APPENDIX 8

EQUIPMENT LIST OF 8-ROAD CONSTRUCTION CENTERS

EQUIPMENT LIST OF 8-ROAD CONSTRUCTION CENTERS No. 1

	SURA THANI			SONK KHLA			TAK			LOM SAK			KHON KAEN			MAHASARAKHAM			LAMPANG			KANCHANABULI			TOTAL		
	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL
1. EARTH MOVING EQUIPMENT																											
1.1 BULLDOZER	18	5	23	6	11	17	31	11	42	18	1	19	28	0	28	17	8	25	27	23	50	15	-	15	160	59	219
1.2 WHEEL LOADER	3	3	6	2	5	7	7	0	7	5	0	5	8	2	10	7	1	8	4	3	7	5	-	5	41	14	55
1.3 TRACTOR SHOVEL	1	1	2	3	0	3	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	7	1	8
1.4 MOTOR GRADER	9	6	15	6	8	14	24	0	24	12	0	12	27	2	29	25	5	30	14	4	18	11	5	16	128	30	158
1.5 MOTOR SCRAPER	4	3	7	1	1	2	13	2	15	0	0	0	16	4	20	1	2	3	6	3	9	11	-	11	52	15	67
1.6 OTHERS	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	14	9	23	-	-	-	15	9	24
SUB TOTAL (1)	35	18	53	18	25	43	78	13	91	35	1	36	80	8	88	50	16	66	65	42	107	42	5	47	403	128	531
2. EARTH EXCAVATOR																											
2.1 HYORAULIC EXCAVATOR	1	1	2	0	1	1	1	0	1	3	0	3	0	0	0	0	0	0	1	0	1	1	0	1	7	2	9
2.2 OTHERS	0	0	0	0	0	0	1	1	2	0	0	0	3	1	4	0	0	0	1	0	1	0	0	0	5	2	7
SUB TOTAL (2)	1	1	2	0	1	1	2	1	3	3	0	3	3	1	4	0	0	0	2	0	2	1	0	1	12	4	16
3. EARTH SOLIDIFYING EQUIPMENT																											
3.1 VIBRATORY ROLLER	3	7	10	1	2	3	13	0	13	0	0	0	2	0	2	2	0	2	4	0	4	5	0	5	30	9	39
3.2 MACADEM ROLLER	0	2	2	8	10	18	3	2	5	0	0	0	2	0	2	6	2	8	0	0	0	2	1	3	21	17	38
3.3 TANDEM ROLLER	1	3	4	0	0	0	7	0	7	3	0	3	12	0	12	4	0	4	0	0	0	3	3	6	30	6	36
3.4 RUBBER ROLLER	8	5	13	5	9	14	20	0	20	7	0	7	13	0	13	14	2	16	4	3	7	5	4	9	76	23	99
3.5 VIBRATION RAMMER	0	20	20	0	0	0	3	2	5	0	0	0	0	0	0	0	0	0	3	0	3	9	2	11	15	24	39
3.6 OTHERS	0	4	4	0	0	0	16	0	16	0	0	0	33	0	33	0	0	0	5	5	10	0	0	0	54	9	63
SUB TOTAL (3)	12	41	53	14	21	35	62	4	66	10	0	10	62	0	62	26	4	30	16	8	24	24	10	34	226	88	314
4. EARTH TRANSPORTATION																											
4.1 DUMP TRUCK	14	22	36	7	13	20	49	0	49	26	0	26	58	2	60	38	5	43	19	18	37	23	0	23	234	60	294
SUB TOTAL (4)	14	22	36	7	13	20	49	0	49	26	0	26	58	2	60	38	5	43	19	18	37	23	0	23	234	60	294
5. PAVEMENT EQUIPMENT																											
5.1 ASPHALT DISTRIBUTER	0	2	2	1	2	3	8	2	10	3	0	3	4	0	4	2	2	4	2	0	2	0	1	1	20	9	29
5.2 PAVEMENT CUTTER	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.3 CHIP SPREADER	0	0	0	0	0	0	2	0	2	0	0	0	7	0	7	0	0	0	1	0	1	0	0	0	10	0	10
5.4 LINE MARKER	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1
5.5 ASPHALT FINISHER	0	2	2	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	3	3	6
5.6 ASPHALT PLANT	0	2	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	3
5.7 ROAD STABILIZER	0	0	0	0	0	0	0	0	0	3	0	3	4	1	5	0	0	0	0	0	0	0	0	0	7	1	8
5.8 ASPHALT KETTLE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	6	2	1	3	7	2	9
5.9 OTHERS	0	8	8	1	5	6	1	2	3	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	5	15	20
SUB TOTAL (5)	0	14	14	2	7	9	13	5	18	6	0	6	16	1	17	2	2	4	11	1	12	4	2	6	54	32	86

EQUIPMENT LIST OF 8-ROAD CONSTRUCTION CENTERS No. 2

	SURA THANI			SONK KHLA			TAK			LOM SAK			KHON KAEN			MAHASARAKHAM			LAMPANG			KANCHANABULI			TOTAL		
	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL	USABLE	UN-USABLE	TOTAL
6. MATERIAL/EQUIPMENT TRANSPORTION																											
6.1 WATER TRUCK	6	11	17	3	4	7	21	0	21	17	0	17	12	2	14	18	2	20	13	3	16	20	0	20	110	22	132
6.2 FORK LIFT TRUCK	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	4	4	0	0	0	1	5	6
6.3 FUEL TRUCK	2	4	6	2	3	5	5	2	7	4	0	4	7	0	7	1	0	1	2	0	2	3	0	3	26	9	35
6.4 SERVICE TRUCK	0	4	4	0	0	0	0	0	0	2	0	2	11	0	11	3	0	3	2	1	3	7	0	7	25	5	30
6.5 FLAT BED TRUCK	5	5	10	8	9	17	52	4	56	16	0	16	42	1	43	18	5	23	15	4	19	11	0	11	167	28	195
6.6 CRANE TRUCK	0	3	3	0	3	3	4	0	4	3	0	3	0	0	0	2	0	2	1	0	1	2	0	2	12	6	18
6.7 TRUCK TRAILER	0	3	3	1	0	1	3	0	3	0	0	0	4	0	4	0	0	0	2	0	2	2	0	2	12	3	15
6.8 SELF-LOADING TRUCK	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
6.9 OTHERS	0	0	0	0	0	0	2	0	2	0	0	0	3	0	3	0	0	0	4	1	5	0	0	0	9	1	10
SUB TOTAL (6)	14	31	45	14	19	33	87	6	93	42	0	42	79	3	82	43	7	50	39	13	52	45	0	45	363	79	442
7. MULTIPE PURPOSE EQUIPMENT																											
7.1 FARM TRACTOR	1	7	8	4	4	8	20	0	20	13	0	13	33	3	36	14	2	16	8	5	13	8	0	8	101	21	122
7.2 TRUCK TRACTOR	0	0	0	0	0	0	0	0	0	2	0	2	4	0	4	0	0	0	0	0	0	0	0	0	6	0	6
7.3 DIESEL GENERATOR	2	5	7	1	2	3	6	5	11	5	0	5	16	0	16	1	3	4	3	1	4	4	5	9	38	21	59
7.4 PORTABLE GENERATOR	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	2	1	3
7.5 MOBILE WORKSHOP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	3	0	3
7.6 OVER-HERD CRANE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	4	0	4
7.7 OTHERS	4	12	16	0	17	17	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	7	29	36
SUB TOTAL (7)	7	24	31	5	23	28	26	5	31	20	0	20	55	4	59	15	5	20	21	6	27	12	5	17	161	72	233
8. INSPECTION CAR /	12	40	52	5	15	20	49	2	51	35	0	35	42	3	45	28	4	32	53	11	64	8	0	8	232	75	307
MICRO BUS	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	1	0	1	4	1	5
SUB TOTAL (8)	12	41	53	5	15	20	49	2	51	35	0	35	42	3	45	29	4	33	55	11	66	9	0	9	236	76	312
TOTAL	95	192	287	65	124	189	366	36	402	177	1	178	395	22	417	203	43	246	228	99	327	160	22	182	1,689	539	2,228

APPENDIX 9

ANALYSIS ON REQUIRED NUMBER OF CONSTRUCTION EQUIPMENT

CALCULATION OF THE REQUIRED CONSTRUCTION EQUIPMENT FLEET FOR THE PLANNED ANNUAL ROAD CONSTRUCTION PROJECT

The required number of main construction equipment for the planned yearly road construction projects under the Surat Thani and Song Khla Road Construction Centers were estimated through the following procedure.

(1) The unit standard road construction project of 10 km length was assumed.

(2) The combinations of standard equipment for the construction of roadbed, subbase, base and surface courses for the above standard project were selected.

(3) The required number of equipment and work days for the construction of each work item of the 10 km standard project were calculated.

(4) The possible annual work volume by the standard equipment fleet were calculated from the above results.

(5) The required number of equipment for the Surat Thani and Song Khla Road Construction Center to execute the planned yearly road constructions were calculated.

1. The Condition of Unit Standard Road Construction Project.

Construction Condition

Construction Items : Roadbed, subbase course, base course, shoulder and surface course

Surface Course : Double bituminous surface treatment

Topography : Flat

Location of Quarries : 5 to 10 km from the construction site

Work Schedule : Dry season 6 months (January to June)
Rainy season 30 % of rainy season

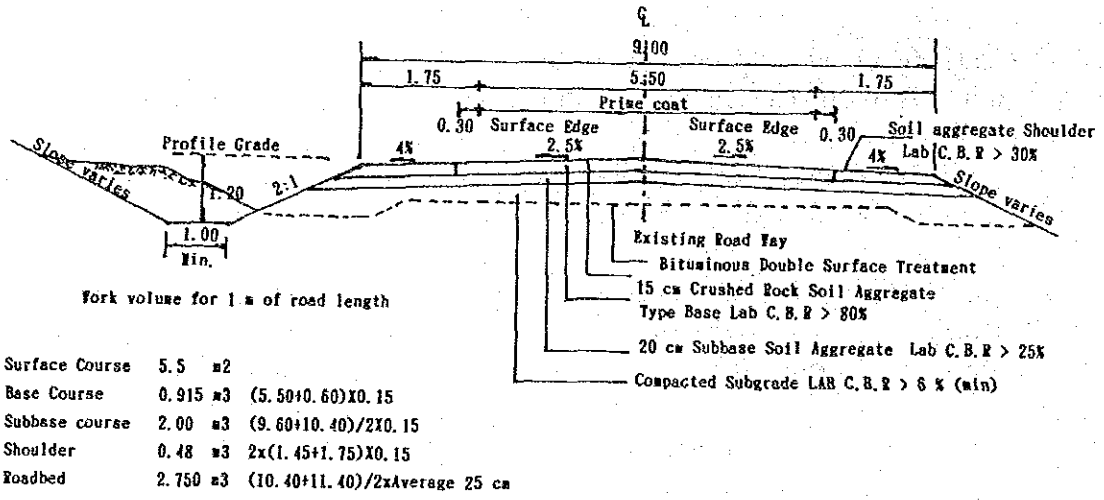
Road Standard : Shown in Figure 9 - 1.

Standard Road Construction Project

Length : 10 km
Project Budget : 27 million Baht
Location of Site : About 100 km from the Road Construction Center

Yearly Road Construction Plan

Surat Thani : Total Length 120 km, Budget 320 million Baht
Song Khla : Total Length 80 km, Budget 190 million Baht



Work volume for 1 m of road length

Surface Course	5.5 m2	
Base Course	0.915 m3	(5.50+0.60)X0.15
Subbase course	2.00 m3	(9.60+10.40)/2X0.15
Shoulder	0.48 m3	2x(1.45+1.75)X0.15
Roadbed	2.750 m3	(10.40+11.40)/2xAverage 25 cm

Figure 9-1 TYPICAL CROSS SECTION

Table 9 - 1 WORK VOLUME FOR A 10 KM STANDARD ROAD CONSTRUCTION PROJECT SHOWN IN FIGURE 9 - 1

Work Item	Specifications	Area m^2	Volume m^3
Surface Course	Double Bituminous Surface Treatment	55,000	
Shoulder	15 cm Soil Aggregate	29,000	9,150
Base Course	15 cm Crushed Rock Aggregate	61,000	20,000
Subbase Course	20 cm Soil Aggregate	96,000	4,800
Roadbed	Cut and Fill	104,000	27,500

2. Selection of the Combination of Standard Equipment

The combination of standard equipment shown in Table 9 - 2 were selected based on the work items described in Section 1.

3. Calculation of the Number of Equipment and Working Days for the Construction of a 10 km standard Project

The required number of equipment and working days for the construction of each work items of 10 km project were calculated based on the work volumes and the working capacity of equipment to execute the corresponding works. The results are shown in Table 9 - 3.

Table 9 - 2 SELECTION OF CONSTRUCTION EQUIPMENT FOR EACH WORK ITEM

Work Item	Type of Work	Equipment
Roadbed	Earth moving	Bulldozer
	Excavation/Loading	Tractor Shovel
	Earth hauling	Dump Truck
	Grading	Motor Grader
	Compaction	Rubber Tired Roller
	Water sprinkling	Water Truck
Subbase and Base Course, Shoulder	Grading	Motor Grader
	Compaction	Vibratory Roller/ Macadum Roller
	Water sprinkling	Water Truck
	Aggregate loading	Tractor Shovel
	Aggregate hauling	Dump Truck
Surface Course	Asphalt binder spraying	Asphalt Distributor
	Cover aggregate spreading	Chip Spreader
	Rolling	Rubber Tired Roller/ Tandem Roller
	Aggregate loading	Tractor Shovel
	Aggregate hauling	Dump Truck

4. Calculation of Possible Annual Work Volume by Standard Equipment Fleets

The possible annual work volume by the standard equipment fleets were calculated based on the condition that the possible working period is to be six (6) months dry season and around thirty (30) percent of the rainy season. The results are shown in Table 9 - 4 and Table 9 - 5.

5. Required Number of Equipment for Surat Thani and Song Khla Road Construction Centers

The required equipment fleet units for construction of 120 km/yr and 150 km/yr under Surat Thani Center, 80 km/yr and 100 km/yr under Song Khla Center were calculated proportionally from the possible annual work volume of each equipment fleet shown in Table 9 - 5. The results are shown in Table 9 - 6.

The required total number of equipment divided into equipment type groups for the road construction under both Surat Thani and Song Khla Centers are shown in Table 9 - 7.

Table 9 - 4 POSSIBLE ANNUAL WORK VOLUME FOR EACH WORK ITEM

Work Items	Required Days for a 10 km Construction		Possible Annual Work Volume
	Working Days	Calender Days	
Roadbed	40	60	(234 / 60) x 10 km = 39 km
Subbase Course	46	69	(234 / 69) x 10 km = 34 km
Base Course	48	72	(234 / 72) x 10 km = 33 km
Surface Course	29	44	(234 / 44) x 10 km = 53 km

Note: Shoulder Work is included in Base Course.

$$\text{Possible Annual Work Volume} = \frac{(6 \text{ months} \times 30 \text{ days} + 6 \text{ months} \times 30 \text{ days} \times 0.3)}{\text{Calender days}} \times 10 \text{ km}$$

$$= (234 \text{ days} / \text{Calender days}) \times 10 \text{ km}$$

Table 9 - 5 STANDARD EQUIPMENT FLEET AND ITS ANNUAL WORK VOLUME

Work Item	Standard Equipment Fleet			Required Days for a 10 km Construction		Possible Annual Work Volume
	Name of Equipment	Class	Number of Equipment	Working Days	Calender Days	
Roadbed	Bulldozer	21 t	2			
	Tractor Shovel	1.8 m^3	2	40 days	60 days	39 km
	Motor Grader	3.7 m	1			
	Rubber Tired Roller	15 t	1			
	Water Truck	6,000 l	1			
	Dump Truck	8 t	7			
Subbase Course	Motor Grader	3.7 m	1			
	Vibratory Roller	12 t	1			
	Macadum Roller	10 t	1	46 days	69 days	34 km
	Water Truck	6,000 l	1			
	Tractor Shovel	1.8 m^3	2			
	Dump Truck	8 t	10			
Base Course and Shoulder	Motor Grader	3.7 m	1			
	Vibratory Roller	12 t	1			
	Macadum Roller	10 t	1	48 days	72 days	33 km
	Water Truck	6,000 l	1			
	Tractor Shovel	1.8 m^3	2			
	Dump Truck	8 t	7			
Surface Course	Asphalt Distributor	6,000 l	1			
	Chip Spreader	Tail Gate	1			
	Rubber Tired Roller	12 t	1	29 days	44 days	53 km
	Tractor Shovel	1.4 m^3	2			
	Dump Truck	8 t	3			

Note : Possible working period of 234 days during one year was applied for this calculation.

Table 9 - 6 ANNUAL WORK VOLUME BY ONE EQUIPMENT FLEET UNIT AND REQUIRED EQUIPMENT FLEET UNITS TO PERFORM YEARLY ROAD CONSTRUCTION PROJECT UNDER SURAT THANI AND SONG KHLA CENTERS

Work Items	Equipment Fleet Unit			Required Equipment Fleet Units for Construction of			
				Surat Thani		Song Khla	
	Equipment	Number of Equipment	Annual Work Volume by One Unit	120 km*	150 km*	80 km*	100 km*
Roadbed	Bulldozer	2					
	Tractor Shovel	2					
	Motor Grader	1	39 km	3.1	3.8	2.1	2.6
	Rubber Tired Roller	1					
	Water Truck	1					
	Dump Truck	7					
Subbase Course	Motor Grader	1					
	Vibratory Roller	1	34 km	3.5	4.4	2.4	2.9
	Macadum Roller	1					
	Water Truck	1					
	Tractor Shovel	2					
	Dump Truck	10					
Base Course and Shoulder	Motor Grader	1					
	Vibratory Roller	1	33 km	3.6	4.5	2.4	3.0
	Macadum Roller	1					
	Water Truck	1					
	Tractor Shovel	1					
	Dump Truck	7					
Surface Course	Asphalt Distributor	1					
	Chip Spreader	1	53 km	2.3	2.8	1.5	1.9
	Rubber Tired Roller	1					
	Tandem Roller	1					
	Tractor Shovel	2					
	Dump Truck	3					

* Planned Annual Road Construction Length

Table 9 - 7 REQUIRED NUMBER OF EQUIPMENT TO PERFORM PLANNED ANNUAL ROAD CONSTRUCTION PROJECT UNDER SURAT THANI AND SONG KHLA CENTERS

Equipment		Required Number of Equipment			
		Surat Thani Center		Song Khla Center	
Group	Class	120 km*	150 km*	80 km*	100 km*
1. Earth Moving Equipment					
Bulldozer	21 t	6.2	7.6	4.2	5.2
Motor Grader	3.7 m	10.2	12.7	6.9	8.5
Sub Total		16.4	20.3	11.1	13.7
2. Excavation/Loading Equipment					
Tractor Shovel	1.8 m^3	16.8	20.9	11.4	14.0
3. Earth Solidifying Equipment					
Rubber Tired Roller	12t, 15t	5.4	6.6	3.6	4.5
Vibratory Roller	12t	7.1	8.9	4.8	5.9
Macadum Roller	10t	7.1	8.9	4.8	5.9
Tandem Roller	8t	2.3	2.8	1.5	1.9
Sub Total		21.9	27.2	14.7	18.2
4. Earth/Aggregates *Hauling Equipment*					
Dump Truck	8t	88.8	110.5	60.0	73.9
5. Asphalt Paving Equipment					
Asphalt Distributor	6,000 l	2.3	2.8	1.5	1.9
Chip Spreader	Tail Gate	2.3	2.8	1.5	1.9
Sub Total		4.6	5.6	3.0	3.8
Total		148.5	184.5	100.2	123.6

* Planned Annual Road Construction Length

APPENDIX 10

THE COST TO BE SHOULDERED BY THAILAND

The Cost to be shouldered by the Government of the kingdom of Thailand:

1. Inland Transportation	755,046.25 ฿
	(¥ 4,000,000)
2. Assembling	3,776,000.00 ฿
	(¥ 20,000,000)
Total	4,531,046.25 ฿
	(¥ 24,000,000)

The Cost to be shouldered by Center:

	Surat Thani Road Construction Center	Song Khla Road Construction Center
1. Inland Transportation	441,871.25 ฿	313,175.00 ฿
	(¥ 2,340,000)	(¥ 1,660,000)
2. Assembling	2,070,000.00 ฿	1,706,000.00 ฿
	(¥ 10,960,000)	(¥ 9,040,000)
Total	2,511,871.25 ฿	2,019,175.00 ฿
	(¥ 13,300,000)	(¥ 10,700,000)

The Cost to be shouldered by the Government of the Kingdom of Thailand: (1/2)

(Surat Thani Road Construction Center) (Unit: Baht)

Item		Quantity	Unit	Unit Cost	Amount
I.	Inland Transportation				
1.5	Crawler Tractor (120HP)	35.94 x 2	F/T	400.00	28,752.00
		8.98 x 2	F/T	625.00	11,225.00
1.7	Motor Grader	45.18 x 4	F/T	Self-Propelled	-
		11.29 x 4	F/T	625.00	28,225.00
2.1	Hydraulic Excavator (200HP)	66.14 x 2	F/T	400.00	52,912.00
		16.53 x 2	F/T	625.00	20,662.50
2.2	Hydraulic Excavator (120HP)	47.70 x 3	F/T	400.00	57,240.00
		11.93 x 3	F/T	625.00	22,368.75
3.1	Self-Propelled Vibration Roller	23.70 x 3	F/T	400.00	28,440.00
		5.93 x 3	F/T	625.00	11,118.75
3.2	Self-Propelled Vibration Roller	19.02 x 1	F/T	400.00	7,608.00
		4.76 x 1	F/T	625.00	2,975.00
3.3	Rubber Tired Roller	21.11 x 2	F/T	400.00	16,888.00
		5.28 x 2	F/T	625.00	6,600.00
4.1	Dump Truck (170HP)	40.98 x 7	F/T	Self-Propelled	-
		10.24 x 7	F/T	625.00	44,800.00
5.1	Asphalt Distributor	48.00 x 1	F/T	400.00	19,200.00
		12.00 x 1	F/T	625.00	7,500.00
6.1	Water Truck	40.33 x 3	F/T	Self-Propelled	-
		10.08 x 3	F/T	625.00	18,900.00
6.3	Fuel Truck	34.78 x 1	F/T	Self-Propelled	-
		8.70 x 1	F/T	625.00	5,437.50
6.5	Flat Bed Truck	40.47 x 1	F/T	Self-Propelled	-
		10.12 x 1	F/T	625.00	6,325.00
6.8	Truck Crane (7.5t)	47.16 x 1	F/T	Self-Propelled	-
		11.79 x 1	F/T	625.00	7,368.75
6.9	Truck Trailer	91.34 x 2	F/T	Self-Propelled	-
		22.83 x 2	F/T	625.00	28,537.50
6.10	Self-Loading Truck	56.24 x 1	F/T	Self-Propelled	-
		14.06 x 1	F/T	625.00	8,787.50
	Total				(¥2,340,000) 441,871.25

The Cost to be shouldered by the Government of the Kingdom of Thailand: (2/2)

(Surat Thani Road Construction Center) (Unit: Baht)

Item	Quantity	Unit	Unit Cost	Amount
II. Assembling				
1.5 Crawler Tractor (120HP)	2	Unit	95,000.00	190,000.00
1.7 Motor Grader	4	Unit	65,000.00	260,000.00
2.1 Hydraulic Excavator (200HP)	2	Unit	135,000.00	270,000.00
2.2 Hydraulic Excavator (120HP)	3	Unit	106,000.00	318,000.00
3.1 Self-Propelled Vibration Roller	3	Unit	47,000.00	141,000.00
3.2 Self-Propelled Vibration Roller	1	Unit	52,000.00	52,000,00
3.3 Rubber Tired Roller	2	Unit	69,000.00	138,000.00
4.1 Drum Truck (170HP)	7	Unit	30,000.00	210,000.00
5.1 Asphalt Distributor	1	Unit	68,000.00	68,000.00
6.1 Water Truck	3	Unit	23,000.00	69,000.00
6.3 Fuel Truck	1	Unit	24,000.00	24,000.00
6.5 Flat Bed Truck	1	Unit	23,000.00	23,000.00
6.8 Truck Crane (7.5t)	1	Unit	38,000.00	38,000.00
6.9 Truck Trailer	2	Unit	95,000.00	190,000.00
6.10 Self-Loading Truck	1	Unit	79,000.00	79,000.00
Total				(¥10,960,000) 2,070,000.00
Grand Total				(¥13,300,000)

The Cost to be shouldered by the Government of the Kingdom of Thailand (1/2)
(Song Khla Road Construction Center) (Unit: Baht)

Item	Quantity	Unit	Unit Cost	Amount
I. Inland Transportation				
1.1 Crawler Tractor (300HP)	35.94 x 2	F/T	400.00	42,632.00
	13.32 x 2	F/T	625.00	16,650.00
1.3 Crawler Tractor (200HP)	25.47 x 1	F/T	400.00	10,188.00
	6.37 x 1	F/T	625.00	3,981.25
1.5 Crawler Tractor (120HP)	35.94 x 1	F/T	400.00	14,376.00
	8.98 x 1	F/T	625.00	5,612.50
1.7 Motor Grader	45.18 x 3	F/T	Self-Propelled	-
	11.29 x 3	F/T	625.00	21,168.75
2.1 Hydraulic Excavator (200HP)	66.14 x 1	F/T	400.00	26,456.00
	16.53 x 1	F/T	625.00	10,331.25
2.2 Hydraulic Excavator (120HP)	47.70 x 2	F/T	400.00	38,160.00
	11.93 x 2	F/T	625.00	14,912.50
3.1 Self-Propelled Vibration Roller	23.70 x 1	F/T	400.00	9,480.00
	5.93 x 1	F/T	625.00	3,706.25
3.2 Self-Propelled Vibration Roller	19.02 x 1	F/T	400.00	7,608.00
	4.76 x 1	F/T	625.00	2,975.00
4.2 Dump Truck (160HP)	32.60 x 6	F/T	Self-Propelled	-
	8.15 x 6	F/T	625.00	30,562.50
6.1 Water Truck	40.33 x 2	F/T	Self-Propelled	-
	10.08 x 2	F/T	625.00	12,600.00
6.5 Flat Bed Truck	40.47 x 1	F/T	Self-Propelled	-
	10.12 x 1	F/T	625.00	6,325.00
6.7 Truck Crane (25t)	79.33 x 1	F/T	Self-Propelled	-
	19.83 x 1	F/T	625.00	12,393.75
6.9 Truck Trailer	91.34 x 1	F/T	Self-Propelled	-
	22.83 x 1	F/T	625.00	14,268.75
6.10 Self-Loading Truck	56.24 x 1	F/T	Self-Propelled	-
	14.06 x 1	F/T	625.00	8,787.50
Total				(¥1,660,000) 313,175.00

The Cost to be shouldered by the Government of the Kingdom of Thailand (2/2)

(Song Khla Road Construction Center) (Unit: Baht)

Item	Quantity	Unit	Unit Cost	Amount
II. Assembling				
1.1 Crawler Tractor (300HP)	2	Unit	187,000.00	374,000.00
1.3 Crawler Tractor (200HP)	1	Unit	93,000.00	93,000.00
1.5 Crawler Tractor (120HP)	1	Unit	95,000.00	95,000.00
1.7 Motor Grader	3	Unit	65,000.00	195,000.00
2.1 Hydraulic Excavator (200HP)	1	Unit	135,000.00	135,000.00
2.2 Hydraulic Excavator (120HP)	2	Unit	106,000.00	212,000.00
3.1 Self-Propelled Vibration Roller	1	Unit	47,000.00	47,000.00
3.2 Self-Propelled Vibration Roller	1	Unit	52,000.00	52,000.00
4.2 Drum Truck (160HP)	6	Unit	25,000.00	150,000.00
6.1 Water Truck	2	Unit	23,000.00	46,000.00
6.5 Flat Bed Truck	1	Unit	23,000.00	23,000.00
6.7 Truck Crane (25t)	1	Unit	110,000.00	110,000.00
6.9 Truck Trailer	1	Unit	95,000.00	95,000.00
6.10 Self-Loading Truck	1	Unit	79,000.00	79,000.00
Total				(¥ 9,040,000)
				1,706,000.00
Grand Total				(¥10,700,000)