T;T=800/180=4.44	Equipment - 17				
Amount	Local	(VN. D)	229,125	212,625	130 625	102,020	201,500		349,600	31,315		157,325		97,900	1,419,015			141,902
Am	Foreign	(J.YEN)	1	'		-	ı		14,288	t		3,917		6,266	24,471			7,447
Unit Price	Local	(VN D	183,300	170,100	000	111,/00	80,600		92,000	1		15,733		55,000				
Cmi	Foreign	(J.YEN)	,	ı		-	1		3,760	1		392		3,520				
	Quantities		1.25	1 25		1.25	2.5		3.8	0.1		10.0		 8:				
	Cmit		nerson	nercon		person	ретѕоп		ĮĮ,	ţ	;	<u> </u>		Ът				
	Standard							large sized breaker	600-800kg	(labor cost)*4%	(labol cost)			20 - 22 ton				n3
	Description		£	Foreman	Skilled labor	Welder	Common labor		Breaking work	Mine House or or or	Miscellaneous expenses	The second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of th	הוצף ביותו ביותו הוא הוא הוא הוא הוא הוא הוא הוא הוא הו	Truck group	יווער כומוני	10121		Per: 1 m3
	2	į	-	- -	7	3	4		v		o	r	-	0	۰			

Demolition of RC structure (concrete breaker)
Per: 10 m3 (demolition with concrete breaker amount of demolition less than 5.0m3)

		η	_	Т	η				Т	 	-T		_	
	Remarks		0.5*2.5	1.0*2.5	0.5*2.5	2.0*2.5	Equipment - 9	Equipment - 57		Process cost - 178				
	Local	(VN. D)	229,125	425,250	139,625	403,000	0	104,000	26,020	149,597		1,476,617		147,662
	Foreign	(J.YEN)	1	t	-	-	320	2,410	55	3,702		6,487		649
2011 1 1110	Local	(VN. D)	183,300	170,100	111,700	80,600	•	104,000	1	14,960				
)	Foreign	(J.YEN)		•	*/ */ */ */ */		160	2,410		370				٠
	Quantities		1.25	2.50	1.25	5.0	2.0	1.0	1.0	10.0				
	Unit	:	person	person	person	person	Ę	h	set	m3				
	Standard						20 kg class	3.5 - 3.7 m3 min	(Sum of above)*2%					14
	Description		Foreman	Skilled Jahor	Welder	Common labor	Concrete breaker	Air compressor	Miscellaneous expenses	Disposition of concrete trash		Total		Per · 1 m
_	Ž	·	<u></u>		1 ~	4		ی		<b>∞</b>				

Disposition of concrete trash (back hoe)
Per: 100 m3 (transport distance 10 km)

					rie'S	Unit Price	An	Amount	
Ž	Description	Standard	Chrit	Quantities	Foreign	Local	Foreign	Local	Remarks
}					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Back hoe	0.6 m3	Ę	2.12	2,560	92,000	5,427	195,040	Equipment - 6
	Dinn Hick	13 ton	PI.	20.45	1,650	67,000	33,743	1,370,150	Equipment - 33
<b>1</b> ~	Т		person	0.1		80,600	1	8,060	0.4*2.5*1/10
ŀ	1								
	Total						39,170	1,573,250	
1	Per 1.0m <sup>3</sup>						392	15,733	
	. Workability of back hoe (0.6 m3)	0.6 m3)							
Ţ.	q.(m3)	¥	0	<b>f</b>	Ш	C <sub>s</sub> (sec)	Q (m3 / hr)	T (hr/100m3)	T (hr/100m3) Q = (3,600*q*f*E) / Cs
	090	0.98	0.59	1.00	9.0	27	47.2	2.12	$T = 100/Q$ ; $q = q_0 * K$
, i	a Standard bucket capacity		f: Soil con	f: Soil conversion factor		E: Efficiency of work	of work		
٠.,	K: Bucket factor		C,: Cycle time	time		q: Excavation	q: Excavation volume per one cycle	e cycle	
	. Workability of dump truck (11 ton)	k (11 ton)	(09) = 0	$Q = (60 * q * f * E) / C_m$	ڻ				
÷			$C_m = bL$	$C_m = b L + a$ ; $T = 100/Q$ ;	٠ <u>;</u>				
	L (km)	Ą	83	C <sub>m</sub> (min)	q (m3)	يبو	3	Q (m3/hr)	T (hr / 100m3)
1	1.0	4.8	5	53	4.8		6.0	4.89	20.45
	L: Transport distance (Km) a: Working factor	1: Working factor		q: Loanding	volume one	dump truck	q: Loanding volume one dump truck E: Efficiency of work	of work	
	b : Factor of transport condit C . Cycle time	Cycle time		f : Soil conversion factor	rsion factor				
.:	Control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the control of the contro								

Disposition of concrete trash (back hoe) Per: 100 m3 (transport distance 10 km)

Remarks 50 Equipment - 6				ш	50 0.4*2.5*1/10	70	05	
Local (VN. D) 117,76	(VN. D) 7,711	117.71		1,3	8,060	1,495,970	14,960	
Foreign		(J.YEN)	3,277	33,743	•	37,019	370	
	Local	_	92,000		80,600			
	Foreign	(J.YEN)	2,560	1,650	•			
	Quantities		1.28	20.45	0.1			
	Unit		hr	h	person			
	Standard		0.6 m3	I ton			n	30
	Description		Back hoe	Dump truck	Common labor	Total	Per 1.0m <sup>3</sup>	(
	Š.	_	_	2	m			

	. Workability of back hoe (0.6 m3)	(0.6 m3)			-					
	q <sub>0</sub> (m3)	¥		o,	Į.	ш	C <sub>s</sub> (sec)	Q (m3 / hr)	T (hr/100m3)	$C_s(sec)   Q(m3/hr)   T(hr/100m3)   Q = (3,600*q*f*E)/Cs$
	0.60	0.98	٠.	0.59		9.0	61	78.3	1.28	$T = 100/Q$ ; $q = q_0 * K$
	qo: Standard bucket capacity			f: Soil con	f: Soil conversion factor		E: Efficiency of work	of work		
."	K: Bucket factor			C,: Cycle time	time		q: Excavation	q: Excavation volume per one cycle	ie cycle	
	. Workability of dump truck (11 ton)	ck (11 ton)		O = O	$Q = (60 * q * f * E)/C_m$	C <sub>□</sub>				
				$C_m = bL$	$C_m = b L + a$ ; $T = 100/Q$ ;				-	
: 1	L (km)	Ą		g	C <sub>m</sub> (min) q (m3)	q (m3)	<b>G</b>	Э	Q (m3/hr)	T (hr / 100m3)
	1.0	4.8		S	53	4.8		6.0	4.89	20.45
	L: Transport distance (Km) a: Working factor	a: Working fa	ctor		q: Loanding	volume on	dump truck	q: Loanding volume one dump truck E: Efficiency of work	of work	
٠	b: Factor of transport condit Cm: Cycle tim	Cm: Cycle tim	ള	· .	f : Soil conversion factor	ersion facto	Ŀ			

Mortared brick work (220x105x60 mm) thick <=11cm Per 10 m2

		Kemarks		10*25		3.0*2.5	4 C*C u	5.0" 2.3			Loss 2 %; Walerial - 72	Process cost - 69								
	, T	<u> </u>															v		00	
Amount	,	Local	(SN D)	750 350	436,430	837.750		1,007,500		1	1,909,710	020,003	004,20	161 245	1,101,1		4 979 385	200	497,938	55 973
<b>▼</b>		Foreign	(I YEN)				'	1			•		•						1	
in Darion	Onit Price	Local	(C 2/2)	12:27	183,300	000	11,700	80.600	200,00	· ·	797		263.013							
1	5	Foreign	(MEX. I)	(7.7 1.7)	,		ı		•				•							
		Ouantities			3.6	213	7.5		12.5		(,,,	0450	2 2	4.3	_					
	٠	; <u>;</u>				person	norcon	2000	person			each	,	Ē	100	ולנו מנו				
		. (	Standard							1000	200mmx105mmx	60mm		M75	700	(labor cost)" / %				1.7
			Description	• • • • • • • • • • • • • • • • • • • •		Coromon	Octivan	Brick worker	Johor	Committee laces			Brick	TO THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF TH	Cerneth montai	Miscellaneous expenses			Total	Dor 1 0 m2
			ي.			-	-	Ω.	1,	ر د			4 7	1	יי מ	6 h	+			

U - Ditch (DS - 1)
Per 10"

		157,315	38					E	Per 1 0m	
		1,573,149	385						Total	
									:	
12	Process cost - 17	130,278		183,490		0.71	E E		Bedding work	4
109	Process cost - 109	1,405,699		319,477		4.40	m <sub>3</sub>		Mortared stone work	6
6-	Process cost - 9	20,392		44,330		0.46	m <sub>3</sub>		Hand excavation	7
99	Process cost - 66	16,781	385	1,920	44	8.74	m³	Back hoe 0.35m3	Dich excavation	-
	Remarks	Local (VN. D)	Foreign (J.YEN)	Local (VN. D)	Foreign (J.YEN)	Quantities	Unit	Standard	Description	No.
		Amount	An	Unit Price	ຕີ					

U-Ditch (DS-2)
Per 10"

_					T		Γ	Т	_	Т	•	Τ	-	0	Γ	~		1
	c c	Kemarks		Process cost - 66		Process cost - 9		Process cost - 109		Frocess cost = 10	Process cost - 17			1.080.000 1+K;K=+0.15;Material-100				
Amount		Local	(V.N. D)	21 072	7/0410	62.062		1,916,862	007 661	155,429	183 490	100,100		1.080,000		3,426,915		
Ϋ́		Foreign	(I.YEN)	041 -	1,1/0	•				188			-			1359	126	
This Daile	riice	Local	(V.V.)	000	1,920	44 330	22.5	319.477		7,086	007 601	183,470		00000	20,00			_
4:001		Foreign	(I.YEN)	, ;	4			•		10		ī		1	-			
		Ouantities	,		26.6		1.4	6.00	33.5	18.83		8.			71.60			
		[]mit	;	,	Ê	м	Ε	~	111	~E	,	E		ŕ	Ë			
		Ctondard	מימותיים		Back hoe 0.35m3	דייים מיים									vellow sand	2000		
		ſ	Description			Dien excavation	Hand excavation	וומוות כשכת הווסוו	3 Mortared stone work		4 Backfull	7-3-11-0	5 Bedung work		Crostom workshop	o Grandian material	Total	
	ſ		Ž			_	,	1	m	,	4	-	۸	_	V	0		

U - Ditch (DS - 3) Per 10"

R.C. Pipe(D=75cm ) Type A1 - Setting work Per 10.m.

									_
				Unit Price	93	An	Amount		
Description	Standard	Unit	Quantities		Local	Foreign	Local (VN. D)	Remarks	
•				(NEX.C)	102 200	,	183,300	0.4*2.5	
Coronnon		person	-1	-	20,501		170,100	0.4*2.5	<u> </u>
Colculation		person		1	001,0/1		221 650	1.1*2.5	
u Jabor		person	2.75	1	20,000	'	2 884 550	Material - 74	
Continue tabol	Ф750×1000	each	01		288,455		2,001,000	0.2day*800/180;	
747	hydraulic 4.8 ~ 4.9			030.	46,000	1.113	40,940	Equipment - 20	
5 Truck crane	ton	Ē	0.89	007,1	10,000	56	175,027		
6 Miscellaneous expenses	Sum of above 5%	set	_		74 220		141.856	Process cost - 9	
Hand excavation		^E	3.2		0000	2 0 43	1 807 366	Process cost - 234	
F	W<4	<sup>~</sup> E	29.80	35	63,6/0	1,043	1,627,70	Draness cost - 17	1
Backilli		E H	3.20	1	183,490	-	38/,168	riocess cost	Τ-
Bedding work		-			319 477		63,895	Process cost - 68	7
Cement mortar		E,	0.40		12.1	069 6	2.801.322	including formwork	
11 Concrete class E-1		Ê	3.8	708	75/,130	4.902	9,167,174		1
Total						490	916,717		7
Por 1 m					1				

R.C. Pipe(D=75cm ) Type A2 - Setting work Per 10 m

	Remarks		0.4*2.5	0.4*2.5	1.1*2.5	Material - 74	0.2day*800/180;	Equipment - 20		Process cost - 9	Process cost - 234	Process cost - 17	Process cost - 68	including formwork			
Amount	Local	(VN. D)	183,300	170,100	221,650	2,884,550		40,940	175,027	141,856	1,897,366	550,470	63,895	7,887,933	1,255,527	15,472,614	1,547,261
A	Foreign	(J.YEN)	+					1,113	56	•	1,043	;	1	7,576	18,473	28,260	2,826
Unit Price	Local	(VN. D)	183,300	170,100	80,600	288,455		46,000	•	44,330	63,670	183,490	319,477	737,190	1,971		
Uni	Foreign	(J.YEN)	t	1	1		7 200	1,250	_		35	-	•	708	. 29		
	Quantities		1	. 1	2.75	10		68.0	1	3.2	29.80	3.00	0.20	10.7	637		
:	Unit		person	ретѕоп	person	each	1.00	Æ	set	ŧш	<sub>E</sub> UL	<sub>E</sub> m	ε <sup>UL</sup>	<sub>є</sub> ш	kg		
	Standard					Ф750×1000	hydraulic 4.8 ~ 4.9	ton	Sum of above 5%		M<4						
	Description		Foreman	Skilled labor	Common labor	R.C. pipe		Truck crane	Miscellaneous expenses	Hand excavation	Backfill	Bedding work	10 Cement mortar	Concrete class E-1	Reinforcing steel	Total	Per 1 m
	Š	٠.	-	2	5	4		5	9	7	8	6	10		12		

R.C. Pipe(D=100cm) TypeA - Setting work Per 10 m

_				,				<del>,</del>					· .						
		Remarks		0.5*2.5	0.5*2.5	5.7 (.0	1.3*2.5	Material - 75	Material - 79	0.4day*800/180;	Equipment - 20		Process cost - 66	Process cost - 9	Process cost - 234	Process cost - 17	Process cost - 68		
	Amount	Local	(VN. D)	229,125	303 616	670,217	261,950	5,421,000	3,991,000		81,880	628,605	21,331	26,155	2,960,655	220,188	127,791	14,063,579	1,406,358
1	Y	Foreign	(J.YEN)				•	1			2,225	111	489		1,628	1	•	4,453	445
	Unit Price	Local	(VN. D)	183,300	001021	1/0,100	80,600	542,100	399,100		46,000	1	1,920	44,330	63,670	183,490	319,477		
	5	Foreign	(J.YEN)	-		,		1	1	3	1,250	,	44	•	35		•		
		Quantities		125	20.	1.25	3.25	10	10	1000	1.78	<b>,1</b>	11.11	0.59	46.50	1.20	0.40		
		Unit		norcon	102100	person	person	each	each		μ	Set	3	°E	E	m3	m³		
		Standard						Φ1000×1000	L=1000:950 kg	hvdraulic 4.8 ~ 4.9	ton	Sum of above 5%	Back hoe 0.35 m3		W<4				
		Description		L	roreman	Skilled labor	Common Jabor	R C. nipe	Cradle		K Truck crane	Miscellaneous expenses	Fycavation	Hand excavation	Rachfill	Bedding work	Cement mortar	Total	Per 1 m
					-[	7	г		Т	,	v	1	1		$\overline{}$	1	1		

R.C. Pipe(2D=125cm ) TypeB - Setting work Per 10 m.

						•	**************************************	
				Š	Unit Price	f	Amount	
Standard	بيو	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	ع ا	nercon	2.2		183,300	•	403,260	0.88*2.5
	រៀ្តនិ	1000	2.2		170,100	•	374,220	0.88*2.5
+	식	1000	200 7		80,600		554,528	2.75*2.5
	ᆈ'	person	0.00		643 900		12.878.000	Material - 76
0001X0C710.7	١,	cac.	07		000,000		9 740 000	Material - 80
L=1000;2*1250 kg	4	each	07		40/,000		22000	0.001/00/180
hydraulie10 ≈ 11 ton		, <u>, , , , , , , , , , , , , , , , , , </u>	43	2.260	55,000	9,718	236,500	Equipment - 19
Sum of above 5%		1 5	,	-	1	486	1,209,325	
$\perp$		, F	20.42	4	1,920	868	39,206	Process cost - 66
-	' I ~	E	1.08	1	44,330		47,876	Process cost - 9
W>5	.ı ⊢	E	60.20	89		4,094	3,853,462	Process cost - 241
	լ ≻-	Ę	3.20		183,490	1	587,168	Process cost - 17
class E		T <sub>E</sub>	9.40	634	396,674	5,960	3,728,736	Process cost - 154
		~E	9.40		57,192	•	537,605	Process cost - 229
	'1 -	F F	0.40		319,477		127,791	Process cost - 68
						21,156	34,317,678	
	1					2,116	3,431,768	

R.C. Pipe(D=200cm) Type C - Setting work Per 10 m.

	Remarks		1.0*2.5	1.0*2.5	3.0*2.5	Material - 78	Material - 82	0.7day*800/180;	Equipment - 18		Process cost - 66	Process cost - 9	Process cost - 241	Process cost - 17	Process cost - 154	Process cost - 229	Process cost - 68		
Amount	Local	(VN. D)	458,250	425,250	604,500	54,027,000	22,146,000		111,111	3,891,606	82,253	100,186	1,625,879	1,376,175	17,896,507	2,676,539	638,954	106,120,210	10,612,021
4	Foreign	(J.YEN)	-	-	1	-	1		9,582	479	1,885	1	1,727	4	17,597	ı	ť	31,270	3,127
Unit Price	Local	(VN. D)	183,300	170,100	80,600	1,800,900	738,200		55,000		1,920	44,330	64,011	183,490	382,404	57,191	319,477		
Chi	Foreign	(J.YEN)	•				1		3,080		44	1	89	-	376		9 9 9 7	17	100
	Quantities		2.5	2.5	7.5.	30	30		3.11	1	42.84	2.26	25.40	7.50	46.80	46.80	2.00		
	Unit		person	person	person	each	each		h	set	m3	m <sub>3</sub>	m <sup>3</sup>	m <sup>3</sup>	m³	Ęщ	m <sub>3</sub>		
	Standard					\$2000x1000	L=1000;1850 kg		hydraulic15 ~ 16 ton	Sum of above 5%	Back hoe 0.35 m3		W>5		class E				
	Description		Foreman	Skilled labor					Truck crane		Excavation		1	11 Bedding work	Concrete		Cement mortar	1 .	Per 1 m
	Z		-	٦	ı k	4	'n		9	-	∞	6	2	=	12	2	14		

R.C. Pipe(2D=125cm ) TypeB - Setting work for headwall Per  $10~\mathrm{m}$ .

		,						·	٠		 	
	Remarks		Material - 76	0.96day*0.5*800/180;	Equipment - 19	0.88*2.5	0.88*2.5	* ***	2.75*2.5			
Amount	Local	(VN. D)	12,878,000		97,900	403,260	174 220	200	554,528	133,201	14,441,109	1,444,111
₹.	Foreign	(J.YEN)			4,023	ŀ			ŀ	ŧ	4,023	402
Unit Price	Local	(VN. D)	643,900		55,000	183,300	170 100	170,100	80,600			
<u>15</u> 5	Foreign	(J.YEN)			2,260				1			
	Quantities		20		1.78	2.2		7.7	6.88	1		
	Unit		each		11	1		person	person	set		
	Standard		2 *61250x1000		hvdraulic:10 ~ 11 ton					(Labor cost) * 10%		
	Description		S C rine	77.7.	Truck crane	Foreman	1 O 1	Skilled labor	Common labor	Miscellaneous expenses	Total	Per 1 m
	Ž	}	-	-		1 ~	, .	4	~	9		

R.C. Pipe(3D=200cm) TypeC - Setting work for headwall Per 10 m.

_		S	. 78	00/180	,001100	1-18	'n		5	4	_						_
		Remarks	Material - 78		0.7day.0.2.0	Equipment - 18	0.88*2.5		0.88*2.5	C#40 C	7.75*2.3						
Amount	TO COLUMN	Local (VN. D)	54 027 000	220112011	:	85,250	056 857	207,000	425,250		604,500	148 800	140,000		55 749 050	0006011600	
*		Foreign (I VFN)				4.774		ı			1		-		A 77A	*	
	Unit race	Local	72:17	1,800,900		000 \$5	000.00	183,300	001 021	170,100	80 600					-	
	- C	Foreign	(). X E.N.	ı		2.080	2,000	•		•							
		Quantities		30		100	1.33	25	) i	2.5	3.5	()		•			
		Unit		each			hr	40000	108120	nerson		person	***	136			
		Standard		3 *62000×1000			hydraulic 15-16ton						74 1 100/	(Labor cost) 1076			
		Description			R.C. pipe		Traick grane	זומפע פומונס	Foreman		Skilled labor	Common labor	Committee resort	Miscellaneous expenses			
	f	o Ž		†			·	1	(M		4	v	,	9			

Catch basin (DC - 1) Per: each

,											,				 	
	Remarks		Process cost - 154	Process cost - 156	Process cost - 229	Process cost - 60	Process cost - 228	Process cost - 69	Process cost - 179	Process cost - 240	Process cost - 17	Process cost - 66	Process cost - 9	Process cost - 234		-
Amount	Local	(VN. D)	181,677	124,743	49,871	14,674	409,415	7,890	178,794	647,392	151,930	75,072	60,289	131,160	2,032,906	2,032,906
4	Foreign	(J.YEN)	290	797	•	173			ι	117	1	1,720	•	72	2,635	2.635
Unit Price	Local	(VN. D)	396,674	301,312	161,73	2,096,273	82,710	263,013	55,873	647,392	183,490	1,920	44,330	63,670		
Cm	Foreign	(J.YEN)	634	634		24,720	t			117	, , ,	44	'	35		
	Quantities		0.458	0.414	0.872	0.007	4.95	0.03	3.2	-	0.828	39.1	1.36	2.06		,
	Unit		<sub>E</sub> ui	m³	m <sub>3</sub>	ton	m,	E.	m3	٤	m3	. m3	m3	m3		
	Standard		Class E	Class G				for pitching	220x105x60mm	D=1000mm;type A		Back hoe 0.35 m3				4
	Description		Concrete	Concrete	Concrete placing	Reinforced stell	Form work	6 Cement mortar	Mortared brick work	R.C pipe	Bedding work	Excavation	Hand excavation	Backfill	Total	Per Jeach
	No		-	2.	ώ	4	S.	9	7	∞	6	10	=	12		

Catch basin (DC - 2) Per: each

				······································					·									·
	Remarks		Process cost - 154	Process cost - 156	Process cost - 229	Process cost - 60	Process cost - 228	Process cost - 69	Process cost - 179	Process cost - 239	Process cost - 17	Process cost - 66	Process cost - 9	Process cost - 15	1+K;K=+0.15	Material - 100		
Amount	Local	(VN. D)	117,812	97,625	35,516	10,481	315,952	5,260	130,184	367,557	118,902	49,536	60,289	164,891	-	1,335,000	2,809,005	2,809,005
7	Foreign	(J.YEN)	188	205	1	124	•	1	_	117		1,135	•	233			2,002	2,002
Unit Price	Local	(VN D)	396,674	301,312	57,191	2,096,273	82,710	263,013	55,873	367,557	183,490	1,920	44,330	7,086		50,000		
Uni	Foreign	(J.YEN)	634	634	•	24,720			ı	117	•	44	•	10				
	Quantities		0.297	0.324	0.621	0.005	3.82	0.02	2.33	1	0.648	25.8	1.36	23.27		26.70		
	Unit		E.	m <sup>3</sup>	m <sup>3</sup>	ton	m	<sub>E</sub> m	m3	E	m3	m3	m3	m3		ິຍ		
	Standard		Class E	Class G				for pitching	220x105x60mm	D=750mm:type A		Back hoe 0.35 m3				vellow sand		ų
	Description		Concrete	Concrete	Concrete placing	Reinforced stell	Form work	Cement mortar	Mortared brick work	R C nine	Redding work	10 Excavation	11 Hand excavation	12 Backfill	T. COLUMN	Granular material	Total	Per leach
	Ž	<u>:</u>	-	.  ^	1 ~	4		ی ا	-	. α		\ _		13	1			

Headwall DH-5-inlet; 2x Φ1.25 m Per one set

			:		Uni	Unit Price	An	Amount	
o Z	Description	Standard	. Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
.					(J.YEN)	(VN D)	(J.YEN)	(VN. D)	
_	Excavation	Back hoe 0.35m3	m3	71	44	1,920	3,124	136.320	Process cost - 66
5	Hand excavation		m3	1.92		44,330		85.114	Process cost - 9
m	Bedding work	Crusher - run	m3	5.95		183,490	-	1.091.766	Process cost - 17
4	Rip rap work	cobble stone	m3	3.99		96,556	,	385.258	Process cost -235
S.	5 Mortar stone work :		m3	33.33		343,725	•	11.456.354	Process cost -110
9	6 Cement mortar	for plastering	m3	0.28		319,477		89,454	Process cost - 68
		2×¢1.25m -							
7	7 R.C. pipe setting work	type B	E		403	1,444,111	403	1,444,111	Process cost - 187
-		Suitable excavated							
<b>∞</b>	8 Hand backfill	lios	m3	23.23	10	7.086	232	164.608	Process cost - 15
6	Transportation of spoil	Dump truck 11 ton	m3	49.7	28	3,598	4,175	178.821	Process cost - 11
	Total						7.934	15.031.805	
	Per one set						7,934	15.031.805	

Headwall DH-12-inlet; 3x Φ2.0 m Per one set

								i		-
					1 [1.1]	Init Price	∢	Amount		
1			;	(	L	10001	Foreign	Local	Remarks	
	Decemention	Standard		Cuantities	roteign	200	1500			_
ġ Z	Description		,	,		(VN D)	(J.YEN)	(VN. D)		_
					;	000	6 160	008 890	Process cost - 66	
-	1000000	Back hoe 0.35m3	m3	140	44	076,1	0,100	202,002		Τ
-	Excavation		-	24.0		055 44	•	109,052	Process cost - 9	-
7	Hand excavation		CE	7:40		2000		CTC CAA C	Process cost - 17	_
,	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cricher - min	m3	18.76	•	183,490	ı	3,447,7	1100 500011	T
3	Bedding Work	Clasiici Icii		ļ		755 70	•	666.236	Process cost -235	
Ą	Rin ran work	cobble stone	щ3	6.9		00000		27-120	011	İ
-	and day		200	70.07		343.725	,	24,394,103	Process cost -110	7
'n	Mortar stone work:		22	12.07		£ 1. 0. 0		208 902	Process cost - 68	
ŀ		formasterno	EE3	0.67	•	1/4,4//		2000		Τ
٥	Cement mortar	ומו הייינים			04.4	200 KT3 3	478	5 574.905	Process cost - 188	
7	R.C. pipe setting work	3 x \$2.0 m - type C	٤		8/4	3,5/4,203	0/1	20.76. 1.76.		Γ
		Suitable excavated		_						
		מחושמות בערת החומה	,	70 77	2	7.086	449	317,878	Process cost - 15	
•••	Hand backfill	soil	шζ	44.00	27	200.	00.0	251 146	Dropes cost 11	_
·		Dump truck 11 ton	£	97.6	84	3,598	8,198	531,103	11 - 1500 60001	T
2	Transportation of spoil	Daily agentical					15 785	35.434.364		
	Total						202	25 424 364		Γ
	Box one cot						13,483	+00,404,00		7
	י בנו המנינו									

Headwall DH-5-outlet; 2x Φ1.25 m Per one set

٠					Uni	Unit Price		Amount		
ĝ	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		_
_	Excavation	Back hoe 0.35m3	m3	51.5	44	1,920	2,266	088'86	Process cost - 66	
7	Hand excavation		m3	1.16	ı	44,330	ī	51,423	Process cost - 9	
3	Bedding work	Crusher - run	m3	3.95	•	183,490	•	724,786	Process cost - 17	
4	Rip rap work	cobble stone	т.3	1.38	•	96,556	•	133,247	Process cost -235	
S	Mortar stone work:		m3	28.34	1	343,725	•	9,741,167	Process cost -110	
9	Cement mortar	for plastering	m3	0.28	1	319,477	•	89,454	Process cost - 68	
		2 x \$1.25 m -		1 1 2 2						
7	R.C. pipe setting work	type B	E		403	1,444,111	403	1,444,111	Process cost - 187	_
		Suitable excavated	:				:			
8	Hand backfill	soil	тЗ	23.23	21	7.086	232	164,608	Process cost - 15	_
6	Transportation of spoil	Dump truck 11 ton	m3	29.43	84	3.598	2,472	688'501	Process cost - I i	
	Total				7		5,373	12,553,564		
	Per one set						5,373	12,553,564		

Headwall DH-12-outlet; 3x Ф2.0 m Per one set

				-		- D		<b>4 mo</b> 0,1m*		
			:		ED .	Juli Frice	,	וווסמווו		
Decembrica		Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
Cescipación				· · ·	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		<sub>r</sub>
		Rack hoe 0 35m3	m3	106	4	1,920	4,664	203,520	Process cost - 66	
Excavation	_	DECK INCO COLO	m2	1.7	'	44.330	-	75,361	Process cost - 9	
Hand excavation	].					102 400		1 624 921	Process cost - 17	
Bedding work		Crusher - run	т3	15.45	-	103,430		3276.007	200	Τ
Jacob de de	ļ	cobble stone	m3	1.33	•	96,556		128,419	Process cost -233	T
Np lap woin	ļ		m3	62.68	,	343,725	•	21,544,683	Process cost -110	
Mortar stone work.	4			100		210 477		508 605	Process cost - 68	
Cement mortar		tor plastering	шŞ	7.0	,	7.7.7		2706700	000	
o work		3 x \( \phi \) 2.0 m - type c	E	-	478	5,574,905	478	5,574,905	Process cost = 188	L
	1	C. Leak la angermand								
		Sullable excavated	,		2	700 6	440	317 878	Process cost - 15	
Hand backfill		lios	m3	44.80	3	200,		200,000		
Transmontation of snoil	┞	Dump truck 11 ton	m3	62.84	. 84	3,598	5,279	. 226,098	Process cost - 11	Т
tails for tailon of sport	-1						10,869	31,215,678	•	
LOLAI	-+						10.860	21 215 678		
Per one set							10,002	01/2017		7
	-									

K.M indicator post setting work
Per. 10 post

Vo.         Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local         Foreign         Local         Remarks           1         Common labor         person         5.00         -         80,600         -         403,000         2.0*2.5           2         KM indicator         each         10.0         -         230,000         -         922,064         Process cost - 9           3         Hand excavation         m3         19.00         10         7,086         190         134,634         Process cost - 15           4         Hand backfill         m3         19.00         10         7,086         190         3,759,698           Total						;		- 4	***************************************		
ription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           or         person         5.00         -         80,600         -         403,000           ion         each         10.0         -         230,000         -         2,300,000           ion         m3         20.80         -         44,330         -         922,064           ro         m3         19.00         10         7,086         190         134,634           Total           Total	1_					5	1 Price	Ċ.	mount		
or         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           or         person         5.00         -         403,000           ion         m3         20.80         -         44,330         -         922,064           m3         19.00         10         7,086         190         134,634           Total           Total		Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
or         person         5.00         -         80,600         -         403,000           ion         each         10.0         -         230,000         -         2,300,000           ion         m3         20.80         -         44,330         -         922,064           m3         19.00         10         7,086         190         134,634           Total           Total         190         3,759,698				- <del>-</del>		(J.YEN)	(N. D.	(J.YEN)	(VN. D)		1
or         person         3.00         2.30,000         2.300,000           ion         m3         20.80         -         44,330         -         922,064           m3         19.00         10         7,086         190         134,634           Total         190         3,759,698					90.3		80,600		403,000	2.0*2.5	_
ion m3 20.80 - 44,330 - 922,064   10.00 m3 19.00 m3 19.00 m3 19.00 m3 19.00 m3 19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.759,698   19.00 m3.7		Common Jabor		person	20.5		22,00		000 000	00 100	
ion         m3         20.80         -         44,330         -         922,064           Total         Total         190         3,759,698         3759,70		7.5.4		Pach	10.0	ı	230,000	•	2.300,000	Maieriai - 30	T
con         m3         20.80         -         44,530         -         7,25,034           m3         19.00         10         7,086         190         134,634           Total         190         3,759,698           m3,75,970         19         3,75,970		K.M. indicator					0000		022 064	Process cost - 9	
Total 134,634 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Hand excessation		E E	20.80		44,550	,	744,004		T
Total 190 3.759,698		TAIL EXCAVATION			300	9	300 5	100	134 634	Process cost - 15	
Total 190		Hand backfill		E S	200.6	O.	000,	2			T
190	-	Hank cacking									
190									000 0000		Γ
61		Total					-	196	3.759,098		Ī
61		10(4)									
		- C C						-61	3/5,9/0		٦

Traffic post setting work Per: 10 post

	1,699,282	127							Total Per 1.0m³
				-					
Process cost - 15	89,992	127	7,086	10	12.70	m3		Hand backfill	. 1
Process cost - 9	576,290	•	44,330	•	13.00	m3		Hand excavation	
Material - 91	630,000	ı	63,000		10.000	each		Traffic post	
2.0*2.5	403,000	I	80,600	ŧ	5.00	person		Common labor	
	(VN. D)	(J.YEN)	(VN. D)	(J.YEN)					
Remarks	Local	Foreign	Local	Foreign	Quantities	Cmit	Standard	Description	Š.
	Amount	¥	Unit Price	Chi					

Marker fabrication and setting (100x100x600) Per:10each

Description         Standard         Unit         Quantities         Foreign         Local           Form work         m2         1.8         150         132.365           Reinforcing bar steel         Φ6 mm         kg         12         24         -           Concrete         Class E-2         m3         0.06         -         79.812           Concrete placing         m3         0.06         -         79.812           Paint         m2         0.8         -         2,900           Common labor         person         3         -         80,600           Miscellaneous expenses         (Labor cost )* 4%         set         1         80,600           Per one each         reach         1         reach         reach			- · · · · · · · · · · · · · · · · · · ·			Unit	Unit Price	1	Amount	
steel $\Phi 6 \text{ mm}$ $kg$ 1.8       150       132.365         steel $\Phi 6 \text{ mm}$ $kg$ 12       24       -         g $12$ $24$ -       -         g $m3$ $0.06$ $6.34$ $396.674$ g $m3$ $0.06$ - $79.812$ m $m2$ $0.06$ - $79.812$ m $m2$ $0.06$ - $2.900$ expenses       (Labor cost)* $4\%$ set       1 $80.600$ all $n$ $n$ $n$ $n$ $n$ each $n$ $n$ $n$ $n$ $n$	Š.	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks
steel     \$\Phi\$ 6 mm     kg     1.8     150       g     Class E-2     m3     0.06     634       g     m3     0.06     -       m     0.06     -       m2     0.08     -       person     3     -       xpenses     (Labor cost)* 4%     set     1       al     -       al     -						(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
steel         \$\to\$ 6 mm         kg         1.8         150           g         Class E-2         m3         0.06         634           g         m3         0.06         -           m2         0.06         -         -           person         3         -           xypenses         (Labor cost)* 4%         set         1           all         -         -           each         -         -	-									Process cost - 42
steel         Φ 6 mm         kg         12         24           g         Class E-2         m3         0.06         634           g         m3         0.06         -           m2         0.8         -         -           person         3         -         -           xpenses         (Labor cost)* 4%         set         1         -           all         each         -         -         -	-	Form work		m2	8:	150	132,365	270	238.257	(5 times for one form)
g Class E-2 m3 0.06 634 3 g m3 0.06 - m3 0.06 - m3 0.06 - xyenses (Labor cost)*4% set 1 sl	7	Reinforcing bar steel	Φ 6 mm	ž,	12	24	,	288		Material - 28
g m.3 0.06  m2 0.8  xpenses (Labor cost)* 4% set 1 .  al	٣	Concrete	Class E-2	m3	90.0	634	396,674	38	23.800	Process cost - 154
m2 0.8	4	Concrete placing		тЗ	90.0		79.812	•	4.789	Process cost - 34
Derson 3	5	Paint		m2	0.8	-	2.900		0000	
xpenses         (Labor cost )* 4%         set         1           11         set         1           21         set         1           22         set         1	9	Common labor		person	3	,	80.600	-	241 800	1 5*2 5
Total Per one each	7	Miscellaneous expenses	(Labor cost )* 4%	set					0.000	
Total Per one each									7,26	
Per one each		Total						965	520.638	
		Per one each						09	52.064	

DACK-HAME	
2	
XCAVALION	r 100 m
×	ď

*						4		
				I init Price	<u> </u>	Amount		
	Standard	Unit	Quantities	Foreign Local	Foreign	Local	Remarks	
Describaon			,	$(I \lor EN) = (VN, D)$	(J.YEN)	(Viv. U)		
				705 6	2 520	72,688	Process cost - 5	
	Back hoe 0 35m3	m3	78	50 1		004.00	Dropper cost 15	
	Dach Hoc Co		9,	7 086	280	178,408	דוטבפס בספוד	
		E.	27	7.22				
					300	300 177		
					7,800	271170		
					000	11110		
				_	27	7, 11		
777								

Arrangement bricks on duct track of underground cable Per 100 m

				Cun	Unit Price	¥	Amount	
Description	Standard	Chrit	Quantities	Foreign			Local	Remarks
			, 	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
D51	220x105x60 mm	niece	606			•	269,973	Material - 92
Direk							700 001	1 51*25
2 Brick worker		person	3.78	•	111,700	-	427,220	1.71 2.0
A DILLY WOLKE								
							000	
Total						,	692,199	
10191							6603	
Dor 1m						ı	774,0	

Street lighting Pull box (type - A)
Per :each

			0			_							
	Remarks	-	Material - 199			○ A#O A	7.7						
Amount	Local	(VN. D)	63,736	101 6	7,18/	1 002 111	00/111		4.00	1/8,043		178,623	
A		(J.YEN)			1							•	
Unit Price	Local		<u> </u>		1	11111	111,700						
5	Foreig	(J.YEN)	\		i		,						
	Quantities				<u>-</u>		_						
	Cnit		×oq		set		person						
	Standard		Tyme A	* : Ad ( *	5%*material cost								
	Description		P11 1-0.12	ruli box	2 Sub material	day marcha:	Electrician			Total			Per one each
	 Z	<u>.</u>	-	-	۰	7	"	T				1	

Distribution panel - type SS Per:each

	1,716,467	•				,		Per one each
	1,716,467	ł						Total
0.5*2.5	139,625	ı	111,700	•	1.25	ретѕоп		3 Electrician
	15,612	•		,	1	set	1%*material cost	2 Sub material
Material - 188	1,561,230	•	1,561,230	-	1	xoq	Type SS	1 Street lighting panel box
	(VN. D)	(J.YEN)		(J.YEN)		· ·		•
Remarks	Local	Foreign	Local	Foreign	Quantities	Unit	Standard	o. Description
	Amount	Ar	Unit Price	Uni				

Distribution panel - type MDP Per each

				5	Unit Price	An	Amount		
Description	Standard	Chrit	Quantities	Foreign	Local	Foreign	Local	Remarks	
iordinana a				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		Т
Ottoot lighting name! box	Tvpe MDP	xoq	1	-	7,613,113	•	7,613,113	Material - 189	
cot lighting pairs; con	70/4material cost	fas			1		152,262		_
Sub material	77	nerson			183,300	,	201,630	0.44*2.5	<u>_</u>
Foreman			375		111,700		418,875	1.5*2.5	
Electrician		מסשפטם	7.5		80,600		604,500	3.0*2.5	
Common Japor		PE13011	23	,	44 330	•	13,299	Process cost - 9	Γ-
Hand excavation		CILI			VOV COC	00	777 10	Process cost - 154	Ţ
Concrete	Class E-2	E E	0.24	0/0	202,404	2	777617	D 1222 222 40	Τ
Form work		m2	2.16	267	86,097	2//	0/6,081	Process cost - 40	Ţ
									T
Total						199	9,281,426		T
1000						1299	9 2 8 1 4 2 6		
Per one each						(00	021,021		7

Street lighting Panel; (type - DB) Per.:each

		Domonic	Neiligins	Material - 190				7 0 ** 0		Y C*7 0	0.4.4.0							
	Altionin		Local (VN D)	2 017 100	0,717,170	78 344	440,0	355 60	83,173	000	80,600			4 159 909	70 A 70 - 50	4 1 59 909		
1	1 × 1		Foreign		1		'				.'				,			
	(Init Price		Local	(7 8)	3 917 190	22.67.75			111 700	2016777	80.600	20200						
			Foreign	(J.YEN)		,												
			Quantities			-	-	_	36.0	2/.2		-					_	_
			Unit		•	pox		set		Derson		person						
			Standard			Type DB		2%*material cost										_
			Description			Street lighting panel box	2 0	Cub moternal	Sub litatellas		Electrician	4 Common Jahor				Total		
		-	ŝ		-	-	-	ď	7	í	<b>~</b>	7	-					-

Underground cable 4 c - 25 mm2

Ħ
8
a

			-	Uni	Unit Price	A	Amount		-
Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
•				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
Inderground cable			2						
4c-25 mm2	4 c - 25 mm2	ш	102	•	69,440	f	7,082,880	7,082,880 loss 2%; Material - 191	· 
									1
Total							7,082,880		1
Per 1 m						ı	70,829		

Underground cable 4 c - 16 mm2
Per 100 m

				_	 	_	~
	Remarks		100	IOSS 276; Maichai - 192			
Amount	Local	16.55		5,4/2,096	5 472.096	. (1 - 1	54,721
Y.	Foreign	(4.1.513)		•			
Unit Price	Local	7		53,648			
'n	Foreign	(2.15/4)		1			
	Quantities Foreign			102			
	Unit		*.	E			
	Standard			4c - 16 mm2			
	Description		Underground cable	4c - 16 mm2		Total	Per 1 m
	No.			-			

Underground cable 4 c - 10 mm<sup>2</sup> Per 100 m

Standard         Unit Process         Foreign Local         Foreign Local         Remarks           4c-10 mm2         m         102         -         37,860         -         3,861,720         loss 2%; Material - 193           -         33,861,720         -         3,861,720         -         3,861,720						,		14	-	
Unit Quantities Foreign Local Foreign L (J.YEN) (VN. D) (J.YEN) (V m 102 - 37,860						5	t Price	Ĭ.	Court	
m 102 - 37,860	·	Ctoro	70.	1 Init	Onantities	Foreig	Local	Foreign	Local	Remarks
m 102 - 37,860 -	Description	Stalle	ָ ב		y	. ~		(J.YEN)	(VN. D)	
m 102 - 37,860 -										
3,8	d cable		ç		2		37.860	•	3,861,720	loss 2%; Material - 193
- 3,861,720 - 38,617	1   4c-10 mm2	4c - 10 m			72.					
- 3,861,720 - 38,617		Ĺ								
38,617									2 861 720	
38,617	F				•			j	3,001,120	
3,10,00	lotal								217 02	
					_			1	10,00	

Cable 4 c - 16 mm2 Per 100 m

	ks		erial - 195						
	Remarks		3,345,600 loss 2%: Material - 195						
Amonii	Local	(VN. D)	3,345,600		2 245 500	3,343,000	337 50	00+,00	
Υ	Foreign	(I.YEN)	ı			1		•	
Unit Price	Foreign Local	J.YEN) (VN. D)	32,800		 _	-			
5	Foreign	(J.YEN)							
•	Quantities	, <u>.</u>	102						
	Unit		E						
	Standard		4c-16 mm2	1					
	Description		0.41- 4-10	Cable 40-10 111114		Total	I OLD	Dor 1 m	
	- 2	·	-	-	 -		-		

Cable 4 c - 10 mm<sup>2</sup> Per 100 m

							_			r			
		Kemarks		loss 2%; Material - 194									
Amoint		Local	(414, D)	2,356,200					2.356.200		23,562		
4	1.1.7	Foreign	(J.YEN)	•							•		
	Unit Price		Ω <u>N</u> N	001 50	23.102								
;	ב ב	Foreig	(LYEN)		. !								
		Quantities			102								İ
		Unit			Ε								
		Standard			Jo-10 mm2	111111111111111111111111111111111111111	ı						
			Describition			1			-		Totai	Day 1 m	
			o N		1	_	+	-	T			T	-

Grounding Wire BCC 6 mm2
Per 100 m

	Remarks			loss 2%; Material - 196	2%; Material - 196	2%; Material - 196	2%; Material - 196	2%; Material - 196	2%; Material - 196	2%; Material - 196	2% : Material - 196
ıur	Local		(VN. D)	720	720	720	720	720	720	720	720
TIPOTILE.	Foreign		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	-		-					
Unit Price	Foreign Local	$(1 \times EX) = (XX, D)$	,	36,360	36,360	36,360	36,360	36,360	36,360	36,360	36,360
5	Foreign	(1.YEN)		'	1	1	1	1	1	1	1
	Quantities			102	102	102	102	102	102	102	102
	Unit	٠.		E	E	E	E	E	E	E	E
	Standard			copper-6mm2	copper-6mm2	copper-6mm2	copper-6mm2	copper-6mm2	copper-6mm2	copper-6mm2	copper-6mm2
	Description			rounding Wire BCC 6	Grounding Wire BCC 6	rounding Wire BCC 6					
_	No.	· · ·		ا ا	- Gr	l Gro	l Gro	1 Gro	l Gro	- Gro	- Gr

PVC conduit D=50 mm Per 100 m

							•	****	
			_		Init	I Just Price	¢	A III Callin	
		T .		Quantities	Forejon	Local	Foreign	Local	Kemarks
ģ	Description	Standard	5	Comment of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the	1 CI CI CI CI CI CI CI CI CI CI CI CI CI	( )	(NEV I)	(AN D)	
				1	(7.101)	(1.1.)	, , , , , , , , , , , , , , , , , , , ,		12 10 10 10 10 10 10 10 10 10 10 10 10 10
						7.070	ī	1.041,140	IOSS 7.70 , INITICITIES - OO
-	DIVE SOND LIST	D=50mm	Ε	701		2.2.7			7 C#0 "
	rvc conduit					111 700	ı	502,650 1	C.7.8.1
,			nerson			111100			
7	Electrician						<b>.</b>	20.106	
١		(12hor cost)*4%	to:						
'n	Miscellaneous expenses	(Japol cost) 770							
			-						
								308 EVC L	
					_		ĭ	100000	
	Total							00, 00	
	I Otes						1	12,439	
	Doz. 1 35							,	
	יבני ויוו								

Duct bank PVC 2 x \$100 mm Per 100 m

							~	•		
					5	Unit Price	A	Amount		
	Description	Standard	Cuit	Ouantities	Foreig	Local	Foreign	Local	Remarks	
9	Describion			;	(I YEN)	(VX)	(J.YEN)	(VN. D)		
				1,00				5 140 800	loss 2%: Material - 198	
_	PVC conduit	PVC 2 x \$100 mm	ш	204	•	77,270			Description (5	
1										
			ç	ç		16.736		669,440	times for one form)	
~	2  Form work		7	}			1100	1 027 426	Process rost - 156	
,		Class	Ë	6.43	634	301,312	4,0//	054,156,1	110003 0001	_
~	Concrete	(1455				101 63		367.738	Process cost - 229	
V	Concrete placing		<del>1</del> 33	6.45	,	171,151			1 ( ) · · ·	
-	College Placing		50000	12.75	·	111,700	•	1,424,175	5.1.2.5	
'n	Electrician		person	17:13		22,1,1		CVC V1		
9	Miscellaneous expenses	(labor cost)*1%	set	-				7t7't1		
,										
							1 077	0 553 831		
	Total						//0**	100,000,		
	10141						41	95.538		
	Dor 1 m							2000		

Grounding system setting work
Per:1 place

_			$\neg$		1		7	_	т	_	т-	-		Ť		1
		Remarks			Material - 197	Proceed onet - 209	1100035 0031 - 707	0.25*2.5	,	0.35*2.5						
- mount		Local	(VN. D)		36,588	276 271	0+0.0+0	175 07	1/0,0,	505 07	27007	5,636	221 150	331,400	331.468	1
4		Foreign	(J.YEN)				1		,		-	•		•	,	
11:401.70	IL FIICC	Local	(VN. D)		36,588	10001	37,087	111	111,00	00.5.00	90,900					
-	5	Foreign	(J.YEN)		1		ŧ		1		1	ı				
		Quantities			,		4		0.63	tto	0.875	,	•	-		
		Chit			hose	17337	m3		person		person	tes	361			
		Standard		conner bar \$10 x	1 500mm	THE POST I	BCC 6 mm2	2000	·····•		•	70V#\+500 #0401/	(labol cost) +/8			
		Description				Grounding electrode	Street Street	Grounding wite	Flantinian	CICCILICIAN	Common Jabor		Miscellaneous expenses	Total		Per 1 place
	_	2	2			1	,	1	,	٦	৸	Ţ,	9	- 	T	

Filled up ground work Per 100 m3

						×	1	
				5	Unit Price	Ä	Amount	
Description	Standard	Unit	Quantities	Foreign (1 VEN)	Local (VN D)	Foreign (T YEN)	Local (VN. D)	Remarks
								Percent of swell and
								shrinkage 1/0.9=1.1;
	Borrow material		110		13,920		1,531,200	Material -115
	15 ton	å	1.29	4,030	91,000	5,199	117,390	Equipment - 3
	8~20 ton	þr	990	1,990	50,000	1,313	33,000	Equipment - 41
		person	0.5	-	80,600	•	40,300	0.2*2.5
Total						6,512	1,721,890	
Per 1.0 m3						65	17,219	
ding work a	Spreading and grading work ability of bull dozer							
	D (m)	)0	Q (m3/hr)	T (hr/	T (hr/100 m3)			$Q = 10E^*(13D+9)$ ;
	0.3		77.4		1.292			D/DO = 1
vork; D: F	E: Efficiency of work; D: Finish thickness							
Compaction work ability of tired roller	red roller							
V(m.hr)	W (m)	(m) Q	Э	N (time)	Q (m3/hr)	T (hr/100m3)		$O = V \times W \times D \times E / V $
3500	1.8	0.3	0.4	5	151.20	0.660		ر 1 = 100/ ال
V : Compaction speed (m/hr)			W: Effective	e compactio	n width per on	W: Effective compaction width per one time of compaction work (m)	tion work (m)	
D : Finish thickness (m)			E: Efficiency of work	y of work		N: Numbers of	N: Numbers of compaction work (times)	es)

Aggregate surface course (t=15cm) for construction road of Bridge Per 100 m2

					[rd		T		<u> </u>	T		Γ	7		Γ			T			1
	c c	Kemarks		0.17/2*2.5	1*100m2*136: Material	113	1.4	Equipment - 14			Equipment - 41		Equipment - 44								
Amount	1	Local	(VN. D)	16,926		0	2,060,400	9.280	0000	0,240	6.500		3,/80	7 103 126	STICTION OF		21 031	150,12		300 071	140,400
ATT		Foreign	(1.YEN)	•			.1	456		707	956	1000		1 007	1,00,1					C	7/
This Daige	111 1/1/05	Local	(VN. D)	009.08	20,00		101,000			48,000			42 000								
	5	Foreign	(VEX.)					000	7,830	2.010	000	1,550	1 230								: -
		Quantities	,		0.21		20.4	1.07	0.16	0:13		0.13	000	22.0							
		Unit			person		,	CIII	hī	hr	111	Ä	1	Ħ							
		Standard					36 V	correct ractor = 0.30	3.1 m	10-00 to	macadam 10~20 tott	8~20 ton	10010	5500 ~ 65001							
			Cesciption		Common labor			Crusher - run	Motor grader	into State	Road roller	T	7	Road sprinkler		10121			Per : 1.0m2		
			ġ		  -			CI	۲,	٦	ιŋ	١,	+	'n	1						

Sub-grade work CBR = 5 (including material)
Per 100 m3.

					5	Unit Price	Ai	Amount	
No. Description	ion	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
				. !	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
									Percent of swell and shrinkage 1/0.9=1.1;
Filling material			m3	110	,	13,920	•	1,531,200	Material -115
2 Bull dozer		15 ton	占	0.47	4,030	91,000	1,894	42,770	Equipment - 3
		8~20 ton	j.	0.97	066'1	50,000	1,930	48,500	Equipment - 41
T			person	0.125	'	80,600	ı	10,075	0.05*2.5
							3,824	1,632,545	
Per 1.0 m3	m3						38	16,325	
Work ability of bull dozer	ull dozer						-		
							3		Q A = (W*V1*D*f1*E1)/
M .		V 1	Ω	1J	Ε1	Z	QA	TA	Z
2.9		2300.0	0.2	1/1.25	9.0	3.0	213.4	0.470	TA = 100/Q
QA: Quantity of Efficiency of	f spreading f work : D	Q A: Quantity of spreading and grading work (m3/E1: Efficiency of work: D: Finish thickness (m)	13/ hr)			W 1 : Efficien V 1 : Spreadir	W 1: Efficiency spreading width per one tim V 1: Spreading and grading speed (m/hr)	W 1 : Efficiency spreading width per one time spreading (m) V 1 : Spreading and grading speed $(m/hr)$	ling (m)
N1 : Quantity of	spreading a	N1 : Quantity of spreading and grading work (times)	es)			fl : Soil conversion factor	ersion factor		
Work ability of tired roller	ired roller								
									Q B =(W*V2*D*f2*E2);
W 2		٧2	Ω	f2	E 2	N 2	QB	TB	ZZ
8.1		3500.0	0.2	1/0.87	0.5	7.0	103.0	0.970	TB=100/Q
QB:Quantity of compaction (m3/hr) E2:Efficiency of work; D:Finish thickn N2:Number of compaction work (times)	of compacti f work; D compaction	QB: Quantity of compaction (m3/hr) E2: Efficiency of work; D: Finish thickness (m) N2: Number of compaction work (times)			W 2 : Effi V 2 : Con f2 : Soil o	W 2: Efficiency compaction width V 2: Compaction speed (m/ht) f2: Soil conversion factor	ion width per one (m/hr)	W 2 : Efficiency compaction width per one time of compaction (m) V 2 : Compaction speed ( $m/hr$ ) f2 : Soil conversion factor	(m)

Backfill (Open cut,max backfill width W>4m)
Per: 100.m3

						int - 3	_		~	Ţ		T		
	Remarks		1.6*2.5	T=0.03 · Faminament - 6	ייים ייים ייים ייים ייים ייים ייים ייי	T=0.186; Equipment - 3	Daniamont 2	Edulpinent - 35	Danie mont	Equipment 42				
Amount	Local	(VN. D)	322,400	05 560	000,00	16,926	021.02	79,170	010 10	010,12		 225,066		
An	Foreign	(J.YEN)		1000	7.301	750	720	956	(1	/0		4,153		
Unit Price	Local	(V.N. D)	80,600	000 00	92,000	91,000	30000	73,000	-0.0	000,191				
S	Foreign	(J.YEN)		33.0	7,500	4,030		350		019				
	Quantities		4		0.93	0,186		2.73		0.1		٠		
	Umit		nerson		Ė	hr		h		day				
	Standard				0.6 m3	15 ton		0.8~1.1 ton		60~100 ton				
	Description		100000	Common rabbi	Back hoe	D11 dezer	Dail GOZGI	Vibrating roller	VIDIALITIE LOTTES	Татпрет	, and the	Total		
	Ž	5	-		~	7	<u> </u>	-	•	10	,	 Γ		

Transporting of excavated soil (Temporary work)
Per 100 m3 (Transport distance 1.0 km).

	Remarks		Equipment - 33	0.1*2.5						Cmt = 1.8*! +3	310	T (hr / 100)	5.23
Amount	Local	(V.N. D)	350,410	20,150	370,560	3,706				, i	בוו כווונ	Ò	19.10
Ar	Foreign	(J.YEN)	8.629.50	•	8,630	98	Cmt: Cycle-time of Dump truck (min.)	for back hoe		****	(oo) - C	ш	10,00
Unit Price	Local	(VN, D)	67,000	80,600			le-time of Dun	Es: Efficiency of factor for back hoe	n: Frequency of loading			Cms	22.00
in S	Foreign	(J.YEN)	1,650				Cmt: Cyc	Es: Effici	n : Freque	a: 5 (min)	7=C/01F	Cmt	9.80
	Quantities		5.23	0.25								Ē	0.80
	Chrit		Ę	person					٠			ц.	0.71
	Standard		]   ton				13 hr)	one Dump truck (m3).		итр тиск		O	5.50
	Description		Duma truck	Common labor	Total	Per 1.0 m3	Q : Quantity of transport (m3 hr)	C: Transported quantity of one Dump truck (m3)	f : Soil conversion factor	Et: Efficiency of work for Dump muck			1.00
	Š	:	-	-   ~	1		1						

Excavation for unsuitable material (temporary work) Per 100m3

			r	Т		Г	7		٦		
	Remarks	Equipment - 4	Danisamont A	o - mandinha							
Amount	Local (VN. D)	98.280		177,560	275 840	2000		0.715.0	7,730		
Am	Foreign	1		4,941		7,131			- 16		
Unit Price	Foreign Local		3,880						· ·		
	Quantities F	1	1.08	1 02	1.25	•					
	Unit		j	-	ηĽ						
	Standard		16 ton		0.6m3						
	Description			Swamp Buildozer	2 Back hoe	ı	Total			ner 1 0m3	
	Š				·	,				ļ.	_

•	report of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the second of the se	1010					
	WOLK ability of Swallip Dulle	UZCI				1 (Pull) 1 (Pull) 1	
		æ	윤	(E)	Cm (mm.) C(mo.)	Eb L (m) Cm (min.) C(mis.in)	
,	ag(ms)		,		2.00	1083	
	000 0	1 000	0.700	30.000	0.700   30.000   1.310   92.330	200.1	:
	7.800	20011			TOTAL TOTAL SOUTH FOOTOT	actor.	
ď	C C Little farmation ( m3/ hr)	m3/hr)			1 : SOII COILLEISION	100	
'n	O: Chantily of excavation (	, , , , , , , , , , , , , , , , , , ,			on . Cools time		
	e contrar ( priching ) nor one cycle	a ) ner one cycle					
	d : execution volunic (pusini	S / bel olle e/ele			E . Efficiency of work	ırk	
	Total American				ני יי היוורורורי אי יי		
	L : average soil pusing distance	ָרָנָ בּרָנָ					
				٠.			
ţ.							
	True Challeton Of Hook Hoo						

Ter 1 - Lilian - Changle han							_
WORK admitty of Dack Hot				,	196-70	T/br/100m3)	
20(m2)	¥	<b>4</b>	ш	Cm(sec)	C (ms/nr)	E Cm(sec) Q(ms/nr) 1(m/100ms)	_
CIII)OD	2.0		.,	0	VO 13	1 93	_
0,0	860	8	0.00	22.00	1.00 0.60 25.00	7.7.1	-
0.00	02:0				or court or are	المارين مين	
O. J. J. L. Shot ponsorthy		Cm: cycle time.		q: excavar	d: excavation volume per one eyele,	ו חווכ באכור,	
do: Standard bucket capacity,				5.00 100	6. coil conversion factor		
E. officionary of work.		K:bucket factor;		1. 3011 50	10000		

Filling work at ponds Per: one set

						T		
	Remarks		Process cost - 213	Process cost - 146				
Amount	Local	(VN. D)	92,018,336	277,655	92.295.991			92,295,991
Am	Foreign	(J.YEN)	347,360	2,700	350.060	22272		350,060
Unit Price	Local	(VN. D)	17,219	185,103				
Cni	Foreign	(J.YEN)	65	1.800				
	Quantities		5344	1.5				
	Unit		m3	dav				
	Standard		for pond	full time				
	Description		Fill up ground work	Dumn operation	r ann operation	lotai		per : one set
	ŝ		-		7	-		

Fabrication yards of PC I girders (with 2 track; W = 3.5m; t = 15 cm) Pcr.: one set

					5	Unit Price	Ar	Amount		
5	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
			·.	,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
	Excavation for unsuitable					(	750 640	12 000 230	Process cost - 218	
	material(temporary work)		m3	5040	91	7,738	75,040	12,700,220	1100035 0031 - 210	1
	Transporting of excavated									
C	soil (Temporary work)		m3	5040	98	3,706	433,440	18,678,240	Process cost - 217	-
			,	4440		13 020		77 177 480	5.040*1.1: material - 115	
'n	Воггом material		m	2544		13,720		20112111		T
	Backfill (Open cut,max	open cut								
4	4 [backfil] width W>4m)	W > 4m	m3	5040	42	5.251	211,680	26,465,040	Process cost - 216	-
-										
	Sub-grade work CBR = 5									
Ś	5 (fincluding material)	CBR = 5	m3	4956	38	16,325	188,328	80,906,700	Process cost - 213	
	rse									
	road	t=15cm;W=3.5m; 2							710	
9	of Bridge	track	m3	<b>2</b>	72	140,208	6,048	11,///,4/2	Frocess cost - 214	7
,	Total						1,298,136	228,900.252		· —
	10191									
										Т
	per : one set						1,298,136	757,006,877		· 7

Access road for bridge work

						·····		1				-			· · · · · ·		 
	Remarks		•	Process cost - 218	-	Process cost - 217	5 040#1 1 : material - 115	0.0+0 1.1 , Hatella: - 1 t.		Process cost - 216		Process cost - 215			Process cost - 214		
Amount	Local	(VN. D)		25,028,850		33,631,950	035 530 951	138,503,500		47,652,825		134,011,925			121,420,128	500,709,038	500,709,038
An	Foreign	(J.YEN)		825,825		780,450		•		381,150		311,942			62,352	2,361,719	2,361,719
Unit Price	Local	(VN. D)		2,758		3,706		076'51		5,251		16,325			140,208		
ភ	Foreign	(J.YEN)		91		98		1		42		38			72		
	Quantities			9075		9075	000	9983		9075		8209			998		
	Unit			m3		m3	,	m3		m3		m3			m3		
	Standard									open cut : W > 4m		CBR = 5		t=15cm; W=3.5m; 2	track		
	Description		Excavation for unsuitable	material (temporary work)	Transporting of excavated	2 soil (Temporary work)		Borrow material	Backfill (Open cut,max	4 backfill width W>4m)	Sub-grade work CBR = 5	5 (including material)	Aggregate surface course	(t=15cm) for construction	6 road of Bridge	Total	per : one set
	ŝ					7		m		4		'n	-		9		-

Steel lighting pole setting work (type - A1)
Per 10. poles

						The Paris	44	4 mount		
					5	Omit Price		1		
		Standard	I Init	Ouantities	Foreign	Local	Foreign	Locai	Kemarks	
Певстриоп		טימויים טינ	5	,	(I VEN)	(C NV)	(J.YEN)	(VN D)		_
				,	(, , , , , , , , , , , , , , , , , , ,	02 710		1,430,883	Process cost - 228	
Form work			m7	1/.3		07,70		100 /01 1	December 151	Γ
		Clace C-1	m3	3.9	376	442,572	1,466	1,720,031	Frocess cost = 151	T
Concrete			,	3.0		79.812	,	311,267	Process cost - 34	_
Concrete placing			CEL		30,00	276 306 1	23.716	1 759 848	Process cost - 61	
Reinforced steel		D13~D16 mm	ton	0.98	75,690	507,027,1	217677	000 000 1	Material - 33	Π
5 Anchor holt	Ŀ	M 24*600	each	40	* * * * * * * * * * * * * * * * * * *	25,000		000,000,1	- V V V	7
	F	120 10 10							1.3 day 1 , 1 + + + .	
	<u></u>	Hydraulic +.o. +.5	Ì	577	1.250	46.000	7,213	265,420	Equipment - 20	$\neg$
6 Truck crane	_]	TOI	111					221 000	0.5*2.5	
Foreman			person	1.25	ì			00, 00,	2 C*2 L	
	L		nercon	4		170,100	,	680,400	C-7.0.1	Т
Skilled labor			707			00,500		423.150	2.1*2.5	
Common labor			person	2.72	•	00,000		700 63		1
	Ĺ	Ashor cost)*4%	set		1		•	105,507		Т
10 Miscellaneous expenses		10001 0001					31.895	7,879,430		
Total							3 100	787 943		
Per 1.0 pole			١.	:			3,130			1
	ļ									

Steel lighting pole setting work (type - A )
Per 10 poles

				T		8											T	T			, V	•					
	Remarks		97 4000	Process cost - bo	Process cost - 17	Process cost - 228	Process cost - 151	, ,	FTOCESS COSt - 24	Process cost - 61	Material - 33	-	701 (25.00)	Material - 197	Material - 196	Process cost - 15	2 C+C +	1.0*2.5	1.8*2.5	3.0*2.5	1 4 44 T - T = 4 44		Equipment - 20				
Amount	Local	(C N)	(2:11)	48,000	117,434	2,382,048	1011011		344.788	646,475	1,000,000			365.880	727,200	146 528	סהריסדו	458,250	765.450	604,500			265,420	36,564	0 820 458	000000000000000000000000000000000000000	982,046
Am	Foreign	(NHVI)	(1.1 0.1)	1,100			1 624	1,027	-	8,528	t			•	ı	200	/N7	•					7,213	ŀ	10 673	710,01	1,86/
Unit Price	Local	(2)	(VN. D)	1,920	183,490	82 710	243 644	7/5/74	79,812	1,795,763	25,000			36,588	36.360	700	4,080	183,300	170.100	80,600	20,00		46,000				
<u>[1]</u>	Foreign	inging I	(J.YEN)	44	,	,	200	3/0	•	23,690	1			ı,		ļ	01	1	1			•	1.250				,
	Questities	Chamines		25	0.64	8 80	0.07	4.52	4.32	0.36	40			10	20		20.68	2.5	4.5	3.6	(,)		5.77	-			
	1	100		m3	m3	5	7117	m3	m3	ton	hach	CHC		each	f		m3.	person	PATCON	100	person		Ļ	to	355		
	£	Standard		hack hoe 0.35 m3				Class C-1		D13~D16	M 24*K00	14, 24 OUV	Copper bar	ф 10×1500 mm	DDC 6 mm2	7111110 - 200						Hvdraulic 4.8~4.9	tot	/loho= 00c+\*70%	(IdDOI COST) 270		
		Description		Typograpion	CACAYAUSII.	Bedding stone	Form work	Concrete	Concrete placing	Doinforced cteel	A Charles	Anchor boil		Crounding Electrode	Cionilaing Execusion	Grounding Wire	10 Hand backfill	Потетоп	normal and	Skilled labor	Common labor		orony (comp	Tiuch clane	15 Miscellaneous expenses	Total	Per cone note
		ĝ			+	1	~	4	V.		,	_		0	Т	7	10	=		_	13		· ·		2		

Street lighting pole (type - A1)
Per.:each

		Remarks		Process cost - 222	Material - 63		Material - 64			Material - 62					
Amount	וסתיור	Local (VN. D)		787,943	000 307 0	4,443,000	160 000	222		1.078.000		2 420 043	4,400,44	4 450 943	
₩.	111	Foreign	(J.YEN)	3,190		•		-		•		00,	3,130	3 100	7,7,7,7
- · · · ·	Unit Price	Local	(VN D)	787.943		2,425,000	000 001	100,000		1 078 000	222,572,5				
*1.	5	Foreign	(J.YEN)	3 190	2,170	13		•							
	Quantities			-		_									
		Umit		4000	caci	te's	3	set			Set				
		Standard				Steel - 1=10m	Sec. 1 1 10111	h=2m; span 1.5m			250W -Sodium lamps				
		Description			Light pole setting work		Kound poles	3 Sinole arm nole			4 Street lighting			lotal	Per one each
	ĺ		į			ĺ	7	<u> </u>	,[		4				

Street lighting pole (type - A)
Per:each

	<del></del>		T	-		-	Г			7		Т		Γ		l
	Remarks	Process cost - 223	0 0	Material - 03	14-4	Marenai - 04			67 [-]	Matenai - 02						
Amount	Local (VN. D)	970 680	2000	2.425.000	000	160,000			4 4 1 1 1	1,078.000			4 645.046	2.2.2.2.	4.645.046	
Am	Foreign (1 YEN)	1 967	1,00,1	1		•				1			LY8 1	1,00,1	1867	200,1
Unit Price	Local	1	982,040	000 300 6	7,440,000	160.000	100,000		7	1.078.000						
<u>"</u>	Foreign	(3.1.514)	/98,1				,									
	Quantities		_		_,		_		-		-					
	Unit		each		set		set			ţ	١					
	Standard			,	Steel: I=10m		h=2m;span 1.5m			Secure Collins	250 W -Sodium lains					
	Description		I jobt pole setting work	רוצייו אסור פרווווצ ייסוו	Round notes	Solod Princy	Single arm nole	Cilibro mili poro			4 Street lighting			Total	ויטומיו	Por one each
	.0	•	-	-	ŗ	,	"	,			T		-	ŀ		

Manhole 1220x1220x1500 mm (under ground) Per 10 each

_			·			<b>,</b>	·					·	-r		_	- 7		1			7	
		Remarks	77	Process cost - 00	Process cost - 228	Material 28	Maleciai - 20	Material - 4	A - Lemesta	ואומורוומו	Process cost - 156	134 7 7 7	Process cost = 1.2.1	Process cost - 229	170	Process cost -172	Process cost -69					
•	מתוני	Local	(2::::)	51,917	1 753 452		•	1 069.740	000 747	454,800	645.845		225,712	157 847		3,878,444	131,507		8 369 323	026 027	200,22¢	
Y	Amount	Foreign	(J. I E(4)	1,190			480			1	846	0	192			1	-		2 708	2014	1/7	
	Unit Price	Local	(NN D)	1 920	0,1,0	01/,70		000	4,400	4.200	107 047	740,/87	442 572	10.10	171,10	186 227	263.013	212,027				
	5	Foreign	(J.YEZ)	44		,	27.000	7,000			700	3/6	375		,		'					
		Quantities	•	27.04	77.77	21.2	5	70.07	254.7	1002	2001	2.25	130	200	2.76	0.0	7.0	CO		,		
		Unit		,	CIII	ш2		ton	Ŕ		χ 20	E .	,	m3	m3	c	ZE ,	m3				
		Standard			Back hoe 0.55m3			\$<13 mm	1.75x75x7		L 63x63x6	ن اعدان	Cimo	Class C-1			Brick 220x105x60	for plastering				
		Description			Excavation		Form Work	Reinforced steel bar	72-1-	Shaped Steet	Shaped steel		Concrete	Concrete cover		Concrete placing	Mortar brick work:	Cement mortar		Total		Doregon
	ı	_	:			1		1	1		ı	1	_	1.	1		نہ ا	10	í	1	- 1	

Form work ( Wooden form, small-sized continuos structure)
Per Leach

					Ē	4017	ζ			
					5	221111		1	D composition	
•		Oton dord	Imit	Ouantities	Foreign	Local	Foreign	Local	Nellialns	
Vo. Description	nonc	Staridalu		y		(C N/S)	(J.YEN)	(VN. D)	-	T
1.			-		( , , , , ,		0.0		Material - I	_
		200	140	\$0.25	37	•	608,1			T
] Steel plate		0-70 11111	20			1 600		6.728	Material - 212	
2 Bolt		φ 12*75	each	4	1	700,1		031.00		
100		(V) (*) ( )	hood	×	•	2,520		20,100	ואומיכיובי	T
3 Bolt		0C1.01 0	cacii			000 5		2.888	Material - 8	
4 Steel bar		F9	kg	0.76	-	2,000		102 591	0.4*2.5	
			norcon	0		183,300		200,001		T
5   Foreman			200			001 021		850.500	2*2.5	
6 Strilled John			person	2.0		1/0,100		001.200	A 0*C+	
7				3.0	_	111,700		333,100	7.7	T
7 Welder			person	2:0			,,,,	090 ₽	Fourpment - 55	
+		2504	79.5	0.16	1,390	21,000	777			
8   Weld machine		A2027	7	91.0	1 250	35 000	200	009'5	Equipment - 52	
9 General		IOKVA	day	0.10	المحرد ا			82 134.00		
Miscellaneous expenses	expenses	(labor cost)*6%	set							
							787,7	1.471.47		T
Total	[R									
							000			<u> </u>
							797.7	0,6,16+,1		
Per leach	each									

Form work ( Wooden form, small-sized continuos structure) Per  $100 \mathrm{m}^2$ 

											٠	_	_		_	_	 		
	Remarks			C:4															
 Amount	Local	(VN. D)	1 115 625	1,140,040	351 000	20041000	2 022 500	0,044,000	751 013	C16,101			000	8,7/1,038			82.710		
7	1	(I.YEN)	1	1		1		•		1				•					
 Unit Price	Local		7.7.	183,300		111.700		80,600								-	-		
5	Foreign	1 VENE	(J. Y. E.IV.)	•		'													
	1	Cuannics		303	0.40	200	2.00	275	51.7	-	_								
	1	ווויס .			person		Detson		person		Set								
		Standard									from of above)*10%	/						: :	!
		Description			Eoreman		Correcter	Carpoine	Common Jahor	Colling race	A Cincillan conserved oversence c	Wilscellaneous cyperiscs			Total	TOTAL		77	Per 1.0m
		S.			-	-	ŗ	ષ	- ا	n	١,	ŧ							

Concrete placing (Chute, plain concrete structure)

Per: 10m3

_										<del>, .</del>	r				1	
	C. C. C. C. C. C. C. C. C. C. C. C. C. C	Кепаткъ	0.1*2.5	0.5*2.5	1 644	1.5*2.5										
Amount		Local (VN D)	45.825	303.010	717,042	302.250		11,214			571,914			57 101	121,121	
Δ.	Š	Foreign	1	1				•							•	
	Unit Price	Local	_	183,300	170,100	200	80,600			_						
		Foreig	(J.YEN)	1.			'	-			+					
		Quantities		0.25	36.1	1.4	2.75									
		Unit		person		person	20000	100120	set							
		Standard							(Sum of above) *2%							
		Description			Foreman	Shilled labor	William Idoo	Common labor	11 -1	Miscellaneous expellises			Total			
				+	<u>-</u>		,	3	† •	4	T	1	•			

Retaining wall work (H = 1.0 m ; H  $_{\rm I}$  = 2.0m) Per 10.0 m

-	Kemarks	2000 66	Process cost - 00	Process cost - 9		Process cost - 11	Process cost - 106		Material - 198	Process cost - 157	000	Process cost - 229	Process cost - 228	1+K·K=+0.1	Material - 111	Process cost - 15					
C	Σ E	2000	Frocess	Proces		Process	Process		Mater	Process		Process	Process	1+K	Mate	Proces					
Amount	Local (VN. D)		32,640	44,330		64,764	7.539.690		100,800	308 831	100000	51,472	330.840	2,000	391,600	28344	200	8.893.312	889,331		
Am	Foreign (1 YEN)		748	•		1,512					700	•		•	, ,	C 7		7.887	288		
Unit Price	Local	(414: 12)	1,920	44 330		3.598	373.252	27.7,01	25.200	ľ	343,140	57.191	0110	87,710	000 68		7,080				
5	Foreign	(J. T.EIN)	4			84	,	'			647	!				\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	101				
	Quantities		17.0	-	0.1	18.0	10:0	7.07	•	0.	0.0	0 0	3	4.0	· ·	†	4.0				
	Unit		m <sub>3</sub>	3	E	e l	11	E		E	Ē	6	E	m	<u>ش</u>	E,	Ē			(m)	
	Standard		Dook hoe 0 35m3	Dack Hoe old				Retaining wall	\$ 100mm x 0.8 x 5	each	Class G			-		Crushed stone				Per 1 0 m (H=1.0 m; H <sub>1</sub> =2.0 m)	
	Description			Excavation	Hand excavation	Transportation of excavated	soil	Stone masonry work		P.V.C pipe		Concrete	Concrete placing	Form work		Permeable material	Hand backfill		Total	Per 1 0	
Ī	S			-	Ľ.		در،	7		10		٥	1~	v	,	0,	01				

Traffic control and safety Per 1set

				4.21.7	This Daile	. 4	Amount	
					1 1100			Remarks
Description	Standard	5	Quantities	Foreign (J.YEN)	Local (VN. D)	roreign (J.YEN)	(VN. D)	Neiliai No
Setting and removal of cign nanels	of sion nanels							
e compression g	1.2m*0.8m	each	15.00		504,000		7,560,000	
Sub-materials	(Sum of above)*3%	set	1.00				226,800	
Common labor		person	75.00		80,600	•	6,045,000	2*2.5*15
Sub total							13,831,800	
Setting and removal of sign posts	l of sign posts							
		each	30.00		250,000	•	7,500,000	
Sub-materials	(Sum of above)*3%	set	1.00	•			225.000	
Common labor		регѕоп	150.00		80,600	•	12,090,000	3*2.5*20
Sub total	Į.					•	19,815,000	
Setting and removal of barricades	of barricades							
8	height = 1.3m	E	1,200		191,700		230,040,000	
Round pipe	<b>6</b> 48.6	E	2,844	186	•	528,984	1	0.51*365 days
		each	1,356	59		80,004		(M-160)*0.3
Sub-materials	(Sum of above)*1%	set	1.00	1		060'9	2,300,400	
Common labor		регѕоп	2,000		80,600		161,200,000	0.8*2.5*10m*100
Sub total	3]					615,078	393,540,400	
Setting and removal of safety cone	of safety cone							
Safety cone	\$ 250; h=0.,7m	each	100	•	150,000		15,000,000	- 1
Common labor		person	145		80,600	•	11,687,000	0.1*2.5*240 days*(29/12)
Sub total	a]					•	26,687,000	

Traffic control and safety
Per 1set

 			γ		· ·		т	<del></del>	·	<u> </u>	· 						Т	T	<del>-</del>	т	Т	Т	· T	7	<u> </u>	7
	Remarks				0.51*365 days	(M-160)*0.3		0.09*2.5*500									0.1*2.5*20*29		g)~ f)	4) - 1)	6#79 month	0.45*01				
Amount	Local (VN. D)			24,720,000	•		000 747	002,172	34 034 700	מיייני מיייני		0	210,000	343,320	1,668,000	75.640	16 196 500	18 703 460	0 651 440	0,051,440	351 532 200	007,200,100	110,010,000	400,400,000	983,756,000	985,750,000
Αm	Foreign (J.YEN)				446 400	70,800	5 172	± 11.0	C75 2073	7/5,775				•						1		•			1,137,450	1,137,450
Unit Price	n Local	1		41.200	70	00	39		- 200,000				17,000	11,444	2.780		' ' '	- 111,/00		1	000	2,020,300	80,600	2		
	Quantities Foreign			007			1,200		113			-	30	30	500	200	<u> </u>	145				174	1,450	•		
	Unit				E	E	each	set	person			-	each	ţeo	338	E	set	person		set		month	person	-		
	Standard		of temporary	height =	2.0~2.7m,w=2.5m	ф 48.6		(Sum of above)*1%			f warning light	including shade and	cocket	7 40 5	0.04		(Sum of above)*3%		78	(Labor cost )* 4%	flagman	ordinary traffic	Extra ordinary traffic	ie.		et
	Description		Setting and removal of temporary		0	I pipe		Sub-maternals	Common labor	Sub total	Setting and removal of warning light				ų	Electric wire	Sub-materials	ician	Sub total	Miscellaneous expenses	Traffic control flagman	าสก	nan	Sub total	Total	Per Iset
	% %		( <del>)</del>		14 Frence	15 Round pipe	16 Clamp	17 Sub-n	18 Comm	1	٥		101	- 1	20 Switch	21 Electr	22 Sub-m	23 Electrician		24 Misce	64	25 Flagman		i ·		

 $Form\ Work\ \ (\ Wooden\ form\ ;\ small-sized\ scattered\ structure)$  Per  $100\ m^2$ 

	8.368.110	•					
	8,368,110	•					
	619,860.00	1		-	1	 set	(sum of above)*8% set
15*2.5	3.022.500	•	80,600	•	37.5	 person	person
12*2.5	3,351,000	t	111,700		30	 person	person
3.0*2.5	1,374,750	•	. 183,300	•	7.5	 person	person
Remarks	Local (VN. D)	Foreign (J.YEN)	n Local I) (VN. D)	Foreig (J.YEN	Quantities	 Cmit	
	Amount		Unit Price	ם			

Concrete curb setting work Per 100 m

			Ψ-			·r		~	— 1		٠,		_	1
	Remarks	12*25	1 040	1.8*2.5	62*25	2::2								
	Local (VN. D)	540 000	פסייידי	502,650	1 249 300	1,000,000	021 191	201121		000 037 0	7,402,780		24,630	-
	Foreign		-	•		•		-			,		•	_
	Foreign Local	(7.14. C)	- 183,300	111 700	20,700	1009.08		ı			-			
	Quantities For	+	3.00	4 50	4.5U	15.50	2,							
-	Unit		nerson	1	person	1000	person	set						
	Standard							/1 abor cost)*7%	(Lacol cost)					
	Description			roreman	Block worker		Common labor		Miscellaneous experises			Total		
	Š.				,	1	er:		-1					

Bacl fill (open cut,max backfill width 1m<W<4 m) Per, 100 m3

Quantities         Foreign         Local         Foreign         Local         Relians           (J.YEN)         (VN. D)         (J.YEN)         (VN. D)         2.5*2.5           5         80,600         -         403,000         2.5*2.5
(VN. D) (J.YEN) (VN. E) 80,600
80,600

Dry riprap work Per 10m3

					Uni	Unit Price	An	Amount		
,ġ	Description	Standard	Unit	Unit Quantities	1	Local	Foreign	Local	Remarks	
•	:				(J.YEN)	(1 YEN) (VN. D)	(J.YEN)	(VN. U)	001 11 11 11 11 11	
		200*200*200	# 3	12	•	63,000	1	756,000	$756,000$ K = $\pm 0.2$ Matrial - 109	
	Copple Stone	202 202					F			
1	Back fill material throw in		Ċ	2		20 956	1	209,560	Process cost - 100	
۲ı	work		CEL	21		22,623		073 370		
1	Total							000,000		
						~~~				~~
								955 90		
	Der 1 fm2	7,						00000		.,

Plastic board drain work
Per: Leach (L=17 m)

					Cnit	Unit Price	A	Amount	
2	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(V.N. D)	
									1+K; K=+0.05;
· .	Plastic board		E	17.85	•	3,950		70,508	Material - 223
		Sum of					٠		
CI.	Submaterials	above)*0.2%	set	1.00	•	•		141	
m	Skilled labor		person	60.0		170,100	l	15,309	0.037*2.5
-1	Miscellaneous expenses	(Labor cost )* 4%	set	1	•	•	•	612	
	-								(17/2,088)*T;T=6.1;
10	Plastic board driver		h	0.05	11,270	78,000	564	3,900	Equipment - 125
ی ر	Check gange for driving		dav	0.0082	11,460		94	-	0.05/T
,	Total						657	90,470	
	וסומו						30		
	Per 1 m = Total / 17 m	al / 17 m				_	70		
	t = Executing time for one plastic board	astic board			$t = t_1 + t_2 +$	$t = t_1 + t_2 + t_3 = 143$ sec			
	L = Design length of plastic board (17 m)	oard (17 m)			$t_1 = Prepara$	tion time for pl	$t_1$ = Preparation time for plastic board driving (60 sec)	ng (60 sec)	-
	$V_1$ = Velocity of driving casing pipe (0.35 m / sec)	ig pipe (0.35 m / sec)			$t_2 = D_{\Box} ving$	time of plastic	: board (sec); t <sub>2</sub>	$t_2 = D_{Ti} \text{ ving time of plastic board (sec)}$ ; $t_2 = L / V_1 = 49 \text{ sec}$	
	$V_2$ = Velocity of extracting casing pipe (0.5 m /sec)	ising pipe (0.5 m /sec)			$t_3 = Extract$	ing time of pla	stic board (sec);	$t_3 = Extracting time of plastic board (sec)$ ; $t_3 = E / V_2 = 34$ sec	
•									

L<sub>r</sub>=(m·day) 2,088 C<sub>m</sub>: Cycle time(sec) C<sub>m</sub>(sec) E: Efficiency of work,  $L_t = 3,600 * T * L * E / C_m = 2,610 m$ 49 اک : Working hour of plastic board driver T(hr/day) Workability of plastic board driver

Transportation of materials Per 1 time (transport distance 77 km)

		—-r			1		1	_	Γ-	Т	-7		Т	_		
	Remarks		1/8*T; T=4.44; Equipment		0.2*2.5*2	C >* C C * C										
Amount	1	(VN. D)		30.800		000 00	20.000	10 556	0.000	1,097,969	1 103 225	The state of the s		105 048 275	2007	
ΑŢ	١	Foreign (1 VFN)		1725		,	1					1,15		777 000	1+1,47	
	Unit Price	Foreign Local	(J.YEN) (VN. U)		3,080	- 183,300	009 08	-	•	27.861	100,10					
		Quantities			0.56	10		9:	-	2.1	29					
		Unit	· !		ħ	10000	person	nerson	2	set	ton					
		Standard			15-16 ton					(Labor cost) *4%						
			Cescription			Truck crane	Stilled Jahor	Shired tages	Common labor	A Gana Handonic Pythemses	Wilstellancous expenses	Transportation fee	Total			Per 139 times
		,	ġ.				c	,	,,	٠   ٠	1	'n				

Transportation of equipment Per 1 time (transport distance 77 km)

~				<u> </u>			_	T	Т		<u> </u>	Т	7		Υ	7	_	ı
		Remarks	2*(1/8)*T;T=4.44;	Equipment - 17	2*(0.2/8)*T; T=4.44;	Equipment - 16	0.1*2.5*2	O O C ** O C ** O	2 7.2 7.7	0.25*2.5*2			32  ton = 0.8 = 23.0 = 20					
	Amount	Local (VN. D)		61,050		14,960	01 650	307 010	270,717	100.750	16 201	107.01	4,295,520	4 797 756			637 436 548	
	Ar	Foreign (1 YEN)	(	3,907		1,610			-				•	8 5 5 1 8	3,310		733 841	1000
	Unit Price	Local	(7.7.7)	55 000		68 000	200	185,500	170,100	007.00	90,000		44,745			-		
	: <u>:</u> :5	Foreign	(V. I EIV)	3 520	2201	7 320	27.6.	-	,		'	t	,					
		Quantities			1.11	2,0	77.0	0.50	1.25		1.25	1.00	00.96					
		Unit		<u>.</u>	≣	1		person	nerson		person	set	ton	3				
		Standard		0000	101 77~07	46.44	40~43 ton					(Labor cost) *4%						
		Description			Truck crane		Truck crane	Foreman	01::11cd 1ches	Skilled labor	Common labor	Miscellaneous expenses	The second of the second	ransportation lee	Total			Per 133 times
		o Z					C1	m	1,	4	'n	y	, ,	,				

R.C. Pipe(D=75cm ) TypeB - Setting work for catch basin Per 10 m.

,					1. 1.		4	A 200,131		
					5	Onit Frice	-	ומחוור		
	Description	Standard	Chit.	Quantities	Foreign	Local	Foreign	Local	Remarks	
			:		(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
			nerson		,	183,300		183,300	0.4*2.5	
ö,	Foreman		TO LOS		,	170,100	1	170,100	0.4*2.5	
Ž	Skilled Jabor		1000	35.0		00900		721.650	1.1*2.5	_
Ę	Common labor		person	7.73	•	000,000		00011111		Т
\ <u>`</u>	ال مزید را ۵	4750 ×1000	each	2	•	288,455	ı	2,884,550	Matenal - /4	7
?	2414	bydraulic4 8 ~ 4 9							0.2day*800/180;	
٠,	1	ton	į	0.89	1.250	46.000	1,113	40.940	Equipment - 20	
ĔΙ	I ruck crane	703 1-3 0		-			95	175 027	•	_
ζï	Miscellaneous expenses	Sum of above 3%	13S	1	,	<u> </u>	3	2000000		Τ
	Total						1,168	7,0/2,20/		T
	Per 1 m						117	367.557		٦
٠										

R.C. Pipe(D=100cm ) TypeB - Setting work for catch basin Per 10.m.

,							180;				
	Remarks		0.5*2.5	0.5*2.5	1.3*2.5	Material - 75	0.4*0.5*T;T=800/180;	Equipment - 20	•		
Amount	Locai	(VN. D)	229.125	212.625	261.950	5.421.000		40.940	308.282	6.473.922	647.392
Απ	Foreign	(J.YEN)	1	·	1	1		1,113	56	1,168	117
Unit Price	Local	(VN. D)	183,300	170,100	80,600	542,100		46,000	-		
5 D	Foreign	(J.YEN)	,	'				1,250			
	Quantities	,	1.25	1.25	3.25	10		0.89	1		
	Unit		person	person	person	each		Ħ	set		
	Standard					\$1000×1000	hvdraulic4.8~4.9	ton	Sum of above 5%		
	Description		Foreman	Skilled labor	Common labor	R C nine		5 Truck crane	Miscellaneous expenses	Total	Per 1 m
	9		-	,	1	4	-	'n	ی ا		.

Bacl fill (open cut,max backfill width W>4 m)
Per 100 m3

			_			<b>,</b>								,		_	~~		,	
	Domonico	Neiliains	10cc 15 % · Material 100	וספר וחומים ואומים ומים ו	Equipment - 3			T*0.5=0.54; Equipment - 6		Equipment - 39	Fourment - 42	בייייייייייייייייייייייייייייייייייייי	2.0*2.5							
Amount	ı	Local (VN, D)	000 000	3,750,000	08.280	201627		49,680		79.170	01010	21.010	000 200	20,501	6,401,140			11077	110,40	
Am		Foreign (1 VEN)	(2) (2)	ŧ	4 350	4,324		1 382	*001.1	926	i,	/9		-	6.757				89	
Unit Price	2211		(AN.D)	50.000	000	000.16		000 60	92,000	000 00		191,000		1 009:08						
	5	Ĺ`	(J. Y.E.N.)			4,030		0	7,260	350	255	610					L			
		Quantities		115	C	108			0.54	i d	2.73	-	0.11	¥						
		Unit		,	E E	7	Cay		, <u>t</u>		Ц	-	day	400	Delaciii					
		Standard			vellow sand	1 5 5	non C l		0 6 203	0.0	0.8 ~ 1.1 ton		60 ~ 100 kg							пЗ
		Description	-		Cyonylar material	Classicia mercina	Bulldozer			3 Back hoe	1761	Vibrating roller	Tomonor	Taking	Common labor	177-06	1 0121			Per 1.0m3
,		Ž	<u>.</u>		-	-	7			"		4	4	^	9		<del>-</del>			

. Work ability of bulldozer (15ton)

Q (m3 /h.) L(m) m q : Execution volume (pushing) per one cycle 1.00 g (m3) 2.92

Q = (60 \* q \*f1 \* E)/Cm) Cm = 0.027 L + 0.7S T = 100/QE : Efficiency of work

T(hr/100m3)

L : Average soil pushing distance

Cm: Cycle time

Road marking Type  $\_$  A (Special application) Per  $150\,\mathrm{m}\,2$ 

Amount		Т	<del></del>		٦,		1		• •		T		Τ	•••	Г	_	Γ-	-7	ı	
	Remarks		1.0*2.5	V C#0 0	2.5.2.	3 0*0 5	2.2	T=610/120	1-010-1 Care Control 1	127		Equipment - 126								
	Local	(VN. D)	458.250	1 40	6/0/8/6	003 403	000.400					013 360	2000017	135.251		2,389,436		15,930		
	Foreign	(J.YEN)	, ,		1		,			022	000	DOVC	701,7	180	1	017.0	20040	22.	1111	
	Local	(N. D)	103 300	100,000	170 100		80,600				•		47,000							
	Foreign	(I VEN)	(:::: (::::::::::::::::::::::::::::::::	,			•				061	3	490		-					
	Quantities		t c	7.7	\$7.5	01.0	7.5				ر م		5.08	,	<b>→</b>					
	Unit	-		person		person	40000	10015			ŗ		'n		set					
	Standard								11.4 2 40.2	Land Smided	discharge 1.2 1/min	Ulscilaige 1.2 minn	2 ton		Sum of above 6%				-	
	Description	in the second		Foreman	Commen	Skilled labor		Common labor				Line marker	Traingly Arona	THE CIAILS	Miscellaneous expenses	Miscellance as one contract	Total		Der 1m	
	Amount		2		-	-[	7		m			,	ন		٠	¥	>			

Monitoring of settlement and lateral flow Per: one set

				5	Unit Price	Am	Amount		
Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
•				(J.YEN)	(VN. D)	(J.YEN)	(VN D)		
Surveyor		month	12	•	3,150,000	1	37,800,000		
Common labor		month	24	1	1,612,000		38,688,000		
Miscellaneous expenses	Sum of above 30%	set	1	1	ı	1	22,946,400		T
Total						1	99,434,400		
Per one set / month						1	8,286,200		$\neg$

P/C 244-P/C300 not used

## RED RIVER BRIDGE CONSTRUCTION PROJECT

## PROCESS COST

Process Cost Nonumber (301 - To the end)

Wagen assemble and disassemble work
Per: 1set\*1 time

								1	
					15	Unit Price	1	Alliousit	
2	Decomption	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
<u>.</u>				,	(J.YEN)	VN. D	(J.YEN)	(VN. D)	
١.	ſ		nercon	45.00	1	183,300	1	8,248,500	1*2.5*18 days
-	Foreman		10000			00.		000 220 37	3/16 A 1 *> C *>
۱	Skilled Jahor		person	270.00	•	1/0,100		43,327,000	0 2.2 10 4433
1 6	1.1		percon	270.00	,	009.08	1	21,762,000	6*2.5*18 days
5	Common labor			200					18 dove*T-T=4 44
						-			To days 1,1 Title
•		hydraulic 45 ton	<u>, </u>	79 90	7,320	68,000	584,868	5,433,200	Equipment -16
ŧ	LTUCK CLAILE	ווא בד אווששות לוו						301 503 00	Dofor to A
~	Miscellaneous expenses	(Jabor cost)*27%	set	1.00	ı		-	50,505,123	VOI DIOV
, :									
							0/0702	300 620 101	
	Total						584,868	101,6/2,62	
			_						
	# # # * * * * * * * * * * * * * * * * *	4					584,868	101,873,825	
	Der I Set 1 umc	CITIC							

A: Expenses, included the cost of Roof material, Floor material Protect material, scaffolding material of Wagen and etc.

CB-263

Wagen removal and setting work
Per. Iset\* Linne

							×	1		
						Cuit Price	TIV.	Amount		
		Cton dord	l lait	Ouantities	Foreign	Local	1	Local	Remarks	
ģ	Describtion	Standard			(LYEN)	(VN. D)	(J.YEN)	(VN. D)		
				05.0	,	183 300	ı	458,250	1*2.5	
	Foreman		person	4.30				002,030	v 7*0	Γ
	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		nercon	5.00	,	170,100	•	850,500	6.7	
N	Skilled labor					00,00		003 703	2 40 5	•
1			nerson	7.50	•	80,000	1	000,**00		Ī
n	Common labor							573 075		
÷	Sestional anomaliansity	(labor cost)*30%	set	00:1	1		,	(-) (-)		T
+	Miscellalicous cypelises	(								
								300 007 0		
							1	2,48/,223		Ţ
	10121									_
										T
							•	2.487.225		
	ner 1 set*1 time	Time						, , ,		

A: Expenses, included the cost of timber,PC steel bar, Mechanical devices and etc.

Wagen climbing work
Per. 1set\*1 time

						,		1 - 1 A	Domonto	
S	Description	Standard	Chit	Quantities		Local	Foreign	Local	Reillaiks	_
					(J.YEN)	(N D)	(J YEN)	(VN. D)		
-	Chain Plant	S ton lift 3m	dav	4 00			400		Equipment - 95	
٦.	Citatil DioCR	, 1011, 1111, 7111	(3)	,						Γ
۲	Supplemental material	sum of above *5%	each	1.00	•		20			7
1	Doromon		person	2.50	,	183,300		458,250	1.0*2.5	
,	1. Orcinali							TO OCC O	2 0#2 2	
4	Skilled labor		person	13.75	r	170,100	•	2,338,8/5	5.5*2.5	1
			the contract	17.50	,	80 600	•	1.410.500	7.0*2.5	
n	Common labor		DC 3011	20:/1		20000				Γ
					•					7
							420	4 207 625		
	l'otal							2006120		T
		-					-			T
	ner-1 set*1 time	tine					420	4,207,625		$\neg$

Wagen pull back work Per. 10m

					Т		T		T		T		1		Ţ		7	
		Remarks		0 5*2.5		1.5*2.5		5*2.5										
	out.	Local	(VN. D)	200 105		637.875		302 250	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2			1 160 250	0076/0161			1 169 250	23,107,44	
V V	AIII	ocal Foreign	(J.YEN)			,			_				1			_	-	
,	t Pace		(VN. D)	000 601	000,001	170 100	170,100	00200	00,00									
1	5		(J.YEN)		•		•		•									
	Quantities Foreign Local Foreign	:	,	7.	35 6	5.75	t	5.75										
				person		person		person										
		Standard															6	
		To company			Loreman	r of citian	Chilled Jahor	Chines 1400	2 Common Jahor	COLLINSIA ISOS			Total	A STATE OF THE STA			mor 10 m	
			ó Z		-	_	·	7	-	נ								

Frame square sets work (5 t/m²;H=5m) for centilever erection bridge Per. 100 air m³

- 1					,		*	1		
					C.	Unit Price	An	Amount		
	Description	Standard	Cmit	Quantities	Foreign	Local	Foreign	Local	Remarks	
-	Total Passa			,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		_
		2000000	45.59	1.5	2 778	,	32,736	1	31*110days	T
헛	Square shore	20042000	201	2.3	702 7	-	25.414		(Material -150)*0.3	
Jac	Jack head	r-'r	eacn	0.0	1,170		2 4 5 7 7		(Material - 1541*0 3	r
Jac	Jack base	P-B	each	5.3	6,523		24,0,45		(Material - 154) 5:5	7-
2	Round pipe	ф 48.6	E	156	45	,	7,020	,	0.51 110 days	- <sub>T</sub> -
S	Round nine joint		each	17	39	1	663	ı	(Material -155)*U.5	
1 8			each	17	63	•	1,071	-	(Material -160)*0.4	
اڙ	dim	703# 1-3	1	201			\$ 074	•		
ヺ	Supplemental maternal	sum of above . 3%	126	3.1				377 000	A C*C O	
Fol	Foreman		person	1.75	1	183,300	4	340,77	0:2 1:0	· T
5	Skilled labor		person	7.25	•	170,100	•	1,233,225	2.9+2.5	1
3 3	Common labor		person	7.25		80,600	•	584,350	2.9*2.5	Т
3	IIIIIOII IAOOI								0.67days*T.;.T=4.44;	
Ę	Truck oreside	hydraulic 20~22 ton	'n	2.97	3,520	55,000	10,454	163,350	Equipment -17	<del>. 1</del>
3	Ch Craile						117,004	2,301,700		
	10121									
										T
	Dor. 1 () sirm	3					1,170	23,017		_
	* ). ' · * ; · * ;									

Inner form setting and removal work for cantilever Per: 10  $\,m^2_{-}$ 

		179,768	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-				m²	Per: 1.0 m <sup>2</sup>	
·		1,797,675	•						Total	
		163,425				00'1	set	(labor cost)*10%	Miscellaneous expenses	ব
,		483,600	-	80,600	•	00'9	person		Common labor	3
	3.3*2.5	921,525	-	111,700	-	8.25	person		Carpenter	7
		229,125	1	183,300		1.25	person		Foreman	
	Kemarks	Local (VN. D)	roreign (J.YEN)	Local (VN. D)	roreign (J.YEN)	Samones	Onit	Standard	Description	0
,		Amount	An	Unit Price	Umi					

Scaffolding work for tower crane foundation work Per. 100 Multiplied  $m^2_{\odot}$ 

					ient -70	4.95; 74	· 			
Remarks		1.3*2.5	4.0*2.5	4.0*2.5	0.5 day; Equipment -70	0.5 day *T; T=4.95 Equipment -74			-	
Local	(VN. D)	595,725	1,532,000	806,000	171,000	550,560	657,951	4,313,236		43,132
Foreign	(J. YEN)	ŀ	•	-	17,760	6,175	4,308	28,244		282
 Local	(VN. D)	183,300	153,200	80,600	342,000	222,000				
Foreign	(J.YEN)	,	•	1	35,520	2,490		:		-
Quantities		3.25	10.00	10.00	0.50	2.48	1.00			:
Unit		person	person	person	day	Ę	set	į		
Standard					40 ton	steel 200ps	(Sum of above)*18%			ied m²
Description		Foreman	Rigger	Common labor	Barge with crane	5 Tug boat	6 Miscellaneous expenses	Total		Per: I Multiplied m
 ŝ			2	m	4	, v	9			

Suspended timbering for tower crane foundation work
Per: 1 set

							¥ <	A mount		_
						Onit race	THE STREET	Out.		-
. ;		Ctondord	Imit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
ė Ž	Description	טומווסוס	5	,	(LYEN)	(XX: D)	(I.YEN)	(VN. D)		
.				2 13		183 300		573,729	0.5*2.5*2.5	
_	Foreman		person	5.15		00000		213 400 0	A C*A C*A C	
٠			norcon	15.63		153,200	ſ	2,394,310	6.2.6.2.6.2	7
N	Kigger		1000			000		1 007 500	0 0*0 5*0 5	
~	Common labor		person	12.50	•	20,000		2,700,1		Τ
'n	Collinion labor									_
	Depreciable value of				. !		CCC	. 1	101 * 10 davs	
,			ţ,	2.5	808	•	7.020	•	2000 101	
4	timbering material							150 020		
٧,	Miscellaneous expenses	(labor cost)*4%	set	_				000,001		T
$\cdot$	IMISCOLIAINCOUS CAPCINGOS	(					2.020	4,134,775		
	Total									
										1
							0000	4 134 775		
	,						4,0-0			1
		<u>.</u>								

Bracket setting work Per: one place

						<del></del>		······		,					T		 ~- <sub>1</sub>
	Remarks		0.4*Ws*2.5	0.2*Ws*2.5	2.4*Ws*2.5	1.6*Ws*2.5		(33/t)*90 days	0.3 day *Ws;	Equipment -70	0.3 day *Ws*T;	T=1040/210:					
Amount	Local	(VN. D)	15,030,600	4,579,700	84,029,400	26,517,400		0		8,443,980			27,128,400	29,936,133		195,665,613	195,665,613
Am	Foreign	(1 YEN)	1		•	1		85,869		876,989			304,278	,		1,267,135	1,267,135
Unit Price	Local	(VN D)	183,300	111,700	170,100	80,600		- 1		342,000			222,000				
n D	Foreign	(J.YEN)		1			:	2,376		35,520			2,490				
	Quantities		82.00	41.00	494.00	329.00		36.14		24.69			122.20	1.00			
	Unit		person	person	nerson	person		t.dav		dav			14	set			
	Standard				3					40 ton			steel 200ps	(labor cost)*23%			
	Description		Horeman		Strilled Johor	4 Common labor	Denreciable value of	temporary steels		K Baroe with crane	200 mm 200 mm		Tue hoat	Miscellaneous expenses		Total	Per one place
	2		-	. (	1 4	J 4		v		v			7	×			

Timbering on the bracket <u>Per: Lair m</u>³

						_ :					·	<u>.</u>	<b></b> -	····	<del></del>		÷-,					. 1		
-	Ç	Kemarks	8.2*90 days	2 0*90 days	(Marine) 150)*() 3	(Marerial -1.22) V.S.	0.51 +90 days	(Material -160)*0.3	(Material -132)*0.4		0.04*2.5	0.04*2.5			0.13*2.5	0.03 day;		0.03			8			· .
	. 1	Local (VN. D)	1				,	1	6,623	331	18 330	001	11,1/0	56,133	26,598		10,260		33,300		162,745		162,745	
	Amount	Foreign (1 YEN)	360	200	091	395	41	53		05			,	ŀ			1 066		374		2,499		2,499	
	Unit Price	Local	(7:11)		•	,	,	,	520 840	25,735	000	183,300	111,700	170 100	80,600	20,000	4, 3, 1	344,000	222.000					
	Unit	Foreign	(J. YEN)	590	144	324	37	48	of .				1					35,520	007.0	2,420		1		
		Quantities		0.61	111	1 22	1 1 1	1.11		0.0125		0.10	0 10		0.33	0.33		0.03		0.15				
		Unit		each	to o	100	eacu	E,	each	each	set	nercon		person	person	person		day		Ę				
		Standard						ф 48.6		0.150x0.150	(sum of above) *5%							40 ton		steel 200ps				
		Description			Frame	Brace	Jack base	Round pipe	Clamp	Timbo	Illinoen 1	Supplemental marchians	Foreman	Carpenter	Skilled labor	Common Jahor	Colimiton race:	Rarne with crane	_	The heat	7	Total		Per: 1 air m.
			,			2	~	4	·		اه	7	8	o	٤	2 :	=	2	7	<u></u>	2			

Timbering of deck slab (overhanging)
Per. 10 air m<sup>3</sup>

I					177	Tinit Drice	A	Amount	
					O	7111			
٥	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
;					(J.YEN)	(VN. D)	(I.YEN)	(VN D)	
-	Поможения		person	0.50		183,300	I	91,650	0.2*2.5
ء ا	Comparison		nerson	0.70	,	111,700	ı	78,190	0.28*2.5
. ا ر	Cal penier		Derson	1.53		170,100	1	259,403	0.61*2.5
- ار	Common labor		person	1.55	1	80,600		124,930	0.62*2.5
- -	Continual tagos								0.14 day; Equipment
 M	Down with mone	40 tom	dav	0.14	35.520	342,000	4,973	47,880	-70
$\int_{-1}^{1}$	Darge with Cane								0.14 day *T;T=1040/210;
V.	The beat	steel 200ps	Ħ	69.0	2,490	222,000	1,726	153,920	Equipment -74
,   	Miscellaneous expenses	(labor cost)*4%	set				1	22.167	
	Total						669'9	778,139	
	Per. 1 oir m3 day	3 day					029	77,814	
	T C   1 4 1 1 1 1	1							

Timbering of deck slab (overhanging)

Per. 100 air m<sup>2</sup>

٠													r	_							F	_	γ	· T	7
	ļ	Kernarks		8.8*90 days	. 0000	2.0*90 days	(Material -159)*0.3	0.51*90 days	(Material -160)*0.3	(Material -132)*0.4		1*2.5	1*2.5	y C¥4	5.7.3	5*2.5	l day; Equipment -70	lday *T; T=1040/210;	Equipment -74						
a mat	1	Local	(VN. D)	-		-	1	ı	l l	99,345	4.967	458.250	050 020	0.0.0.7	2,126.250	1,007,500	342,000		1,098,900	154,850		\$ 571 312	2		55,715
tanom A	- 1	Foreign	(I YEN)	080 37	200,07	16,272	31,104	5.587	9.216		6 913	2,2		1	1		35 520	040,00	12,326	•		103 017	1706551		1,930
	Unit Price	Local	<u>S</u>		,		•			078 005	252,040	103 300	105,000	111,/00	170,100	80,600		342,000	222,000						
	ב כ	Foreign	(NHX I)	1	634	141	324	720	0.7	ř			1		•		2000	35,520	2 490	1			:		
	٠	Ouantities	,		120	113	20		151	761	0.1875		2.50	2.50	12.50	02.21	12.50	8	4 05	. C.C.				1 2	
		[ Imit			each	+0.5	ı,	eacu	Ę,	cach	each	set	person	person	100	person	person	day	<u>د</u> د.	3	set				
		Crondord	טומווספוס						ф 48.6		0.150x0.150	(sum of above) *5%						40 ton	000	steel 200ps	(labor cost)*4%				<b>6</b>
			Description			Frame	Brace	Jack base	Round pipe	Clamp	Timber	Supplemental materials	Foreman		Carpenter	Skilled labor	Common labor	Barge with crane		Tug boat	Miscellaneous expenses		Total		\$
	-	-	Š		ľ		2 H	3	4	2	9	1	1	Т	2	0	=			13	14			T	

Inner timbering of pier head Per: 10 air m<sup>2</sup>.

					Unit	Unit Price	Am	Amount	
Š	Description	Standard	. Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
			,		(J.YEN)	(SZ, D)	(J.YEN)	(VN. D)	
-	Foreman		person	0.25		183,300	•	45.825	0.1*2.5
,   c	Camenter		person	0.25	•	111,700	3	27,925	0.1*2.5
1 "	Skilled Jahor		person	1.25	1	170,100	1	212.625	0.5*2.5
4	Common labor		person	1.25	-	80,600	_	100.750	0.5*2.5
	Depreciable value of								
٧.	5 timbering		set		6,440		6,440	•	
ی	Barge with crane	40 ton	day	0.10	35,520	342,000	3,552	34.200	0.1 day; Equipment -70
,	0								0.1 day *T;T=1040/210;
1	Tug boat	steel 200ps	hr	0.05	2,490	222,000	125	11.100	Equipment -74
∞	Miscellaneous expenses	(labor cost)*4%	set	1			1	15.485	
					4				
	Total						10,117	447.910	
	Par. 1 air m	°E					1,012	164,791	
	1								

Frame square sets work (simple box bridge) Per: one place

•				7	7		-	Τ.	т			T	Т				т	7			T	$\neg$
	Remarks		31*55 days:	20*66 3	38"33 days,	(Material -147)*0.3	(Material -150)*0.3	(001 101 101 111)		4.368*0.7*2.5	4.368*2,8*2.5	か しまの じまひとしゃ	4.36872.872.3	0.1 day *Ws*T; T=4.44	Equipment -16							
Amount	Local	(VN. D)	1		-	•	,			1,393,080	4 687 920	000000	7,400,500		650,760	341.894			9,540,014			9,540.014
Am	Foreign	(J.YEN)	21306	20,17	3,110	37,802	17 OSO	0000	800,0	1			ı		70,052		0), 01.	110,103	295,896			295,896
Unit Price	Local	(VN. D)			1	1				183,300	153 200	207,001	80,600	-	68,000							
5	Foreign	(J.YEN)	1361	1,00	1,672	9.288	100	4,793		1					7,320							
	Quantities		1	70.01	1.86	4.07		01	: :	7.6	200	20.00	30.6		9.57		7					
	Chrit			ton	ton	Ę		each	set	nerson		person	person		<u>.</u> E		ser					
	Standard			300x300x10x15	150x75x6.5x10	100×100×10	212221	P-H	(sum of above) *5%						Hvdravije 45 t	2 Claimin (VI	(labor cost)*4%					Jone
	Description	Costingia		H shaped steel	Channel ctee!	T. J. C. J. C. C.	L snaped sicei	Jack (head)	Supplemental materials	The state of the s	roreman	7 Rigger	Common Jahor	Committee account		I LUCK CIAILS	Miscellaneous expenses		- + E	I OCAI		Port one mad
		į		<b>,</b>	c	1,	?	4	v		٥	1	٥	۰		т	2					

Pedestal work for prefabricated Per. one place

-	
	-
	l

						Unit	Unit Price	Amount	1	\$
No. Description Standard Unit	Description Standard		Unit		Quantities	Foreign	Local	Foreign	Local	Remarks
						(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
1 H shaped steel 350x350x12x19 ton	350x350x12x19	_	ton		12.15	1,452	-	17,642	•	33*55 days
2 H shaped steel 300x300x10x15 ton	300x300x10x15	_	ton		21.2	1,364	-	28,917	,	31*55 days
3 Channel steel 250x90x9x13 ton	250x90x9x13		ton		0.97	1,408		1,366	1	37*55 days
4 PC steel bar \$\psi\$ 26 kg	ф 26		ķ	_	110	149	•	16,390		(Material -163)*0.9
5 Sheath $\phi$ 32 m	ф 32		E		2.1	901		223	•	Material -164
6 Supplemental materials (sum of above) *5% set	(sum of above) *5%	-	set		ti pund			3,227	_	
7 Foreman person		person	person		43.0		183,300		7,888,774	0.5*Ws*2.5
8 Rigger person		person	person	1	301.26	•	153,200	•	46,153,415	3.5*Ws*2.5
9 Common labor person	n labor	person	person	1	25.8	ı	80,600	•	2,081,294	0.3*Ws*2.5
										0.1day *Ws*T; T=4.44
10 Truck crane Hydraulic 45 t hr	Hydraulic 45 t	• .	pt.		15.29	7,320	68,000	111,900	1,039,511	Equipment -16
11 Miscellaneous expenses (labor cost)*4% set	Miscellaneous expenses (labor cost)*4%	_	set		, ,			1	2,244,939	
Total	Total							179,664	59,407,932	
							,	-		
Per: one place	Per: one place	ace		1				179,664	59,407,932	

Timbering for bottom of side span Per: 100 air m².

		8.8*55 days	2.0*55 days	(Material -159)*0.3	0.51*55 days	(Material -160)*0.3		1.11*2.5	4.36*2.5	3.48*2.5	0.31day*T; T=4.44	Equipment -16					
Local	(VN. D)	•	-		1			509,574	1,669,880	701,220		93,840	115,227		3,089,741	-	30,897
Foreign	(J.YEN)	27,090	11,616	15,131	2,891	8,962	3,284		•			10,102	•		79,075		162
Local	(V.Y. D)	,		•	1	•		183,300	153,200	80,600		68,000					
Foreign	(J.YEN)	387	88	324	22	48		1.				7,320					
Quantities		70.0	132	46.7	131.4	186.7		2.78	10.90	8.70		1.38	_				:
Unit		each	each	each	E	each	ž	person	person	Derson		Æ	set				
Standard				stroke 460mm	φ 48.6		(sum of above) *5%					Hydraulic 45 t	(labor cost)*4%				
• .		Frome	Brace	Tack hase			Cumlemental materials	Torremon	Digger	1		Truck crane	Miscellaneous expenses		Total		Per: 1 air m
	Description Standard Unit Quantities Foreign Local Foreign	Quantities Foreign Local Foreign (J.YEN)	Description         Standard         Unit         Quantities         Foreign         Local         Foreign           Trame         (1.YEN)         (VN. D)         (J.YEN)           Example         70.0         387         -         27,090	Description         Standard         Unit         Quantities         Foreign         Local         Foreign           Frame         each         70.0         387         -         27,090           Brace         each         132         88         -         11,616	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           Frame         acch         70.0         387         -         27,090           Brace         each         132         88         -         11,616         -           Inck have         stroke 460mm         each         46.7         324         -         15,131         -	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           Frame         acch         70.0         387         -         27,090         -           Brace         acch         132         88         -         11,616         -           Jack base         stroke 460mm         ach         46.7         324         -         15,131         -           Round nine         d 48.6         m         131.4         22         -         2,891         -	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           Frame         aeach         70.0         387         -         27,090         -           Brace         aeach         132         88         -         11,616         -         -           Back base         stroke 460mm         each         46.7         324         -         15,131         -           Round pipe         φ 48.6         m         131.4         22         -         2,891         -           Clarm         each         186.7         48         -         8,962         -	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         (VN. D)         (J.YEN)         (VN. D)         (VN. D)         (VN. D)           Frame         each         70.0         387         -         27,090         -           Brace         each         132         88         -         11,616         -           Brace         stroke 460mm         each         46.7         324         -         15,131         -           Round pipe         ф 48.6         m         131.4         22         -         2,891         -           Clamp         cach         186.7         48         -         8,962         -           Clamp         cum of above) *5%         set         1         3,284         -         -	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         (VN. D)         (J.YEN)         (VN. D)         (VN. D)         (VN. D)           Brace         each         70.0         387         -         27,090         -           Jack base         each         132         88         -         11,616         -           Round pipe         φ 48.6         m         131.4         22         -         2,891         -           Clamp         each         186.7         48         -         8,962         -         -           Supplemental materials         (sum of above) *5%         set         1         3,284         -         509,574	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         each         70.0         387         -         27,090         -           Brace         stroke 460mm         each         132         88         -         11,616         -           Jack base         stroke 460mm         each         46.7         324         -         15,131         -           Round pipe         φ 48.6         m         131.4         22         -         2,891         -           Clamp         each         186.7         48         -         8,962         -           Supplemental materials         (sum of above) *5%         set         1         3,284         -           Foreman         person         2.78         -         183,300         -         509,574           Primer         person         10,90         -         153,200         -         1,669,880	Description         Standard         Unit         Quantities         Foreign         Local         Local           Frame         (J.YEN)         (VN. D)         (J.YEN)         (VN. D)           Frame         each         70.0         387         -         27,090           Brace         each         132         88         -         11,616         -           Jack base         stroke 460mm         each         46.7         324         -         15,131         -           Round pipe         φ 48.6         m         131.4         22         -         2,891         -           Clamp         cach         186.7         48         -         8,962         -           Supplemental materials         (sum of above) *5%         set         1         3,284         -           Foreman         person         2.78         -         183,300         -         1669,880           Rigger         person         10.90         -         163,200         -         1,669,880           Consortable         person         2.78         -         1669,880         -         1660,880	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         each         70.0         387         -         27,090         -           Brace         each         132         88         -         11,616         -           Jack base         stroke 460mm         each         46.7         324         -         15,131         -           Round pipe         φ 48.6         m         131.4         22         -         2,891         -           Clamp         each         186.7         48         -         8,962         -           Supplemental materials         (sum of above) *5%         set         1         3,284         -           Foreman         person         2.78         -         183,300         -         569,574           Rigger         person         8.70         -         153,200         -         1,669,880           Common labor         person         8.70         -         80,600         -         701,220	cription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           ach         70.0         387         -         27,090         -         -           stroke 460mm         each         132         88         -         11,616         -           \$toke 460mm         each         46.7         324         -         15,131         -           \$toke 460mm         each         186.7         48         -         15,131         -           \$toke 460mm         each         186.7         48         -         8,962         -           \$toke 460mm         person         186.7         48         -         8,962         -           \$toke 460mm         person         2.78         -         8,962         -         509,574           \$toke 50         person         10.90         -         153,200         -         509,574           \$toke 50         person         8.70         -         80,600         -         701,220           \$toke 50         person         1.38         7,320         68,000         10,102         93,840	Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Frame         each         70.0         387         -         27,090         -           Brace         each         132         88         -         11,616         -           Jack base         stroke 460mm         each         46.7         324         -         2,891         -           Round pipe         φ 48.6         m         131.4         22         -         2,891         -           Clamp         cach         186.7         48         -         8,962         -           Supplemental materials         (sum of above) *5%         set         1         3,284         -         1,669,880           Rigger         person         2.78         -         183,300         -         1,669,880           Common labor         person         8.70         -         8,060         -         701,220           Tuck crane         Hydraulic 45 t         hr         1         7,320         68,000         10,102         93,840           Missellaneous expenses         (labor cost)*4%         set         1         -	cription         Standard         Unit         Quantities         Foreign (VN. D)         Local (J.YEN)         Foreign (VN. D)         Local (J.YEN)         Local (VN. D)         Local (J.YEN)         (VN. D)         -         27,090         -         -         27,090         - <td>cription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           carb         70.0         387         -         27,090         -         -           stroke 460mm         each         132         88         -         11,616         -           \$troke 460mm         each         46.7         324         -         2,891         -           \$48.6         m         131.4         22         -         2,891         -           al materials         (sum of above) *5%         set         1         8,962         -         1669,880           or         person         2.78         -         183,300         -         509,574           or         person         8.70         -         1,669,880         -         701,220           or         Hydraulic 45 t         hr         1.38         7,320         68,000         -         115,227           us expenses         (labor cost)*4%         set         1         3,089,741         -         19,075         3,089,741</td> <td>cription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           each         70.0         387         -         27,090         -           stroke 460mm         each         132         88         -         11,616         -           \$troke 460mm         each         46.7         324         -         15,131         -         -           \$d 48.6         m         131.4         22         -         15,131         -         -           al materials         (sum of above) *5%         set         1         88         -         8,962         -           or         person         2.78         -         8,962         -         1,669,880           or         person         10.90         -         153,200         -         1,669,880           or         Hydraulic 45 t         hr         1,320         68,000         -         701,220           us expenses         (labor cost)*4%         set         1         73,20         68,000         -         115,227           orall         1         1         1         1         1         115,227         115,075</td>	cription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           carb         70.0         387         -         27,090         -         -           stroke 460mm         each         132         88         -         11,616         -           \$troke 460mm         each         46.7         324         -         2,891         -           \$48.6         m         131.4         22         -         2,891         -           al materials         (sum of above) *5%         set         1         8,962         -         1669,880           or         person         2.78         -         183,300         -         509,574           or         person         8.70         -         1,669,880         -         701,220           or         Hydraulic 45 t         hr         1.38         7,320         68,000         -         115,227           us expenses         (labor cost)*4%         set         1         3,089,741         -         19,075         3,089,741	cription         Standard         Unit         Quantities         Foreign         Local         Foreign         Local           each         70.0         387         -         27,090         -           stroke 460mm         each         132         88         -         11,616         -           \$troke 460mm         each         46.7         324         -         15,131         -         -           \$d 48.6         m         131.4         22         -         15,131         -         -           al materials         (sum of above) *5%         set         1         88         -         8,962         -           or         person         2.78         -         8,962         -         1,669,880           or         person         10.90         -         153,200         -         1,669,880           or         Hydraulic 45 t         hr         1,320         68,000         -         701,220           us expenses         (labor cost)*4%         set         1         73,20         68,000         -         115,227           orall         1         1         1         1         1         115,227         115,075

PROCESS COST - 315 (2)

Timbering for bottom of side span ( 3.6 t / m2 ; L= 10m ; H = 13.6m) Per:  $100.air\ m^3$ 

					Unit	Unit Price	Am	Amount	
Š.	Description	Standard	Cnit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	Frame		each	110.0	387		42,570		8.8*55 days
7	Brace		each	207	88	τ	18,216		2.0*55 days
'n	Jack base	stroke 250mm	each	20.0	225		4,500	Ŧ,	(Material -123)*0.3
4	Jack base		each	20.0	270		5,400	ı	(Material -119)*0.3
5	Round pipe	ф 48.6	ш	06	22	ı	1,980	1	0.51*55 days
ø	Conection pin		each	124.0	36	•	4,464	•	(Material -125)*0.3
-	Clamp		each	140.0	48	•	6,720	1	(Material -160)*0.3
00	Supplemental materials	(sum of above) *5%	198	1			4,193		
6	Foreman		uosiad	2.35	•	183,300		430,755	0.94*2.5
2	Rigger		nostad	9.35	•	153,200	•	1,432,420	3.74*2.5
1 1	Common labor		nostad	7.43	•	80,600	1	858,865	2.94*2.5
12	12 Miscellaneous expenses	(labor cost)*4%	set	1			•	98,481	
								-	0.28day*T; T=4.44
13	Truck crane	Hydraulic 20~22 ton	hr	1.24	3,520	55,000	4,365	68,200	Equipment -17
	Total						92,407	2,628,714	
					<u> </u>				
	Per: 1 air m	em.					924	26,287	

PROCESS COST - 316

Timbering of deck slab (overhanging) of side span (1.6 t/m2 ; L = 10m ; H = 2.5m) Per: 100 air m<sup>3</sup>

				т—	-r-		r			<del></del>									_		-	1
	Remarks		8.8*55 days	0.00 AAAA	2.U.33 days	(Material -123)*0.3	(Material -119)*0.3	(Material -125)*0.3	0.51*55 days	(Material -160)*0.3		> C*07 0	2.2.5.0	3.10*2.5	2.46*2.5	0.25day*T; T=4.44	Equipment -16					
ount	Local	(V.N. D)	•		•		1	•	•	•		262 010	207,7010	1,187,300	495,690		75,480	81,800	2 200 200	007,707,7		22,023
Amount	Foreign	(I.YEN)	19,350	0000	0,57,0	7,515	9,018	2,401	2,545	6,403	2.776		1		ľ		8,125		100	474,00		664
Unit Price	Local	(VN D)	,		•	,	7	•	í	1		000	183,300	153,200	80,600		68,000					
Unit	Foreign	(I YEN)	287		88	225	270	36	22	48			-	•	1		7,320			* .		
	Quantities	•	0 05	0.00	94.2	33.4	33.4	66.7	115.7	133.4	-	7	1.98	7.75	6.15		1.11	-	-			
	Cnit		140	cacii	each	each	each	each	ε	Pach	1000	אַנוּ	person	person	nerson		,b	100	120			
	Standard					stroke 250mm			A 48 6		/02# \******	(sum of above) 75%					Hydraulic 45 t	/0/#\+++++++++++++++++++++++++++++++++++	(labor cost)~4%			
	Description			Frame	Brace	Tack base	Jack base	Connection min	Donad wine	Nound pipe	Clamp	Supplemental materials	Foreman	Rigger	Common Jahor	Collinion lacor	10 Thurst reason	TIUCK CIAILO	Miscellaneous expenses	Total		Em vio IO
	2	; :		-	2	1 ~	, *	T			ľ	∞	6	Г		-	Š	71				

Suspended scaffolding for center closing Per, one place

					Unit	Unit Price	Απ	Amount		
Description		Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		<sub>1</sub>
2 Round pipe	-	ф 48.6	٤	7.6	14	,	106	4	0.51*35 days	
Stanchion h=	=¥	h=1000mm	Each	20	19		1,340	-	2.4*35 days	
Scaffold board 24	24	240 * 4000	Each	73	218	•	15,914	-	7.8*35 days	
Timber 1.	-	150 *150	m3	8.0	-	529,840	_	423,872	(Material- 132)*0.4	
6 PC steel bar		ф 32	kg	170	95		8,500	-	(Material- 157)*0.3	
Anchor plate			set	14	990'1	_	14,924	•	(Material- 47)	
Supplemental materials (sum o	o muns)	(sum of above) *5%	set	-			2,039	21,194		r
Foreman			person	1.25	•	183,300	ı	229,125	0.5*2.5	,
Rigger			person	2.88	,	153,200	•	441,216	(0.115*5*2)*2.5	
Common labor			person	5.00	,	80,600	1	403,000	2.0*2.5	
	:								0.4 day*T;T=4.33;	
Truck with crane hanging	hangin	hanging load 2 ton	hr	1.73	670	41,000	1,159	70,930	Equipment -101	
13 Miscellaneous expenses (labor	(labor	(labor cost)*4%	set	1			-	42,934		<del></del>
Total							43,983	1,632,270		
Per: 1 place	ace						43,983	1,632,270		

Suspended timbering for center closing Per. one place

					Unit	Unit Price	Απ	Amount	
Š	Description	Standard	Cnit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(NN. D)	(J.YEN)	(S.S.	
		300x300x10x15;L=5.							
. –	H shaped steel	5m	ton	5.12	868		4,444	1	31*35 days
							:		
^	Channel steel	200x90x9x13;L=19m	ton	2.3	1,036	1	2,383	f	37*35 days
۳,	PC steel bar	\$32:L=1.0~3.8m	kg	96	149	1	14,304	1	(Material -157)*0.9
٨	Sheath	ø 32	Ε	4.2	106	1	445	•	Material -164
4	Frame		Each	25.2	230	-	5,796	•	8.2*35 days
1	Brace		Set	47.4	95	-	2,654	•	2.0*35 days
1			Each	16.8	324	-	5,443	•	(Material- 159)*0.3
~		φ 48.6	E	47.3	14		662	•	0.51*35 days
0	Clama		Each	67.2	47	1	3,158		(Material- 160)*0.3
٤	<del></del>	(sum of above) *5%	Set	7-44			1,965	•	
2 =	_		person	9.4	•	183,300	-	1,723,020	0.5*Ws*2.5
2			person	47	•	153,200	•	7,200,400	2.5*Ws*2.5
; }	Common Jahor		person	37.6	-	80,600	•	3,030,560	2.0*Ws*2.5
3									0.2 day*Ws*T;T=4.33;
4	14 Truck with crane	hanging load 2 ton	h	6.51	929	41,000	4,362	266,910	Equipment -101
	Miscellaneous expenses	(labor cost)*4%	set	gu-sa			1	478,159	
:	Total						45,617	12,699,049	
	Per: one place	Jace					45,617	12,699,049	
	Per: 1 air m3=Total/47	Total/47					971	270,193	

Inner timbering for center closing Per. 100 air m³.

:					Uni	Unit Price	An	Amount		
ž	Description	Standard	Chrit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(V.V. D.	(J.YEN)	(VN. D)		
-	Frame		each	20.0	246		4,920		8.8*35 days	
7	Brace		each	56	95	1	3,136		2.0*35 days	
3	Jack base	stroke 250mm	each	20.0	225	•	4,500	3	(Material -123)*0.3	
4	Jack base		each	20:0	270	•	5,400	1	(Material -119)*0.3	
5	Conection pin		each	40.0	36	-	1,440	I	(Material -125)*0.3	
9	Round pipe	ф 48.6	ш	100	14	•	1,400	1	0.51*35 days	
7	Clamp		each	180.0	48	•	8,640	1	(Material -160)*0.3	
∞	Supplemental materials	(sum of above) *5%	set	1		·	1,472	•		
6	Foreman		person	1.63	1	183,300	1	297.863	0.65*2.5	
10	Rigger		person	6.20	1	153,200	t	949.840	2.48*2.5	
=	Common labor		person	4.88		80,600	-	392,925	1.95*2.5	
12	Miscellaneous expenses	(labor cost)*4%	set					65,625		
									0.2 day*T;T=4.33;	
<u></u>	Truck with crane	hanging load 2 ton	Ę	0.87	670	41,000	583	35,670	Equipment -101	· ·
	Total						31,491	1,741,923		
	Per: 1 air m	m <sup>3</sup>			-		315	17,419		

Vertical prestressing steel bar setting work (32, SBPR 930/1180)
Per: 1 ton

		 													_			
	Remarks	Material - 169		1.7#2.5	4 09/ 01	13.0"2.3	75 *25			0.1 day: Equipment -91	0 1 3*T - T-1040/010 .	U. day" I : 1=1040/210;	Equipment -75					
Amount	Local (VN. D)		•	779 025	000,000	5,783,400	1 511 250	2 24. 24.	484,421	30.200	20162		000,09			8.648.296	700 077 0	8,048,290
Am	Foreign (J.YEN)	213,000	4,260			1			•	1001 6	2,170		655			220.105		220,105
Unit Price	Local (VN. D)	1		102 200	102,500	170,100	005.00	00,000		000 000	202,000		120.000					
Uni	Foreign (J.YEN)	213,000			'	. í		-	-		21,900		1 310					
	Quantities	1.00			4.25	34.00		18.75	100		0.10		0.50	2000				
	Unit	ton			person	TOPTEON	100120	person	uo.	103	day			10				
	Standard	632 SBPR 930/1180		(sum of above)" 2%					/10 h == 0.00+)# 60/	(Japor cost) 676	25 ton		-00.	steel 100ps				
	Description	100 Act of 100 Act	r C siect val	Supplemental material	Foreman		Skilled labor	Common labor		Miscellaneous expenses	Barge with crane			Tug boat			Total	Per 1 ton
	Š	,-	-	7	~	┰	4	ų	-	9	1			∞				

PROCESS COST - 321

Vertical prestressing steel bar anchorage work (32, SBPR 930/1180)
Per: 10 place

						Unit Price	Am	Amount		
		Chandend	Imit	Opentities	Foreig	Local	Foreign	Local	Remarks	
ġ	Describinon	Stallward	; ;	y		(U.N.)	(J.YEN)	(V.V. D.)		_
					<u>.</u>		45 000	,	Material - 166	
_	Anchorage	tension side	each	0.	5,500	-	20,000			Τ
-	Allenotage			-	0891	•	46.300		Material - 167	_
S	Anchorage	thx stde	eacn	2	2,2,2		001		Material - 168	
,	,		ויינים	01	1.740	1	17,400	,	Iviaterial - 100	T
~	Coupler		1					425 250		
١,	Cirilled Johor		Derson	<u>.</u>		1 /0,100	1	200		Γ
+	Skilled Jabos							21.263		
·~	Miscellaneous expenses	(labor cost)* 16%					'			
,										T
							110 700	446 513	٠	_
	Total						110,700	2006		Ī
										7
							010	11771		
	D 4						10/8/11	100,44		1
	707		_		-					

Vertical prestressing steel bar tensioning work (32, SBPR 930/1180) Per: 10 place

			,-			_	•			т-					_	_	1
		Remarks		0.8*2.5			2.0*2.5										
	Allicalit	Local	(VIV. D)	366,600	1 956 150	224224	403.000		109 030	000000		7 834 780	20161		000	283,478	
	110	Foreign		1					ı							•	
	Unit Price	L	_	183,300	170.00	170,100	100900	00,000									
-		1	(J.YEN)	.1		1											
		Quantities	-	2		7.		~		-							•
L		Unit		none)	DCI 3OII	person		person		set							
		Standard								(labor cost)* 4%							
		Description			Foreman	C1:11-4 10hor	Skilled labor	Common Jahor	Common Japon	Miscellaneous expenses	The same of the sa		Total				Der 1 nlace
	1	o		1		١,	.,	٦	_	١.,	Ļ			ļ		1	

PROCESS COST - 322 (2)

Vertical prestressing steel bar tension releasing work (f 32, SBPR 930/1180) Per: 10 place

۰,		- 11.01	'		_		_		rer inface
		198 435							
		1,984,346	•						Total
								-	
<del></del>		76,321	1			1	set	(labor cost)* 4%	Miscellaneous expenses
	0.7*2.0*2.5	282,100	-	80,600	-	4	person		Common labor
Ţ-	4 41 4 41 1			22,16,7,			15013		auoi
	0.7*4.6*2.5	1,369,305	-	170,100	-	00	person		Skilled labor
	0.7*0.8*2.5	256,620	•	183,300	t		person		Foreman
		(VN. D)	(J.YEN)	(VN. D)	(J.YEN)	; ;			·
	Remarks	Local	Foreign	Local	Foreign	Quantities	Unit	Standard	Description
		Amount	Am	Unit Price	Unit				

Miscellaneous work for vertical prestressing steel work
Per: 1 place

							_			 
	Remarks		Process cost - 38	Process cost - 60	Process cost - 149	Process cost - 34				
Amount	Locai	(VN. D)	638,885	2,008,230	651,329	106,948	137,816		3,583,207	3,583,207
Amo	Foreign	(J.YEN)	-	23,682	504	-	196		25,153	25,153
Unit Price	Local	(VN. D)	86,805	2,096,273	515,917	79,812				
Cmil	Foreign	(J.YEN)	-	24,720	376	-				
	Quantities		7	1	I	1	1			
	Umit		m2	ton	m3	m3	set			
	Standard			ф12	class A1		(sum of above)* 4%	-		
	Description	•	Form work	Reinforcement steel	Concrete	Concrete placing	Miscellaneous expenses		Total	Per 1 place
	Š.		_	7	3	4	'n			

Depreciable value of tools for \$32 SBPR 930 / 1180 Per: 1 set

		-1	T		Τ	7		Т		T	_	T		Ι	-7	
	Remarks		Equipment -123	Fourinment -64	22 4	oo- memdinba										
Amount		(VN. D)	-	,		•					,				•	
Am	Foreign	(1.YEN)	3,040	1 640	0.00	840	000	207			5 720	24.60			5.720	,
I Init Price	Local	(VN. D)	-		•	•										
I In	Foreign	(J.YEN)	1.520		820	420		9								
	Ouantities	,	2	1 6	7	7		7		-						_
	Unit		day	1	day	dav		day								_
	Standard		05 ton	20 1011	15~30 l/min	100135-74	, vicino,									
	Description	TOTAL DESCRIPTION	1	lension jack and pump	Grout pump		לוטמו זווויאכו	Other tools	Culci toota			Total			3	Tor Loot
	: 5	; Z	1	_	7	1	า	٧	-		1		Ţ			

Inner form fabrication setting and removal work for pier head  $$\rm Per.~10\,m^2$$ 

ĺ						* ×	****	
					Chit Price	ALIA T	Amount	
Standard	70	Cmit	Quantities	Foreign	Local	Foreign	Local	Remarks
			,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
		norcon	2.0	,	183,300	1	366,600	0.8*2.5
			0 0 0		111 700		1.340.400	4.8*2.5
		person	77.0		20,111		7.07	V C*0 C
		person	7.25	1	80,600		084.300	6.3.6.7
10,00		7	0.05	35 520	342,000	1.776	17,100	0.05 day; Equipment -70
101 04		(gg)						0.05day *T;
2000 June 1			500	2.490	222.000	623	55,500	T=4.95; Equipment -74
steet zoops			27.0	î			030 120	
I (labor cost)*12%	%	set	yd	•			704,707	
						2,399	2,638,912	
						0,0	262 001	
Dar. 10 m2						047	170,502	

Inner form fabrication for pier head Per. 10 m<sup>2</sup>.

					לווני גאיכי	NIM CHILL		
Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	900 * 1800*12	Each	7.0	-	40,720		285,040	(Material- 130)*0.8
		. m³	0.4	•	927,220	t	370,888	(Material- 132)*0.7
naterials	(sum of above) *15%	set	1			4	98,389	
		person	0.25	1	183,300	1	45,825	0.1*2.5
		person	4.5	-	111,700	•	502,650	1.8*2.5
		person	3.0	-	80,600		241,800	1.2*2.5
expenses	(labor cost)*4%	set	1			-	31,611	
16	40 ton	day	6.05	35,520	342,000	1,776	17,100	0.05 day; Equipment -70
			1					0.05day *T;
	steel 200ps	ΙΊ	0.25	2,490	222,000	623	55,500	T=4.95;Equipment -74
2]						2,399	1,648,803	
er: 1.0 m2=	{ Total * 1/2 +Total*0	.1*(2-1)}*	1/10			144	98,928	
	Supplemental materials  Foreman Carpenter Common labor Miscellaneous expenses Barge with crane Prug boat Total Per: 1.0 m2=	materials (sum of above) *15%  r expenses (labor cost)*4%  ne 40 ton  steel 200ps  tal  Per: 1.0 m2= { Total * 1/2 +Total*0}	materials (sum of above) *15% set  r  r  expenses (labor cost)*4% set  ne 40 ton day  steel 200ps hr  tal  steel 200ps hr  tal	(sum of above) *15% set  person person (labor cost)*4% set 40 ton steel 200ps hr  steel 200ps hr	(sum of above) *15% set 1  person 0.25  person 4.5  person 3.0  (labor cost)*4% set 1  40 ton day 0.05 3  steel 200ps hr 0.25  n2= { Total * 1/2 + Total*0.1*(2-1)}*1/10	(sum of above) *15% set 1  person 0.25 - person 4.5 - person 3.0 - (labor cost)*4% set 1 40 ton day 0.05 35,520  steel 200ps hr 0.25 2,490  n2= { Total * 1/2 + Total*0.1*(2-1)}*1/10	(sum of above) *15%       set       1         person       0.25       -       183,300         person       4.5       -       111,700         person       3.0       -       80,600         (labor cost)*4%       set       1       80,600         40 ton       day       0.05       35,520       342,000         steel 200ps       hr       0.25       2,490       222,000         n2= { Total * 1/2 + Total*0.1*(2-1)}*1/10	(sum of above) *15%     set     1     -     -       person     0.25     -     183,300     -     5       person     4.5     -     111,700     -     5       (labor cost)*4%     set     1     -     80,600     -     2       40 ton     day     0.05     35,520     342,000     1,776       stee! 200ps     hr     0.25     2,490     222,000     623       n2= { Total * 1/2 + Total*0.1*(2-1)}*1/10     144     9

Inner form setting and removal work for pier head  $\overline{\rm Per.~10~m^2}$ 

7.5	Б .	Set	enses (labor cost)*4% set
1	4.5	person 4.5 -	person set
	4.5		person

Outer form fabrication setting and removal work for pier head Per.  $10\,\mathrm{m}^2$ 

=4.95;Equipment -74		623 2,399 2	222,000	2,490	0.25	ł	steel 200ps	Per: 1.0 m2
0.05day *T; T=4.95;Equipment -74	55,500 T=4	623	222.000	2.490	0.25	Ė	.	
0.05 day; Equipment -70	17.100 0.05	1,776	342,000	35,520	0.05	day	_	(labor cost)*18% 40 ton
2.4*2.5	483,600	*	80,600	1	6.0	person		
5.7.7.0	1.055,225	•	111,700	1	9.25	person	ñ.	pe
9.7*7.5	229,125	ŀ	183,300	,	1.25	person	per	ad
Kemarks	Local (VN. D)	Foreign Lo	Local (VN. D)	Foreign (J.YEN)	Quantities	e	Unit	Standard Uni
•		Amount	Unit Price	Unit			•	

Outer form fabrication for pier head Per. 10  $\ensuremath{m_{\star}^2}$ 

					Unit	Unit Price	Ame	Amount		
	\$	Ctandard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
ò	Describnon	טומוותמו		,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		т
		1	5	t	,	1000	1	285.040	(Material- 130)*0.8	
,	Plywood	900 * 1800*12	Each	0./	'	40,120				7
, ,	1		II	0.4	,	927,220	•	370,888	(Material- 132)*0.7	-т
7	11mber							:		
			:	· · · · · · · · · · · · · · · · · · ·				98.389	-	
m	Supplemental materials	(sum of above) *15%	set	_				200 27	A C*1 O	τ-
١,	2		nerson	0.25	•	183,300	•	C70°C5	0.1.2	7
4	roreman		20.01	1 4 5		111 700	,	502.650	1.8*2.5	
'n	Carpenter	-	person	. <del>1</del>	'	00/00		000 18.0	1 0*0 A	r-
Ļ	Common Johor		Derson	3.0	1	80,600	,	000.1#2	2.4 4.1	-
٥	Committee rappi			-				31.611		
7	Miscellaneous expenses	(labor cost)*4%	set	-		000 000	755	17 100	0.05 day: Equipment -70	T-
∞	Barge with crane	40 ton	day	0.05	35,520	342,000	1,770	001,1	O.O. day, Equipment - 3.0	т-
					:				V.V.D.CAY 1,	_
	† † † † † † † † † † † † † † † † † † †	steel 200ns	Æ	0.25	2,490	222,000	623	55,500	T=4.95;Equipment -74	
7	i ug boat	odooz izase					2,399	1.648.803		
	Total						001	077 60		<u> </u>
	Der . 1 0 m2	Der. 1 ft m2 = ( Total * 1/2 * 1/16	( 01				071	07.4.70		7
	1111 AT - 13 T	- TAIL	,							

Outer form setting and removal work for pier head Per. 10 m.

					-			η-		_	7	
	Domorke	Neillaine	0.4*2.5	3 0*0 5		1.8*2.5						
# TER 19 11 11		Local	183,300	050	83/,/30	362,700		55,350	001.007.1	1,439,100	143,910	
1		Foreign		•	•		-			• ]	t	
	Unit Price	Local		- 183,300	111 700	2006234	- 80,600					
,	ر	Foreign	(1.YEN									
	:	Quantities		0.1		2	7 4	-				
		Unit		norcon	200120	person		person	CPT	126		
		Standard							701*(*****	(Japor cost) 470		m2
			Describtion		Foreman		Carpenter	ammon labor	Committee	Miscellaneous expenses	Total	Per: 1.0 m2
		-	္		1	<u>'</u>	7	1,	<u>د</u>	4	-	

Bottom form fabrication setting and removal work for pier head Per.  $10\,\mathrm{m}^2$ 

					T T	-	<		
					חוום	Onit Price	Č	Alitourit.	-
	Decemption	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
	Torid Toring		. :	,	(J.YEN)	(VX. D)	(J.YEN)	(VN. D)	
				1 25	,	183 300		229.125	0.5*2.5
,	Foreman		person	رع. ۱		001677		300 000	2 7*0 5
,	100 may 100 ma		person	7.25		111,700	1	609,673	5.7 4.3
7	Carpeine			Š		002 00		483 600	0.4*2 5
~	Common Jahor		person	0.00	•	00000	_	20,001	
,		A 1 80/					•	274,059	
ν,	Miscellaneous expenses	(iapor cost) 18%	אבו	*				00	
Į,	Done with grown	40 ton	day	0.05	35,520	342,000	1,776	17,100	0.05 day; Equipment -/0
٥	Barge Will Claire								0.05dav *T;
-				:			:	1	
t	, ,	steel 200ms	Ė	0.25	2,490	222,000	623	55,500	i =4.95; Equipment -/4
_	i ug boat	2002 2000					002 6	1 860 200	
	Total						750.7	1,000,000	
							240	186 921	
	Per 1 D m2	щ.					212	2500 .	
		1							

Bottom form fabrication for pier head Per,  $10\,\mathrm{m}^2$ 

					Unit	Unit Price	An	Amount	
Š.	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
-	•				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
_	Plywood	900 * 1800*12	Each	7.0	-	40,720	-	285.040	(Material- 130)*0.8
. 24	Timber		E E	0.4	-	927,220	•	370,888	(Material- 132)*0.7
~	Supplemental materials	(sum of above) *15%	set				ı	98.389	
4	Foreman		person	0.25	1	183,300	1	45,825	0.1*2.5
S	Carpenter		person	3.0	1	111,700	•	335,100	1.2*2.5
9	Common labor		person	3.0	i	80,600	1	241,800	1.2*2.5
7	Miscellaneous expenses	(labor cost)*4%	set	1			_	24,909	
	Barge with crane	40 ton	day	0.05	35,520	342,000	1,776	17,100	0.05 day; Equipment -70
Т									0.05day *T;
0/	Tug boat	steel 200ps	Ė	0.25	2,490	222,000	623	55,500	T=4.95;Equipment -74
	Total						2,399	1,474,551	
	Per: 1.0 m2	Per: 1.0 m2 = ( Total * 1/2 *1/10					120	73,728	

Bottom form setting and removal work for pier head  $\overline{\rm Per.~10\,m^2}$ 

						D-1.00	Æ	Amount		
			-	,		Onit Frice	71147		•	
. ;		Ctandard	[ Jmit	Ouantities	Foreign	Local	Foreign	Locai	Remarks	
Š	Певсприоп	טיפוועבויט	)	,	(I VEN)	(V.V.)	(J.YEN)	(V.V. D)		
						000 001		45.825	0.1*2.5	
-	1		TOSTACE	0.25	1	1005,581	-	Caro'C		-1-
1	Foreman					002 111		363.025	1,3*2.5	
١	,		person	3.25	•	111,700				_
N	Carpenter					009 08		161,200	0.8*2.5	
١	Johor Johor		person	7.0	•	000,00				r
ኅ	Committee Japon			,			1	22,802		
-	Miscellaneous expenses	i (labor cost)*4%	Set					0.00		_
1	ואווארכוותוורספו משליים						1	597,852		
	Total							10000		
							1	1087.60		
	Dor . 1 0 m							,		1
	312 - 122	7								

Killed mold work for pier head Per. 10  $m^2$ 

			_	1111	Price	EK	11100111		
Description	Standard	Unit	Quantities	Foreign	Local	Foreign (I VEN)	Local (VN. D)	Remarks	
				(1.1.1.1)	10000	, , , ,	356 300	Material- 130	
	900 * 1800*12	Each	7.0	-	50,900	1	200,000		T
		~E	0.47	,	1,324,600		622,562	Material-132	T
	000,000,000		690	27.360		16,963	•	Material- 165	
d steel	700X700X8X17	1102	70.0	2000		848	48.943		
nental materials	(sum of above) *5%	set	- I			P. C.	01 650	0.0*2	
		person	0.50	•	183,300	,	0.00,1%	7:0	
			7.50		111,700	•	502,650	1.8*2.5	
પ્ર		person			002.00		302 250	1.5*2.5	
n labor		person	3.75	,	000,000		008 000	5 C*9 0	
		person	1.50	1	153,200		223,000	2:0	
aneons expenses	(labor cost)*4%	set	-				40,04		
ביייים באריווים	(					17,811	2,199,209		
I otal						1 781	719.921		
Dor : 10	, m					10,01	1 = 1/6/17		
	1 Plywood 2 Timber 3 H shaped steel 4 Supplemental materials 5 Foreman 6 Carpenter 7 Common labor 7 Common soor 8 Rigger 9 Miscellaneous expenses Total	900 200 (Sum)	Standard 900 * 1800*12 200x200x8x12 (sum of above) *5% (labor cost)*4%	Standard Unit 900 * 1800*12 Each 200x200x8x12 ton (sum of above) *5% set person person (labor cost)*4% set	Standard Unit Quantities Foreig 900 * 1800*12 Each 7.0 200x200x8x12 ton 0.62 27,3 (sum of above) *5% set 1 (sum of above) *5% set 1 person 0.50 person 4.50 person 3.75 person 1.50 person 1.50	Standard Unit Quantities Foreign Lo 900 * 1800*12 Each 7.0 - 1,37 200x200x8x12 ton 0.62 27,360 (sum of above) *5% set 1 1,37 person 0.50 - 1 person 4.50 - 1 person 3.75 - 1 person 1.50 - 1 person 1.50 - 1 person 2.050 - 1 person 3.75 - 1 person 1.50 - 1 person 1.50 - 1 person 1.50 - 1 person 1.50 - 1 person 1.50 - 1 person 1.50 - 1	Standard         Unit         Quantities         Foreign         Local         Foreign           900 * 1800*12         Each         7.0         -         50,900         -           200x200x8x12         ton         0.62         27,360         -         16,96           (sum of above) *5%         set         1         8         16,96           person         0.50         -         183,300         -           person         4.50         -         111,700         -           person         1.50         -         153,200         -           (labor cost)*4%         set         1         153,200         -           10m2         1.50         -         17,8	Standard         Unit         Quantities         Foreign         Local         Foreign         Local           900 * 1800*12         Each         7.0         -         50,900         -           200x200x8x12         ton         0.62         27,360         -         16,963           (sum of above) *5%         set         1         848           (sum of above) *5%         set         1         80,600         -           person         0.50         -         111,700         -         -           person         3.75         -         80,600         -         -           person         1.50         -         153,200         -         -           (labor cost)*4%         set         1         17,811         2           10m2         1,781         1,781         2	Standard         Unit         Quantities         Foreign         Local         Foreign         Local         Local         M           900 * 1800*12         Each         7.0         -         50,900         -         356,300         M           200x200x8x12         ton         0.47         -         1,324,600         -         622,562         M           sum of above) *5%         set         1         848         48,943         M           sum of above) *5%         set         1         848         48,943         M           sum of above) *5%         set         1         80,600         -         91,650         91,650           person         0.50         -         111,700         -         302,550         91,650           person         1.50         -         113,3200         -         229,800         150,54           (labor cost)*4%         set         1         17,811         2199,209           10m2         1,781         219,921         17,811         219,921

Outer timbering (2.0 t / m2 ) of cantilever Per: 100 air m³

										-
					T C	Unit Price	Am	Amount		
1	Documention	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
0	Describion					(VN. D)	(J.YEN)	(VN. D)		
			1.7	0.03	5	1	4 050	•	8.8*11.5 days	_
_	Frame		eacn	20.0	3		2001.		0.54 h 1.80 C	Т
۱,	Descrip		each	94.2	18	•	1,696	ı	2.0"11.3 days	T
4	Diace	0.50	dogs	0.00	225	ı	4.500	•	(Material -123)*0.3	
m	Jack base	stroke zoumin	cacii	0.04			2 400		(Material -139)*0.3	г
4	Jack base		each	0.02	7/7		2,400		C (*/40's 5')	T
1	_		each	80.8	36	•	2,909	1	(Material -125)*0.3	т
		707 4		70.6	٧	1	353	•	0.51*11.5 days	
9	Round pipe	₩ 48.0	155	2.07	,		7 250		(Material - 160)*0 3	_
1	Clamp		each	80.0	47	-	3,700		(Matchal - 100) or	Т
٥	C.malomental materials	(sum of above) *5%	set	<b>~</b> -1	1		1,133	•		_1
٥	Supplemental materials	(2000)	2000	1 00		183 300	•	362,018	0.79*2.5	
9	Foreman		person	1.70		00000		1 107 200	3 10*2 5	r-
2	Rigger		регѕоп	7.75	٠	133,200	-	1,107,700	2.1.0 .1.0	T
=	1 Common labor		person	6.15	•	80,600	•	495,690	C.2.04.2	1
: :	Missellaneous expenses	(Jahor cost)*4%	set	1	-			81,800		7
7							23.801	2,126,808		
. '	Total									Γ-
				-	-		-			Т
	££	6					238	21,268		
										l

Inner timbering (2.0 t / m2 ) of side span Per. 100 air  $m^3$ 

£.					5 _	Unit Price	An	Amount	
	Description	Standard	Cnit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(V.N. D)	
	Tanana		each	50.0	387		19,350	•	8.8*55 days
	Descri		each	94.2	88	,	8,290	•	2.0*55 days
	Diace	the 250mm	hasa	33.4	225	,	7,515	•	(Material -123)*0.3
	Jack base	Suche Counti	each	33.4	270	,	9,018	1	(Material -119)*0.3
	Jack Dase		each	2.99	36	1	2,401	•	(Material -125)*0.3
	Round nine	Φ 48.6	E	115.7	22	1	2,545	-	0.51*55 days
	Clamp		each	133.4	47	•	6,270	1	(Material -160)*0.3
	Sumlemental materials	(sum of above) *5%	set		1	,	2,769	•	
	Foreman		person	1.98		183,300	-	362,018	0.79*2.5
	Dioger		person	7.75	,	153,200	1	1,187,300	3.10*2.5
	Common Jabor		person	6.15	1	80,600	1	495,690	2.46*2.5
	Miscellaneous expenses	(Jabor cost)*4%	set	1				81,800	
	viscondinated or possession	(							0.25day*T; T=4.44
	Tellok organe	Hvdraulic20~22 t	hr		3,520	55,000	3,907	61,050	Equipment -17
	Total				1 2 2 2		58,158	2,126,808	
					7 -				:
	David Line	3					582	21,268	
	FCI: 1 40								

Scaffolding work for box girder (L=60m x 3) Per. 100 multiplied m<sup>2</sup>

					Uni	Unit Price	Ą	Amount		
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	•••••
į					(J.YEN)	(V.V.)	(J.YEN)	(VN. D)		_
-	Horeman		person	2.50	,	183,300	ı	458,250	1.0*2.5	
٠ (	Diaget		nerson	7.50	,	153,200	1	1,149,000	3.0*2.5	
۱ ,	Common Johan		nerson	7.50	,	80,600	•	604,500	3.0*2.5	
ń	Common tagos								0.7day*T; T=4.44	
*	Truck mane	15~16 ton	hr	3.1	3,080	55,000	9,548	170,500	Equipment -18	
+   v	Miscellanenis expenses	(Labor cost )*18%	set	1				398,115		
,										
	Total						9,548	2,780,365		<u> </u>
	10141									Γ
										Т
	Per: 1 m	n <sup>2</sup>					95	27,804		_

Concrete work for approach slab

		7,371,908	6,741						Per: 1 m <sup>3</sup>
							1 3		
	0.2*2.5	85,050	1	170,100	-	0.50		person	nosia
Т	Material - 7	14,707	•	3,840	•	3.83		kg	Ф 10 x 1260 kg
Ī	Material - 29	25,536	ŀ	3,800	, , , , , , , , , , , , , , , , , , ,	6.72		ķg	D 19x500 kg
	Material - 25	1	16		54	1.69		ш	Φ 27.2 x 310 m
	Material - 118	_	310	- 8	738	0.42		m2	m2
I	Process cost - 34	798,120	1	- 79,812	•	10.00		m3	m3
	Process cost - 154	3,966,740	6,340	4 396,674	634	10.00		m3	class E1 m3
	Process cost - 38	2,481,755	-	86,805		28.59		m2	m2
7	Remarks	Local (VN. D)	Foreign (J. YEN)	Local (VN. D)	Foreign (J.YEN)	Quantities		Chrit	Standard Unit
		Amount	Aπ	Unit Price	Ω		i i		

Parapet and railing (PC I Girder, abutment)
Per 10 m

-					iπU	Unit Price	An	Amount		
	Description	Standard	Zait Cait	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
+	Concrete	class C1	m3	2.17	634	456,842	1,376	991,347	Process cost - 151	
#	Strom and		m2	11.95	1	86,805	-	1,037,320	Process cost - 38	
11:	Dain forcement mork	D13	tot	0.2835	23,690	1,795,763	6,716	660,605	Process cost - 61	
+=	Handaril	h=0 63 cman 2 0	£	10.00	43.155		431,550	•	Material - 14	
4	nanthan Ichlad labor	0.0 chan chan	nostada	0.50		170,100		85,050	0.2*2.5	
-	Ownied Japon									Γ-
+							£ \$ 95 P	2,622,816		T
	Total						CF06/CF	o columnia		1
-	:									T
1	Per: 1 m						43,964	262,282		

Parapet and railing (Box girder) Per 10 m

						_				 		~~		~
	Remarks		Process cost - 151	Process cost - 38	Process cost - 61	14040-01	โฟเสเตกสา - 14	0.2*2.5						
Amount	Local	(VN. D)	1,219,768	1,460,928	541,243		_	85,050		3,306,989			330 600	ביטיטכר
Am	Foreign	(J.YEN)	1,693		7,140	322	431,550	,		440,383			0.00 7.7	44,030
Unit Price	Local	(V. V.	456,842	86,805	1 795 763		1	170,100						-
ÇÇ	Foreign	(J.YEN)	634	'	23 690		43,155	ı						
	Quantities		2.67	16.83	0 3014		10.00	0.50						
	Cuit		m3	m2	ton		Æ	person						
	Standard		class C1		7113	0.10	h=0.63, span 2.0							6
	Description		Concrete	Form work		Remiorcement work	Handrail		Drifted 1800!	Total	1830			Per: 1 m
	Ž	;	-	- (	۱/۰	n	4	4	٠,					

Outer form fabrication setting and removal work for side span  ${\rm Rer.\,10\,m^2}$ 

			_		· ·	—		<del></del> 7	1		
	Remarks		-		2.4*2.5		0.2day *T; T=4.44;	Equipment -100			
Amount	Local	(VN. D)	229,125	1.033,225	483,600	314,271		53,400		2,113,621	211,362
An	Foreign	(J.YEN)	_	-	1			3,783		3,783	378
Unit Price	Local	(VN. D)	183,300	111,700	80,600			60,000			
<u>-</u>	Foreign	(J.YEN)	٠	1	•	1		4,250			
	Quantities		1.25	9.25	6.0	-		0.89			
	Unit		person	person	person	set		hr			
	Standard					(Sum of above)*18%		25 ton			m2
	Description	•	Foreman	Carpenter	Common labor	xpenses		5 Truck crane		Total	Per: 1.0 m2
	Š		Ŀ	7	60	4		٧.			

Outer form fabrication for side span, center closing Per 10 m2

					Uni	Unit Price	An	Amount		
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	~~~
				·	(J.YEN)	(V.N. D)	(J.YEN)	(VN. D)		
-	Plywood panel	900*1800*12	each	7.00	,	40,720	-	285,040	Material 130*0.8	Ţ
2	Timber		m3	0.40	•	927,220	. •	370,888	Material 132*0.7	
m	Supplemental materials	(sum of above) *15%	set	1	1	r	ı	68£'86		
4	Foreman	-	person	0.25	1	183,300	ŀ	45,825	0.1*2.5	
N.	Carpenter		person	3.75	1	111,700	_	418,875	1.5*2.5	
9	Common labor		ретѕоп	2.50	. 1	80,600	,	201,500	1.0*2.5	
7	Miscellaneous expenses	(labor cost)*4%	set	1.0	•			26,648		7
	Total						ı	1,447,165		
	Per: 1.0 m2={total*(1/2)*(1/10)	(1/2)*(1/10)					1	72,358		_

Inner form setting and removal work for side span , box girder Per. 10  $m_{\star}^2$ 

							•	-		_
						Unit Price	An	Amount		
ç	Description	Standard	Unit	Quantities	Foreig	Local	Foreign	Local	Remarks	
S		-			(I.YEN)	(N.V.)	(J.YEN)	(VN. D)		
١,	ī		Derson	0.75		183,300	-	137,475	0.3*2.5	·
	Poreman					000		561 903	ひん*ひん	
6	Cornenter		person	6.25		111,/00	•	030,120	J. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17	7
7	Carpenier			6		002.00		302 250	O * O * O	
۱,	Common labor		person	2.x	1	00,000	,	007,200		,
h h	Common tages			·			•	45 514		
_	Micoellanous expenses	(labor cost)*4%	Set	_	•			27.60		F
	יאווסכרוומווסספס כשססיוואי	, , , , , , , , , , , , , , , , , , , ,							0.2dav *T; T=4.44;	
		15~ 16Ton	<u> </u>	0.89	3,080	55,000	2,741	48,950	Equipment -18	
۱	ITUCK CIAILE									
							,	1 200 000		_
	1,040						2,741	1,434,314		-
	10141						1720	123 231		
	Car 1 1 0 m	, E					4/7	107,071		7
		7								

Outer form setting and removal for center closing Per. 10 m  $^2$ 

•					Chit	Unit Price	Ar	Amount		
	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
			:		(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		-т
Foremon	45		person	0.75	-   	183,300	٠	137,475	0.3*2.5	
	p.11		noren	625	•	111,700	1	698,125	2.5*2.5	
Carpenter	iter							030 000	A C#A L	_
omm	Common labor		person	3.8		80,600	t	302,200	6.2 6.1	
fisce	Miscellaneous expenses	(labor cost)*4%	set	1	-			45,514		-г
										1
	Total						0	1,183,364		
	i Utal							7.00.00		r
	Per: 1.0 m2	m2				•	•	118,330		٦

Inner form Fabrication, setting and removal for side span Per. 10.m<sup>2</sup>

					1	1 1 1 Day	K	Amount	
						LFIICE			, i
		14 11 11 11 11 11 11 11 11 11 11 11 11 1	1 [24	Ouantities	Foreign	Local	Foreign	Local	Kemarks
ં	Description	Standard			(I VEN)	(C NY)	(I.YEN)	(N. D.	
					(3.1 1.7)	707		009 998	0.3*2.5
			nerson	2.00	•	000,001		222,000	
	Foreman			2000		111 700	•	1,340,400	2.5*2.5
,	Comporter		person	12.00				030 700	2 (*2
7	Carpenier			30.6	•	80.600		284,350	L.2 C.1
٠,	Common Jabor		ретѕоп	(7.1				CAO 177	
,		/0C1#4	100	<u>-</u>	1			702,17	
4	Miscellaneous expenses	(labor cost) #12%	125						0.3day *T;
			٠.				1	0000	T-4 44: Equipment -100
		J. T.	1	1.33	4,250	000,09	5,653	000,47	ו - יייין, הלתיףווימיוי
S	5 Truck crane	101.07							
							5.653	2.646.112	
1	1.44.1						20062		
	I OUZI						565	264,611	
	Per: 1.0 m <sup>2</sup>	m2							

Inner form Fabrication for side span Pec. 10  $m^2_{\odot}$ 

		1			7		1		γ	<del></del> -	1
	Remarks		Material 130*0.8	Material 132*0.7		0.1*2.5					
Amount	Local	(VN. D)	285,040	305,983	88,653	45,825	418,875	201,500	79,944	1,425,820	75,229
Ar	Foreign	(J.YEN)	•	-	•	-	1	1		•	,
Unit Price	Local	(VN. D)	40,720	927,220	,	183,300	111,700	80,600			
E C	Foreign	(J.YEN)	•	•	1	•	•		•		
	Quantities		7.00	0.33	1	0.25	3.75	2.50	1.0		
	Chit		each	m3	set	person	person	person	set		
	Standard		900*1800*12		(sum of above) *15%				(labor cost)*4%		tal*0.1*(2-1)}*(1/10)
	Description		Plywood panel	Timber	Supplemental materials	Foreman	Camenter	Common labor	Miscellaneous expenses	Total	Per: 1.0 m2= $\{total*(1/2)+total*0.1*(2-1)\}*(1$
	Š		-	14	~	4	·	10	7		

Inner form setting and removal work for side span Per. 10 m2

_	_				r	-+		7		7	_	_			7		7
		Remarks		0.3*2.5	ひん*ひひ	6.2 6.2	0 C*0 A	2.7			0 3day *T.	( t) (t)	T=4.44; Equipment -18				
Amount	nount	Local (VN. D)		137,475	301 903	038,123	403 000	000,004	70 547	47,244			73,150	,	1,361,294	001351	
•	W	Foreign	(J.YEN)	•		•		•		•		**			4,096		410
This Drive	rt Price	Local	(VN. D)	183.300		111,700	007.00	80,000					55.000	2,62	•		
	<u> </u>	Foreign	Foreign (J.YEN)			,				1			3 080	2,200			
Quantities			0.75		6.25		S					1 33					
		Cait		norcon	חלווא	Derson		person		Set			1	111	-		
	,	Standard							(labor cost)*4%	Con Toni		- <del>L</del> 21 31	13-15 1011			m2	
			Describuon	\$	Foreman	200000000000000000000000000000000000000	Carpenter	Common labor	COLUMNOI JADOI	Miccollongons avnences	Miscellalicous capcilists			Truck crane	Loto T	10141	Per: 1.0 m2
			o ·	.		ړ		۱	_						1		

Inner form setting and removal work for center closing Per: 10 m2

					'n	Unit Price	A	Amount		<del></del> .
ŝ	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	J.YEN) (VN. D)	(J.YEN)	(VN. D)		
-	Foreman		person	0.75	-	183,300	•	137,475	0.3*2.5	-
17	Carpenter		person	6.25	-	111,700	-	698,125	2.5*2.5	<del></del>
3	Common labor		person	5		80,600	•	403,000	2.0*2.5	· 
4	Miscellaneous expenses	(labor cost)*4%	set	1	-		1	49,544		
	Total					•	1	1,288,144		
	Per: 1.0 m2	n2					t	128,814		
-								١		

Bottom form fabrication , setting and removal work for side span Per.  $10\,\mathrm{m2}$ 

					т		Т		T	_	T	٠.,			_	_	7
	4	Kernarks		5 0*5 0	2:2	3.7*2.5		2.4*2.5				0.2day *1;	T=4.4				
Amount	1	Local	(V.N. D)	370 175	447,143	1.033 225	1,22,1	483,600	22,22	314.27]			60,520	2 130 741	7.170,741	212 074	414,001
Amo		Foreign	(J.YEN)							1			6.515	1	C(C)9	137	160
Linit Drice	7777	Local	(C NV)	(200	183,300	002 111	111,700	00700	000,00				68.000	200100			
112		Foreign	(I VEN)	(7,77,7)	1		•		1		-		7 320				
i.		Onantities	Carrent Carren		125		9.25		90.9		20.1		0	0.07			
		1 12:	5		Toron	DC13C	nercon	200	nerson		set		-	nr			
		7	Standard						L		(Jahor cost)*18 %	(2000 :000)	: !	40~45 Ton			
			. Description	:		Foreman		Carpenter		Common labor	Adjust supposed	IVITSCEITAITECIUS CA PETISCS		Truck crane		Total	C 0 -
ı			ö		ı		١.	۸,	L	_	۱.	۱.			١,		Ţ

Bottom form fabrication for side span and box girder Per: 10 m2

40,720 927,220 183,300 111,700 80,600
Standard   Unit   Quantities   Foreign   Office   Control   Cont
Description         Standard         Unit         Quantities         Foreign           Piywood         900 * 1800*12         each         7.00         -           Timber         m3         0.39         -           Supplemental materials         (sum of above) *15%         set         1.00         -           Foreman         0.25         -         -           Campenter         person         2.50         -           Common labor         person         2.50         -           Miscellaneous expenses         (labor cost)*4%         set         1.00         -           Total         Per: 1.0 m2         -         -         -
Description         Standard         Unit         Quantities         Foreign           Piywood         900 * 1800*12         each         7.00         .           Timber         m3         0.39         .           Supplemental materials         (sum of above) *15%         set         1.00         .           Foreman         person         2.50         .         .           Common labor         person         2.50         .           Miscellaneous expenses         (labor cost)*4%         set         1.00         .           Per: 1.0 m2         Per: 1.0 m2         .         .         .
Description Standard Unit Quam Plywood 900 * 1800*12 each Timber m3 Supplemental materials (sum of above) *15% set Foreman Carpenter Common labor person Common labor (labor cost)*4% set Total Set 1.0 m2
Description Standard Plywood 900 * 1800*12 Timber Supplemental materials (sum of above) *15% Foreman Carpenter Common labor Miscellaneous expenses (labor cost)*4% Total Per: 1.0 m2
Description Plywood Timber Supplemental materials Foreman Carpenter Common labor Miscellaneous expenses Total

Bottom form setting and removal work for side span,box girder Per: 10 m2

						-,		-,						_			
		Remarks		0.1*2.5	A C*	L.2 I.1	く いまつ つ	٠.٧ حــا			0.2day *T; T=4.44;	•	Equipment -18				
	Amount	Local	(VN. D)	45,825	361 506	507,175	050 171	141,000	075.01	19,707			48,950	C34 C33	70/,705	724 73	30,270
-	Am	Foreign	(J.YEN)	1				-		1			2,741	172 6	74/17	710	4/7
	Unit Price	Local	(VN. D)	183,300		111,700	000	80,600					55,000		-		
	5	Foreign	(J.YEN)			ı		1		1			3.080				
		Ouantities	,	0.25		2.75		1.75		8.			0.89		•		
		Unit		nerson		person		person		set		-	1				
	-	Standard								(labor cost)*4 %	(2001 2000)		15~16 Ton	201 01			
		Description	TOTAL DESCRIPTION	<u> </u>	roreman	Camenter	Calpulies	Common labor	Common tago	Miscellaneous expenses	Wisconancous expenses		Section of the Party of the Par	o Huck Claire	Total	LOCAL	Der . 10 m2
			<u>.</u>	-	_	٦	,	, ا	٠,	۱.	ŀ		0	٥		1	

Bottom form setting and removal work for center closing Per. 10 m2

Description         Standard         Unit         Quantities         Foreign         Local         Foreign         Foreign         Local         Foreign         Foreign         Local         Foreign         Foreign         Local         Foreign         Foreign         (I.YEN)         (VN. D)         (I.YEN)         (I.YEN)         (VN. D)         (I.YEN)         (							<b>.</b>						_,				~		7		
Standard   Unit Quantities   Foreign   Local   Foreign   Foreign   Local   Foreign   Local   Foreign   Local   Foreign   For		,	Remarks			0.1*2.5		1.1*2.5		C 7*7 S											
Standard   Unit Quantities   Foreign   Local   Foreign	-	Danie	Local	2 . 6 .	(N. C)	45.875	270,01	307 175	21.11.20	141 050	000,141	0,40.	120/.61		•	610 630	210,010	100 15	196.16		
Standard   Unit   Quantities   Foreign   (J.YEN)		ול   ול					3		ı		•		•				1				
Standard Unit Quantities Foreign (J.YE)  person 0.25  person 2.75  person 1.75  (labor cost)*4 % set 1.00		t Price	Local		(C) X S		183,300	000	3		80 600	222,00									
Standard Unit Quanti person person person person (labor cost)*4% set		5	Corosom	roleikii	(NEVI)	7 7 7	•		•		1	1		1						:	
Standard (labor cost)*4 %				Channes			0.05	7.5	275	7.13	176	1./2		30.							
			:				2000	DELSOIL		person		Derson		set							
Description Foreman Carpenter Common labor Miscellaneous expenses Total				Standard										(labor cost)*4 %	(נמססו סססו)					Ç.	
				December	Describitor			Foreman		Companies	Calpener		Common labor	11	Miscellaneous expelises			Total		Dor. 101	

Edge form , setting and removal work Per. 10 m2

_						_			_						-
		Remarks		0.8*7.5	2.0	63#25		つ 化半り 化							
	Arisoun.	Local	(VN. D)	009 335	200,000	1750275	ت استوکرل او د	523 000	000,000	450 462	7016001	3,100,237		210 024	710,047
1	WIII.	Foreign	(J.YEN)				_		•	,					•
	Unit Price	Local	(0, X, E)		185,500	00%	111,/80	007.00	80,600						
	<u>=</u>	Foreign	(I VEN)		1		•		•		,				
		Onantities	, ,		2.00		15.75		6.50		00:1				
		Ĭ			TOPTSOT		Derson		nerson		Set				
		Ctondord	אומות מות								(Jahor cost)*17%	(1000 1001)			
		ſ	Description			готеттап	10,100	Z Carpeniei	2 Common labor	CONTINUE IADO:	Adjacation of the state of	Miscerialicous experises	Total	10(4)	- 0 - · · · · · · · · · · · · · · · · ·
			ė.				,	4	,	2	4	7			

Edge form work Per: 10 m2

				,					T		T			
	Remarks		Material- 132	(Material- 132)*0.7		0.6*2.5	6.0*2.5	A 0 * L C	7.4.7					
Amount	Local	(VN. D)	596,070	370,880	96,695	274,950	1,675,500	002 604	483,000	97,362		3,595,057	359,506	
Am	Foreign	(J.YEN)	1	•	•	•	٠		,	1		-	1	
Unit Price	Local	(VN. D)	1,324,600	927,200		183,300	111.700		80,600				-	
5	Foreign	(J.YEN)				,			•	1				
	Ouantities	,	0.45	0.40	1.00	1.50	15.00	20.54	00.9	1.00				
	Unit		m3	m3	set	nerson	Dercon	100120	person	set				
	Standard				(sum of above) *10%	(2)				(labor cost)*4%				
	Description		Timber	Source timeber	Sunnjemental materials	Horamon	Comparison	Carpenter	6 Common labor	Miscellaneous expenses		Total	Per . 1 0 m2	
	Z	•	-	-	1 ~		1	٠	9	7				•

Pressure pipe setting and removal for pier head Per. 10 m3

•					Ι	Т	_	Γ		Г	••••	1							
		Remarks		(0.49*(L-40)/B)*2.5	Ĺ														
	Amount	Local	(VN. D)	37.076	7.00	+76	38.000				3,800						nsj	300<7<600	370
	An	Foreign	(J.YEN)								1			L = 100m	$B = 160 \text{m}^3$	1.0	Concrete placing volume (V ms)	less than 50  50 <v<100 100<v<300<="" td=""  =""><td>160</td></v<100>	160
	Thit Price	Local	(Q.NA)	009.00	000,00	,							L-40)/B	<u>.</u>			Concrete p	50<1<00	30
	I in	Foreig				,							Production rate: 0.49*(L-40)/B	 L: in case of L > 40m only;	Pelow.	,		less than 50	40
		Ousptities	X remining	,	0.40	1 00	7.00						Production	L: in case	D . on listed below .	D. & Haley			
		÷.	100		person	,	Set							٠					-
		-	Standard											-					
			Description		Common Jahor	Commission races	Miscellaneous expenses	4-4-1	lotai			Per. 1 m3	1 51 1 11						
	.		ġ		[-	-	7	ſ		ĺ	_	آ							

Pressure pipe setting and removal for center closing Per: 10 m3

					1 Init	I Init Drice	Am	Amount	
	<u>.</u>		Custit	4	Foreign	1003	Foreign	Local	Remarks
			Angel Inch	?	(Nach)		(I VEN)	(C NV)	
				_	(7:12:14)	11:12		/= ::: )	
Common labor	person	person	L	3.45		80,600		278,070	{0.49*(L-40)/B}*2.5
expenses	set	set		1.00	•	-	ı	930	
Total							,	279,000	
Dor. 1 m3								27,900	
Prodi	Produ	Produ	Produ	ıction	Production rate: 0.49*(L-40)/B	-40)/B			
	L:ü	L:in	Ľ:	case of	L: in case of L > 40m only;		L = 153m		
B: B	B:as	B:as	B: as	listed	B: as listed below;		B = 40m3		
						Concrete pla	Concrete placing volume (V m3)	3)	
				. :	less than 50	less than 50   50 <v<100< td=""><td>100<v<300< td=""><td>300<v<600< td=""><td></td></v<600<></td></v<300<></td></v<100<>	100 <v<300< td=""><td>300<v<600< td=""><td></td></v<600<></td></v<300<>	300 <v<600< td=""><td></td></v<600<>	
				-	Ç	102	160	370	-

Pressure pipe setting and removal for cantilever erection area Per:  $10\,\mathrm{m}3$ 

ž

	-					. 4		
				Cart	Unit Price	A	Amount	
	Lead	, [2]	Oughtities	Foreign	Local	Foreign	Local	Remarks
Description	Standard	5	-	(NHV I)	(VN. D)	(J.YEN)	(VN. D)	
				(3.1.0)	009 00		216.008	(0.49*(L-40)/B}*2.5
Common labor		person	2.68	-	200,000		000	
Common races		1	1 00	•	r	•	766	
Miscellaneous expenses		126	2				217.000	
Total								
						•	21,700	
Per: 1 m3								
			Production	Production rate: $0.49*(L-40)/B$	40)/B			
		1	T in case o	1 · in case of L > 40m only;			L = 127  m (average)	_
			B - as listed helow:	helow :			B = 40 m3 (average)	
					Concrete pla	Concrete placing volume (V m3)	n3)	
				less than 50	50 <v<100< td=""><td>less than 50 50<v<100 100<v<300<="" td=""><td>300<v<600< td=""><td></td></v<600<></td></v<100></td></v<100<>	less than 50 50 <v<100 100<v<300<="" td=""><td>300<v<600< td=""><td></td></v<600<></td></v<100>	300 <v<600< td=""><td></td></v<600<>	
			٥	40	70	160	370	
			a	2				

Pressure pipe setting and removal for pier concrete Per: 10 m3 (B=160m3)

Unit Quantities Foreign  (J.YEN)  person 0.27  set 1.00	Unit Price Local (VN. D)		Amount	
Quantities 0.27 1.00	Local (VN. D)		•	
0.27	(NN. D)	roreign	Local	Remarks
0.27		(J.YEN)	(VN. D)	
	80,600	-	21,762	{0.49*(L-40)/B}*2.5
	ŧ	-	238	
			22,000	
		•	2,200	
Production rate: 0.49*(L-40)/B	-40)/B			
L: in case of L > 40m only;	ly;		L = 75  m (average)	
B: as listed below;			B = 160 m3 (average)	(a)
	Concrete pla	cing volume (V m.	3)	
< 50 m3	50 <v<100< td=""><td>100<v<300< td=""><td>300<v<600< td=""><td></td></v<600<></td></v<300<></td></v<100<>	100 <v<300< td=""><td>300<v<600< td=""><td></td></v<600<></td></v<300<>	300 <v<600< td=""><td></td></v<600<>	
B 40	70	091	370	
2		Concrete pla V<100 70	Concrete placing volume (V m.   V<100   100 <v<300 160="" 70="" td=""  =""  <=""><td>placing volume (V m3) 100<v<300 300<v<600<br="">0 160</v<300></td></v<300>	placing volume (V m3) 100 <v<300 300<v<600<br="">0 160</v<300>

Pressure pipe setting and removal for footing concrete Per: 10 m3 (B=370 m3)

						*	******	
					Unit Price	A	Amount	:
	Charles Board	<u>,</u>	Onantities	Foreign	Local	Foreign	Local	Remarks
Description	Standard		2	(LYEN)	(VN. D)	(J.YEN)	(VN. D)	
					00900	1	9,672	{0.49*(L.40)/B}*2.5
Common labor		person	71.0	1	00,000			
Common race		1	5		ı	ŧ	328	
Miscellaneous expenses		301	20:1				10.000	
Total							20001	
							1.000	
Per: 1 m3								
			Production	Production rate: $0.49*(L-40)/B$	~40)/B			
			I. in case o	I in case of L > 40m only;	· ^		L = 75  m (average)	
			B - as listed below:	below:			B = 370  m3  (average)	e)
		-			Concrete pl	Concrete placing volume (V m3)	13)	
				< 50 m <sup>3</sup>	50 <v<100< td=""><td>100<v<300< td=""><td>300<v<600< td=""><td></td></v<600<></td></v<300<></td></v<100<>	100 <v<300< td=""><td>300<v<600< td=""><td></td></v<600<></td></v<300<>	300 <v<600< td=""><td></td></v<600<>	
		- 1. - 2. - 1.	ď	40	70	160	370	
			<b>)</b>					

Front side of pier head scaffolding work

Per: 1 m2

					Unit	Unit Price	An	Amount	
Ž	No. Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
				<u>.</u>	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	Front side of pier head					- 2			Refer to M,
_	scaffolding		m2	1.00	•	125,012		125,012	girder hight ;6.5m
								-	
1	Total						t .	125,012	
	Per: 1 m2						•	125,012	

 $M = \{(S * X)/T + N * y\} * A$ 

M: Cost for side of pier head scaffolding work

S : Factor for depreciable value of temporary materials X ; Total months in demand for pier head work

T: Time used as facilities per one project

N: Factor for production rate
y: Wage rate of skilled labor per day
A: Quantity of front side pier head

X:90 day/30=3 T=1 y:188,864 \* 2.5

Z	620 0	750
Giredr hight of pire head	Less than 6m	More than 6m

Front side of pier head scaffolding work Per: 1 m2

					בים	Unit Price	Am	Amount	
		Ctandard	Į in į	Onantities	Foreign		Foreign	Local	Remarks
No. Description	ption	מושות	:		(J.YEN)	(NN. D)	(J.YEN)	(VN. D)	
Front side of pier head	er head		£	001		427,500	1	427,500	Refer to M
l scattolding			1111						
						+		000 507	
Total	-					-	•	44.1,500	
101	41								
							•	427.500	
Per: 1 m2	m2.	_				_			

 $M = \{(S * X)/T + N * y\} * A$ M: Cost for side of pier head scaffolding work

S: Factor for depreciable value of temporary materials

X ; Total months in demand for pier head work

T: Time used as facilities per one project

y: Wage rate of skilled labor per day N: Factor for production rate

A: Quantity of front side pier head scaffolding

	Z	
	S	750

y:170,100 \* 2.5 = 425,250 M:(750 \* 3)/1+1 \* 425,250 = 427.500

X: 90 day / 30 = 3

Bridge side scaffolding

Per: 1 linear meter

					Unit	Unit Price	Am	Amount	
2	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	r 1	Remarks
2				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Bridge side length for scaffolding	dino	E	1.00		73,823	ŀ	73,823	Refer to M
-		9							
	Total						1	73,823	
	10131								
	Por- 1 linear meter							73,823	

 $M = \{(S * X) / T + N * y \} * A$ M: Cost for bridge side scaffolding work

S: Factor for depreciable value of temporary materials

X; Total months in demand for side span and center closing

T: Time used as facilities per one project

N: Factor for production rate y: Wage rate of skilled labor per day

A: Quantity of bridge side length covered by scaffolding

y:170,100 \* 2.5 = 425,250 M:(510 \* 3)/1+0.17 \* 425,250 = 73,823/l.m

A:60 m

X:90 day / 30 = 3T = 1

Bridge surface guardrail work

Per: 1 linear meter

								•	
			-		Unit	Unit Price	Am	Amount	
		7	<u>.</u>	Ougnities	Foreign	Local	Foreign	Local	Remarks
ģ	Description	Standard		2011111111	(NEV I)	(C XX	(J.YEN)	(V.N. D)	
					1777			22 750	Refer to M
				00		23,739	1	601,62	THE PARTY OF THE P
_	Bridge surface guardrail		1.1.1	?					
ا.									
								CHE CC	
							•	72,/23	
	Total								
	Local				-	_			
								01:1	
							,	72,739	
	Der. 1 linear meter								
	FEI. Lillean Miles								

 $M = \{(S * X)/T + N * y \} * A$ 

M. Cost for bridge surface guardrail work

S : Factor for depreciable value of temporary materials

X; Total months in demand for pier head and cantilever erection work

T: Time used as facilities per one project

N. Factor for production rate

N: Factor for production rate
y: Wage rate of skilled labor per day

A: Quantity of bridge side length installed with guardrail

S N 265 0.054

y:170,100 \* 2.5 = 425,250 M:(265 \* 3)/1+00.54 \* 425,250 = 23,759/l.m

A:430 m

 $X: 278 \, day / 30 = 9$ 

Dead head cost of concrete pump (pipe setting type 90–100m3/hr)

Per. one day

	10					rost								
	Remarks		0.16*2	11.9*2	17.33.703	5 % of ruel cost								
יווהי	Local	(VN. D)	39,872	77.897	2000	3,895		4	76	00	121,/00	, .	121,700	
Alibouit	Foreign	(J.YEN)				•		098'6		1	6,860		098'6	
Chit Frice	Local	(VN. D)	124,600	3773		1								4
5	Foreign	(J.YEN)	١.	,		•		4.930						
	Ouantities	,	0.32	23.80	20.07	1.00		2.00		1.00				
	C <sub>mit</sub>		person	1	11101	set		F		set				
	Standard						pipe setting type	90~100 m3 / hr						
	Description		Equipment operator	Equipment operator	Fuel	Lubricant oil		Owning cost of Fourment	Owilling cost of Equipment	Adjustment	Total		Per: one day	
_	Ž	2	T-		7	6		_	r	Ś				

Dead head cost of concrete pump (boom type 90~110m3/hr) Per: one day (2 hrs)

					,					
	Remarks		0.16*2	17*2	5 % of fuel cost					
Amount	Local	(VN. D)	39,872.00	111,282	5,564			82	156,800	156,800
Am	Foreign	(J.YEN)	•	1	Ē		10,660	r	10,660	10,660
Unit Price	Local	(VN. D)	124,600	3,273	_		•			
Unit	Foreign	(J. YEN)	_	ı	_		5,330			
	Quantities		0.32	34.00	1.00		2.00	1.00		
	Unit		person	liter	set		hr	set		
	Standard					boom type	90~110 m3 / hr			
	Description		Equipment operator	Fuel	Lubricant oil		4 Owning cost of Equipment	Adjustment	Total	Per: one day
	Š.		-	2	3		4	5		

Dead head cost of concrete pump (boom type 55~60 m3/hr) Per. one day (2 hr)

			_	T	_	T		Γ		Γ	_		~~T	_	Т		T		T		7	
	•	Remarks			0.16*2		10,7*2		5 % of fuel cost													
A 110,111	July	Local	(G 10)	(V.N. D.)	20 672 00	32,0,70	70 042	10,0	3 502	2006			ì		4%	003 213	113,300			000 010	113,500	
¥	7117	Foreign	İ		١	1		ı					7.640	2.24	,		7,640				7.640	
	Unit Price	[oca]		25		124.600		3.273		•											-	
	[][]	E aresion	1010101	(I VEND	(1.17.1)	•					_			3,820								
	-	Unit Quantities	,		020	70.0	27.40	71.40	2	2			2.00	6	1.00							
		;	Cart.		-		person		iiter		set			±		set						
			Standard										boom type	50-60 m3 / hr	ST CITT ON OC							
			December	Cescionon			Equipment operator	Equipment operator	<u> </u>	I act	T. T. Leant Cal	Luoricant on			4 Owning cost of Equipment		Adjustment	Total				Dor. one day
				ó		ļ	-		ć	4	,	ריי			4	١,	n					

Concrete work for pier head Per: 10 m3

_				—		Τ	·T-			Т		Τ		Τ	T		T	٦
	Remarks		k=+0.04;	Process cost - 149	0.2*2.5	7 0 3 4 0 4	7 544 -	1.4~2.3	0.43*7-Faniment - 99	0.04%0.	Process cost - 347 (1)		Process cost - 343 (1)					
Amount	Local	(VN. D)		5,513,945	91 650	070 075	270,072	282,100	52 460	77.100	14.604		38.000	94 678	C20.77	7045001/	305 305	0+0,007
Amo	Foreign	(J.YEN)		6.594			-	•	0,000	4,440	1 183	2011	•		1000	17,017		1,202,1
Thit Drice	Local	22		530 187	162 200	00.501	170,100	80,600		000,10	121 700	121,700	3 800	2,000	•			
I Imit	Foreign	(NEVI)	(a, v v v)	634			•	•		4,930	000	2,600		•	-			
	Onsantities	- Audillance		10.40	04.01	0.50	5.75	3.50		0.86		0.12	9	10.00	1.00			
	1 7	5		,	CIL	person	регѕоп	person		hr	•	gá	r	B	set			
	C	Standard		;	Class A I				pipe setting type	90~100 m3 / hr	pipe setting type	90~100 m3 / hr			(Jabor cost)*7%			
		Description			1 Concrete	Foreman	Skilled labor	Common labor		5 Concrete pump operation	Dead head cost of concrete	dund	Pressure pipe setting and	removal	Miscellaneous expenses	Total		Per: 1 m3
	,	ģ.				2		٩		หา		9		<u></u>	S			

Concrete work for side span Per. 10 m3

			·	1 - 149	5	5	5	00-		347 (1)	347 (1)	347(1)	347 (1)
	Remarks		k=+0.04;	Process cost - 149	0.2*2.5	2.3*2.5	1.4*2.5	Fortingent - 99		Process cost - 347 (1)	Process cost -	Process cost -	Process cost
unt	Local	(VN. D)		5,513,945	91,650	978,075	282,100	56,120	The second secon	30,425	30,425	30,425 94,628 7,046,943	30,425 94,628 7,046,943
Amount	Foreign	(J.YEN)		6,594	ŀ	•	•	4,536		2,465	2,465	2,465	2,465
Unit Price	Local	(VN. D)		530,187	183,300	170,100	80,600	61,000		121,700	121,700	121,700	121,700
Cnit	Foreign	(J.YEN)		634	1	•	t	4,930		098'6	098'6	9,860	9,860
	Quantities			10.40	0.50	5.75	3.50	0.92	,	0.25	0.25	1.00	1.00
	Unit			m3	person	person	person	hr		day	get	set	ret set
	Standard	:		Class A1				setting type 90~100 m	m 001-00 and prints	11 001 100 11 00 11 10 11 11 11 11 11 11	(labor cost)*7%	(labor cost)*7%	(labor cost)*7%
	Description			Concrete	Foreman	Skilled labor	4 Common labor	Concrete pump operation		Dead nead cost of concrete pretting type 30~100 m	Miscellancous expenses	Miscellancous expenses  Total	Miscellancous expenses  Total
	Š	-		<u>-</u>	2 F	3 . S	4	5 (	y	_			<del>-11</del>

Concrete work for center closing Per. 10 m3

			1				Γ	Τ	7			SSS					_	Γ	T		
	Demorte	Neiligi KS		k=+0.04;	Process cost - 149	0.2*2.5	2 2*2 5	7 C*V 1	1.4 2.2	0.92*2;	Equipment - 99	0.25*2. Process	st - 347 (1		Process cost - 343 (2)					٠	
Amount	1	Locai	(VN. D)		5,513,945	91,650	070 076	270,075	787,100		112,240		64,000		279,000	94,628	7 415 628	00000744		741 564	
Δ Ψ.	1	Foreign	(J.YEN)		6.594		,	•	,		9,071		4,930				303.00	265,07		2.050	11211
	Unit Frice	Local	(C) XX		530 187	102,000	183,500	170,100	80,600	- /-	000 19		128 000	2006	27.900				-		
	iu)	Foreign	(NAV )	(1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	727		,	•	ı		4 030	4,220	0 860	200,							
		Onantities	<b>y</b>			10.40	0.50	5.75	3 50	50.0	1 67	1.04	0 20	0000	10.00	20.07	3.1				
		Linit	•		_ (	3	person	person	2000	Delson	ļ	nr	7	day	· •	CIII	set				
		Crop doro	Stational			Class A I					pipe setting type	90~100 m3 / hr	pipe setting type	90~100 m3 / nr			(labor cost)*7%				
			Description			Concrete	Foreman	Skilled labor	Chilled labor	Common labor		5 Concrete pump operation	Dead head cost of concrete	dund 9	Pressure pipe setting and	removal	Miscellaneous expenses	Total			
		-	Š.			,	,	1 "	٦	4		٧		9	- 1	_	8				

Concrete work for cantilever erection area Per: 10 m3

					Unit	Unit Price	Am	Amount	
2	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Locai	Remarks
<u>.</u>				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
									k=+0.04; Process
_	Concrete	Class A1	m3	10.40	634	530,187	6,594	5,513,945	cost - 149
ع  د ا	Foreman		person	0.50		183,300	,	91,650	0.2*2.5
1 ~	Skilled labor		person	5.75	1	170,100		978,075	2.3*2.5
1	1		person	3.50	•	80,600		282,100	1.4*2.5
		pipe setting type							
Ś	Concrete pump operation	90~100 m3 / hr	Ħ	1.84	4,930	61,000	9,071	112,240	0.92*2;Equipmen
	Dead head cost of concrete	nine setting type							0.25*2; Process
9	6 pump	90~100 m3 / hr	day	0.50	098'6	128,000	4,930	64,000	cost - 347 (1)
	Pressure pipe setting and								
	7 removal		m3	10.00		21,700		217,000	Process cost - 343 (3)
S	Miscellaneous expenses	(labor cost)*7%	set	1.00	_	•	-	94,628	
	Total			:			20,595	7,353,638	
	Per: 1 m3						2,059	735,364	

Timbering base for box girder Per: 10 m2

Setting and removal of timbering for box girder (L=60m) Per: 100 air m3

					Unit	Unit Price	Am	Amount	
7	Decomination	Standard	. Init	Ouantities	Foreign	Local	Foreign	Local	Remarks
<u>.</u>				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
1	Denreciable value of timbering	0	set	1.00		1	107,200	1	
- -	Transfer and the same of the s	2	nerson	1.25	1	183,300	•	229,125	0.5*2.5
الا	Foreman		a constant	2.00	,	153,200		766,000	2.0*2.5
٦	Kigger		0010	20:5		80.600		403.000	2.0*2.5
4	Common labor		регѕоп	0.00	,	200,00			
4	Miscellaneons expenses	(labor cost)*4%	set	9.1	'		•	55,925.00	
	Misconalicous cyberises								0.31*T;T=4.44;
٧	ويوسي كامريدال	15 ~16 ton	ā	1.38	3,080	55,000	4,250	75,900	Equipment -18
	Huch clane	101 01	:				111,450	1,529,950	
	I Otal						V ,	006 31	
	Per: lair m3	_					C11,1	000,01	

Distribution of setting and removal cost of timbering

	Ratio	Foreign (J. YEN)	Local (VN.D)
Concrete (5.070 m3)	98.0	14,656 /m3	185,887 / m3
Reinforcement steel (611.3 t)	0.10	14,627/t	185,509 / t
PC cable (12T152) (177.21)	0.03	14,697/1	186,398/1
PC cable (7712 7) (62 4 t)	0.01	15.303/t	194,085/t

Outer form fabrication work for box girder Per 10.m2

1					Uni	Unit Price	Ar	Amoun
	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	
:					(J.YEN)	(VN. D)	(J.YEN)	
1	Plywood panel	900x1,800x12mm	each	7.00	-	40.720	1	
1	Timber		m3	0.40	-	927.220	1	
1	Supplemental materials	(sum of above) *15%	set	1.00	•	•	J	
1	Foreman		person	0.25	-	183.300	3	
1	Carpenter		person	3.75	•	111,700	•	
1	Common labor		person	2.50	•	80.600		
1	Miscellaneous expenses	(labor cost)*4%	set	1.00		ı		
ļ .	Total				-		. #	
l								
	Per: 1 m2=(totalx1/3)x1/10	x1/3)x1/10					ı	
ı								

(Material - 130)\*0.8 (Material - 132)\*0.7

285,040 370,888 98,389

0.1\*2.5 1.5\*2.5 1.0\*2.5

> 418,875 201,500

26,648

45,825

48,239

Remarks

Local

Outer form setting and removal work for box girder Per 10 m2

				Unit	Unit Price	Am	Amount	
	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-+		nerson	0.75		183,300	. 1	137,475	0.3*2.5
-+		nerson	625	1	111,700	1	698,125	2.5*2.5
		nerson	3.75	·	80,600		302,250	1.5*2.5
	(labor cost)*40%	į dy	1 00		1	•	45,514	
	(ופסס וספור)							0.2day*T; T=4.44
	15-16 ton	hr	0.89	3,080	55,000	2,741	48,950	Equipment -18
						7.741	1,232,314	
				•				
1						274	123,231	
				1				

Timbering of deck slab (overhanging) for box girder Per. 100 air m3

		Per: JUV air m2								
Ļ						- Chit	Unit Price	Amount	ount	
			Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
	ė Ž	Description	) contraction	5		(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
				1	26.00	1 338		48.168	1	8.8*190 days
٠.	,,	Frame		eacu	20.00	0.00		2000		2 0*190 days
<u>l</u>	~	Brace		each	68.00	304	1	7/0,07		2.0 130 days
Т.	T	Pound nine	φ 48.6	E	106.00	78	1	8,268	1	0.51*150 days
	1	odia pipo		Pach	63.00	24		1,512	•	(Material- 160)*0.3*0
_	寸	Сіятр		13.55	00 03	162	•	11.178		(Material- 159)*0.3*0
	'n	Jack base		CaCI	33.50				004 400	(Afetonial 120)*0 34
ــــــــــــــــــــــــــــــــــــــ	9	Timber		m3	1.80	•	463,610		074,470	(Material 132) U.S.
	Т-	C.malomontol moterials	(enm of above) *5%	set	1.00	1	•	4,490	41,725	
	Т	Supplemental materials	and factor to time!	norcon	125	•	183,300	1	229,125	0.5*2.5
_1	寸	roreman		1000	90 4		153,200		000'992	2.0*2.5
	0	Rigger		person	3.5		207.00		000 504	> 0*0 6
ـــــ	9	10 Common labor		ретѕоп	5.00		20,000	1	000,004	2.00
1_	=	Camenter		person	0.75	•	111,700	•	83,77	0.372.5
٠.	:									0.25day*[; [=4.44
		· ·	15 15 100	Ļ	1.1	3.080	55,000	3,419	61,050	Equipment -18
	7	12 Truck crane	12-10-01	****	,				37.6 95	
	:::	Miscellaneous expenses	(labor cost)*4%	set	3	,		100 20	072,22	
Ц.		Total	-					71,107	70 VC	
<u>1</u>		Per: 1 air m3						7/7	+0/,47	
	•									

Inner timbering of box girder Per: 100 air m3

					Unit	Unit Price	Am	Amount	
Š	Description	Standard	C <sub>mit</sub>	Quantities	Foreign	Local	Foreign	Local	Remarks
				:	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
_	Frame		each	23.00	1,338	ŧ	30,774	1	8.8*190 days
2	Brace		each	42.00	304	ı	12,768	-	2.0*190 days
<u>س</u>	Round pipe	F 48.6	E	78.00	78	-	6,084		0.51*190 days
4	Clamp		each	46.00	24	•	1,104		(Material- 160)*0.3*0.5
<u> </u> _	1		each	94.00	162	-	15,228	1	(Material- 159)*0.3*0.5
9	-		m3	2.40	•	463,610	•	1,112,664	(Material- 132)*0.35
7	1	(sum of above) *5%	set	1.00	1	•	3,298	55,633	
∞	Foreman		person	1.25	ı	183,300	. =	229,125	0.5*2.25
٥	Rigger		person	5.25	1	153,200	1	804,300	2.1*2.5
01	Common labor		person	5.25	ŧ	80,600	_	423,150	2.1*2.5
=	Carpenter		person	0.75	•	111,700	•	83,775	0.3*2.5
									0.25day*T; T=4.44
12	Truck crane	15-16 ton	Ϊ́́	1.11	3,080	55,000	3,419	61,050	Equipment -18
13	Miscellaneous expenses	(labor cost)*4%	set	1.00	t		-	61,614	
							72,675	2,831,311	-
	Per: 1 air m3						727	28,313	

Tower crane foundation work Per: 1set

					47.7	C	Æ	Amount	
Į.					וניס	Unit Price			ç
	1	Ctompord	I Init	Onantities	Foreign	Local	Foreign	Local	Kemarks
	Description	אומחומוס		y	(I VEN)	(VN. D)	(J.YEN)	(VN. D)	
				0.00		86.805	1	13,064,153	Process cost - 38
	Form work		m2	02.001		20,00	007.02	001 767 0	Drocess cost - 307 (1)
)	26.135		m2	200.00	282	43,132	56,400	0,070,400	F100ess cost = 507 (1)
O	Scarroiding		Cm	18.00	140	229,710	2,520	4,134,780	Process cost - 30 / (2)
٦I	Suspended timbering		1	7.67	23.690	1 795.763	110,727	8,393,396	Process cost - 61
بو	Reinforcement steel		5	) i	20,07	115 065	116 073	76 727 093	Process cost - 153
برا	Concrete	class D1	m3	184.50	450	413,600	2/2/21		
		pipe setting type;	. (	197.50	212	2.623	39,114	483,944	( Equipment - 99)*0.043
Ų	6 Concrete pump operation	90 ~ 100 m3 /nr	Ē	104.30	717				0.14*2
I۳	Dead head cost of concrete	pipe setting type .	<b>.</b>	86.0	0 860	121 700	2.761	34,076	Process cost - 347 (1)
5	7 pump	90 ~ 100 m3 /hr	day	0.20	2,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
٠,٠	Pressure pipe setting and		,	104 60		2 200	· •	405,900	Process cost - 343 (4)
65	removal		E	104.30		2016	3 285	1,118,697	
÷	Miscellaneous expenses	(Sum of above)*1%	set	00:1	-	000	CCX (24	26 180 019	Process cost - 175
12	The state of some of the state of the	اللاه	m3	184.50	2,447	141,902	7/4,104	77,100,107	200 200 1
χI	וווסוווסוו סו בסווכו בוב או מב						783,251	139,169,357	
	Total								
							783 251	139 169 357	
1	Per: 1 set						1,77,007	12.623.623.6	
			i						

Setting and removal work of tower crane Per: 1set

					Unit	Unit Price	Amount	nunt	
		Standard	I Init	Ouantities	Foreign	Local	Foreign	Local	Remarks
ġ Z	Describrion	סומוויים ס		) )	(LYEN)	(VN. D)	(J.YEN)	(VN. D)	
	-		100104	31 88	,	183,300	1	5,843,604	1*D*2.5
-	Foreman		10017	20:10		00,000		37 531 675	C*U*V
ŗ	Stylled Jahor		person	191.25	•	1 /0,100	1	02,100,70	
1	Skilled fator		nereon	31 88	,	80,600	•	2,569,528	1*D*2.5
<b>^</b>	Common labor		10011			330	. 000 330	000 000 0	10 dove - Equipment - 70
-	Donney States	40 ton	dav	10.00	35.520	342,000	355,200	5,420,000	10 days, Equipment 10
t	Darge will claire	100	7						10 days *T; T=4.95;
•		2000		49.50	2 490	222.000	123,255	10,989,000	Equipment -74
ሳ	lug boat	Sicci 200ps	111				1.07 007	T3F 535 33	
	Total						4/8,400	101,000,00	
1									
							227 227	55 353 757	
	Dor. 1 cot	_			_		4/0,433	,0,000,00	

D: Days in demand for setting remova⊨ 0.25 W+0.125H; D=12.75 days W: Weight of tower crane
H: Height of tower

Inner form fabrication work for box girder <u>Per. 10 m2</u>

				( Juit	Unit Price	Am	Amount		
		T fmit	Onantities	Foreign	Local	Foreign	Local	Remarks	
Description	Stational		) )	(I VEN)	(VX, D)	(I.YEN)	(VN. D)		
			00.0	( )	002.01		285.040	(Material - 130)*0.8	
Plywood panel	900x1,800x12mm	each	00.7	1	40,120		200 300	(146,000)	
		£ #4	0.33	1	927,220	•	505,505	(Iviaterial - 134) · U./	
Imber		1	00.1			•	88,653		
Supplemental materials	(sum of above) *15%	ıəs	1.00		000		20021	0.1*2.5	
		nerson	0.25		183,300	1	£20,0±	2:2	
roreman			7.0		111 700	•	418.875	1.5*2.5	
Camenter		person	5.73		111,700		000	7 6*0 -	
		t Corot	056	ı	80.600	ı	701,500	1.0"2.3	
Common labor		TIOS ISC	2007				26.648		
Miscellaneous expenses	(labor cost)*4%	set	1.00	1	1	,	2,007		
						1	1,3/2,54		
Total									
-									
						•	82.351		
$ \mathbf{p}_{pr}  = \frac{1}{2} \frac{1}{2$	$x(x_0, 1x(2-1))x(1/10)$								

Inner form setting and removal work for box girder Per. 10.m2

	~~·		· · · · · · · · · · · · · · · · · · ·	~~~т	1	т					_ <sub>r</sub> -	,
	Remarks		0.3*2.5	2.5*2.5	1.5*2.5		0.2day*T; T=4.44	Equipment -18				
Amount	Local	(V.N. D)	137,475	698,125	302,250	45,514		48,950		1,232,314		123,231
Am	Foreign	(J.YEN)	1		•	•	- :	2,741	,	2,741		274
Unit Price	Local	(VN. D)	183,300	111,700	80,600	١		55,000				
Unit	Foreign		,	1	ľ			3,080				
	Ouantities	· :	0.75	6.25	3.75	1.00	1	0.89				
	Cmit		person	person	person	set		Į.			-	
	Standard					(labor cost)*4%		15-16 ton				
	Description		Foreman	Camenter	Common labor	Miscellaneous expenses		Truck crane		Total		Per: 1 m2
	2	:	-		m	4		'n	1:			

Steel sheet piling work (type IV.L=19m)
Per: 10 sheets

					··					<b></b>			т-			<u>-</u>		<b>.</b>	r	7		
	Remarks			10x19x0.0761=14.46;	148x65 days	(10/N)*1*2.5	(10/N)*2*2.5	J (#:+/: d (	(10/N)+1-2.5	(10/N)xT; T=4.55;	Equipment - 27	10/N : Equipment - 48		10/N; Equipment - /U	(10/N)xT; T=4.85;	Equipment - 74	!					
ount	Local	(0.00)	(21:12)		•	362.934	608 204	0.000	159,588		216,600	366 560	200,000	270,180		854,700	45.229	7,883,995	007 000	788,400		
Amount	Foreign	(1,1/1,1)	(J. YEIV)		139,105				1		28.591	6563	1,07,0	28,061		9,587		111 601	100,114	21,160		
I'mit Drice	loco I	Lovai	(コ <i>バ</i> ろ)		•	163 300	000.001	007.561	80 600		000 09	000,00	000,404	000 CT E		222,000						
Thirt		roreign			000		-	_			7 020		7,920	25 520		7 490		-				
	) <u>.</u>	Quantities				14.40	1.98	3.97	00	1.30	,	3.01	0.79		0.7%	200	6	1.00				
		Cuit			٠.	to	person	norson		person	•	Ė	مول		day		Ħ	set				
		Standard				eet pile						60KW	AVVVA	FA007	40 Ton		200ps	(labor cost)*4%				
		Description				Depreciable value of steel sheet pile	Foreman		Rigger	Common labor		Vibrohammer		Generator	Barge with crane		Tue boat		_	LOLAI	Per: 1 sheet	
		- 2					1	1	ጥ	4		٧	,	9	1		00	0	ľ			

N=n\*E\*F; F=1.0+(f1+f2)
N: Number of steel sheet piling per a day; 12.6
n: Standard number of steel sheet type IV piling per a day; 19
E: Efficiency of piling work on the barge; 0.7
F: Fractror related with working condition; 0.95
f1=0.05; f2=0

Soil condition Depth 13m E

> N-value N=15

L: Jength of steel sheet pile; 19m

Removal of steel sheet piling Per. 10 sheets

					Unit	Unit Price	Amount	ount	
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Repair cost of steel sheet pile type IV	De IV	ton	14.46	5,150	1	74,469	•	(Material -170)*0.07
7	Foreman		person	1.19		183,300	•	218,127	(10/N)*1*2.5
m	Rigger		person	2.38		153,200	₽	364,616	(10/N)*2*2.5
4	Common labor		person	1.19	1	80,600	•	95,914	(10/N)*1*2.5
									(10/N)xT; T=4.55;
Ŋ	Vibrohammer	60KW	Ę	2.17	7,920	60,000	17,186	130,200	Equipment - 27
9	Generator	200KVA	day	0.48	7,920	464,000	3,802	222,720	10/N; Equipment - 48
7	Barge with crane	40 Ton	day	0.48	35,520	342,000	17,050	164,160	10/N; Equipment - 70
									(10/N)xT; T=4.85;
<b>∞</b>	Tug boat	200ps	hr	2.31	2,490	222,000	5,752	512,820	Equipment - 74
6	sous expenses	(labor cost)*4%	set	1.00	·		•	27,146	
	Total						118,259	1,735,703	
	Per: 1 sheet						11,826	173,570	

N=n\*E

N. Number of steel sheet piling per a day; 21

n: Standard number of steel sheet type IV piling per a day; 30

E: Efficiency of extracting steel sheet pile; 0.7

Setting and removal of brace and wale Per: 10 ton

							*	A mount	
		· ·			Cuit	Unit Price	and a	Outst	
,	1000	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
Š.	Describinon		,		(I YEN)	(VN. D)	(J.YEN)	(VN. D)	
						00,000		1 191 450	(1.6+1.0)*1*2.5
	Foreman		person	6.50		183,500		00,47714	J (+ (+ (+ (+ (+ (+ (+ (+ (+ (+ (+ (+ (+
-	1 olonomia		nerson	13.00	1	153,200	1	1,991,600	(1.6+1.0)*2*2.5
~	Kigger			0.9		111 700	,	726.050	(1.6+1.0)*1*2.5
w	Welder		person	0.50	-	111,700	,	1 047 800	(1 4+1 0)*2*2 5
4	Common labor		person	13.00		80,600	,	740.00.	(1:1 (0:1 (0:1)
,		(Japor cost)*4%	Set	1.00	ı	,	•	198,270	
٨	Miscellancous expenses	(labol cost)							1.0day+1.0 day;
,		40 Tos	کوئر	2 00	35 520	342.000	71,040	684,000	Equipment - 70
اه	Barge with crane	40 101							2*(1.0 dayxT);
		Č	<u>.</u>	0.70	7 490	000 222	24.153	2,153,400	T=4.85;Equipment-74
_	Tug boat	Sdnn7	=	2.70	271.5	200			1.0 day +0.4
			1					007 67	Dominant As
∞	Welding machine	250 A	day	1.40	1,390	31,000	1,940	45,400	בכ - זויםווולוחלים
	т-								
							97.139	8,035,976	
:	Fotal								
								007.000	
	Per- 1 ton						9,714	803,508	

Depreciable value and expenses of wale and brace

									j	
					Init	I Init Price	Am	Amount	•	
				1	Torreign	Cocal	Foreign	Local	Remarks	
2	Description	Standard	Cart	Quantines	roleigh	2 24	(I VEN)	(VN. D)		
į					(J.YEN)	(VIN. D)	1		16.168tx3=48.50	
					(		108 640		32x70  days = 2240	
	Denteciable value of H steel	400x400x13x21	ton	48.50	2,240		2		28.215  tx 2 = 56.43	
-				1			130 353	•	$33 \times 70 \text{ days} = 2310$	
Č	Denreciable value of H steel	350x350x12x19	ton	56.43	2,310		1 015 920	,	third stage brace	
با اد		350x350x12x19	ton	28.22	36,000		27,571,251		10.692 t x3=32.08	
,					(		1154880		Material - 155	
_	H steel ( Angle brace)	350x350x12x19	ton	32.08	36,000		131077		10.692 t x3=32.08	
-	Size Constitution						021 329	1	Material - 156	
V	H steel ( nost)	300x300x10x15	ton	18.60	34,200	-	21,000		36.000x0.5=18.000	
1	11 Store ( F. co. )			:			(677 /40)	:	(Material - 155) x 0.500	
	Sub-mortion of scrap of H stel 350x350x12x19	350x350x12x19	ton	32.08		<u>'</u>	(017,440)	1	(Material - 156) x 0.30	
ا	Such action of Second of U. cts	300x300x10x15	ton	9.30	10,260	•	(90,410)		(Material -117)*0.075	
-	Subtraction of scrap of 11 sty	1		48 50	2.633	•	12/,/01		340 046	
∞	Repair cost of H steel	44x400x13x21	132	5	2.00	1	152,361		(Material -155) 0.0/5	
0	Repair cost of H steel	350x350x12x19	ton	20.43	4,100					
							2 652 117			
							111,000,7			
	Total									
							2,653,117			
			<u> </u>				4,000,7			
	Per: 1 Set									

Scaffolding work for pier Per: 100 multiplied m2

			,			~	-	_	1	·	_		_	r		_	~T		1
	٠	Remarks		1.5*2.5	ソ つ*ひ つ	6.7 6.3	3.1*2.5	000	Eduipment - /U	0.8×T · T=4.85:	61)	Equipment - 74							
-	ount	Local	(VN. D)	687.375	000 000	280,500	624.650	, ,	273,600			861,360	132 789	1000	3,660,674			709 95	2000
1	Amonut	Foreign	(J.YEN)	,		1			28.416			9,661	3 808	0,00,0	41.885			710	7:4
i	Unit Price	Local	(C XS)	103 200	200,001	153.200	009 08	200,00	342 000	225.0		222.000		1					
	Unit	Foreign	(I VEN)	(3.1 514)	•	1		1	25 520	72,56		2 490		1					
		Onsatities		i d	3.75	A 75	0.0	C/:/	000	0.00	_	000	0.00	90.					
		÷ •	5		person		person	person	-	day			ē	set					
		10 To 10 To	Standard					. :		40 Ton			200ps	(cum of above)#10%	(September 10 line)				
			Description		Foreman		Rigger	Cammon labor	COMMISSIN 18001	Barge with crane			5 Tug boat	3 67 11	Miscellaneous expenses	Total			Dor. 1 m2
			ģ		-	-	7	,	2	4		1	'n		0			٠	

Tower crane cost Per: one set

					Unit	Unit Price	Am	Amount	
ž	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
									240 days;
	Depreciable value of Tower crane	rane	day	240.00	18,780	000.06	4,507,200	21,600,000	Equipment - 96
$\Gamma_{i}$	Foundation for Tower crane		set	1.00	735,174	136,510,400	735,174	136,510,400	Process cost - 357
	Setting and removal of Tower crane	er crane	set	1.00	478,455	55,353,757	478,455	55,353,757	Process cost - 358
	0								240x0.8=192;
-1	Generator	20KVA	dav	192.00	1,980	50,000	380,160	9,600,000	Equipment - 106
			person	120.00	1	111,700		13,404,000	6*2.5*8 months
$\mathbb{L}^{\circ}$			person	40.00	•	111,700		4,468,000	2*2.5*8 months
<u></u>		(Labor cost)*10%	set	1.00				1,787,200	
	Total						6,100,989	242,723,357	
	Per: one set						6,100,989	242,723,357	
	Per: two sets			-			12,201,979	485.446,715	

D: Days in demand; 240 days D=Ds+Dc+Dt Cantilever erection bridge Concrete work DS. Days in demand for setting and removal; 13 days Ds=D=0.25W+0.125H;

Local (VN.D)

129891

4,849 4,855 4,881 4,980

0.846 0.109 0.035 0.010

Foreign(J.YEN)

Distribution of tower crane cost (2 sets)

Ratio

Quantities 3595 m3 462.611 t 147.762 t 41.381 t

130052 130741

W: Weight of tower crane; 32 t

Reinforcement steel work PC Cable work (12T12.7) PC Cable work (7T12.7)

H: Height of tower crane; 40m

Dt: Transportation days; 4 days

Dc: Days in demand for pier head and cantilever

erection work; 223 days

Tower crane cost
Per: one set

																1								
	Remarks		Process cost - 357	2000	Process cost - 538	Equipment - 96	Equipment - 96	Equipment - 50	8*6*2.5	8*2*2.5														
unt	Local	(VN. U)	136 510 400	20.62.262.4	55,353,757	16,920,000	4,590,000	43,240,000	13,404,000	4,468,000	1 787 200	276 273 357			276,273,357	552,546,715								
Amount	Foreign	(J.YEN)	125.174	1,70,77	478,455	3.530.640	957.780	770.800				6 477 8 10	24.0.77 4.0		6.472.849	12 945 699		- 1	Local (VN.D)	145,675	145,855	146,628	149 593	
Unit Price	Local	(C N.S)	Ŭ.	136,510,400	55.353.757	1	,			111 700	201111							st (2 sets)	Foreign(J.YEN	5.141	5.147	5,174		
5	Forejon	CNOV I	(3.1 ELV)	735,174	478 455	10,100	10,100	19,790	4,100									ver crane co	Ratio	0.8460	0.1090	0 03 50		0.0100
	Seithire. C	Cualities		1.00	001	00.1	188.00	51.00	188.00	120.00	40.00	1.00						Distribution of tower crane cost (2 sets)	Ouantities	3595 m3	462 611 1	+ 677 761	14/107	41.381 t
				to	120	Set	day	day	day	person	person	set						Distr	1 7	1-6	A STORY	WICK TO S	12112.13	7T12.7)
		Standard				r crane	(Operating time)	(Preparation time)	100KVA			(Labor cost)*10%							rd notivers man firm	Californi erecti	CONCIETE WOLK	Keintorcement steet	PC Cable work (12112.1)	PC Cable work (7T1
		Description			Tower crane foundation work	Setting and removal of Tower crane	Tower crane	Tower crane	Generator	Mechanical	Plectrician	Miscellaneous expenses	ואוופרטיומוורסמם מעל	Totai		Per: one set	Dor: two core	Ter. two sees						
		Š				7	m	4	<u> </u> '^	2	-	lo	٥				_				; - ; -			. :

Track way work for erection girder Per. 10m

rectamine)	66,228	•						Per: 1 m
	662,282	•						Total
	6,557	•	1	1	1.00	set	(sum of above)*1.0%	Miscellaneous expenses
0.9*2.5	181,350	J	80,600	l	2.25	person		Common labor
0.9*2.5	382,725	ı	170,100	1	2.25	person		
0.2*2.5	91,650		183,300	-	0.50	person		·
	(VN. D)	(J.YEN)	(VN. D)	(J.YEN)			:	
Remarks	Locai		Local	Foreign	Quantities	Chrit	Standard	Description
	Amount	Am	Unit Price	Unit				

Equipment depreciable value for erection work by erection girder <u>Per: one set</u>

					Chirt	Unit Price	ΨA	Amount		
		Stondard	Ilmit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
ġ	Description	לופוולמו			(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
				4,	000		003 222 7	:	D = 168 - Fourinment - 85	
-	Frection girder	30 <l<35< td=""><td>day</td><td>168</td><td>78,200</td><td>,</td><td>4,727,000</td><td></td><td>מים יויים וויים /td><td></td></l<35<>	day	168	78,200	,	4,727,000		מים יויים וויים	
۰   ۰	Girder cuspension commen	30 ton type	day	336	22,100	•	7,425,600		2 * D; Equipment - 86	
۱,	The state of the s	30 400	700	891	15 700	,	2,637,600	•	D=168, Equipment - 87	
ń	Cirde side loading equipment	30 tOn type	CG.	3	000,000		000 1000		D=168 Equipment - 88	
4	Girder drawing out equipmen	30ton type	day	168	15,900	-	2,0/1,200		20, 100,100,100,100	
l,	Tool for prophon		dav	168	5,570	•	935,760	•	D=168,Equipment - 89	
<b>.</b>	I OOI TOI CIECTION				0000		020 000		(OOL/L/**)	
٧	Track way facility	30 kg/m rail etc	day	403	2,090	•	047,270		(A) (A) (A)	
. .	Micaellanonic evices	(sum of above)*1%	set	,		,	192,500	1		
,	IVIISCEITARICOUS CAPCITISCS	or (Store to time)					10 447 530	•		
	Total						000,244,71			
	Per: one set						19,442,530	, , , , , , , , , , , , , , , , , , ,		
	D · Davs in demand	[14.5+4*(number of span-1)+total weight of girder * 1/56]*1.6*2	span-1)+to	tal weight of g	girder * 1/56]*	1.6*2	Total weght of girder; 1440	der ; 1440		
		=[14.5+4*3+1440*1/561*1.6*2=167.1 168	561*1.6*2	=167.1 -	168		Number of span;4			
÷	1	r σ±/T σ±1)*0±5±/πιπ	nher of cn.	3 * 1 c=238	₹240		Ls: legth of one girder;33	irder;33		
	L : Track length in defination	1011) · 0 · 7 · ( 1 - 6.1 ) - 6.1	<u> </u>				)			

Main girder erection with erection girder Per :1 ton

		~~~			— <sub>T</sub>			 	
-	Remarks		1* 2.5	6*2.5	4*2.5				
Amount	Local	(VN. D)	458,250	2.551,500	806,000	152,630	3.968,380	66,140	
Amo	Foreign	(J.YEN)	1	-	•	,	_	•	
Unit Price	Local	(VN. D)	183,300	170,100	80,600				
Uni	Foreign	(J.YEN)	-	. 1	•				•
	Quantities		2.50	15.00	10.00	1.00			
	Unit		регѕоп	person	person	set			
	Standard					(labor cost) * 4%		60 ton/ day	
	Description	•	Foreman	2 Skilled labor	Common laboe	Miscellaneous expenses	Total	Per 1 ton = Total /60 ton/ day	
	S.		[	2	5	4			

Truck crane cost for assembling and disassembling of erection girder facility Per: one set

	-							_	7		T	٦		T	٦	_	1	
-	D 2.22.2.100	Kemarks		7 days * T; T = 4.44;	Equiment - 16	1*2*2*T; T = 3.62;	Equipment - 35		2 tirries 0.0 2									
lunc	ì	Local	(VN. D)		2,113,440		738.480	007 000	680,400	869 61	41,040		3,579,948	2		3 579 948	2000	
Amount		Foreign	(J.YEN)		227.506		12 308	22012	1		1		720 814	T10,504		220.914	1 10,207	
I Inst Drice	77117	Local	5 25	1	000 89		×1 000	200,10	170.100									
I Inch		Foreign	CIVEN	(7. 1 514)	7 320	0476	V20	ACO.	•						-			
		Onantities	,		31.00	00.10	0 7 7	4.40	4.00	2	1.00							
		Timit				nr	•	ij	20202	DCI SOIT	set							
		Constitution of	Standard			hydraulic 40-45 ton		4-4.5 ton			(Jahor cost) * 7%	(2002 1000)						
			Description			Truck crane		Tanck	TIMEN	Skilled labor	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Miscellancous expellaca		Total			Dor. one set	
			ď		[		1	_	.1		1.	_1	•		1			

Assembling and dissasembling of ercetion girder facility
Per one set

									_			_
	Remarks		12 days * 1 * 2.5	12 days * 5.5 * 2.5	12 days * 3.5* 2.5		7 day*T;T=4.44;	Equipment - 16				
ount .	Local	(VN. D)	5,499,000	28,066,500	8,463,000	1,681,140		2,113,440		45,823,080		45 823 080
Атпопп	Foreign	(J.YEN)	ı		•	-		227,506		227,506		227.506
Unit Price	Local	(VN. D)	183,300	170,100	80,600			68,000				
Chit	Foreign	(J.YEN)	,		ı	1		7,320				
	Quantities		30.00	165.00	105.00	1.00		31.08				
	Unit		person	person	ретѕоп	set		hr	•			
	Standard					(labor cost) * 4%					-	
	Description		Foreman	Skilled labor	Common labor	Miscellaneous expenses		Truck crane cost		Total		Per cone set
	ő		-	7	ιú	7		'n			٠	

Movement of erection girder frame Per: 1 time (4 days)

					_			_		-,		_				_		_		
		Remarks			A O * O C * * * * * * *	4 days 0.2 2.3	A dove * 1 6 * 0 5	0:1 2:45	**************************************	4 0ays 1.0 4.1										
	Amount	i ocal	Local	(V.N. D)	000,000	366,600	7 771 600	7,771,000	000,000	200,000	0,0	135,768	070 070	007,740,4			0,000	4,047,768		
•	AR	10:01	roreign	(VEN)	, , , , ,	•		1		•		,		1				•		
_	Unit Price		Local	6	(7:17)	183 300		170.100		20,600	20,00									
	L		Foreign		(J. YEIN)			ı		-										
			Onsptities	2	-	00 6	4.00	16.00	10.00	10.00	00.01		00.1						-	
			1	5			person		person		person		Set				_			
			7	Standard									(labor cost) * 4%							
				Description			Boreman	1 Of Citient	Chilled labor	S SKIIICH IAUGI	C. Lohor	Common labor	Missellaneous expenses	IVIISCELIAIICOUS CAPATICOS	Total	1007			Dor. 1 time	ביין ייין ייין
				ò Z			۲	1	٢	ኅ	١.		١-	1						

Anchor work for erection girder work Per one place

					Unit	Unit Price	Am	Amount		
Z	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
}					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
-	Regular sleeper	2.1*0.14*0.2m	m3	2.47	1	1,272,727	•	3,143,636	Material -133	<u> </u>
-	Wire rope	Φ 16	E	210.00		20,000	-	4,200,000	Material - 32	
m	Supplemental materials	(sum of above) *1%	set	1.00	1	-	1	73,436		
m	Foreman		регѕоп	7.00	'	183,300	•	1,283,100	14*0.2*2.5	
-	Skilled labor		person	14.00	•	170,100	•	2,381,400	14*0.4*2.5	7
'n	Common labor		регѕоп	32.20	,	80,600	-	2,595,320	14*0.9*2.5	
9	Miscellaneous expenses	(labor cost) * 4%	set	1.00			1	250,393		T
							,			Т
	Total						,	13,927,285		<u> </u>
							,			
	Per: one place=total/14	total/14					-	904,806		7

lota:	8	10	12	77
Draw out anchor	2	2	2	2
Erection girder anchor	9	8	10	12
No of span		2	3	7

Transportation of erection girder facility

Pet: 1 set

								,	-
					l'ini!	Unit Price	Amount	ount	
			1 1	Oriontities	Foreign	Local	Foreign	Local	Remarks
Š.	Description	Standard	ווווס	Chainnes	L	2 25	(I VEN)	(VN. D)	
					(J. X EIN)	(414: 12)			9 trucks * 2 * 3.5 hr;
			•	000	0100	67.000	139.230	4,221,000	Equipment - 34
, ,	Truck	1] ton	Ĭ	00.50		220,10			9 trucks * 3.5;
				23.60	3.080	55 000	97.020	1,732,500	Equipment - 18
,	Traink mane	hydraulic 15-16 ton.	μ	05.15				385 075 1	9 trucks * 2 * 3 5 * 1/8
4	liach ciaic		nerson	7.88	1	170,100	1	000,000,1	a committee
'n	Skilled labor		1000	00				53,616	
4	Miscellaneous expenses	(labor cost) * 4%	Set	1.00					
							016.766	7 247 504	
-				ļ			736,250	*OC'/*C'/	
ł	Total								
i							236,250	7,347,504	
	Per : 1 set								

Perevention work against overturning of main girder Per: Lgirder

			,	,			,			. ,	<b>-</b>				
	Remarks			Material - 132		0.2*2.5		a)		0.05*2.5			p)		
Amount	Local	(VN. D)		264,920	13,246	85,050	363,216	72,643		22,113	885	22,998	22,998		159.541
Am	Foreign	(J.YEN)		1	-	•	1		•	1	-	•.	•		•
Unit Price	Local	(VN. D)		1,324,600	-	170,100				170,100					
Unit	Foreign	(J.YEN)			-	-				•					
	Quantities			0.20	00.1	0.50				0.13	1.00	• • •			
	Chit			m3	set	person				регѕоп	set				-,-
	Standard				(sum of above) *5%						(labor cost) * 4%				-
	Description	•	(During transpostation)	Timber	Supplemental materials	Skilled labor	Subtotal	Per 1 girder=subtotal*1/5	(During setting girder)	Skilled labor	Miscellaneous expenses	Subtotal	Per 1 girder		Per:1 girder = $a$ )+b)
	ģ		*		2	3			*	5	9			-	

Transient placing of PC I girder Per: 1 girder

							,_			~~		т-		<b>-</b>		1	т		·		,-		1
	-	Remarks		Material -130	TO THE COURT		v (*v )	0.0	3 0*0 5		1.9*2.5			1	Process cost $-373(1)$								
4 mount	2000	Local	(VN. D)	163 610	010,001	46.361	301 000	223,173	1 218 275	2176121	382 850	000000	77.210	2 1 2 1	95,641			2.613.072		•	020 027	2,613,072	
4	TIN 7	Foreign	(J.YEN)		•	•		•					•		•			•				,	
***************************************	Unit rince	Local	(VN, D)		1,324,000			183,300	00.	1 /0,100	00300	90,000			05 641	110,600				_			
T T.		Foreign	/I VFN	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				1				,					•						
		Onantities	<b>Y</b>		0.35	,	1.00	1.25		7.75		4.75	00,	9. <b>.</b>	5								
		Thit			т3	١	set	nercon	2000	nerson		person		set		gırder							
		Oton dard	Startoard				(sum of above) *10%							(Jabor cost) * 4%	ı								
		•	o. Description		سان: الله الله الله الله الله الله الله الل	Imper	Supplemental materials		Foreman	(01,111, 1 1, 1, 0, m)	SKIIIED IADOI	Common labor	COMPINAL PROPE	Miscellaneous exnenses	ואוופרכזומוורסמש בעלמוואני	Prevention work			Total	1014			Per: 1 girder

Equipment depreciable value of fabrication work ( PC I girder ) Per one set ( PC I girder, L=33m)

					Unit	Unit Price	Amo	Amount	
ò	Description	Standard	Chir	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
									(A+D) * 2 set =294
	Tensioning jack	195 ton	set.day	294.00	2,300	-	676,200	•	Equipment - 54
:									(A+B) = 140;
7	Gantry crane	3.0 ton	set.day	140.00	2,850	3	399,000	•	Equipment -118
									L=186  m; $(L/100)*(A+B)$
က	Track way facility	30 kg / m	100m.day	260.00	2,090		543,400		= 260
4	Other instruments		day	137.00	24,600	•	3,370,200		A = 168; Equipment - 90
'n	Miscellaneous expenses	(sum of above)*1.5%	set	1.00		1	74,832		
	Total		,				5,063,632		
	Per: one set						5,063,632		
	A = [N/S + (S-1)/S] * 14 days = [36/4 + (4-1)/4] * 14	ys = [36/4 + (4-1)/4]		= 136.5 - 137		L: Length of track	rack		
	A: Days in demand					$L = \{(33+1) *$	$L = \{(33+1) * 2 + 5 + 10 * 2 \} * 2 \text{ tracks} = 186 \text{ m}$	racks = 186 m	

N: Number of fabrication girder; 36

S: Number of fabrication stand; 4

B: Gantry crane and track facility removal days; 3 D: Tensioning jack transportation days; 10

Equipment depreciable value of fabrication work (PC I girder)
Per :one set (PC I girder: L = 33m.)

					I Imit	Thit Drice	Amount	unt		
			# ;     	Onentities	Foreign	Local	Foreign	Local	Remarks	
Š	Description	Standard	Ē	Challings	TVENT	(C 70)	(I VEN)	(V. D.)		
					(J. Y.C.IV)	(414: 17)	)		(A+D) * 2 set = 264;	·
				00 770	2 200	. 1	607,200	•	Equipment - 54	
-	1 Tensioning jack	195n	set.day	00:407	2,200				(A+B) = 125;	
			-	00 301	2.850		356,250	_	Equipment -118	
4	Gantry crane	3.0 ton	Set. day	142.00					L = 186  m;	
			100	223.00	060 6		486,970	1	(L/100)*(A+B) = 233	
'n	Track way facility	30 kg / m	100m.day		27,500	,	3.001.200	•	A = 122; Equipment - 90	<sub>1</sub>
A	Other instruments		day	122.00	7,4,000		NTC 33			
٠,	T	%5  *(avode 30 m)	set	1.00			b0,//*			
n	Miscellaneous expenses	(Sull of About of Hine)						•		-r
							4.518.394			—
	Total									
							1 518 304	1		
	Per: one set									ı
		10/10/	101   VI#	2 122		I : Length of Hack	X			
	$A = DN/C + (C_1)/C + (14 \text{ days} = (24/3 + (3-1)/3) + (14 = 121)$	108 = [24/3 + (5-1)/3]	14 = 141			)	4	701		

A = [N/S + (S-1)/S] \* 14 days = [24/3 + (3-1)/3] \* 14 = 121.3

 $L = \{(33+1) * 2 + 5 + 10 * 2\} * 2 \text{ tracks} = 186 \text{ m}$ 

A: Days in demand
N: Number of fabrication girder; 24

S: Number of fabrication stand; 3
B: Gantry crane and track facility removal days; 3
D: Tensioning jack transportation days; 10

Track way work for gantry crane Per 2 tracks \* 100m

(labor cost) * 4%	
Miscellaneous expenses (labor cost) * 4%  Total  Per :2 tracks * 1m	Miscellaneous expenses  Total  Per :2 tracks * 1m

l of gantry crane Settin Per: J

5	
3	
Lemo	
ב	
₫	
200	set
ŝ	<u>~</u>
_	

					Chrit	Unit Price	Amount	unt	
٠,	6	Standard	Init	Ouantities	Foreign	Local	Foreign	Local	Remarks
ġ Ż	Describnon			,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
ĺ									3 days*T;T=4.44,
		15_16 ton	į	13.30	3.080	55,000	40,964	731,500	Equipment-18
	Truck crane	10101-01		300		170.100		1 063 125	25*25
7	Skilled labor		person	0.73		1,0,100		221100011	r ( )
٠	-		nerson	10.25	,	80,600	,	826,150	4.1 *2.5
٦	Common labor			8	•	111 700	•	558,500	2.0*2.5
4	Elictrican		DCISOIL	3				00 .11.	
8	5 Miscellaneous expenses	(labor cost) * 4%					1	12/,1/1.00	
-									
	Total						40,964	3,306,446	
							<del></del>		
							40.064	3 306 446	
	Por -1 set						1 ±0.5.0±	OFF,000.0	

zed breaker (1300 kg) Breaking Per: Ihr

73	-
Size	
=	
~′	
ō,	
Large	
=	
εá	
~	
=	
-	
۶.	
< with	
Ċ	
Ξ.	
ĭ	
-	
aking work	
ĕ٣	
=	~
×	-
ಡ	

Equipment operator   Derson   O.20   - 124,600   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3   O.3
scription         Standard         Unit         Quantities         Foreign           operator         person         0.20         -           liter         19.50         -           t         set         1.00         -           t         Back hoe         hr         1.00         2,560           nt         Large side breaker         day         0.18         10,860           Potal         set         1.00         -
Description         Standard         Unit         Quant           Equipment operator         person         liter         l           Fuel         liter         l           Lubricant oil         set         hr           Owning cost         Back hoe         hr           of Equipment         Large side breaker         day           Adjustment         set           Total         set
Description Standard  Equipment operator Puel Lubricant oil Owning cost Back hoe of Equipment Adjustment Total
Description Equipment operator Fuel Lubricant oil Owning cost of Equipment Adjustment Total
Equipme Fuel Lubricar Owning of Equip

Breaking work with Large - sized breaker (600-800 kg) Per: 1hr

								*****		
					Cnit	Unit Price	<b>A</b> E	Amount		
	•	family 100 P	Imit	Onantities	Foreign	Local	Foreign	Local	Remarks	
<u>ن</u>	Description	Standard	Š		(J VEN)	(C) N.S.	(J.YEN)	(VN. D)		
				300	1	003 101		24.920	Back hoe 0.6m3	
-	Dominant operator	-	person	0.20	•	000,4.71			, - ) · · · · · · ·	
_[	Equipment operator		1.400	10.50	1	3.273	,	63,824	Васк пое отошо	
7	Fuei		211	2000				101	%5	
1			cet cet	8.		•		1,11,0		
m	Lubricant oil									
		ç	į	1 00	2.560	•	2,560	•	1930*1.1+9370/4.0=4466	
4	Owning cost	Back noe		22.1	200					
. 7									1/t=0.18; t=880/160=5.5;	
٠.		7 Cont. Ch. 14	7	0.18	099.9		1,199	al l	Equipment - 8	
	of Equipment	Large Side Dicanel	Cay	2				65		
\ \	Adjustment		set	1.00				000 60		
,							3,700	72,000		
	Lota									

Concrete placing (with gantry crane) Per. 10m3

							 ~	 
	Remarks		0.3*2.5	2.3*2.5	1.7*2.5			
Amount	Local	(VN. D)	137,475	978,075	342,550	58,324	1,516,424	151,642
Am	Foreign	(J.YEN)	-	_	4	-		•
Unit Price	Local	(V.N. D)	183,300	170,100	80,600			
Unit	Foreign	(J.YEN)	ı	ŀ	-			
	Quantities		0.75	5.75	4.25			
	Umit	:	ретѕоп	person	регѕоп			
	Standard					(labor cost) * 4%		
	Description		Foreman	Skilled labor	Common labor	Miscellaneous expenses	Total	Per 1 m3
	Š.		_	7	3	4		

Temporary access road for transportation and erection Per 6 girder

	_			səc		_	T	_		1	T	_	٦	
		Remarks		1.6 days*24m2*2 cranes	W = 157  kg / m2									
+0110	Tipolit	Local	(AN D)	-				!		t				
¥		Foreign	(1.YEN)		54,528	171	040		CECULA	52,0,55		051.0	9,1/9	
	Unit Price	Local	(J.YEN) (VN. D)		•									
,	5	Foreign	(I.YEN)		710									
		Ouantities			76.80		1.00							
		Unit			wo day		set							
		Standard			:==20mm	1 2011111	(sum of above)*1%							
		Description			[1]	riooi piate	2 Miscellaneous expenses			Total			Por .1 girder	
		Ž	5		-	_	~							

Truck crane (120t) assembling and disassembling Per: 1 crane

		$\neg$				1									_	
	Remarks		1.0*2.5	1.8*2.5	1.4*2.5	0.6*2.5		2 times*T;T=4.44;	Equipment-17	T*2 times; T=3.65;	Equipment - 36	T*2 times;T=3.65;	Equipment - 37			
Amount	Local	(VN. D)	279,250	765,450	536,200	120,900	68,072		488,400		635,100		635,100	3,528,472		3,528,472
Am	Foreign	(J.YEN)	1	ı	E		1		31,258		24,966		23,287	115,611		79,511
Unit Price	Local	(VN. D)	111,700	170,100	153,200	80,600		÷	55,000		87,000		87,000			
Chit	Foreign	(J.YEN)		-	•	-			3,520		3,420		3,190			
	Quantities		2.50	4.50	3.50	1.50	1.00		8.88		7.30		7.30	-		
	Unit		person	person	person	person	set		ΙΊ		hr		Ę			
	Standard						(labor cost) * 4%		20-22 ton		32 ton		28 ton			
	Description		Mechanics	Skilled Jahor	Rioger	Common Jahor	Miscellaneous expenses		6 Truck crane		Trailer		Trailer	Total		Per: 1 crane
	ź		-	, ,	"	, 4	1		٠,	,	7		· cc			

Erection and setting of main girder (truck crane) Per: Égitder

					7.1		ΨA	A mount		_
	İ					Onit File		ı		
		7	1.	Onsontitres	Foreign	Local	Foreign	Local	Kemarks	
Description		Standard	5		(I VEN)	(C XX)	(J.YEN)	(VN. D)		—т
					7.7.7.6			301 000	1*0 5	
	1		Dercon	1.25	,	183,300		447,147		Т
	- 1		1000	900		170 100		1,701,000	8*2.5	
			person	10.00	_	2011011		757 503	A C*A	
	1		Toron C	625	ı	80,600	1	JUS,130	0.40	т
			100120					97 355		
0000		(labor cost) * 4%	set	- 80:	-			202417	+ + + + · ·	Υ-
Miscellaneous expelises	1	(1900) 5001)							2crane 1;1=4.44;	
				88 8	24 600	000.66	218,448	879,120	Eequipment - 15	- 1
		hydraulic 120 ton	111	20.0					,	
	1									T
	- [						218,448	3,410,350		
				-		:	:			Τ
							50 753	909 427		
100	۲	Dan . 1 minder - Total* 60/75					20,420	12.622		1
ב	1	ULAI UULEEN								

Wt: Setting weight of girder with 120 ton truck cranes; 225 ton/day Wg: Weight of one girder; 60 ton

Main girder erection (truck crane) Per: 6 girder

					Unit	Unit Price	Am	Amount	-
Ż	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
						(VN. D)	(J.YEN)	(VN. D)	
	Foreman		person	2.50	•	183,300	ī	458,250	1*2.5
7	Skilled labor		person	20.00	•	170,100	4	3,402,000	8*2.5
4	1		person	12.50	•	80,600		1,007,500	5*2.5
5	Miscellaneous expenses	(labor cost) * 4%	set	1.00			t	194,710	
									1.0 day*2crane*T;T=4.44
9	Truck crane	120 ton	br	8.88	24,600	99,000	218,448	879,120	; Eequipment - 15
	Total						218,448	5,941,580	
L	Per: 1 girder=total*60/360	tal*60/360					36,408	990,263	

Wt: Setting weight of girder with 120 ton truck cranes; 360 ton/day Wg: Weight of one girder; 60 ton

Transportation of main gider Per: Lgirder

				Γ								Γ	•	Γ	 Γ		
	Remarks		1*2.5	0.000	87.2.5	1 (31	577.5										
	Local	(VN. D)	458250		3.402.000	000	.007.200		194.710		-	V. 6500	5,062,460			1.349.989	
and .	Foreign	(J.YEN)			•		,						•			1	-
Chit Price	Local	(C NY)	103 200	100,000	170 100	1/0,100	80.600	200,000									
	Foreign	(I VEN)	(1,7,7,1)	•		•											
	Ouantities	ý		05.7	00.00	70.07	03 61	00.21		00.1							
	Limit	<b>.</b>		person		person		person		set							
	Ctondord	Stalinaru								(Jabor cost) * 4%							tal*60/225
	•	Description		Foreman	T Of Cilian	Chilled labor	SALING IGOO!	Common Jahor	CONTINUE DECO	Miscellaneous expenses	Miscerialicous constructions			Total			Per: 1 pirder-total*60/225
		o Z		-	-	c	1	•	•	1/	,				İ		

Wt: Setting weight of girder with 120 ton truck cranes; 225 ton/day Wg: Weight of one girder; 60 ton

Production cost of steel form (PC I Girder)
Per\_10m2

			··				,				,									
	Remarks		Material - 1	Material - 3		Material - 4	Material - 6	Material - 10		(946.4-871.0)x0.7		12 person/ton * 0.9464								
umt	Local	(VN. D)	•	-		433,860	14,782	-	448,642	(42,715)	405927	915,616	81,185	63,800		1.144,520		326,381		2,937,429
Amount	Foreign	(J.YEN)	25,874	5,076		1	1	2,808	33,758	(1,003)	32,755	•	6,551	ı		. •		4,913		44,219
Unit Price	Local	(V.N. D)	-	1		4,200	3,890	į	ı	608	1	80,600		2,900		•				
Unit	Foreign	(J.YEN)	37	45		•	-	801	,	61			,	,				•		
	Quantities		06.669	112.80		103.30	3.80	26.00	946.40	52.80		11.36	1.00	22.00		1.00		1.00		
	Unit		kg	kg		kg	kg	Зy		ķŝ	kg	person	set	m2		set	-	set		
	Standard		3.2mm ~ 9.0mm	FB 4.5x6 $\sim 9x10$	L50x50x6 ~	75x75x9	RB f 9 ~ 19mm	SGP 25A ~ 50A					(material)*20%		(direct labor	cost)*125%	Jo ums)	above)*12.5%	2	
	Description		Steel plate	Shaped steel			-	Steel pipe	Sub total	Subtraction of scrap	Balance total	Direct labor cost	Sub material	Painting cost		Secondary labor cost		Miscellaneous expenses		Total
	Š		1	2		m	4	5	L, _,	9		7	8	6		10			:	

Install forms and strip form (Steel form) Per: 10m2

ļ					J. Janie	I lanit Daige	Απ	Amount		
ĺ					5	LFILE				
		Ctolidard	Imit	Ouantifies	Foreign	Local	Foreign	Local	Remarks	
Š	Description	Stallualu		<b>Y</b>	CLVEN	(U NV)	(J.YEN)	(VN. D)		_
				0	(	162 300		91 650	0.2*2.5	
-	T. Caronion		person	0.50	1	102,500			4 644	Γ
-	Forcinan			5		111 700	•	167,550	0.6*2.5	
c	Shuttering camenter		person	00.1	1	20,411			440 6	Γ
4	בוותנים יוופ במו לבווים:			00 -		80.600		009.08	0.4+2.5	
•	3 Common Jahor		person	1.00	_	22252		0000		_
1		/03#\	+0.0	1 00	1	•		066,91		٦
ý	6 Miscellaneous expenses	(Sum of above) 376	100					167.355		. , <del>.</del>
	Total							27,622		T
	-			_						Γ
								35,679		
	Per: 1 m2									]

Production cost and depreciable value of steel form (PC I Girder)
Per. 10m2

	Remarks			Process cost - 383 (1)					A	В
Amount	Local	(VN. D)		2,937,429	261,300	31,987		3,230,716	87,455	359
Am	Foreign	(J.YEN)		44,219	-	•	•	44,219	491	5
Unit Price	Local	(VN. D)		2,937,429	300	•				
Unit	Foreign	(J.YEN)		44,219	-	ì				
	Quantities			1.00	871.00	1.00				
	Unit			set	kg	set				
	Standard					(sum of above) *1%			st /36)*4*1/10	36)*4*1/10*1/100
	Description		Production cost and	depreciable value	Cost of transportation	Supplemental expenses		Total	Per: 1 m2 = (Total cost /36)*4*1/10	Per: 1 m2 = $(Total cost /36)*4*1/10*1/100$
	ģ			-	2	3				

Depreciable value of form per 1.0 m2 = (Total cost / frequency of use) \* set number of forms \* 1 / 10 = (total cost / 36) \* 4 \* 1 / 10 = (total cost / 36) \* 4 \* 1 / 10 \* 1/100

PC I Girder form work (steel form) Per. 1 m2

_			_				1	y		Т		T		7		7	
		Remarks			Aof	Process cost - 384 (1)	502 (7)	Process cost - 303 (2)									
	Amount	Local		(VN. D)		87,455	VII. 2 C	35,6/9			ACE CCX	173,134			V C 1 C C 1	145,134	
_	Ame	Foreign	2	(1.YEN)		401		ı			***	491				164	
	I init Price	[oca		(Q.N.A.)	,	07 155	0.4.10	35.679									
	- Imi	Coreign		(1 VEN)	( )		44										
		30,77		,			00.	-	7.50					ļ <u>.</u>			
		;		)			ш2	,	1								
		•	Otendard	Standard			sle value						_		_		-
				реготриоп			the transfer and denremable value	רוסמתכנוטון כספר מווח חבלורבות	Install forms and strin form	דוופתיו דמיווים מווה מהי			Total				Der: 1 m2
			;	è Ż			•		r	1							

(Numbers of girder: 24; form 3 set)

PC I Girder form work (steel form) Per: 1 m2

					Unit	Unit Price	An	Amount	
ġ	Description	Standard	Unit	Quantities	Foreign		Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	Production cost and								B of Process
_	depreciable value		m2	00.1	S	359	5	359	cost - 384 (1)
2	Install forms and strip form		m2	1.00	1	35,679	1	35,679	Process cost - 383 (2)
	Total						5	36,038	
	Per: 1 m2						5	36,038	

Reinforcement steel work (PC I Girder) Per. Lton

Bottom plate subcontract fabrication cost Per: 10 m (with of girder bottom B=0.65 m)

			<u>-</u>				p-				· r · · · · ·	·			· -	_		·		··		ı —	Γ	7
	Remarks		B/0.5*507.1 : Material-1	D. C. *15 C. Moverial 3	B/U.5" / 3.3; INIAICITAL-2		Ē	B/0.5*2.7; Material-7		B/0.5*(816.5-755.7)*0.7			0	nerson/ton*B/0.5*0.8165			B/0.5*14.0							
Amount	Local	(VN. D)	1		•		1,260,168	13,478	1.273.646	(44 484)	891 666 1			0.50 0.00 1	1,044,17	245,833	52.780		1277774		178 471	820 908 9	VC2 005	±70,00+
Am	Foreign	(I.YEN)	24 202	74,372	4,440		•		28 832	(800)	20 380	700,02				5,678					020	4,430	30,323	3,835
Thit Price	Local	25	/	-	1		4.200	3.840	2	500	100	•			80,600	•	000	2,900						
I Init	Toreion	(Y VEN)	( T T T T T T T T T T T T T T T T T T T	37	45					•	×	F			!	1								
	,	Quantities		659.23	79.86		70000	19.000	3.31		55.33				10.61	,	20.1	18.20		1.00		1.00		
	;			Х Я	7.5	50	P	χ. Σ	85 85		kg			19	Derson	!	Set	m <sub>2</sub>		set		set		
	•	Standard		6-16mm	37*7G3	LDO OGJ	L50x50x6~	02-03-0	RB o 15mm							0000	(material)720%		direct labor	cost)*125%	Jo mns)	above)*12.5%		
		Description		Oten mote	Sieci piate	Shaped steel			#	Sub total	Subtraction of scrap	Balance total				-+	Sub material	Painting cost		Secondary labor cost		Miscellaneous expenses	Total	Per 1 m
		Š		-	-	(1		m	4		9				t		00	6		10				

Main girder fabrication stand (steel form)
Per: 10 m (with of girder bottom B=0.65 m)

					##I	Init Drice	Amo	Amount	
								1	Demarks
2	Description	Standard	Chit	Quantities	Foreign	Local	roreign	Local	Inclinating
2				:	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
1		2 16.000		10.00	3 833	430.624	38,325	4,306,238	process cost - 385
_	Bottom plate	0-1011111		200		1 224 600		1 308 705	B/0 5*0.7 · Material - 132
2	Timber	-	m3	0.99	,	1,524,000		201,000,	D/0 5#3 0 : Material 100
-	Cakelo etono		m3	2.60	1	63,000		103,600	103,600 D/0.3 2.0 , Material = 103
٦	CODDIC STORIC			00			1.916	288,937	
4	Supplemental expenses	(sum of above) 75%	SCI SCI	1.00			10.01	003 630 3	
1	Sub total						147,741	0,00,000	
			מטבפע	0.05	1	183,300	,	45,825	0.1*2.5
n	Foreman		100130			000		111 700	5 C*P U
4	Chaittenno capenter		person	1.00	1	111,/00		111,100	
ا	Silutioning capenics		20000	05 6		111.700	•	279,250	1.0*2.5
_	Welder		Delacii	200		00000		000 908	4.0*2.5
∞	Common labor		person	10.00	1	80,000	r	355 676	
	Cub total						1	1,242,17	
	מתה המוני						40.241	7.310,455	
	Total						100 001	24 055 540	
	Per: 1 Fabri	Per: 1 Fabrication stand=total*(gird	girder leng	ler length+1.0)/10			120,051	740,000,47	

Girder length = 33.0 m

rehabilitation of fabrication stand Per: 1m2

				Unit	Price	Amc	ount		
Description	Standard	Chit.	Quantities	Foreign	Local	Foreign	Local	Remarks	
•				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		<u>.</u> 
arpenter		person	0.25	•	111,700		27,925	0.1*2.5	_
ł	(sum of above) * 4%	set	1.00			-	1,117		
Total						1	29,042		
Per: 1 Fabricat	tion stand=total* {0.6	5*(33+1)}				•	641,828		7
	40. Description  1 Carpenter  2 Miscellaneous expenses  Total  Per: 1 Fabrical	Description Standard  Larpenter  Aiscellaneous expenses (sum of above) * 4%  Total  Per: 1 Fabrication stand=total* {0.6	Standard  (sum of above) * 4%  (sum of above) * 4%  ication stand=total* {0.65*	Standard Unit Quant (sum of above) * 4% set (sum of above) * 4% set ication stand=total* {0.65*(33+1)}	Standard   Unit   Quantities   Foreign	Standard Unit Process   Foreign   Unit Frace	Standard   Unit Price   Continue   Foreign   Local   Foreign   Local   Foreign   (J.YEN)   (J.YEN)   (J.YEN)     (Sum of above) * 4%   Set   1.00   -	Standard   Unit Quantities Foreign   Local Foreign   Local   Foreign   Local   Foreign   Local   Foreign   Local   Foreign   Local   Foreign   Local   Foreign   Local   (J.YEN)   (VN. D)   (J.YEN)   (VN. D)   (J.YEN)   (VN. D)   (J.YEN)   (VN. D)   (J.YEN)   (VN. D)   (J.YEN)   (VN. D)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YEN)   (J.YE	Standard         Unit Price         Constitution stand=total* {0.65*(33+1)}         Foreign Local         I.1.700         I.3.702         I.3.702         I.3.702         I.3.702         I.3.17         I.3.17         II.3.17         II.3.18         <

PROCESS COST - 388

Steel rib material fabrication cost by subcontract for cantilever form <u>Per. Iton</u>

·				1	Υ-	r		r-	7-			r		ι-	-	-		Υ-	-			ר
Remarks			Material - 11	Martin 20	Maichal - 77	Material - 36	Material - 37	Motorio 25	Material - 23	Material - 26	Material - 27	iviateliai – E.	8.0*2.5									
unt	Local	(VN. D)	1			•	•			•		1	1.612,000	000 321 0	2,1/6,200	568,230		00, 720.	4,356,430	•	020 230 0	4,500,450
Amount	Foreign	(J.YEN)	25235	2000:	12,036	1,240	8 595	2,50	017	702	V	74	,		•	7,212			55,290		000 5	087,00
Unit Price	Local	(NN. D)			•	1			1			•	80.600	200,00								
Unit	Foreign	(LYEN)	70	447	51	31	11	3	54	54		54		•	•							
	Ouantities	y	0000	00.010	236.00	40.00	200	191.00	4.00	13.00	20.5	8	0000	20.02	1.00	100						
	Unit			K So	χ. Θ	1,0	Sa.	κg	ķя	120	Ş	R P		person	set	ā	1					
	Standard			100x100x3.2	150x50x20x3.2	50.50.5	OVOCYOC	50~90×4.5	25 A	*000	SUA	32A			(Jabor cost ) * 135%	/05/# (************************************	(SULL OF ADOVE) 1270					
		Description		Steel square pipe	I jobt gange chaned steel	Digiti Bango anabar area.	Angle steel	Steel plate	Carbon steel nile	כמוסטו פוכבו ביוב	Carbon steel pile	Corton cteel Dile	Caliboli steel pine	Common labor	O Secondary labor cost	Secondary Japon cost	(0) Miscellaneous expenses		To+01	1 0441		Per: 1 ton
	No.				c	7	3	4	¥		9	,		∞	0		2					

Steel rib material fabrication cost for cantilever form Per. Iton

					·. 14		tel. Ow A			
						Unit Price	NIC.	Julia		
	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
o Z		3			(1 YEN)	(VN. D)	(I.YEN)	(VN. D)		
				-	000 33	4 256 430	196.25	4 356 430	Process cost - 388	
r	Fabrication cost		ton	00.1	02,00	4,000,400		,	Transly 11 ton.	
									1156 11 1011,	
Ċ	Transcription		ton	1.00	1,080	22,990	1,080	22,990	Truck with crane	
ų	1 Falls portrainon							701 107		
۳,	Miscellaneous expenses	(sum of above) * 1%	set	1.00	564	43,794	264	43,734		
١	וועומברוושוינסמים כארמים ביו	/=								
									4	
•	Company of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the		tot.	1 00	5.529		(5,529)		10 % of steel material cost	
4	4 Subtraction of scrap									
	Total						51,404	4,473,714		
	10(4)									
							51 404	4 423 214		
	Per: 1 ton						7,17			

Outer form fabrication (metal form) for cantilever Per: 10 m2

					Ť		-	Т		Т	_		-	т		Τ	7		ı
	Remarks		Process cost - 389				0.0*0 A	6.2.2.0	0.9*2.5	0 047	1.4*2.5								
unt	Local	(VN. D)	1,680,821			33,616	039 10	91,630	251.325		28,210	17077	14,04/		2.100.470			22,895,125	
Amount	Foreign	(J.YEN)	19,534	27 003	200,72	932		•	r		•		L		47.548			518,279	
Unit Price	Local	(VN. D)	4,423,214		'		00000,	183,300	111 700	20,111	80,600								
Unit	Foreign	(J.YEN)	51,404	ן י	/2/			ı			1								
	Ouantities	· · · · · · · · · · · · · · · · · · ·	0.38		172.50	1 00		0.50	300	6.4.7	0.35	200	1.00					5	1
	Unit		Ę		day	s.p.t	3	person		person	uostaa	10013	set					100 - 4	
	Standard				orm orm	/// * (0/100 of 0 mm/s) * 30/	(Sunt of accept)						(labor cost) * 4%					2 T-4-17-4-1710 : 8 A = 100 m <sup>2</sup>	2 . 7 . 7
	Decomption	Condition	7.1	radification cost	Depreciable value of metal form	2[0]-040	Supplemental materials	Loreman	Oscillar	Carpenter	0	Common labor	Miscellaneous expenses			Total		£   4   7   7   7   7   7   7   7   7   7	- Les auc Les
		j Ž	1-		2	,	า	5	,	Ý		٥	_		†			†	•

Outer form setting and removal work for cantilever Per:  $10\,\mathrm{m2}$ 

			$\neg$	_	_	_	 -	 _
	Remarks		0.3*2.5	2.5*2.5	1.1*2.5			
Amount	Local	(VN. D)	137,475	698,125	221,650	10,573	1,067,823	106,782
Am		(J.YEN)	•	ı	P		1	•
Unit Price	Local	(VN. D)	183,300	111,700	80,600		,	
Unit	Foreign	(J.YEN)		•	1			
	Ouantities		0.75	6.25	2.75	1.00		
	Unit	•	person	person	ретѕоп	set		
	Standard					(labor cost) * 1%		
	Description		Foreman	Camenter	Common labor	Miscellaneous expenses	Total	per: 1 m2
				, ,	1 ~	4		

Inner form fabrication setting and removal work for cantilever <u>Per: 10 m2</u>

_					_	_		μ.		-		r	_	Γ-		r-		-	_	
		Remarks			0.5*2.5	U (#C C	5.372.3	4 0 % 7 0	C-7+4-7											
	Alionii.	Local	(4.14.5)	(V.N.D)	229,125		921,525		483,600		163,425 1				1.797.675			671 01.	1/9,/08	
*		Foreign	*****	(J.YEN)			•		1						•				•	
	Unit Price	Local		(C.X.S.	183 300	200,001	111 700	00/111	009 08	200,00										
		Foreign	١	CLYEN	, , ,	1		•		ı										
		Ougatities	Cuantilities			7.7	200	C7.8		20.0		200.1								
			100			Derson		person		Derson		set								
		,	Standard									(19hor cost) * 10%	(igool cool)							
			Decomption			1	roreman	, com 400	Carpenier	1 1-1 1	Common labor	11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	Miscellaneous expenses			Total	10141			per: 1 m2
	-			<u> </u>		-		   	7	,	<u>-</u>	Í.	4	-			4	_	-	

Inner form fabrication for cantilever Per: 10 m2

		1	1	·			T	1			-т	-г		
	Remarks		(Material - 130)*0.8	(Material - 132)*0.7			0.1*2.5	1.5*2.5	1.0*2.5					
Amount	Local	(VN. D)	285,040	305,983		88,653	45,825	418,875	201,500	66,620		1,412,496	-	75,333
Am	Foreign	(J.YEN)	1	•			_	•	-			•		•
Unit Price	Local	(VN. D)	40,720	927,220			183,300	111,700	80,600					
Umit	Foreign	(J.YEN)	1	•			1	ı	-					·
	Quantities	-	7.00	. 0.33		1.00	0.25	3.75	2.50	1.00				1*(3-1)} * 1/10
	Unit		each	£m3		set	person	person	person	set				*0.1*(3-1)
	Standard		900x1800x12		(sum of above) *	15%				(labor cost) * 4%				Per: 1 m2 = $\{ Total^*1/3 + Total^*0.$
	Description		Plywood panel	Timber		Supplemental materials	Foreman	Carpenter	Common labor	Miscellaneous expenses		Total		Per: 1 m2
	9			7		<u>.</u> س	4	S	9	7	Γ			

Inner form setting and removal work for cantilever Per: 10 m2

							-		<u>T</u>	
	Remarks		0.3*2.5	2.5*2.5	2.0*2.5					
Amount	Local	(VN. D)	137,475	698,125	403,000	123,860		1,362,460		136,246
Am	Foreign	(J.YEN)	-	•	•			•		•
Unit Price	Local	(VN. D)	183,300	111,700	80,600					
Uni	Foreign	(J.YEN)	-	•	,					
	Quantities	,	0.75	6.25	5.00	1.00				
	Cnit		person	person	person	set				
	Standard					(labor cost) * 4%				
	Description		Foreman	Carpenter	Common labor	Miscellaneous expenses		Total		per: 1 m2
	o Z			2	m	4				

Scaffolding for setting and removal of branket Per. 100 multiplied m2

			S/	s/s	ys		)*0.3	1)*0.3							:061	.91	:0/210;	. 75				
	Remarks		8.8*10days	2.0*10 days	7.9*10 days	0.51*10	(Material -159)*0.3	(Material -160)*0.3	2.4*10		1.8*2.5	6.9*2.5	8.8*2.5		1/T; T=690/190;	Equipment - 91	0.28xT; T=1040/210;	Equipment - 75				
unt	Local	(VN. D)	, -	- 10	1	•	_	1		_	824,850	2,642,700	1,773,200	209,630		84,560		166,800		5,701,740		57,017
Amount	Foreign	(J.YEN)	2,520	1,056	4,158	800	7,776	3,760	790	3,050	•	•	-	•	1	6,132		1,821		31,339		313
Unit Price	Local	(VN. D)	1	-		•	•	•	•		183,300	153,200	80,600	1		302,000		120,000				
Unit	Foreign	(J.YEN)	02	16	63	4	324	47.	61		1	ı	1			21,900		1,310				
	Quantities		36.00	00.99	00.99	200.00	24.00	80.00	14.00	1.00	4.50	17.25	22.00	1.00		0.28		1.39				
	Unit		each	each	each	Έ	each	each	each	set	person	person	person	set		day		ħ				
	Standard				1829×500	ф 48.6				(sum of above) * 15%				labor cost *4%		25 Ton		sd001			-	
	Description	•	Frame	Brace	Steel flat frame	Round pipe	Jack base	Clamp	Stanchion	Supplemental materials	Foreman	Rigger	Common labor	Miscellaneous expenses		13 Barge with crane		14 Tug boat	\$ 1 m	Total		Per: 1 multiplied m2
	ģ.		1	2 8	3 S	4	S.	9	7 · S	8	9 F	10 R	1-	12 N		13 E		14	_		- - -	

Inner timbering for cantilever Per: 100 air m3

		·····Y		Т				1-		т		Т				7-	-7-			Т	-1		٦
	Remarks		8 8*11 5 dave	2(22 2:1: 2:0	2.0*11.5 days	(Material -159)*0.3	0.51*11.5	C (*()) L L	(Material -100)"U.5	Material -132		V (**:	1.7.3	4.2*2.5	4 0*7 5	1 (1)	0.772.5						
unt	Local	(VN. D)			f	1			1	3,179,040	659 851	2000	458,250	1,608,600	005 328	00100	195,475	124,345			6.570,962	65710	21/10
Amount	Foreign	(J.YEN)	1 963	coo't	756	30,456	300	260	2,162	t	1 781	10,11	-	-				•			37,408	777	+/n
Unit Price	Local	(VN. D)			ı	•				1.324,600			183,300	153,200	007.00	20,000	111,700	•					
Cm	Foreign	(I.YEN)		\ \ \ \	18	324	1		47	,			•	1			i						
	Ouantities			23.00	42.00	04 00	20.1	/8.00	46.00	2.40	,	1.00	2.50	10.50	0.00	10.50	1.75	1 00	200				
	Init			each	each	4000	Cacii	ш	each	7.	2	set	person	norcon	person	person	person	ţ	361				
	Standard	סנפווקפוס						Φ 48.6				(sum of above) * 5%						1-1-0-00+ *10/	Labor cost : 470				
		Describnon		Frame	, imit		Jack base	Round pipe		-	1 mber	Supplemental materials	Description	rordinali	Rigger	Common labor	Corrector	Carpence	Miscellaneous expenses		- 1	I OCAI	Daniel Air m2
	,	ė Ž		-		7	3	4	v	<u>\</u>	اء	7	٥		6	10	-		12	L			

Curing of concrete work for cantilever Per 100 m2

:				Unit	Unit Price	Am	Amount	
	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
-				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
		kg	10.00	450		4,500	_	Material - 171
		each	6.00	1	1,500	-	000'6	(Material -211)*0.05
L		m2	110.00	41	,	4,510	_	(Material -173)*0.10
	Φ 19mm	ε	45.00	•	200	•	9,000	(Material -174)*0.05
్	(sum of above) * 3%	set	1.00			270	540	
		person	7.50	-	80,600		604,500	3.0*2.5
						9,280	623,040	
						93	6,230	

Curing of concrete work for pier head and side span Per: 100 m2

		,					· 	_		·	 	
	Remarks		Material - 171	(Material -211)*0.05	(Material -173)*0.10	(Material -174)*0.05		1.5*2.5				
Amount	Local	(VN. D)		000'6	•	000'6	540	302,250		320,790	3,208	
Ame	Foreign	(J.YEN)	4,500	•	4,510	•	270	•		9,280	93	
Unit Price	Local	(VN. D)	1	1,500	,	200		80,600				
	Foreign	<u> </u>	L		41	'		,				
	Quantities	,	10.00	00'9	110.00	45.00	1.00	3.75				
_	Unit		장	each	m2	E	set	person				
	Standard	-				ф 19mm	(sum of above) * 3%					
	Description		Curing compound	Cover cheet	Curino mat	Water hose	Supplemental materials	Common labor		Total	Per: 1 m2	
	Ź	}	-		1 4	74	-	۶	$\sqrt{}$			•

Curing of concrete for substructure concrete and others Per. 10m3

		3.978				•			Per: 1 m3	
Т										
		39,776	ı						Total	
T		11,566	ı	ı	1	1.00	set	labor cost *41%	2 Miscellaneous expenses	7
	1.5*2.5	28,210		80,600	r	0.35	person		Common labor	-
		(VN. D)	(J.YEN)	(VN. D)	(J.YEN)		·		•	
	Remarks	Local	Foreign	Local	Foreign	Quantities	Cuit	Standard	Description	ů. Ž
		Amount	An	Unit Price	Uni					

Main girder construction joint roughening work
Per: 1.0 m2

					*. L		**	+		-
						Omit Price	H W	Altionin		
Z	Description	Standard	Unit	Quantities	Foreign	Local		Ĺocal	Remarks	
}					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
-	Skilled labor		person	0.88	-	170,100	1	148,838	0.35*2.5	
						-				
										1
	Total						-	148,838		
										1
	Per: 1 m2						r	148,838		

PROCESS COST - 400

Longitudinal pre-stressing steel setting work (SWPR 7B;12T12.7) (Cantilever erection bridge) Per. 1ton

					Unit Price	An	Amount	
Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	12 T 12.7	ton	1.06	230,000		243,800	1	1+K; K=+0.06; Material - 203
	ф 65	٤	108	308	ŧ	33,264	·	1+K; K=+0.08, Material - 161
Reinforcing bar	D 16	ķg	84	23	-	1,932	•	Material - 29
Supplemental materials	(sum of above)*1%	set	1	-		-	•	
		person	11	•	183,300	ı	2,016,300	4.4*2.5
		person	58.25	•	170,100	•	9,908,325	23.3*2.5
Common labor		регѕоп	43.25		80,600	-	3,485,950	17.3*2.5
Miscellaneous expenses	(labor cost) * 4%	set	1			•	616,423	
Tower crane cost		ton	-	5,174	146,628	5,174	146,628	Process cost - 364 (2)
Total						284,170	16,173,626	
per : 1 kg						- 284	16,174	

Perpendicular pre-stressing setting work (SWPR 7B;7,T12.7) (Cantilever erection bridge) Per: Iton

				11.	, T. T.	₩.	4 mount	
					חווו דווכנ	TALL	Calif	
Description	Standard	Cmit	Quantities	Foreign	Local	Foreign	Local	Remarks
4.5				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
DC cable	7 T 12 7	ton	1.06	230,000	-	243,800	•	1+K; K=+0.06; Material - 203
Cheath	φ 55	E	200	266	•	53,200	•	1+K; K=+0.08; Material - 53
Dicadi		nerson	11.5		183,300	1	2,107.950	4.6*2.5
Forethan			37.63		170.100	1	9 142.875	21.5*2.5
Skilled labor		person	22.73		2016		1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(
Common Jahor		person	44.5	,	80,600		3,586,700	17.8*2.5
Common recor		┺					1 187 002	
Miscellaneous expenses	(labor cost) * 8%	set					**************************************	
						-		
						297.000	16.024.527	
Total						22,		
			,					
						297 000	16.024.527	
ner : I ten		_						

Longitudinal pre-stressing steel anchorage work (Cantilever erection bridge)
Per: 10places

					Uni	Unit Price	Αm	Amount	
	Description	Standard	Unit	Quantities	Foreign		Foreign	Local	Remarks
7					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
,	Anchorage	fix side	ps	01	19,980	•	008,661	•	Material - 204
~,	Skilled labor		person	7.5	•	170,100	ı	1,275,750	3*2.5
	Miscellaneous expenses	(labor cost)*12%	set				1	153,090	
$\vdash$	Total						199,800	1,428,840	
$\vdash$	per: 1 place						19,980	142,884	

Longitudinal pre-stressing steel tensioning work (Cantilever erection bridge)
Per: 10places (one side tensioning)

ocal Foreign N. D) (J.YEN) - 166,50 - 170,100 - 80,600 - 60,600 - 166,50	ı					1	I Init Drice	An	Amount		
Standard         Unit         Quantities         Foreign         Local         Foreign         Local           Tensioning side         set         10         16,650         -         166,500         -           Tensioning side         set         10         16,650         -         687,375           person         3.75         -         170,100         -         2,806,650           person         7.5         -         80,600         -         604,500           (labor cost) * 6%         set         1         -         245,912           (labor cost) * 6%         set         1         -         245,912           16,650         4,344,437         -         166,500         4,344,437							2011		ı		
Tensioning side set 10 16,650 - 166,500 - 687,375 - 183,300 - 2,806,650 - 687,375 - 170,100 - 2,806,650 - 604,500 - 604,500 - 604,512 - 140,000 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 -		December	Standard	Unit	Ouantities	Foreign		Foreign	Locai	Remarks	-
Tensioning side set 10 16,650 - 166,500 - 687,375 - 183,300 - 2,806,650 - 2,806,650 - 2,806,650 - 2,806,650 - 604,500 - 604,500 - 604,500 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,912 - 245,91		Describación				(I.YEN)		(J.YEN)	(VN. D)		$\neg$
1	· [		£	1	-	16.650		166,500	,	Material - 206	
person 3.75	⇆	chorage	l ensioning side		2	2,2,2,	000		772 707	1 5*0 5	
person   16.5	١,۶	reman		person	3.75		183,300		0,000	1.0400	T
person     7.5     -     80,600     -     604,500       (labor cost) * 6% set     1     -     245,912       1     166,500     4,344,437       1     16,650     434,444	1			20000	165	t	170.100		2,806,650	6.6*2.5	~
(labor cost) * 6%         set         1         245,912           (abor cost) * 6%         set         1         245,912           (abor cost) * 6%         4,344,437         166,500         4,344,437	≾	illed labor		00000	22.2				F04 500	2 0*0 5	
(labor cost) * 6% set 1 166,500 4	1	mmon Jahor		person	7.5	•	80,600	-	000,400	2:-	T
(labor cost) 7 676 set 1 166,500 4 166,500 16,650	ζΙ.	THINKS INCO.	100 # 11		-				245,912		-
166,500	₹	scellaneous expenses	(labor cost) * 6%	١	]						
166,500											T
16,650	-1							166 500	4.344,437		
16,650		Total						22622			Γ
16,650											T
00001	ļ							16.650	434 444		
		nor . I man						00001			]

tion bridge)

ning work (Cantilever erection			
tensio	7	ન	
I onoitudinal pre-stressing steel tensioning work (Cantilever erectio		Per- 10places (both side tensioning)	

		г				_	η-		Г	7		1	7	1		7		
	Remarks			Material - 206	1.1*2.5	4 (*) /	6.6.7.3	5.3*2.5										
Amount		(VN. D)		•	500 005	20+00	2,806,650	050 777	004,500	238.541			4,214,216			421,422		
AH		Foreign	(3.1.514)	333 000	200,000	1			ı				333,000			33,300		
	Unit Price	Local	(AN D)		•	183 300	001.001	1/0,100	80.600									
,	5	Ĺ.	(J.YEN)		16,650													
		Quantities			20		2.73	16.5	١	8.25	-	-						
		Unit			đ	3	person	more Of	20013	person		125						
		Standard		Tensioning side	20,300	122 [0]]					700 + 1	(Japor cost) + 6%					451 / 10	01 / 1810
		4.	Describation			Anchorage		roreman	Skilled labor		Common labor	Miscellaneous expenses			Total			101/101 = 10131 / 10
			Š		1	, <del>-</del>	-	7	"	,	4	v	,		L			

Perpendicular pre-stressing steel anchorage work Per: 10places

					Uni	Unit Price	Ame	Amount		
S S	Description	Standard	Unit	Quantities [	Foreign	Local	Foreign	Local	Remarks	
;					(J.YEN)	(VN. D)	(J.YEN)	(V.N. D)		
		130 ton ,for 7, T			:					
· –	Anchorage	12.7	set	10	12,537	•	125,370	•	Material - 205	_
. ار	2 Strilled Jahor		person	5.25	,	170,100	•	893,025	2.1*2.5	
۳   ۱	Missellaneous expenses	(labor cost) * 26% set	set	-			•	232,187		٠
	Miscellances expenses									·
	Total						125.370	1,125,212		<b>-</b>
	, C. C.									
							1000	109 011		_
	per: 1 place						17,007	112,321		7

Perpendicular pre-stressing steel tensioning work Per: 10places

•					Uni	Unit Price	An	Amount		· 
ż	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
		130 ton, for 7,T								Ι
	Anchorage	12.7	set	01	9,072	1	90,720		Material - 207	
2	Foreman		регѕоп	2.75		183,300	1	504,075	1.1*2.5	Γ-
3	Skilled labor		person	12.5		170,100	•	2,126,250	5.0*2.5	T
4	Common labor		person	5.25		80,600	,	423,150	2.1*2.5	_
5	Miscellaneous expenses	(labor cost) * 9%	set	-			1	274,813		<u> </u>
										Ι
	Total						90,720	3,328,288		Γ
										Γ-
	per: 1 place						9,072	332,829		Ι

PROCESS COST - 406(1)

Depreciable value of equipment and tools for erection (rigid frame bridge and side span)

Per: 1set

					Uni	Unit Price	Ame	Amount	
Z	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
<u>:</u>			-	,		(VN. D)	(I.YEN)	(VN. D)	
	Wagen	3x17m	set.day	794	31,740	1	25.201.560	1	D*1;Equipment - 58
2	Wagen reforming cost		set	4	3,464,000	1	13.856,000	ı	43,300,000 x 0.08
	Depreciable value of			Ç	0000		1 056 000		(18+1*15) x 4
m	erection tools		day	132	0,000		1,000,000		
	Depreciable value of								
	fabrication tools for main							-	( <del>)</del>
4	girder		day	602	2,750	1	1.655,500		1.7
	Total						41,769,060	1	
	ner 1 cet						41.769,060	•	

**D**: Days in demand for wagens; a\*P + d\*n + b\*m + n\*k + F = 794 days a: factor depend on main girder; (53)

P: Number of pier (2);

b: Factor of re-use of wagen (14) n: total numbers of cantilever erection block (58)

d: Execution days of one block (11.5) m: Re-use numbers of one project (0)

k: Factor pull back of wagen (0.18) F: Transportation days (10) T: Days in demand for Fabrication of main girder; e + (D-F)/g + h + i = 301 days

g; Numbers of wagen (4) i: center closing execution days (35) e: Pier head concrete work days (15)

h: side span execution days (55)

PROCESS COST - 406 (2)

Depreciable value of equipment and tools for tensioning (rigid frame bridge)
Per: 1set

-					Unit	Unit Price	Amount	unt		
Š	Description	Standard	Umit	Quantities	Foreign	Local	Foreign	Local	Remarks	
	•				(I.YEN)	(VN. D)	(J.YEN)	(VN. D)		Т
1	Tension jack and pump	225 ton	set.day	1204	3,060	-	3,684,240	•	T*4; Equipment - 121	T
7	Tension jack and pump	130 ton	set.day	602	1,920	_	1,155,840	ı	T*2; Equipment - 122	
+	Grout mixer	200 liter x 1	set.day	602	009	1	361,200	t	T*2; Equipment - 68	· T
<del> </del>	4 Grout pump	15~30 liter/min	set.day	602	820	•	493,640	1	T*2; Equipment - 64	
1-	Winch	1.0 tx40 m/min	set.day	602	1,000		602,000	•	T*2; Equipment - 67	т-т
9	Miscellaneous tools		set day	602	1,650	•	993,300	1	T*2	
<del> </del>	Total			-	•		7,290,220	. 1		
-										
<del> </del>	per: 1 set						7,290,220	1		1
٠	\									

T: Days in demand for Fabrication of main girder e + (D-F)/g + h + i = 301 days e: Pier head concrete work days (15) g; Numbers of wagen (4) h: Side span execution days (55) i: Center closing execution days (35) Distribution of depreciable value

	Tension jack &			
Description	dumd		Grout mixer and pump etc.	Total
	(J.Yen)	Ratio	Distributed value (J.Yen)	(J.Yen)
PC cable (12 T 12.7)	6,140,400 0.78	0.78	3,188,312	9,328,712
PC cable (7 T 12.7)	1,926,400 0.22	0.22	899,268	2,825,668

Concrete work for box girder (L = 60m) Per 10 m<sup>3</sup>

					Uni	Unit Price	Amount	ount	
2	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
<u>.</u>				,	(J.YEN)	(N. D.)	(J.YEN)	(VN. D)	
									1+K; K=+0.02;
-	Concrete	class A2	m3	10.2	634	530,187	6,467	5,407,907	Process cost - 149
1		hoom tyne							
	Constant and a	90 ~ 110 m3/hr	1	0.15	5,330	78,000	800	11,700	Equipment - 60
1	Concrete pump		noscon	225		183.300	•	412,425	0.9*2.5
7	Foreman		100	77.7		000 631		459 600	12*25
4	Rigger		person	3.00	•	135,400	'	200,000	L GAY
ŀ	Chilled labor		person	3.50	•	170,100	,	595,350	[,4*2.5
1			00000	12.50		80.600	•	1,007,500	5.0*2.5
Ó	Common labor		100130	2011			7.2	72 0.45	-
۲	Miscellaneous expenses	(Sum of above)*1%	set				2/	C+C,0 /	
	Dead head cost of concrete	boom type	-			- (		7110	(C) 775 - 1200 page 0
×	dmin	90~110m3/hr	day	0.03	10,660	157,000	320	4,710	FIOCESS COST - 247 (2)
}							7,659	7,978,137	
							776	110 101	
	per: 1 m3						00/	1+10,121	

PROCESS COST - 408

Longitudinal pre-stressing steel setting work (SWPR 7B;12T15.2) (box girder,L = 60m)
Per: 100 m (sheath length)

				_	,				
7					ű.	Unit Price	Am	Amount	
<u>.</u>	Description	Standard	C.mit	Quantities	Foreign	Local	Foreign	Local	Remarks
			-	:	(J.YEN)	(VN D)	(J.YEN)	(S/N/S)	
		SWPR					, , , , ,		
-	PC cable	7B;12T15.2	Ş.	1374	747		327 500		
7	Sheath	mm0/ \$	\$	101	1 6		000,200	•	1+K; K=+0.04; Material -208
·		4 (011111		*	225	,	34,528	,	1+K · K=+0.04 · Material - 38
3	reinforcement steel	D16	ş	45	25		1125		Marie 1 00
4	Supplemental materials	(sum of above) *1%	tes	-			600	•	Waterial - 29
	1	27 (2.22.22	3	*			3,082	1	
	roreman		person	5.75		183.300	ı	1 053 075	2 0#0 0
9	Skilled labor		Derson	27		001.021		010,000,1	2.3.2.3
7	7 Comment Tolk at		1	1		1/0,100	1	4,592,700	10.8*2.5
$\left  \right $	Common labor		person	19.5	ı	80,600		1 571 700	7 0*0 7
∞	Miscellaneous expenses	(Labor cost) * 4%	. JdS	-				1,071,100	6.5 6.7
				1			1	788,735	
	1.7.4								
	1.012						271 843	7 507 110	
							CTU,LIC	V1 1, 10C, 1	
						-			
	Fer: I m (sheath length)	length)	,				3.710	100 24	
	Per: 1kg (PC cable) = Total / 1271 La	Octo / 1271 Le					0,710	1/0,5/	
	1 (2000) 2 (2000)	OLA! / 1321 NE		-			281	5 683	

PROCESS COST - 409

Longitudinal pre-stressing steel tensioning work (box girder, L=60m) Per: 10 cables (one side tensioning)

			-				İ			
					C	Unit Price	Amount	unt		
2	Description	Standard	Chit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
j Z	·		ı	,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
		320 ton, Fixed for					6		000	
	Anchorage	12,T15.2	set	10	28,350	1	283,500	1	Material - 209	- <del></del>
		Tensioning for						-		****
•		12 T152	Ş	10	24,300	ţ	243,000	1	Material - 210	- T
۱,			2000	,		183 300		366,600	0.8*2.5	
6	Foreman		2012	7		00.01.		2 041 200	4 8*2 5	
4	Skilled labor		person	12		1/0,100	•	2,041,200	0. 0. c	7
4	Comenter	-	person	5	'	111,700		228,500	2.0.7.	1
٠ ·	Carpellia		0.000	72.7		80.600		544,050	2.7*2.5	٠.
9	Common labor		10013		3.5		770 071		Material - 57	
7	Coupler		each	2.83	59,670	1	100,000	305 370	ייותוכוומן	<del></del>
×	Miscellaneous expenses	(Sum of above)*7%	set				48,676	77,757		1
	1						744,042	3,756,075		
	Total									
							707 71	275 607		ι
	Per: 1 cable						404,47	700,070		٦

PROCESS COST - 410

Longitudinal pre-stressing steel tensioning work (box girder,  $L=60 \, \mathrm{m}$ ) Per: 10 cables (both side tensioning)

					Cun	Juit Price	Am	Amount		~ <del>-</del>
ź	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
		320 ton,								Т
		Tensioning for								
· 	Anchorage	12,T15.2	set	20	24,300	•	486,000	•	Material - 210	· ———
7	Foreman		person	5	1	183,300		916.500	2.0*2.5	Γ
'n	Skilled labor		person	31.25	,	170,100	1	5.315.625	125*2.5	7
4	Carpenter		person	6		111.700		1,005,300	36*75	т-
5	Common labor		person	18.75	,	80,600	1	1.511.250	7.5*2.5	<del></del>
ق ا	Miscellaneous expenses	(Sum of above)*8%	Set	-			38.880	699.894		γ
	Total						524.880	9.448.569		
										<del></del> -
	Per: 1 cable						52 488	044 857		·I'

PROCESS COST - 411

Perpendicular pre-stressing steel setting work (SWPR 7B; 7T12.7) (box girder, L=60m) Per: 100 m (sheath length)

·-		,					···		_			
	Remarks		1+K; K=+0.04; Material - 203	1+K; K=+0.04; Material - 53		4.4*2.5	3.1*2.5					
Anguir	Local	(VN. D)			458,250	1,871,100	624,650	177,240	3,131,240		31,312	5,777
AIII	Foreign	(J.YEN)	129,651	27,664	ı		,	9,439	166,754		1,668	308
Onit Price	Local	(VN. D)			183,300	170,100	80,600					
5	Foreign	(J.YEN)	230	266		,						
_	Quantities		563.7	104	2.5	L	7.75					
_	Unit	_	kg	E	person	person	person	<del></del>				
	Standard		7.T12.7	ф 55 mm				%)*(evode to mis)	ליים בי ביים ביים ביים		lenorth)	/ 542 kg
	Description		PC cable	Sheath	Foreman	Skilled lahor	Common Jahor	Miccellaneone evancee	Total	1000	Per: 1 m (sheath length)	Per. 1 kg = Total / 542 kg
_	Ž	;	-		1 ~	7	- 4	۲	٥			

Perpendicular pre-stressing steel tensioning work (box girder, L=60m) Per: 10 cables (one side tensioning)

			,		_				r				<b></b>	
	Remarks			Material - 205		Material - 207	1.1*2.5	6.8*2.5	2.6*2.5	3.7*2.5				
ount	Local	(VN. D)					504,075	2,891,700	726,050	745,550	292,043	5,159,418		515,942
Amount	Foreign	(J.YEN)	-	125,370		90,720	٠		ı		12,965	229,055		22,906
Unit Price	Local	(VN. D)				•	183,300	170,100	111,700	80,600				
Uni	Foreign	(J.YEN)		12,537		9,072		1	1	,				
	Quantities			10		10	2.75	17	6.5	9.25				
	Chit			set		set	person	person	person	person	set			
	Standard		130 ton, Fixed for	7,T12.7	Tensioning for	7,T12.7					(Sum of above)*6%			
	. Description			1 Anchorage		Anchorage	Foreman	Skilled labor	Carpenter	Common labor	Miscellaneous expenses	Total		Per: 1 cable
	ġ		· ·	-	1	7	3	4	3	9	1			

Depreciable value of tension jack and pump during transportation (box girder) Per: 1set

Standard Unit Quantities	s Foreign Local	Foreign		
-	O VEND	_	Local	Remarks
	1	(J.YEN)	(VN. D)	
320 ton   day   10	4,640	46,400	9	Equipment - 46
Miscellaneous expenses (Sum of above)*1% Set		464	1	
		46,864	•	
		46.864	1	

PROCESS COST - 413 (2)

Depreciable value of tension jack and pump during transportation (box girder)
Per: 1set

					C.E.O.	Unit Price	AH	Amount	
ģ	Description	Standard	Unit	Quantities	Foreign	Local	1	Local	Remarks
					(J.YEN)	(J.YEN) (VN. D)	(J.YEN)	(VN. D)	
	Tension jack and pump	130 ton	day	01	1,920		19,200		Foliament 122
7	Miscellaneous expenses (Sum of above)*1%	(Sum of above)*1%	set	_			192		771 amoundinker
							2		
	Total						10 202		
							765.61		
	***					-			
	Per: 1 set						19 397	•	
							1,11,1		

Reinforcement steel work for box girder Per: 1ton

		<del></del> 1		·	7			<del></del> 1	r	1
	Remarks		1+K; K=0.04; Material - 29	0.5*2.5	4.5*2.5	2.6*2.5				
Amount	Local	(VN. D)	1	229,125	1,256,625	523,900	160,772	2,170,422		2,170,422
Ame	Foreign	(J.YEN)	23,920	_	1	•	1,914	25,834		25,834
Unit Price	Local	(VN. D)	1	183,300	111,700	80,600				
S	Foreign	(J.YEN)	23,000	ŀ	,					
	Quantities		1.04	1.25	11.25	6.5	I			
	Unit		ton	person	person	person				
	Standard		φ13 ~φ25				(labor cost) * 8%	,		
	Description		Reinforcement steel bar	Foreman	Steel worker	Common Jahor	Miscellaneous expenses	Total		Per: 1 ton
	Z	;	-	.   ~	1 6	7 4	\ \	,		

Reinforcement steel work for cantilever erection bridge Per: 1ton

Longitudinal pre-stressing steel setting work (PC I Girder) Per: 100 m (sheath length)

		~~~				····			<b></b>		 	
	Remarks			1+K;K=0.05; Material - 152	1+K; K=+0.04; Material - 161	1.4 * 2.5	5.6*2.5	5.2*2.5				
Amount	Local	(VN. D)		•	1	641,550	2,381,400	1,047,800	407,075	4,477,825	44,778	5.119
Am	Foreign	(J.YEN)		206,663	32,032	,	1	1	1	238.695	2,387	273
Unit Price	Local	(VN. D)		1	•	183,300	170,100	80,600				
Oni	Foreign	(J.YEN)		225	308	-	-	-				
	Quantities			918.5	104	3.5	14	13				
	Unit			kg	ш	person	ретѕоп	person	set			
	Standard		SWPR 7A;	12,T12.4	ф 65 mm				(labor cost)*10%		length)	'874.8kg
	Description			PC cable	Sheath	3 Foreman	Skilled labor	Common labor	Miscellaneous expenses	Total	Per: 1 m (sheath length)	Per: 1 kg = Total / 874.8kg
	Š			1	2	3	4	5	9			

Concrete work for fabrication of PC I Girder Per: 10m3

				C	Unit Price	Am	Amount	
Description	Standard	Chrit	Quantities Foreign	Foreign	Local	Foreign	Local	Remarks
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
								1+K; K=+0.02;
	class A	m3	10.2	634	530,187	6,470	5,407,909	Process cost - 149
				:				
	With gantry crane	m3	10		151,642	•	1,516,420	Process cost - 378
	fine ceramics							
	insert	each	34	423		14,382	1	Material - 40
	for curing	person	9.5	ı	80,600	ı	765,700	3.8*2.5
5 Miscellaneous expenses	(labor cost) * 10%	set	1				76,570	
						20,852	7,766,599	
						:		
Per: 1 m3						2.085	176,660	

Longitudinal pre-stressing steel tensioning work (PC I Girder)
Per: 10 cables

				<u>.</u>				 		
	Remarks		Material - 162	1.5*2.5	5.2*2.5	4.5*2.5				
ount	Local	(VN. D)	.1	687,375	2,211,300	906,750	418,597	4,224,022		422,402
Amount	Foreign	(J.YEN)	333,000	-	•	-	1	333,000	-	33,300
Unit Price	Local	(VN. D)	ı	183,300	170,100	80,600				
Chi.	Foreign	(J.YEN)	16,650	-	1	ı			. :	
	Quantities		20	3.75	13	11.25	1			
	. Chit	:	each	person	person	person	set			
	Standard		195 ton				(labor cost) * 11%			
	Description		Anchorage	Foreman	Skilled labor	Common labor	Miscellaneous expenses	Total		Per: 1 cable
	ż		-	~	m	4	5			

Reinforcement steel work for side span Per: Iton

Unit Quantities Foreign (J.YEN) ( ton 1.04 23,000 person 1.25 - person 6.25 - set 1	ſ					Unit Price	Amc	Amount	
ton 1.04 23,000 - 23,920 - 229,125   person 1.25 - 170,100 - 2,126,250   person 6.25 - 80,600 - 223,750   set 1		Standard	: <u>:</u> 5	Quantities	Foreign	Local	Foreign	Local	Remarks
ton         1.04         23,000         -         23,920         -           person         1.25         -         183,300         -         229,125           person         12.5         -         170,100         -         2,126,250           person         6.25         -         80,600         -         503,750           set         1         -         228,730           set         1         -         228,730           set         23,920         3,087,855					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
person         1.25         -         183,300         -         229,125           person         6.25         -         80,600         -         503,750           set         1         -         203,750           set         1         -         228,730           set         1         -         228,730           23,920         3,087,855		D13~D25	ton	1.04	23,000	•	23,920		1+K; K=+0.04; Material - 29
person         12.5         -         170,100         -         2,126,250           person         6,25         -         80,600         -         503,750           set         1         -         228,730           set         1         -         228,730           3,087,855         3,087,855	_		person	1.25	1	183,300	1	229.125	0.5*2.5
person         6.25         -         80,600         -         503,750           set         1         -         228,730           1         -         23,920         3,087,855           23,920         3,087,855			person	12.5	1	170,100	1	2,126,250	5.0*2.5
set 1 - 228,730 - 228,730 - 23,920 3,087,855 - 23,920 3,087,855			person	6.25	1	80,600	•	503,750	2.5*2.5
<b>6</b>	_	(labor cost) * 8%	set	-				228.730	
	<u> </u>								
	L.						23.920	3.087.855	
	_							2006	
	<b> </b>						23.920	3.087.855	

From work of cross beam Per: 10 m2

						_			Ţ	
	Remarks		0.5*2.5	2.6*2.5	1.8*2.5					
Amount	Local	(VN. D)	229,125	1,105,650	362,700	186,722		1,884,197		188,420
Am		(J.YEN)	_	ı	1	1		ı		,
Unit Price				170,100	80,600					-
Ē,	Foreign	(J.YEN)	•	,	,					
	Quantities	. ,	1.25	6.5	4.5	-				
	Unit	-	person	person	person	1				
	Standard					(labor cost)*11%	,			
Description			Foreman	2 Skilled Jahor	Common labor	Miscellaneous expenses		Total		Der: 1 m2
Š			-	1	۳ ر	4				

Concrete of cross beam Per: 10 m3

			т		т		γ		·—		·		 	 
	Remarks		1+K;K=+0.04;	Process cost - 151		Equipment - 22		Process-cost - 347 (3)	0.3*2.5	1.5*2.5	3.9*2.5			
Amount	Local	(VN. D)		4,751,157		88,500		28,375	137,475	637,875	785.850	171.732	6.600.964	960,099
Am	Foreign	(J.YEN)		6,594		9,555		3,185			•		19.334	1,933
Unit Price	Local	(VN. D)		456,842		59,000		113,500	183,300	170,100	80,600			
T T	Foreign	(J.YEN)		634		6,370		12,740	ı		•			
	Quantities			10.4		1.5		0.25	0.75	3.75	9.75	1		
٠	Unit			m3		Ħ		ďav	person	person	person	set		
	Standard			Class C-1	boom type 55~60	m3/hr	boom type 55~60	m3/hr				(labor cost) * 11%.		
	o. Description			Concrete		Concrete plump	Dead head cost of concrete   boom type 55-60	dund	Foreman	Skilled labor	Common labor	Miscellaneous expenses	Total	Per: 1 m3
	ģ					7		٣	4	3	9	7		

Suspended scaffolding under PC I girder Per: one span (L=33m)

					5	Unit Price	An	Amount	
Š	Description	Standard	Cnit	Quantities	Foreign (J.YEN)	Local (VN. D)	Foreign (J.YEN)	Local (VN. D)	Remarks
-	Suspended scaffolding cost		set	1		11,662,213	ı	11,662,213	O
	Total						•	11,662,213	
	Per: 16 span	u.					ĸ	186,595,408	

C: Suspended scaffolding cost: (SX+Ny) \*A = 11,662,213

S: Factor for depreciable value of scaffolding(1.5<=H 376

X : Months in demand for suspended scaffolding (2 months)

**4**0.12) N : Factor for production rate (1.5 < = H

y: Wage rate of skilled labor (188,864/day)

A: area of bridge surface (15.1\*33=498.3 m2)

Distribution of above cost	Ratio	Unit cost (VN.D)
Concrete work for cross	(689m3) 0.225	60,934 / m3
Concrete work for deck slab (1,866m3)	b (1,866m3) 0.608	60.799 / m3
Reinforcement steel work (505 ton)	(505 ton) 0.164	60,597/1
PC cable work	(8.0ton) 0.003	69,973 / t

Grout material for PC I girder Per: 1 m3

		_	7				Γ	$\neg$
	Remarks		Material - 71	Material - 73				
Amount	Local	(V.N. D)	1,142,304	167,500	1,309,804			1,309,804
An	Foreign	(J.YEN)	•	t	,			-
Unit Price	Local	(VN. D)	876	50,000				
E.E.	Foreign	(J.YEN)		. •				
	Quantities		1304	3.35				,
	Unit		Kg.	ķ	8			
	Standard							
	Description		Cement	Add-mixture	Total	Autai		Per: 1 m3
	Š.		-		1			

Perpendicular pre-stressing steel setting work (PC I Girder; L=33m) Per: 100m (cable length)

					Uni	Unit Price	An	Amount	
ż	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	PC cable	1 \$ 21.8	ş	263	266	-	856,69	1	1+K; K=+0.06; Material - 116
7	Sheath	ф 38 mm	E	106	153	-	16,218	1	1+K; K=+0.06; Material - 54
m	Supplemental materials	(sum of above)*1%	set	1			861.76	,	
4	Foreman		ретѕоп	2	-	183,300	_	366,600	0.8*2.5
N	Skilled labor		person	8.25	•	170,100	-	1,403,325	3.3*2.5
9	6 Common labor		ретѕоп	5	,	80,600	-	403,000	2.0*2.5
7	Miscellaneous expenses	(labor cost) * 0.9%	set				1	19,556	
	Total						87,038	2,192,481	
	Per: 1 m(Cable length)	length)					870	21,925	
	Per: 1 kg=Total / 248 kg	/ 248 kg					351	8,841	

Note: Sheath (\$4.8 mm) length 402.5 m in case of PC cable (1 S 21.8): 1 ton

PROCESS COST - 426

Perpendicular pre-stressing steel tensioning work (PC I Girder; L=33m)
Per: 10 cable

Cuit	Cuit	Cuit	Cmit	=	5	မွ	- 1	Amount		
	Description	Standard	Chrit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(1.YEN)	(VN. D)	(J.YEN)	(VN. D)		
Anchorage	ge	Fixed side; 60 ton	each	10	3,807	1	38,070		Material - 105	T
		Tensioning side;								1
Anchorage	3e	60 ton	each	10	3,411	•	34,110	•	Material - 103	
Foreman			person			183.300		183 300	0.4*2.5	Τ
Skilled labor	bor		person	3.25	,	170,100		552.825	13*0 4	Τ
Common labor	labor		person	2	1	80,600	1	161,200	0.8*2.5	Τ
fiscellar	Miscellaneous expenses	(labor cost) * 4%	set				•	28 561		Ť
										T
	Total						72.180	975 886		7
								2262		Т
P	Per: 1 Cable						7218	02 580		Τ

Depreciable value of Perpendicular pre-stressing work (PC I Girder; L=33m)

Per: 6 spans

					Chi	Unit Price	Amount	unt	
Š	Description	Standard	Cmit	Quantities	Foreign	Local	Foreign	Local	Remarks
}						(VN. D)	(I.YEN)	(VN. D)	
<b>,,</b> ,	Tension jack and pump	70 ton	day	15	1,360	1	20,400	1	Equipment - 10
2	Grout pump	15 ~ 30 1/min	day	91	820	1	13,120	ı	Equipment - 64
۳	Grout mixer	1x1 001	day	16	420	•	6,720	•	Equipment - 66
4	Other equipment and tools		day	16	100		1,600		
2	1.7	(Sum of above)*3%	set	ĭ			1,255		
	Total						43,095	1	
							-		
	Per: 1 span						7,183	_	

H: Days in demand for tension jack and pump H = (n/N) \* K \* 1.5 + G = (16/30) \* 6 \* 1.5 + 10 = 14.8

K: Numbers of span (6)

G: Days of transportation of jack and pump (10 days)

N: Production rate of perpendicular pre-stressing steel per one day (30)  $\mathbf{n}$ : Numbers of tensioning cable per one span (96 / 6 = 16)

Depreciable value of Perpendicular pre-stressing work (PC I Girder; L=33m) Per: 4 spans

					Unit	Unit Price	Amount	yunt	
ò	Description	Standard	5	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
-	Tension jack and pump	.70 ton	day	1.2	1,360	,	16,320		Equipment - 10
2	Grout pump	15~30 J/min	day	13	820	ı	10,660	1	Equipment - 64
т	Grout mixer	100 lx1	day	13	420		5,460	1	Equipment - 66
4	Other equipment and tools		day	13	100		1,300	1	
Ş	Miscellaneous expenses	(Sum of above)*3%	set	1			1,012		
	Total				-		34,752		
	Per: 1 span						8,688	t	

H: Days in demand for tension jack and pump H = (n/N) \* K \* 1.5 + G = (6/30 \* 4\*1.5 + 10 = 11.2)

K: Numbers of span (4)

G: Days of transportation of jack and pump (10 days)

 $\mathbf{n}$ : Numbers of tensioning cable per one span (24 / 4 = 6)

N: Production rate of perpendicular pre-stressing steel per one day (130)

Reinforcement steel work for cross beam (PC I Girder) Per: 1 ton

-						Unit Price	Am	Amount		
	,	71070	<u>, î</u>	Oughtities	Foreion	Local	Foreign	Local	Remarks	
9	Description	Stational	5		(I VFN)	(V. D.	(J.YEN)	(VN. D)		
					(200		24 380	1	1+K · K=+0.06 :Material - 29	
12	Peinforcement steel har	D13~D25	to	90:	72,000	•	200,44		1 647 C	
4	to the second of		20000	1.5	t	183,300	•	274,950	0.6*2.5	
i I.q	Foreman		100130			00.00.		375 901 1	2 5*2 5	
٢	1.31.4 101.00		nerson	8.75	•	1/0,100	•	C/C,004,1	0.7	
2	Skriled Japor					002.00		362 700	1.8*2.5	
-	Tohor Jahor		person	5.5		000,00	1	2021120		
ار	Olithion labor							85.041		
2	Miscellaneous expenses	(labor cost ) * 4%	set	_			•	2,20		
+										
							74 300	3311066		
-	Total	-					005,47	2,211,000		
	10141						74 280	2211 066		
_	Per: 1 ton						200,47	20011776		
1						-	20	2.2		
_	Per: 1 kg									

Reinforcement steel work for deck slab (PC I Girder) Per: 1 ton

			<del></del> -			·		<b>_</b>	·		r	· ·
			Material									
	Remarks		1+K; K=+0.03;	29	0.5*2.5	3.0*2.5	2.5*2.5					
Amount	Local	(VN. D)			229,125	1,275,750	503,750	80.345		2,088,970	2,088,970	2,089
Am	Foreign	(J.YEN)		23,690		•	•			23,690	23,690	24
Unit Price	Local	(VN. D)			183,300	170,100	80,600					
Cun		(J.YEN)		23,000	1	•	•					
	Quantities			1.03	1.25	7.5	6.25	-				
	Chit			ton	person	регѕоп	person	Set				
	Standard			D13~D25				(labor cost) * 4%				
	Description			Reinforcement steel bar	Foreman	Skilled labor	Common labor	Miscellaneous expenses		Total	Per: 1 ton	Per: 1 kg
	ò			-	7	3	4	5				

Diaphragm concrete work PC I Girder (L=66m x 2) Per: 10m3

				<u></u>		,	ſ <b>T</b>	— <sub>1</sub>	 
	Remarks		Process cost - 421	Process cost - 422		Process cost - 423			
Amount	Local	(VN, D)	7,329,538	6,600,960		609,340		14,539,838	1,453,984
Amo	Foreign	(J.YEN)	1	19,330				19,330	1,933
Unit Price	Local	(VN. D)	188,420	960,099		60,934			
Un	Foreign	(J.YEN)		1,933					
	Quantities		38.9	01		. 10			
	Unit		m2	m3		. m3			
	Standard			class C1					
	Description		Form work of cross beam	2 Concrete of cross beam	Suspended scaffolding	under PC I Girder		Total	Per: 1.0 m3
Ĺ	s.		Ŀ	7	1				

Diaphragm concrete work PC I Girder (L=99m x 2) Per: 10m3

					Unit	Unit Price	Amount	yunt		
Š.	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
	Form work of cross beam		m2	38.9	•	188,420	,	7,329,538	Process cost - 421	Υ
7	Concrete of cross beam	class C1	m3	01	1,933	960'099	19,330	096,009.9	Process cost - 422	Г
	Suspended scaffolding									Т
ω	under PC I Girder		. m3	10		60,934	•	609,340	Process cost - 423	
										т-
	Total						19,330	14.539.838		- <u></u> -
										1
	Per: 1.0 m3						1,933	1,453,984		Т
								_		

Setting work of rubber bearing (less than 60 kg / each)
Per. 10 plates

-		1	1		7		-1		-[	 7		_	-1		7
	Remarks		0.9*2.5	U C#U -	1.3.2.3	W 0 %0 0	5.2.7								
Amount		(VN. D)	412,425	1100 1107	627.873	050 777	004.400	(1) (1)	010.80	 4	1,783,860			204 051	1/8.380
Am	Foreign	(J.YEN)	ŧ		_						•				-
Unit Price	Local	(VN. D)	183,300	() · () ·	1/0,100	000.00	80,600								
5	Foreign	(J.YEN)	1												
	Quantities	,	2.25		3.75		8.25		,						
	Cmit		person		person		person		set						
	Standard	-							(Labor cost )*4%						
	Description		T.	(FOICHIM)	Skilled labor	Dallied racel	Common Jahor	Common tages	Miscellaneous expenses		Total				Per: 1 mlate
	Ź	į	-	-	c	1	"	1	4						

Setting work of rubber bearing (60~100 kg / each) Per: 10 plates

					E S	Unit Price	Ame	Amount		
1	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(I.YEN)	(N. D)	(J.YEN)	(VN. D)		
Foreman			person	4.5	,	183,300		824,850	1.8*2.5	Γ
Skilled labor	bor		person	7.5	,	170,100	,	1,275,750	3.0*2.5	T-
Common labor	labor		uosıad	16.25	,	80,600		1,309,750	6.5*2.5	T-
Miscellan	Miscellaneous expenses	(Labor cost )*4%	set	1			ı	136,414		T-
									1.4 /T; T = 4.44;	Γ
5 Truck crane	ne	4.8 ~4.9 ton	Ę	6.22	1,250	46,000	7,775	286,120	Equipment - 20	
	Total						7,775	3,832,884		T
										<del></del>
	Per: 1 plate	ate					778	383.288		T-

Setting work of rubber bearing (100~500 kg / each) Per. 10 plates

						_				 		
	Remarks		2.0*2.5	6.0*2.5	6.0*2.5	4.0*2.5		3.0/T; $T = 4.44$ ;	Equipment - 20			
Amount	Local	(VN. D)	005'916	2,551,500	1,675,500	806,000	237,980		612,720	6,800,200		680,020
Am	Foreign	(J.YEN)	=	1	r	•	•		16,650	16,650		1,665
Unit Price	Local	(VN. D)	183,300	170,100	111,700	80,600			46,000			
Un	Foreign	(J.YEN)	t	t	1	ı			1,250			
	Quantities		5	15	15	10	1		13.32			
	Unit		person	person	person	person	set		hr			
	Standard	-					(Labor cost )*4%		4.8 ~4.9 ton			į,e
	Description		Foreman	Skilled labor	Camenter	Common Jabor	Miscellaneous expenses		6 Truck crane	Total		Per: 1 plate
	Š			7	<u>س</u>	4	5		9		-	

Setting work of rubber bearing (more than 500 kg / each)
Per: | plate

					Uni	Unit Price	An	Amount		_
Š.	Description	Standard	Cmit	Quantities	Foreign	Local	Foreign	Local	Remarks	<del></del>
					(J.YEN)	(VN D)	(I.YEN)	(AN. D)		
1	Foreman		uosıəd	2.5	-	183,300		458,250	1*2.5	Γ
7	Skilled labor		person	7.5	•	170,100	£	1,275,750	3*2.5	Τ
3	Carpenter		person	2.0	t	111,700	1	558,500	2*2.5	[
4	Common labor		person	7.5	1	80,600	6	604,500	3*2.5	т-
5	5 Miscellaneous expenses	(Labor cost )*4%	set	1			E	115,880		<b></b> -
									0.5/T; T = 4.44;	
٥	6 Truck crane	15~16 ton	hr	2.22	3,080	55,000	6,838	122,100	Equipment - 18	
					-					ļ
	Total						6,838	3,134,980		γ
										T
	Per: 1 plate	e					6.838	3.134.980		Τ-

Setting work of rubber bearing (Box girder) Per: 3 plate-Fix(1110\*1260\*122)

			•••	2		-				7.1	(3)		
	Remarks	,		Material - 182				Material - 6	Material - 88	Process-cost - 71	Process-cost - 430(3)		
Amount	Local	(VN. D)			•		•	77,644	•	6,992,032	2,040,060	9,109,736	3,036,579
Απ	Foreign	(J.YEN)		3,860,190	63,528		5,472	_	61,221	_	4,995	3,995,406	1,331,802
Unit Price	Local	(VN. D)			1		•	3,890	1	19,000,087	680,020		
ភ្ន	Foreign	(J.YEN)		1,286,730	7,941		684	1	784,890	ı	1,665		
	Quantities			3	8		8	19.96	0.078	0.368	3		
	Unit			each	each		each	kg	m3	m3	place		
	Standard		Fix(1)10*12600*	122)	Fix (\$100*2200)	Fix.	(114.3A*1100)	mm 6 ф			Wegtth = 465 kg		e,
	Description			Rubber bearing	Anchor bolt		3 Anchor cap	4   Spiral steel bar	Tar joint filler	Non shrinkee mortar	Setting work	Total	Per: 1 plate
	2			_	7		w	4	'n	ی ا	1		

PROCESS COST - 431(2)

Setting work of rubber bearing (Cantiliver)
Per: 3 plate-Mov. (860\*1010\*143)

			γ	~	η		Τ-		Τ	1	γ	T		<del></del>	_	1	
	Remarks			Material-224					Material - 6	Material - 88	Process-cost - 71		Process-cost - 430(4)				
Amount	Local	(VN. D)				•			93,166		1,007,005		9,404,940		10,505,110		3,501,703
Am	Foreign	(J.YEN)		5,388,120		5,264		5,416		65,931	,		20.514		5,485,245		1,828,415
Unit Price	Local	(VN. D)		1					3,890	,	19,000,087		3.134.980				
Ų	Foreign	(J.YEN)	٠	1,796,040		658		229	1	784,890			6.838				
	Quantities			3		00		∞	23.95	0.084	0.053		m				
	Cuit			each		each		each	kg	щЗ	m3		place				
	Standard		Mov.	(860*1010*143)		Mov. (\$46*1100)	Mov1. (165.2	A*600)	mm 6 ф				Wegtth = $1108 \text{ kg}$				83
	Description			Rubber bearing		2 Anchor bolt		3 Anchor cap	4 Spiral steel bar	5 Tar joint filler	Non shrinkge mortar		7 Setting work		Total		Per: 1 plate
	ġ Ż			-		2		m	4	2	9		7				

Setting work of rubber bearing (Box girder) Per: 3 plate-Mov 2. (610\*810\*110)

	Remarks			6,300*0.27=123,201; Material -				Material - 6	Material - 88	Process-cost - 71	Process-cost - 430(4)				
Amount	Local	(VN. D)			•			93,166		1,007,005	9,404,940		10,505,110		3,501,703
Am	Foreign	(J.YEN)		2,365,740	5,264		5,416	- ,	65,931		20,514		2,462,865	-	820,955
Unit Price	Local	(VN. D)		•	 •		•	3,890	•	19,000,087	3,134,980				
<sup>u</sup> n	Foreign	(J.YEN)		788,580	658		677	•	784,890	-	6,838				
	Quantities			3	8		<b></b>	23.95	0.084	0.053	3				
	Unit	-		each	 each		each	ķ	m3	m3	place				
	Standard		Mov	(610*810*110)	Mov. (\$46*1100)	Mov1. (165.2	A*600)	4 9 mm			Wegtth = 527 kg	-		-	te
	Description			1 Rubber bearing	 2 Anchor bolt		3 Anchor cap	Spiral steel bar	Tar joint filler	Non shrinkge mortar	Setting work		Total		Per: 1 plate
	Ż	;		-	7		<b>(^</b> )	4			1				

Setting work of rubber bearing (PC I girder-L=99m;L=66m)
Per: 12 plate-Fix(510\*310\*56)

					Unit	Unit Price	Amount	ount		
ÿ	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
1	Rubber bearing	Fix(510*310*56)	each	12	55,800	1	009,699	•	Material -180	Γ
2	Anchor bolt	Fix (432*750)	each	20	250	-	5,000	1	Material - 41	Γ
3	Anchor cap	ф 42.7*400	each	20	46	1	920			
4	Spiral steel bar	mm 6 ф	kg	10	t	3,890	•	38,900	Material - 6	<u> </u>
5	Tar joint filler		m3	0.024	784,890	•	18,837	r	Material - 88	Γ-
9	6 Non shrinkge mortar		m3	0.136	200 T 10 10 10 10	19,000,087	•	2,584,012	Process-cost - 71	
. 7	Setting work	Wegtth = 21 kg	place	12	•	178,386	ı	2,140,632	Process-cost - 430(1)	Ι
								<i>z</i>		Γ
	Total						694,357	4,763,544		Γ
										Γ
	Per: 1 plate	te					57,863	396,962		<u> </u>

Setting work of rubber bearing (PC I girder-L=99m)
Per: 12 plate-Mov.(500\*330\*63)

					T.	Unit Price	Am	Amount		
2	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
3				,	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		г
		Mov.2.(500*330*								
_	Rubber bearing	(3)	each	12	221,760	-	2,661,120		Matenal - 178	·
2	Anchor bolt	Mov.(\$ 25*600)	each	20	182	1	3,640	•		
		Mov.								
~	Anchor cap	(60.5A*350)	each	20	79		1,582			
۲	Spiral steel har	49 mm	Z,	10	ι	3,890	1	38,900	Material - 6	
	Tarioint filler	-	m3	0.033	784,890	1	25,901	•	Material - 88	
بار	A Non chanbas mortar		m3	0.122		19,000,087	•	2,318,011	Process-cost - 71	
5/1	Setting work	Wegtth = 107 kg	1 "	12	1,665	680,020	19,980	8,160,240	Process-cost - 430(3)	
				1						
	Total						2,712,223	10,517,151		
'										- 1
	Per: 1 plate	te					226,019	876,429		_

PROCESS COST - 432(3)

Setting work of rubber bearing (PC I girder-L=99m;L=66m)
Per: 6 plate-Mov (500\*300\*59)

			7		Uni	Unit Price	Aπ	Amount		
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
.					(J.YEN)	(VN. D)	(J.YEN)	(V. D.		
		Mov.2.								
_	1 Rubber bearing	(500*300*59)	each	9	209,520		1,257,120	1	Material -177	
7	Anchor bolt	Mov.(\$ 25*600)	each	10	182	1	1,820	•		r
		Mov.								
	Anchor cap	(60.5A*350)	each	Ś	62	4	395	•		
		Mov.								·····
m	Anchor cap	(89.1A*350)	each	\$	119	1	595	•		
4	Spiral steel bar	աա 6 ф	kg	5		3,890	.1	19,450	Material - 6	
S	Tar joint filler		m3	0.023	784,890	ı	18,052	1	Material - 88	
٥	Non shrinkge mortar		m3	0.061	1	19,000,087	•	1,159,005	Process-cost - 71	
7	Setting work	Wegtth = 100kg	place	9	778	383,288	4,668	2,299,728	Process-cost - 430(2)	<u>,</u>
		-								
	Total						1,282,650	3,478,183		<b>,</b>
	Per: 1 plate	9					213,775	579,697		

Fabrication of joint steel plate for connecting pontoons Per: 10 plate

					Umi	Unit Price	Am	Amount	
9	Description	Standard	Chit	Quantities	Foreign	Local	Foreign	Local	Remarks
	•			i i	(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
_	Skilled labor		person	1.2	,	170,100	1	204,120	0.48*2.5
2	Common Jabor		person	3	-	80,600	•	241,800	1.2*2.5
<u>.</u> ب	3 Plate steel (WxLxH)	270*350*10	χg	81.62	37		3,020		7.42kg*10+loss10%;Material-1
4	Plate shears	15.0 KW	day	0.03	•	164,322	1	4,930	
Į,	Drilling machine	4.5 KW	day	0.42	-	72,334	•	30,380	
	Total						3,020	481,230	
Γ									
	Per: one	Per: one plate=total/10*1/5	N.				302	48,123	
_									

Setting and removal pontoons Per: 1 set

5	TOTAL DESC	Standard	5	Campings	180 TO T	Local	12001	Local	- Kentans
•					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
	Joint steel plate	270x350x10mm	4269	128	302	48 123	38.656	K 150 744	Decogn cont /33 (1)
	2000	1111101 40004017		0.47	100	10,140	oco:sc	0,102,744	FIOCESS COST - 433 (1)
74	Bolt	M27x80mm	each	1536	•	12,000	-	18,432,000	(Material - 85)*10/15
'n	Anchor	Cast- iron	each	8	1	1,250,000	1	10,000,000	(Material - 83)*0.5
4	Rope	ф 45	m	240	882	,	211,680		Material - 84
S	Foreman		person	11.25	•	183,300	•	2,062,125	4.5*2.5
٥	Skilled labor		person	20		170,100	1	3,402,000	8.0*2.5
7	Common labor		регѕоп	82.5	_	80,600	ŀ	6,649,500	33.0*2.5
∞	Miscellaneous expenses	(Sum of above)*2%	set	1			5,007	934,107	
									(0.05 day+0.05x50%)*14
9	Barge with crane	25 ton; 200 ton	day	1.05	21,900	302,000	22,995	317,100	each; Equipment - 91
	*								(0.01day+0.01x50%)* 14
									each*T; T=4.95; Equipment -
2	Tug boat	100 ps	hr	1.02	1,310	120,000	1.336	122,400	75
									(0.05day+0.05*50%)*
	11 Welding machine	250 A	day	1.05	1,390	31,000	1,460	32,550	14each; Equipment - 55
	Total						281,133	48,111,526	
		-							
	Per: one set						281,133	48,111,526	

Supporting facility for pressure pipes in river Per: one set

					Unit	Unit Price	Amount	ount		<u></u>
ò	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		7
	Assembling and	7.2x3.6x1.8 m;								·
·	disassembling the	pontoon L = 75								
	l supporting facility	m : W = 3.6 m	set	1	281,133	48,111,526	281,133	48,111,526	Process cost - 433 (2)	Т
	Depreciable value of									
7			day	300	ı	1,400,000		420,000,000	100,000*14 each	<del>-</del>
	Total						281,133	468,111,526		T
										<u>-</u>
	Per: one set						281,133	468,111,526		_
	Per: 2 set						562,266	936,223,052		
	Concrete placing per 1 m3	1 m3					69	114,818		_,

Note: (Total amount of 2 sets)/Total concrete volume of P16,17 and cantilever erection bridge except side span (8154 m3)

Expansion joint work, type A Per each (Length = 14m)

	Remarks		Material - 29			Process cost - 166	Material - 55	Material - 48	Process cost - 151	0.5*2.5	2.0*2.5	0.5*2.5	2.0*2.5		
tunt	Local	(V.N. D)			•	389.375	1		607,600	229,125	850,500	139.625	403,000	2,619,224	187,087
Amount	Foreign	(J.YEN)	3,864		58	423	1,081,080	430,920	843				•	1,517,188	108,371
Unit Price	Local	(VN. D)	1		•	487,938	1	ı	456,842	183,300	170,100	111,700	80,600		
Unit	Foreign	(J.YEN)	23,000		1	530	2,574	30,780	634	ı					
	Quantities		0.17			08.0	420.00	14.00	1.33	1.25	5.00	1.25	5.00		
	Unit		ton		set	m3	kg	ш	m3	person	person	person	person		-
	Standard		ф 16	(sum of above) *	1.5%			d = 30 mm	class C1						
	. Description		Reinforcement work		2   Supplemental material	3 Asphalt pavement	4 Epoxy resin mortar	5 Expansion joint	Concrete	Foreman	Skilled labor	Welder	Common labor	Total	Per 1.0 m
:	è Ž			-	2		4	3	٥	7	∞	6	0.		

Expansion joint work, type B Per each (Length = 14m)

_													y.			-,-	,		-,	,		.,	-,-	
		Remarks		Material - 20	1410101161 - 27			Process cost - 166	Material SS	ואומוכין ביי	Material - 49	Decrees cost - 151	1100030031-101	0.5*2.5	2 0*2 5	C	0.5*2.5	2 0*2 5	2:2					
	unt	Local	(VN. D)				1	389.375		•	1	003 203	000,100	229,125	005058	OCC.OCO	139,625	403 000	200,000		160 013 5	4,017,444		187,087
•	Amount	Foreign	(J.YEN)	2064	2,004	-	- 28	423	000 100 -	1,081,080	1,260,000	0.40	043	,		•	,				076 776 6	007'046'7		167,591
	Unit Price	Local	(VN. D)		-		•	487 038	2271.21			(, (, ),	450,847	183,300	00.5	1/0,100	111,700	, , ,	80,000					-
	E. C.	Foreign	(J.YEN)	00000	23,000			UES		2,574	000 06		634	٠					•					
		Ouantities		1	0.17		00 -	000	00.0	420.00	14.00	20.5	1.33	1 25	7.7	5.00	1 25	1:42	5.00					-
		I Init			ton		å		5	Ϋ́	}	=	Ë	a Conce	DCISOIT	person		person	person					
		Standard			ф 16	(sum of above) *	7051	1.070		-	2 - 60	a = 50  min	class C1											
					Reinforcement work			Supplemental material	Asphalt pavement	Enovy regin mortar		Expansion joint	Concrete		Foreman	Skilled labor		Weider	Common labor			Total		Per 1 0 m
		;	Š.		-		(	7	m	-	†   '	'n	7		_	×	١	0	101					

Expansion joint work, type C Per each (Length = 14m)

Š.

	-		٠	Ë	Unit Price	Amount	unt		
Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
				(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
Reinforcement work	ф 16	ton	0.62	23,000		14,267	٠	Material - 29	
	Jo mns)								
Supplemental material	above)*1.5%	set	1.00			214			
Tar joint filler		kg	20.00	513	-	10,260	-	Material - 88	···
Expansion joint	d = 110 mm	ш	14.00	317,700	ŀ	4,447,800		Material - 50	
Concrete	class C1	_ m3	2.08	634	456,842	1,319	950,231	Process cost -151	
Foreman		person	1.25	-	183,300	1	229,125	0.5*2.5	
Skilled labor		person	6.25	1	170,100	1	1,063,125	2.5*2.5	
Welder		ретѕоп	2.50	ı	111,700	1	279,250	1.0*2.5	٠
Common labor	-	person	6.25	•	80,600	-	503,750	2.5*2.5	
								-	
Total						4,473,860	3,025,481		
		-	***			-			
Per 1.0 m						319,561	216,106		

Expansion joint work, type D Per each (Length = 14m)

					Chit	Unit Price	Amount	bunt		
Ž	Description	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)		
1	Reinforcement work.	ф 16	ton	0.62	23,000	1	14,267	1	Material - 29	-7
		(sum of above) *								
7	2 Supplemental material	1.5%	set	1.00		1	214	•		r
3	Tar joint filler		kg	25.70	513	•	13,184	1	Material - 88	
4	<b></b> -	d = 150 mm	ш	14.00	317,700	•	4,447,800	1	Material - 51	
2	Concrete	class C1	m3	2.08	634	456,842	1,319	950,231	Process cost - 151	
9			person	1.25	1	183,300	•	229,125	0.5*2.5	
1	Skilled labor		person	6.25		170,100	-	1,063,125	2.5*2.5	
∞	-		person	2.50	•	111,700	1	279,250	1.0*2.5	
6			регѕоп	6.25	-	80,600	1	503,750	2.5*2.5	
	Total						4,476,784	3,025,481		
										~1
	Per 1.0 m						319,770	216,106		
***************************************										

Main girder construction joint roughening work Per 1.0m2

			-		Cni	Unit Price	Am	Amount	
No. Description Standard Unit Quant	Chit		Quani	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
7 Skilled labor person	person	person		0.88	ı	170,100	٠	148,838	0.35*2.5
		-							
Total								148,838	
Per 1.0 m2		-					•	148,838	

Bottom form fabrication for box girder Per: 10 m2

					-	112:4 07:00		4 motint		
					5	LINC			-	
		Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks	
ġ	Description			,	(J.YEN)	(V.N. D)	(J.YEN)	(VN. D)		
- 1		000 1000 10	4000	1		29 455	,	184	(Material -130)*1.62*0.5	
	[P]vwood panel	900x1800x12	cacii	`					A 04/000 101/1/20	
١,			m3	0.39	ı	662,300		757,907	('vialena! = 132 / 0.3	
~1	Timber			,			,	69.672		
(1)	Supplemental materials	(sum of above) *15%	Set	-				7000	4 c*- C	
١,	\$		nerson	0.25	,	183,300	•	45,825	0.1.2.3	
4	roreman					111 200		020 070	1 0*0 -	
١,	1000000		person	7.2	1	111,700	1	007,717		
ኅ	Calpaine			ı,		00200		1005 100	- C*O ~	_
l,	Common Jahor		person	7.5	1	00,000		0001107		
٥	Common	7 6 7 7				_		21.063		
<b>!</b> ~	Miscellaneous expenses	(labor cost ) * 4%	19S	1						
Ì							•	1.081,791		
	Total									
-										
								108 170		
	Per: 1 m2						•	100,100		_

Outer form fabrication for box girder Per: 10 m2

				·		,						 
	Remarks		(Material -130)*1.62*0.5	(Material -132 )*0.5		0.1*2.5	1.0*2.5	1.0*2.5				
Amount	Local	(VN. D)	206,184	264,920		45,825	418,875	201,500	26,648		1,163,952	38.798
7	Foreign	(J.YEN)	E	•		ı	_	•	-		5	
Unit Price	Local	(VN. D)	29,455	008,299		183,300	111,700	80,600				
Un	Foreign	(J.YEN)	-	-		1	t	1				
1.	Quantities		7	0.4	1	0.25	3.75	2.5	1			
	Unit		each	m3	set	person	person	ретѕол	set			
	Standard		900x1800x12		(sum of above) *15%				(labor cost ) * 4%			(3 times*10)
	Description		Plywood panel	Timber	Supplemental materials	Foreman	Carpenter	Common labor	Miscellaneous expenses		Total	Per: 1 m2 = total / (3 times * 10)
	S		,	7	3	4	5	9	7	-		

Inner form fabrication for box girder Per: 10 m2

					7				Γ	T	Ŧ	<del></del> r	 <u>1</u>
	Remarks		(Material -130)*1.62*0.5	(Material -132 )*0.5		0.1*2.5	1.0*2.5	1.0*2.5					
Amount	Local	(VN. D)	206,184	218,559	63,711	45,825	418,875	201,500	26,648			1,181,302	63,003
	Foreign	(J.YEN)	f	-	,		t					•	•
Unit Price	Local	(VN. D)	29,455	662,300		183,300	111,700	80,600					
5	Foreign	(J.YEN)	'	1		ı							
	Quantities		7	0.33	ĭ	0.25	3.75	2.5	-			:	
	Unit		each	m3	set	person	person	person	tes				
	Standard		900x1800x12		(sum of above) *15%				(10hor cost ) * 40%	(1000 1000)			tal/10)*0.1*(3 times-1
	Description		Plywood nane	Timber	Supplemental materials	Foreman	Camenter	Common Jahor	Minosilonomic avancer	ואווארבוומוובסתא באחרווארא		Total	Per: 1 m2= $total/(3*10)+(total/10)*0.1*(3 times-1)$
	Ž	}	-		m	4	-[~	, 4	Т	$\left[ \right]$			

Setting and removal of temporary ladder (height 10 m) at the bridge pier Per. I place

					Uni	Unit Price	7	Amount	
2 Ž	Description	Standard	Chrit	Quantities Foreign	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	J.YEN) (VN. D)	(J.YEN)	(VN. D)	• -
-	Setting and removal work		set	1	ı	2,922,976	1	2.922.976	Refer to C
7	Miscellaneous expenses (Sum of above )*4%	(Sum of above )*4%	set	1	,			116.919	
	Total						1	3.039.895	The second secon
	Per: 1 place	lace					I	3,039,895	

C: (2.69\*T+0.361\*y+0.258\*y) \*H

T: Duration of ladder setting at the bridge pier (11 months)

y: Wage rate of skilled labor (188,864 \* 2.5 = 472,160 / day)

H: Height of temporary ladder

Setting and removal of temporary ladder (height 12 m) at the bridge pier Per. 1 place

	Remarks		Refer to C				
	Rer		Refe				
Amount	Local	(VN. D)	3,507,572	140,303	3,647,875	3,647,875	7,295,750
A		(J.YEN)	1	-	1	-	1
Unit Price	Local	(VN. D)	3,507,572	_			
		(J.YEN)	-	-			
	Quantities		1	1			
	Carit		set	set			
	Standard			(Sum of above )*4%		ace	ces
	Description		Setting and removal work	Miscellaneous expenses	Total	Per: 1 place	Per: 2 places
	Š.			74			

C: (2.69\*T+0.361\*y+0.258\*y) \*H

T: Duration of ladder setting at the bridge pier (11 months)

y: Wage rate of skilled labor (188,864 \* 2.5 = 472,160 / day)

H: Height of temporary ladder

Setting and removal of temporary ladder (height 15 m) at the bridge pier. Per: 1 place

	Remarks	Refer to C												
Amount	Local (VN. D)	4 384 464	2: 1: 2:	175,379			4.559.843			4 559,843		18,239,370		
Q.	Foreign	(,,)	1				•					r		
I Init Price	Local	(VIX. D)	4,284,464											
11,1	Foreig	(J.YEN)	ı		<u> </u>				ļ					ı
	Quantities				~									
	Unit		set		set									
	Standard				(Sum of above )*4%						1.4.5	are	3068	
	Description		1	Setting and removal work	Miscellaneous expenses			Total	10.41			Per: 1 plate	Per 4 nlaces	
	o Z		+	S	,	+		-			1		-	

C: (2.69\*T+0.361\*y+0.258\*y) \*H
T: Duration of ladder setting at the bridge pier (11 months)
y: Wage rate of skilled labor (188,864 \* 2.5 = 472,160 / day)
H: Height of temporary ladder

Reinforcement steel work for deck slab Per: 1 ton

							~	1		_
						Unit Price	₹	Amount		
: 5	Description	Standard	Unit	Quantities	Foreign	Foreign Local	Foreign	Local	Remarks	
ė į					(J.YEN)	(VN. D)	(J.YEN)	(VN D)		-1-
							-			
		· ·	1	5	23 690	23 690 1 795,763	23,690	1,795,763	Process cost - 61	· · · · · · · · · · · · · · · · · · ·
	Reinforcement steel work	D13-28mm		1.00	22.5	, , , ,				
	Suspended scaffolding		ţ	1	,	60.597	ı	60,597	Process cost - 423	<sub>T</sub>
CI.	2 under PC I Girder		1101	20:1						
										7
							069 26	1.856.360		
	Total						2/26/24			
										1
							24	1856		
	D 1 Lee						1.7	1 2 2 2 6 .		1
	rer: I Kg									

Timbering work for box culvert Per: 100 air m3

				÷	Unii	Unit Price	A1	Amount		
No.	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
					(J.YEN)	(VN. D)	(J. YEN)	(VN. D)		_
	Frame		each	35	352	-	12,320	•	8.8*40 days	
7	Brace		each	62.9	08	-	5,272		2.0*40 days	
٣	Jack base	stroke 250mm	each	24	281	•	6,744	1	(Material -123)*0.3	
4	Jack base		each	24	338	1	8,112	-	(Material -119)*0.3	
S	5 Round pipe	¢ 48.6	Ε	92.6	20	•	1,852	•	0.51*40 days	_
9	Clamp		each	93.1	59	•	5,493	t	(Material -160)*0.3	
7	Supplemental materials	(sum of above) *5%	set	-		•	1,990	•		
8	Foreman		person	1.63	,	183,300	4	298,779	0.65*2.5	
٥	Rigger		person	6.2		153,200	ı	949,840	2.48*2.5	
10	10 Common labor		person	4.88	1	80,600	1	393,328	1.95*2.5	3
11	Miscellaneous expenses	(labor cost)*4%	set	7	ı		2	65,678		
	Total						41,783	1,707,625		т
	Per: 1 air m3						418	17,076		

Timbering work for box culvert Per: 100 air m3

					5	Unit Price	€.	Amount	
	Decomption	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	
	Continue						(J.YEN)	(VN. D)	
			20000	525				962,325	
_	Foreman		Detaci	)		00000		1 417 100	
	hoger	-	person	9.25	,	133,200	ŀ	0015/1451	
	1-1		nerson	13.25	1	80,600	1	1,067,950	
	common labor							379 211	
	iscellaneous expenses	(labor cost)*11%	set	-	'			302 300 5	
	Total	-					i	3,046,000	
	72.0								
								38.286	
						_	-	704,00	

Remarks

2.1\*2.5

Concrete work for box culvert (Class E2) Per: 10 m3

			:		Cnit	Unit Price	7	Amount		
ę Z	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
	•				(J.YEN)	(VN. D)	(J. YEN)	(VN. D)	-	·[
-	Form work		m2	28.1		86,805	-	2,439,221	Process cost -38	
2	Concrete	Class E2	m3	10	634	396,674	6,340	3,966,740	Process cost -154	
m	Concrete placing		m3	10	764	49,304	7,640	493,040	Process cost -28	
4	4 Timberring work		air.m3	13	418	17,076	5,434	221,988	Process cost -445	
										Т
										<u>-</u> -
	Total						19,414	7,120,989		
	Per: Iplace						1,941	712,099		

5	
_	
7	
5	
8	
2	
Š	
Concrete Work 10r Dox Culvel (C)	Ë
cre	10 m <sup>3</sup>
5	Der.
_	,,,

					im(1	Unit Price	7	Amount		
	December	Standard	Unit	Ouantities	Foreig	Local	Foreign	Local	Remarks	
o Z				,		(VN, D)	(J.YEN)	(V.N. D)		7
				100		86.805	-	2,439,221	Process cost -38	
<u>,</u>	Form work		ZIII	1.07		20,000	0,0,0	071 000 0	Discourage 254	Γ-
ľ		Clace E2	m3	0	634	396,674	0,540	3,900,740	F1000000000	1
7	Concrete	Class LE	,	-	176	10201	7 640	493.040	Process cost -28	
4.	Concrete placing		шŞ	2	+o/	12,001	25.	0.00	(4) 2 7 7	Τ
,	Control of the control		200	13	•	38.266	ı	497,458	Process cost -445(2)	_
4	(Timber-ring work		C111.)(B	2						
		1								T
							12 000	7 306 459		
	Total						13,700	(Cathority)		Τ
										_
								282000		Γ
	Dor. 1m3				-		366,1	040,667		٦
	rel: mil			,						

Concrete work for name plate Per: 10 m3

		тТ	т		<del>-</del> -T					-1		-	-1
	Remarks		Process cost -232	Material - 6	Material -58	Process cost- 153	0.72*2.5	0.84*2.5	3.06*2.5				
Amount	Local	(VN. D)	1,472,786	439,570		590,528	329,940	357,210	616,590	52,150	3,858,774		385,877
¥	Foreign	(J.YEN)	-	•	9,200	006	•	,		1	10,100		1,010
Unit Price	Local	(VN. D)	189,681	3,890		415,865	183,300	170,100	80,600				
Umi	Foreign	(J.YEN)		ľ	230	634	_						
	Quantities	,	17.6	113	40	1.42	1.8	2.1	7.65				
	Cmit	:	m2	χg	Set	m3	person	person	person	set			
	Standard			\$ 10 mm	M 16x160	class D-1				(Labor cost) * 4%		-	
	Description	:	Form work	Steel mesh	Anchor bolt	Concrete	Foreman	Skilled labor	Common labor	Miscellaneous expenses	Total		Per: 1place
	Š			7	m	4	.~	ی	,	~			

Name plate setting work Per: 10 places

		ks		- 56	1		نا	5.									
		Remarks		Material - 56	5 6*5 0		0.5*2.5	2.0*2.5									
4	Amount	Local	(VN. D)	19,450,000	201000	52,6722	218,579	403,000	SCU PE	077,10		20.334,732			2,033,473		
•	4	Foreign	(J.YEN)	i			,	ı		1		•			•		
	Unit Price	Local	(VN. D)	1,945,000	162 200	102,200	170,100	80,600						:	-		
;	<u>=</u>	Foreign				,	t	-									
		Quantities		10	30.1	1.43	1.285	S	-	_							
		Unit		each		person	person	person		set				-			
		Standard								(Labor cost) * 4%	Ī						-
		Description		2,000	Name plate	Foreman	Skilled labor	Common labor	COMMISSION ISSUE	5 Miscellaneous expenses			Lotal		1 - 1 - 1 - 1	rer: 1piace	
		2	<u>;</u>	1,	-	N	٦		,	'n			_				

PROCESS COST - 450

Boring including undisturbed sampling and standard penetration test Per:  $10\,\mathrm{m}$ 

			The state of the s						
,					Uni	Unit Price	7	Amount	
Š.	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)	(V.N. D)	
-	Bentonite		kg	35.62	'	800	1	28,496	Material - 176
2			each	0.1	14,970	-	1,497	-	Material - 129
<u>س</u>	Metal crown		each	0.1	4,700	-	470	•	Material - 128
4	Rod		each	0.14	16,000	•	2,240	_	Material - 127
'n	casing	L=1.5m	each	0.03	10,300		309	1	Material - 126
9	Supplemental materials	(sum of above)*6%	set	1			271	1,710	
-	Diesel oil		liter	11	•	3,273		36,003	Material - 134
∞	Lubricant oil	(Diesel oil cost)*5%	set	,_1		1	-	1,800	
6	Boring machine	98 ф	day	1.99	3,040	-	6,050	•	Equipment - 28
2	10 Boring pump	30 liter / min	day	1.99	1,570	1	3,124	,	Equipment - 26
=	Diesel engine	5.2 PS	day	1.99	310	ł	617	1	Equipment - 24
2			hr	15.92	•	37,057	•	589,947	1.99day*8 hrs
2	13 Engineer B		Ę	15.92	1	31,000	_	493,520	1.99day*8 hrs
14	14 Engineer C		μ	15.92	,	22,500	-	358,200	1.99day*8 hrs
15	15 Common labor		person	5	t	80,600	ı	403,000	2*1*2.5
16	16 Miscellaneous expenses	(labor cost) * 8 %	set	Ţ	-	-	1	147,573	
11	17 Standard penetration test		time	5	1,020	•	5,100	,	
	Total						19,678	2,060,250	
	Per: 1 m			Ĭ			1,968	206,025	

Testing at bridge area Per: one borehole

					*	ŗ		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
					5	Unit Price	,	Amount	
2	Decomption	Standard	Unit	Ouantities	Foreign	Local	Foreign	Local	Remarks
2					(J.YEN)	(VN. D)	(J.YEN)	(VN. D)	
									test of 1 time per one
	Physical test on disturbed								borehole
-	l cohesive soil samples				•				
	- Depreciable value of		•		:				
	Equipment and tools for		•		6.436		6 436	•	
	testing		361	-	32.5	245 (00)		345 600	
	- Labor cost		set		_	343,600		000,040	tout of times not one
	Physical test on undisturbed							•	lests of 2 times per one borehole
7	2 soil samples								
	- Depreciable value of		į	,	18 578		37.156	•	
	Equipment		361	1 (	2.00	205 300		1 370 218	
	- Labor cost		set	2	-	060,109		37.721	
3	3 Reporting	(labor cost) * 8%	set		-		*	207,151	
			:					100000	
	Total						43,592	1,853,083	
	T. C. C. C. C. C. C. C. C. C. C. C. C. C.						43,592	1,853,083	
	rer: one porenoie						1.453	61,769	:
- *	Per: 1 m = $Total/30$						200		

Testing at embankment area Per: one borehole

					Uni	Unit Price	1	Amount	
Š.	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
			-		(J.YEN)	(VN. D)	(J.YEN)	(VN D)	
	Physical test on disturbed								tests of 3 times per one
_	1 cohesive soil samples					1		•	borehole
:	- Depreciable value of								
	Equipment and tools for								
	testing		set	3	6,436	1	19,308	•	
	- Labor cost		set	3 .	. 1	345,600	•	1,036,800	
	Physical test on undisturbed								tests of 5 times per one
7	soil samples							:	borehole
1	- Depreciable value of								
	Equipment		set	5	18,578	•	92,890		
	- Labor cost		set	5	,	685,109	1	3,425,545	
m	Reporting	(labor cost) * 8%	set	1	ı		1	356,988	
	-	-							
	Total						112,198	4,819,333	
	Per: one borehole					٠	112,198	4,819,333	
	Per: 1 m = Total/30						3,740	160,644	

Deck slab concrete work (PC I Girder , L=66m)
Per: 10 m3

	Remarks		Process cost -38	. Process cost. 151	101 -100 550001	0.07*2.5	0.28*2.5	0.31*2.5		,	Equipment - 60		Process cost -347(2)		Dec 2005 200 (2)	LIOCESS COSE-370 (2)	1	Process cost - 423				
Amount	Local	(VN. D)	564,233	A 5.68 420	021,000,1	32,078	119,070	62,465			49,140	-	9,420	54,048	100000	09,760	000	066,100	6,106,643		777 017	+00°010
Aı	Foreign	(J.YEN)	1	6 240	0+5.0						3,358		640	103		-	:	,	10,441			1,044
Unit Price	Local	(VN. D)	86.805	156 013	420,047	183,300	170,100	80.600	<u> </u>		78,000		157,000		0.00	3,978	. !	60,799				
Unit	Foreign	(J.YEN)	-	100	450	1	•	•			5,330		099,01			-		•				
	Quantities	•	6.50		10	0.175	0.700	0.775			0.63		0.06	1		10.0		10.0				
	Chrit		cm c	,	rn3	person	person	Derson	1000		ji,		dav	100	320	m3		m3				
	Standard				class C - 1					boom type	90 ~ 110 m3/hr	boom type	$90 \sim 110 \text{ m}^3/\text{hr}$	/o of obout 0 10/	(SUITION ADDIVE) 170	-						
	Description		Į.	Form Work	Concrete	Foreman	Chilled labor	SALINCE INDOI	Common labor		Concrete numb	Dead head cost of concrete	The state of the s	dramd	Miscellaneous expenses	Curing of concrete	Suspended scaffolding	under PC I Girder	Total	I VIAI		Per: 1 m3
	. 2	į	<u> </u>		7	1	1	+	^		ve	ľ	٦	1	×	6		10				

Deck slab concrete work (PC I Girder, L=99m) Per: 10 m3

					, , , ,		*	****	
					u O	Onit Price	٠,	Amount	
Š	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN. D)	(J.YEN)		
_	Form work		m2	5.7	1	\$08'98	-	494,789	Process cost - 38
2	Concrete	class C - 1	m3	10	634	456,842	6,340	4,568,420	Process cost - 151
т	Foreman		ретѕоп	0.175	1	183,300	-	32,078	0.07*2.5
4	Skilled labor		ретѕоп	0.70	1	170,100	-	119,070	0.28*2.5
5	5 Common labor		person	0.775	1	80,600	1	62,465	0.31*2.5
		boom type,							
6	Concrete pump	90 ~ 110 m3/hr	hr	0.63	5,330	78,000	3,358	49,140	Equipment - 60
	Dead head cost of concrete	boom type,							
7	dumd	$90 \sim 110 \text{ m}3/\text{hr}$	day	90.0	10,660	157,000	640	9,420	Process cost -347(2)
8	Miscellaneous expenses	(sum of above) * 1%	set	1			103	53,354	
6	9 Curing of concrete		m3	10.0	-	3,978	_	39,780	Process cost-398 (2)
	Suspended scaffolding						-		
10	10 under PC I Girder		m3	10.0		60,799	1	607,990	Process cost - 423
	Total	-					10,441	6,036,505	
	Per: 1 m3						1,044	603,650	

Fabrication of Pre-cast panel for PC I girder Per: 100 panels

·-·					Т	-т		 7				ľ	7	- <sub>T</sub>			 Т	Τ.	
	Remarks		16*10 days	23*10 days		(Matenal - 132)*0.5		Process cost - 60	Process cost - 151	Process cost - 34	2.4*2.5	V 0*0 0 F	10.0 2.3	10.0*2.5					
Amount	Local	(VN. D)	1	1		1,589,520	15,895	3,722,981	6,834,356	1,193,988	008.660.1	000, 000, 0	7,792,500	2,015,000	236,292	19,500,332		195,003	104,224
Aı	Foreign	(J.YEN)	000'08	23,000	77,000	1	1,030	43,903	9,485	,			1	•	1	157,417		1,574	841
Unit Price	Local	(VN. D.)	•		-	662,300		2,096,273	456,842	79,812	183 300	22,552	111,700	80,600		:			
Ę.	Foreign	(J.YEN)	160	220	7007		•	24,720	634	1			•	7.					
	Quantities	ŗ	200	901	100	2.4		1.776	14.96	14.96	9		25	25	1				
	Unit	Ī	hose		eacn	m3	set	to	m3	m3	100000	100120	person	person	set				
	Standard		300×1500	2021	200×1500		(sum of above)*1%	less than 613mm	class C - 2						(labor cost) * 4%			nel	*(1/187.1)
	Description		Made   farm	ואופומו וסוווו	Metal form	Timber	4 Supplemental materials	Reinforcement steel work		Commence of Commence	Concrete placing	Foreman	Carpenter	Cornmon labor	Miscellaneous expenses	Total		Per: 1 panel	Per: 1m2=Total*(1/187.1)
	Ž	<u>:</u>	-	-	7	~	4		۷	2	$\int_{0}^{1}$	×	6	2	=				

Transportation of Pre-cast panel Per: one truck

											1
	Remarks		Equipment - 34	1/T; T = 4.44;	Equipment - 17						
Amount	Local	(VN. D)	000'29		12,100		79,100		79,100		1,566
Aı	Foreign	(J.YEN)	2,210		774		2,984		2,984		59
Unit Price		(VN. D)	000'19		55,000						
Cari	Foreign	(J.YEN)	2,210		3,520						
	Quantities		1		0.22						
	Unit	:	h		J.						
	Standard		10 ton		20 ~22 ton				= 27 each		7*0.995*1.88)
	o. Description		Truck		Truck crane		Total		Per: one truck = 27 each		Per: 1m2 = Total / (27*0.995*1.88)
	ب		1 -		$\sim$	ſ	1	1	1.	1	ŀ

Unloading pre-cast concrete panel Per: 100 each

	Remarks			0.5*2.5	5*2.5	0.5*2.5	.5*2.5 .0*2.5 .0*2.5	0.5*2.5 1.0*2.5 1.0*2.5	.5*2.5 .0*2.5 .0*2.5 Equipment-17	0.5*2.5 1.0*2.5 1.0*2.5 35.9/100, Equipment -17	.0*2.5 .0*2.5 .0*2.5 Equipment -17	.5*2.5 .0*2.5 .0*2.5 Equipment -17	.0*2.5 .0*2.5 .0*2.5 Equipment -17	.\$*2.5 .0*2.5 .0*2.5 Equipment -17	.0*2.5 .0*2.5 .0*2.5 Equipment -17	.0*2.5 .0*2.5 .0*2.5 Equipment -17	0*2.5 0*2.5 0*2.5 Equipment -17
ī	<u> </u>			_			1		ļ.				r	/			
THEORIE	Local	(VN. D)	229,125	036 361	423,43	201 500		19,800		875,675				16/,8			
₹'	Foreign	(J.YEN)			ı			1.267		1.267				13			
Unit Price	Local	(VN. D)	183.300	00.00	170,100	002.00	00000	45 000	20000								
5	Foreig	(J.YEN)	,		,		•	2 530	7,720								
	Quantities		1.05	(4.1	2.5		2.5	700	0.30								
	Unit		100	person	norcon	100130	nerson	,	lu I	-						ļ	
	Standard								20 - 22  ton						4.		
	Description			1 Foreman	O COLUMN	2 Skilled labor	7	3 Common labor	Parale orono	Truck clane	Total				Per: 1 each		
	Z	į		-	-	7	,	m		4		1	-				_

Setting of pre-cast concrete panel Per: 10 each

	-				:	C	Unit Price	,	Amount	
	ġ Z	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
						(J.YEN)	(VN. D)	(J.YEN)	(VN, D)	
<u> l</u>	-	Foreman		person	0.5	ŧ	183,300		91.650	0.2*2.5
_1	7	2 Skilled labor		person	1.5	,	170,100		255,150	
	m	Common labor		person	1.5	1	80,600	ı	120,900	0.6*2.5
										(10/50)*T:T=4.44
	4	4 Truck crane	20~22 ton	hr	0.888	3,520	55,000	3,126	48,840	Equipment - 17
		Total						3,126	516,540	
Ш										
		Per: 1 each	-ci					313	51.654	
-		Per: 1 m2 = $Total/(0.995*1.88*10)$	.995*1.88*10)					1,47	27.614	

Joint work for pre-cast concrete panel Per: 100 m (both side)

-		···	~~~~			·	r	r	 		~	1
	Remarks		Material - 118.	2*2.5								
Amount	Local	(4.14. 12)	1	403,000	090.8		1.00	411,060	4,111			2,186
ų,	Foreign	(3.1 514)	11,808	1	236			12,044	120			64
Unit Price	Local	(VIV. L.)		80,600								
5	Foreign	(J. Y EN)	738									
	Quantities		91	5		۲.						
	Unit		m2	Derson		120						
	Standard		t=10mm		70 0 4 7	(Sum of above) * 2 %						.88m)
	Description		Loint filler senhalt foint filler	Common labor	Common record	Miscellaneous expenses		Total	Down 1 m (hoth cide)	יייי (מסניו פיתה)		Per- 1 m2 = Total / (100m*1.88m)
	Š.		-	- -	1 (	3						

Footing concrete work (Abutment and piers)
Per 1 set

	454,635	930					ocrete)	Per:1m <sup>3</sup> (concrete)	
	2,542,771,595	5,201,490						Total	
Process cost - 398(2)	22,248,954	•	3,978		5,593	m,		Curing concrete	4
Process cost - 30	145,155,129	1,655,528	25,953	296	5,593	. m³		Concrete placing	m
Process cost - 154	2,218,597,682	3,545,962	396,674	634	5,593	m³	Class D1	Concrete	.2
Process cost - 38	156,769,830	1	86,805	1	1,806	m <sub>z</sub>	Straight	Form work	-
	(VN.D)	(J.YEN)	(VN.D)					•	
Remarks	Local	Foreign	Local	Foreign	Quantities	Cuit	Standard	Description	ģ
	Amount	Ą	Unit Price	ភ		:			

Footing concrete work
Per 1 set

Remarks			Process cost - 38	Process cost - 154	Process cost - 32	Process cost - 398(2)			_
			Proc	Proc	Proc	Proces			
ייייייייייייייייייייייייייייייייייייייי	Local	(VN.D)	46,787,895	1,193,592,066	407,566,041	11,969,802	1,659,915,804		551 650
	Foreign	(J.YEN)	3	1,907,706	677,025	ı	2,584,731	-	859
	Local	(VN.D)	86,805	396,674	135,449	3,978			
5	Foreign	(J.YEN)	•	634	225	•			
	Quantities		539	3,009	3,009	3,009			
	Chit		m <sup>2</sup>	m³	m³	EE.			
	Standard		Straight	Class D1					
-	Description		Form work	2 Concrete	Concrete placing	Curing concrete	Total		Per . Im3 (concrete)
	Š.		_	۲۱	m	4			

Wall concrete work (Abutment, height > 4m)
Per 1 set

				, C	Unit Price	7	Amount	
. Description	Standard	Cnit	Ouantities	Foreign	Local	Poreim		c c
			2			1800	Locai	Kemarks
				(J.YEN)	(Q.Z.S.)	() YEN)		
Form work	Straight	m	795	219	82.626	174 105	65 687 670	Drocess aget 30
Concrete	Class D1	33	272	1003	747 300	217 460	0.00000	110003 5031 - 33
	i or comic		CEC	£20	570,074	704,/17	136,029,182	Process cost - 154
Concrete placing		ິ≅	343	296	25.953	101 528	\$ 901 879	Ottorion and control
Curing concrete		2	, ,				7,010	Lincess cost - 30
Sing College			343	1	3,978		1,364,454	Process cost - 398(2)
		multilied		-				
Scafolding		Ë	1.030	113	36 635	116 390	37 734 050	25 +200 2000 C+Q
į		ŀ				272.01	000,407,70	riocess cast = 20
ттретпр		air m	36.3	232	68,073	8,422	2,471,050	Process cost - 37
					<b>L</b>			
Total						617,907	252.218.285	
Per:1m (concrete)	crete)	:				1.801	735 330	
						,		

Wall concrete work (Piers, height < 4m)
Per 1. set

					iell	Init Drice	v.	Amount		
		-	<u>, i</u>	Onematities	Foreign	Local	Foreign	Local	Remarks	
ģ	Description	Standard	<b>1</b> 5 5	- Kaantings	(LYEN)	(VN.D)	(J.YEN)	(V.N.D)		-1
			2	6		\$08.98		33,940,755	Process cost - 38	
	Form work	Straight	E	391		200,00			D	Τ
,	And it was	Cylindrical	m <sub>z</sub>	125	1	125,307		15,605,51	Process cost - 41	7
4	rollii wolk	,	7	371	634	396,674	235,214	147,166,054	Process cost - 154	$\neg$
ιν)	Concrete ·	Class DI	=					100.00	D-000000000	
-	Concrete macing		E	371	764	49,304	283,444	18,291,784	Frocess cost - 20	7
r	College Placing		m.1713-							
			- 111mmm	000		70 090	•	63.984.000	Process cost - 35	
'n	Scafolding		ea m	1,000	-	277670			(6)000	ı –
9	Curing concrete		m <sub>3</sub>	371		3,978	1	1,475,838	Process cost - 598(2)	
	3						0 1	700 100 000		T
	Total						518,658	006,125,082		Τ.
			.							Т
	6. 7						1,398	756,123		
- 1	Per :1m (concrete)	ncrete)								

Wall concrete work (Piers, height > 4m)
Per Lset

٠.					υni	Unit Price	7	Amount	
, Z	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
					(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
	Form work	Straight	m	1,319	219	82,626	288,861	108,983,694	Process cost - 39
5	Form work	Cylindrical	m <sup>2</sup>	297	150	132,365	89,550	79,021,905	Process cost - 42
m	Concrete	Class D1	m3	1,674	634	396,674	1,061,316	664,032,276	Process cost - 154
4	Concrete placing		ε <sup>ω</sup>	1,674	967	25,953	495,504	43,445,322	Process cost - 30
			multilj-					-	
5	Scafolding		ed m <sup>2</sup>	4,727	113	36,635	534,151	173,173,645	Process cost - 36
9	Curing concrete		ęш	1,674	-	3,978	-	6,659,172	Process cost - 398(2)
	Total						2,469,382	1,075,316,014	
		-							
	Per:1m³(concrete)	icrete)					1,475	642,363	

Wall concrete (class D1) work Per 1 set

							<	******		
					5	Onit Pince	C.	Amount		_
2	December	Standard	Chait	Ouantities	Foreign	Local	Foreign	Local	Remarks	
2					(J.YEN)	(VN.D)	(J.YEN)	(VN.D)		т
-	Town work	Straight	m <sup>2</sup>	444	267	86,097	118,548	38,227,068	Process cost - 40	1
،  -	TOILS WOLK	Colindation	m <sup>2</sup>	257	267	137,055	68,619	35,223,135	Process cost - 43	
7	roth work	Cymulicai		500	783	115 865	635.902	417 112 595	Process cost - 153	
w	Concrete	Class D1	E	1,000	100	413,000	20,000	2,11,11,11		7
4	Concrete placing		m,	1,003	457	139,806	458,371	140,225,418	Process cost - 33	
			multilied							
·	Scotolding		E,	949	113	36,635	107,237	34,766,615	Process cost - 36	Т
, ,	Simpone		٦	1.003		3,978	,	3,989,934	Process cost - 398(2)	
٥	o louring concrete									
							1 388 677	669,544,765		r
	Total						230004	20141		ή-
	Per:1m³ (concrete)	ncrete)		•			1,385	667,542		,

Wall concrete (class B1) work

					Uni	Unit Price	4	Amount	
ģ	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks
			-		(J.YEN)	(VN.D)	(J.YEN)	(O.N.A)	
-	Form work	Straight	m <sup>2</sup>	190.4	267	86,097	50,837	16,392,869	Process cost - 40
2	Form work	Cylindrical	m <sup>2</sup>	110.3	792	137,055	29,450	15,117,167	Process cost - 43
m	Concrete	Class D1	m <sub>3</sub>	429.0	634	415,865	271,986	178,406,085	Process cost - 153
4	Concrete placing		m <sub>3</sub>	429.0	457	139,806	196.053	59,976,774	Process cost - 33
- :			multilied						
5	Scafolding		m <sup>2</sup>	407.0	113	36,635	45,991	14,910,445	Process cost - 36
6	Curing concrete		m³	429.0	•	3,978		1,706,562	Process cost - 398(2)
	Total						594,317	286,509,901	
	Per:1m³(concrete)	screte)					1.385	667.855	

Beam concrete work
Per | set

					Unit	Unit Price	4	Amount		
Ž	Description	Standard	Unit	Quantities	Foreign	Local	Foreign	Local	Remarks	
5	•			:	(J.YEN)	(VN.D)	(J.YEN)	(VN.D)		7
-		Straight	]2 E	545.0		86.805	-	47,308,725	Process cost - 38	
-	FOTTI WOLK	ou aguir					77.0	150 274 271	Process cost - 153	
?	2 Concrete	Class D1	È	385.4	634	415,865	744,344	100,474,001	55: 1502 55001 1	Т
,	Sticological		Ē	385.4	764	49,304	294,446	19,001,762	Process cost - 28	<del>-</del> T
٦	5 CONCINE PRACTING		,					10100	December 208(7)	
4	Ouring concrete		Ē	385.4	1	3,978	,	1,533,121	Process cost = 320(2)	Ţ
r	Calming Collection			0 000	000	260 03	70 344	23.280.966	Process cost - 37	
Ś	5 Timbering		aır m	347.0	707	00,00	17,01	20,000		Γ
			,							7
	Total						618,133	251,398,945		_
	LOCAL									
										Г
	Por .1m3 (concrete)	(crefe)				-	1,604	652,307		٦
	102) (17 T)	(21212)								

Beam concrete work
Per 1 set

					Uni	Unit Price	4	Amount	
Š	Description	Standard	Cant	Quantities	Foreign	Local	Foreign	Local	Remarks
÷					(J.YEN)	(VN.D)	(J.YEN)	(VN.D)	
_	Form work	Straight	m <sub>z</sub>	1,142	219	82,626	250,098	94,358,892	Process cost - 39
2	Concrete	Class D1	m³	925	634	396,674	586,450	366,923,450	Process cost - 154
n	Concrete placing		E E	925	517	37,784	478,225	34,950,200	Process cost - 29
4	Curing concrete		°E	925	-	3,978	-	3,679,650	Process cost - 398(2)
5	5 Timbering		air m³	963	232	68,073	223,416	65,554,299	Process cost - 37
	Total						1,538,189	565,466,491	
	Per :1m3 (concrete)	(crete)					1.663	611.315	-

the end

