SPRED	가 다니. 제품은 동안에서							
(kn/h)	1	2	3	4	- 5	6	7	
16	4.36	9.08	14.04	19.14	23.73	30,11	36.46	
24	5.06	10.60	16.28	22.07	28.37	34.86	42.18	
32	5.47	11.54	17.71	24.00	30.74	37.83	45.97	
40	6.67	13.01	19.54	26.19	33.26	40.92	49.69	
48	6.04	12,49	19.22	26.01	33.26	41.13	50.27	
56	5.98	12.40	19.19	26.09	33.46	41.63	50.95	
64	5.85	12.13	18.81	25.86	33.40	41.59	50.9	
72	5.61	11.93	18.36	25.28	32.78	41.12	50.58	
80	5.47	11.52	17.79	24.64	32.00	40.32	49.8	
88	5.33	11.08	17.18	23.84	31.19	39.41	48.8	

Table 8A-5 ADDITIONAL UPHILL GRADE COSTS (% of Level Tangent Costs)

Heavy Bus (H/B) and Medium Truck (M/T)

SPEED		्रिस्टी की सुरुष स	GRADE (%)				
(km/h)	1	2	3	4			
16	4.33	8,90	14.00	19.64	2		
24	5.21	10.80	17.29	24.26			
32	6.16	12.75	20.53	29.20			
40	7.10	14.65	24.08	34.68	2		
48	8.15	16.76	27.74	41.35			
56	9.26	19.17	31.85	49.76	j.		
64	10.48	21.90	36.29	60.97			
72	11.85	24.79	41.04	. 1			
80	13.43	27.36	45.71	_			
88	14.24	29.74			* <u>.</u>		

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Light Bus (L/B) and Light Truck (L/T)

and the second second

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Heavy Truck (H/T)

SPEED			GRV	ADB (%)				SPKED		GRADE (%)						
(kr/h)	1	2	3	.	5	6	7	(km/h)	1	2	3	4	5	6	7	
16	3.76	7.94	12.55	17.72	23.54	30.31	38.27	16	8.65	17.22	25.67	33.98	42.40	50.33	58.6	
24	4.39	9.20	14.54	20.45	27.20	34.90	44.05	24	12.15	24.27	36.51	48.79	61.16	73.45	87.2	
32	4.93	10,17	15.99	22.54	29.84	38.34	48.32	32	14.61	29.37	44.77	60.81	77.61	95.49	116.0	
40	5.21	10.81	17.07	23.95	31.89	40.88	51.39	40	16.52	33.38	51.65	71.92	95.29	120.57	_	
48	5.42	11.44	18.03	25.31	33.47	44.63	53.97	48	17.99	36.68	57.80	83.37	-	.	-	
56	5.73	11.96	18.83	26.42	34.97	45.13	56.20	56	19.62	40.21	64.52	97.25	-		· _ ·	
64	6.00	12.45	19.56	27.34	36.15	46.22	58.15	64	20.05	42.49	70.22		-		-	
72	6.26	13.04	20.35	28.38	37.45	47.80	60.37	72	20.87	45.29	2 - 2 - 2 - 2 - 1 - 1 - 2 - 2 - 1 - 2 - 2	· _	_	. –	· _	
80	6.52	13.49	21.09	29.42	38.79	49.82	63.57	80	22.12		<u> </u>	-	-		-	
88	6.75	14.00	21.82	30.46	40.30	51.12	65.24	88	23.10		-	-	-		-	
									<u> </u>			· 		= ÷		

TABLE 8A-5

7 6 5 33.15 41.57 25.98 41.35 52.27 32.20 51.09 66.39 39.06 63.93 88.34 48.45 77.87 60.59 73.66

Table 8A-6 REDUCTION FOR DOWNHILL GRADE COSTS (% of Level Tangent Costs)	te en anti-altre de la contra de		Table 8A-6	REDUCTION FOR	DOWNHILL GRADE	COSTS (% of	Level Tang	ent Costs	2
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Heavy I	Bus (H	/B) and	Hedium	Truck	(M/T)
---------	--------	---------	--------	-------	-------

Motor Cycle (H/C) and Passenger Car (P/C)

SPEED		une de la constante La constante de la constante		GRADE (%)					SPEED	- 			GRADE	(%)		
(km/h)	1. 1.	2	3	4	5	6	7	1	(km/h)	1	2	3	4	5	6	7
16	3.74	12.26	12.09	11.82	11.24	10.44	8.92		16	5.37	9.54	13.50	16.61	17.35	16.86	16.36
24	4.40	11-55	14.62	14.30	13.69	12.96	11.48	1	24	6.79	11.88	16.13	19.17	20.80	20.02	19,17
32	4.99	11.16	16.90	16.53	15.99	15.23	13.86		32	7.83	13.60	18.13	20.77	22.78	22.49	21.34
40	5.25	10.47	15.86	18.50	17.93	17.29	15.97	e e e e e e e e e e e e e e e e e e e	40	8.51	14.99	20.70	21.78	23.59	24.49	23.11
48	5.47	10.51	15.61	19.68	19.97	19.22	18.08		48	8.92	16.02	19.81	22.39	24.33	25.11	24.51
56	5.67	10.56	15.42	19.36	21.69	21.14	19.97		56	9.02	16.28	20.03	22.61	24.47	24.86	24.1
64	5.80	10.62	15.30	19.21	22.81	22.87	21.67	2.5	64	8.94	16.06	19.99	22.14	23.30	22.61	· -
72	5.73	10.70	15.66	19.53	22.99	24.78	23.52		72	8.85	15.37	20.03	21.90	··· <u>-</u>	— '	: <u>:</u>
80	5.75	10.81	15.77	19.71	23.13	26.03	25.18	y stir	80	8.73	14.49	19.38	-	· +		
88	5.75	11.01	16.04	20.45	23.84	26.28	26.81		88	8.92	13.47	18.28			· -	-

Light Bus (L/B) and Light Truck (L/T)

_ -

Heavy Truck (H/T)

SPEED			Filipi da sa Fi	GRADE (%)					SPEED			· ·	GRADE	(%)		
(km/h)	1	2	3	4	5	6	7		(km/h)	1	2	3	4	5	6	7
<u> </u>	3.86	7.21	10.26	11.05	10.55	9.82	8.33		16	8.07	11.67	15.28	14.35	11.56	9.26	7.00
24	4.39	8.11	11.71	13.32	12.80	12.21	10.83		24	10.30	14.85	18.70	17.28	14.53	11.51	8.3
32	4.69	8,46	12.68	15.27	14.86	14.28	13.07	· · · · · · ·	32	11,95	17.91	21.23	19.59	17.16	13.75	-
40	4.96	8.76	13.12	16.55	16.85	16.40	15.27		40	13.05	19.75	21.73	20.38	18.53	14.95	-
48	5.06	9.26	13.91	17.07	19.05	18.51	17.60		48	13.59	20.90	21.81	20.83	19.25	· -	÷
56 ·	5.55	9.67	14.41	17.56	20.79	20.62	19.78		56	12.99	20.63	21.77	-	-	-	
64	5.42	10.14	15.16	18.30	21.59	22.82	21.97		64	12.80	20,41	22.59	· - ·	-	· -	-
72	5.70	10.67	16.10	19.79	23.09	25.29	24.68		72	10.43	19.47	22.66	-	-	-	-
80	5.98	11.13	16.83	21.28	24.74	27.51	27.47		80	11.96	18.37		-			· -
88	6.24	11.96	17.67	23.35	27.35	29.75	29.65		88	12.40	17.58		- -	њ. 20 <u>–</u>		· -
		<u>. 13 - 16 - 1</u>	111			141 A. 4				*.		<u></u>	<u> </u>	<u></u>	ter de agr	

TABLE 8A-6

Table 84-7 ADDITIONAL COST PER SPEED CHANGE CYCLE ABOVE CONTINUING AT INITIAL SPEED

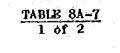
(% of Level Tangent Cost per km at Initial Speed)

INITIAL SPEED				REDUCED SPEED (km/h)									
(km/h)	Stop	16	24	32	40	48	56	64	72				
16	6.55						· · · · · · · · · · · · · · · · · · ·	-	-				
24	13.13	4.71	_	_ · · _ ; · · ·	-								
32	21.35	11.47	6.21	.		• ••	-	-	. –				
40	31.25	20.75	14.73	8.04	<u> </u>	.		_	<u></u> `				
48	42,90	31.99	25.71	18.42	10.04	-							
56	56.34	45.25	38.80	31.48	22.74	12.43							
64	71.98	60.79	54.22	46.86	38.14	27.95.	15.21	_	<u> </u>				
72	89.77	78.59	72.07	64.66	55.95	46.03	33.19	18.19					
80	110.16	98.99	92.37	84.97	76.21	66.53	53.92	39.14	21.42				
88	133.35	122.03	115.53	107.98	99.11	89.36	77.14	62.71	45.30				

Motor Cycle (M/C) and Passenger Car (P/C)

Light Bus (L/B) and Light Truck (L/T)

INITIAL				REDUCED SPEED	(ks/h)			·	s	
SPEED - (km/h)	Stop	16	24	32	40	48	56	64	72	80
16	7.02		· · · · ·			-		•••••	-	_
24	13.41	5.04		e e 🕂	· · · ·	. 	-	-		
32	21.80	12.25	6.61		. – .	 .	_	-	-	-
40	32.04	21.55	15.46	8.37	-	-	- 	-	-	· -
48	44.19	32.96	26.49	19.04	10.25	÷	-	-	· · · · -	-
56	58.36	46.55	39.79	32.05	23.13	12,50	-	<u>↔</u>	-	-
64	74.52	62.30	55.36	47.40	38.24	27.52	15.02		-	·
72	92.45	79.84	72.80	64.77	55.58	44.93	32.45	17.61	÷	. –
80	111.73	100.50	91.84	83.86	74.67	64.17	51.81	37.28	20.22	-
88	131.66	118.89	111.74	103,83	94.81	84.36	72.45	58.39	41.82	22.54



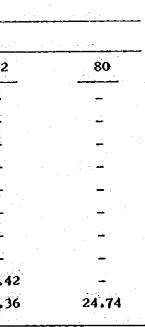


Table 84-7 ADDITIONAL COST PER SPEED CHANGE CYCLE ABOVE CONTINUING AT INITIAL SPEED

(% of Level Tangent Cost per km at Initial Speed)

INITIAL	REDUCED SPEED (km/h)													
SPEED (km/h)	Stóp	16	24	32	40	48	56	64	72					
16	9.74	• • • • • • • • • •			· · · · · · · · · · · · · · · · · · ·	_								
24	19.07	6.78	<u></u>		<u> </u>		<u>-</u>		· <u> </u>					
32	30,66	16,83	8,95	_	-	-		-	-					
40	43.63	29.12	20,91	11.25			-	· · · · · · ·						
48	58.39	43.52	35,12	25,31	13.69	-	-	_	-					
56	74.64	59.77	51.32	41,61	30.05	16.41		-	-					
64	92.74	78.01	69.60	59.99	51.71	35.24	19.33		· · · - ·					
72	112.45	97.91	89.71	80.31	69.31	56.33	40.91	22.36	_					
80	133.58	119.47	111.44	102.24	91.59	79.04	64.20	46.50	25.3					
88	155.53	141.85	134.14	125.26	115.00	102,91	88.77	71.92	51.8					

Heavy Bus (H/B) and Hedium Truck (H/T)

Heavy Truck (H/7)

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INITIAL			en en el composition de la composition Composition de la composition de la comp		REDUCED SP	'EED (km/h)		· · · · · · · · · · · · · · · · · · ·		
SPEED (km/h)	Stop	16	24	32	40	48	56	64	72	80
16	17.01					-	-		· _	_
24	35.79	14.75	-	-			-	-	· · · -	<u>, 1</u>
32	61.34	42.47	21.02	-	-	-		. ÷	. ``	-
40	93.05	66.71	49.76	27.78		· · · · · · · · · · · · · · · · · · ·	<u> </u>	·	-	-
48	130,11	102.41	. 84.85	62.61	34.78	-	-	-	-	. –
56	171.27	143.59	125.78	103.48	75.91	41.92	· · . . · · ·	-		
64	215.90	188.86	171.16	149.36	122.51	89.54	49.28	-	-	. –
72	262.58	236.37	219.46	198.55	172.84	141.38	103.07	56.25	-	·. -
80	309.51	284.64	268,60	248.80	224.63	195.11	159.27	115.53	62.71	. +
88	352.90	329.71	314.79	296.50	274.13	246.88	213.77	173.52	125.09	67.3

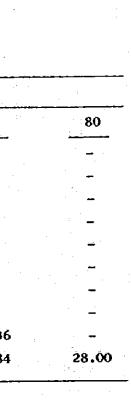


TABLE 84-7 2 of 2

Table 8A-8	ADDITIONAL TIME FOR SPEED CHANGE CICLE ABOVE CONTINUING AT I	NITIAL SPERD
Table on-o	ADDITIONAL TIPE FOR STEED CHARGE CICER ADOTE CONTINUENT I	ILLIAD DIESD

(% of Initial Time per km at Initial Speed)

INITIAL SPEED				RI	duced speed (k	m/h)			
(km/h)	Stop	16	24	32	40	48	56	64	72
16	2.42								
24	4.80	1,10	د بر المحمد ا محمد المحمد ال	-	an an an Anna an Anna Anna an Anna Anna			_	÷
32	7.97	2,98	1.12	-	_ ***	 ···	. ji 4	_	. .
40	11.92	5,60	3,20	1.12	· · · · · · · · · · · · · · · · · · ·			_	-
48	16.61	8.98	5.95	3.36	1.10	-	-	_	-
56	22.06	13.10	9.46	6.22	3.36	1.06		_	-
64	28.29	17.98	13.63	9.73	6.21	3.26	1.02		-
72	35.28	23.62	18.50	13.90	9.65	5.98	3.02	0.94	. · ·
80	42.96	30.00	24.08	18.72	13.68	9.20	5.44	2.80	0.88
88	51.39	37.05	30.36	24.11	18.30	12.94	8.27	5.02	2.46

Motor Cycle (M/C) and Passenger Car (P/C)

Light Bus (L/B) and Light Truck (L/T)

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INIŢIĂL		fill a sin a statu ta a sa si sa		R	EDUCED SPEED (kæ/h)		· · · · · · · · · · · · · · · · · · ·	· · · ·
SPERD - (km/h)	Stop	16	24	32	40	48	56	64	72
16	1.79				· · · · · · · · · · · · · · · · · · ·	n ing <u>rade ingr</u> up an ing Ngrup -	_		_
24	3.65	1.13	-	-	-	1 <u>4</u>			-
32	6.18	2.75	1.31	-	-	-		_	-
40	9.44	4.96	3.04	1.40	4 <u>-</u>	-	-	-	-
48	13.49	7.82	5.42	3.26	1.44	-	-	•_	-
56	18.37	11.48	8.51	5.82	3.47	1.51	<u> </u>	. <u>.</u>	-
64	24.19	16.00	12.35	9.09	6.14	3.65	1.60		-
72	30.96	21.31	16,99	13.63	9.50	6.41	3.82	1.73	- '
80	38.96	27.84	22.72	18.08	13.84	10.08	6.72	3.92	1.76
88	48.22	35.55	29.66	24.11	19.01	14.43	10.38	6.95	4.14

TABLE 8A-8 1 of 2

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Table 8A-8 ADDITIONAL TIME FOR SPEED CHANGE CYCLE ABOVE CONTINUING AT INITIAL SPEED (2)

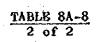
(% of Initial Time per km at Initial Speed)

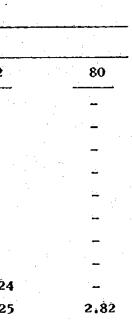
INITIAL			· · ·		REDUCED SPE	ZBĎ (km/h)			
SPEED - (km/h)	Stop	16	24	32	40	48	56	64	72
16	2.35		· · · · · · · · · · · · · · · · · · ·						
24	5.28	1.49	4		-	-	-		· –
32	9.38	3.94	1.70		-				
40	14.68	7.44	4.48	1.80		<u> </u>	-	en de la composición	_
48	21.12	12.00	8.26	4.85	1.87		_	-	
56	28.73	17.70	13.05	8,90	5,10	2.02			· -
64	37.57	24.58	19.01	13.95	9.47	5.31	1.98		-
72	42.24	29.06	23.30	17.98	13.25	8.77	4.86	1.79	
80	58.64	42.08	34.64	27.76	21.44	15.44	10.16	5.76	2.24
88	71.02	52.98	44.62	36.70	29.48	22.53	16.19	10.82	6.25

Heavy Bus (H/B) and Medium Truck (M/T)

Heavy Truck (H/T)

INITIAL					REDUCED SPEE	2D (km/h)				·
SPEED (km/h)	Stop	16	24	32	40	48	56	64	72	80
16	2.35						-			
24	5.52	1.32	-	-		. _	-	-		· _ .
32	10.21	3.81	1.60	-	— — — — — — — — — — — — — — — — — — —	· · · · · · · · · · · · · · · · · · ·	• • • • •	-	<u> -</u>	. – .
40	16.64	7.80	4.48	1.88	_	_	÷		-	-
48	25.06	13.68	9.02	5.14	2.11	-		· · · -		. .
56	35.90	22.06	15.90	10.53	5.99	2,46	· · · · · ·	-		,
64	49.66	33.54	25.92	18.94	12.67	7.42	3.14		_	
72	67.32	48.96	40.10	31.46	23.40	15.91	9.43	4.10		· <u> </u>
80	90.72	69.60	59.20	48,96	39.04	29.76	21.12	13.28	6.24	- -
88	122.67	97.86	85.71	73.74	62.04	50.69	39.60	29.04	18.83	9.15





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Appendix 9 ROAD INVENTORY

Appendix 9

ROAD INVENTORY

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				Maria de Carlos		
Table 9A-1 Road Inventory, Seg	ment 1	(Nong Bua - Route 11)				
					C-P-n (ø) – L	: PIPE CULVERT
Table 9A-2 Road Inventory, Seg					C-B-n (AxB) - L	: BOX CULVERT
Table 9A-3 Road Inventory, Seg	ment 8	(Nong Ngu Luam - Hin Dat Yai)				n : Number of rows
Table 9A-4 Road Inventory, Seg	ment 9	(Wang Phikun - Sap Mai Daeng)				ø : Diameter (cm)
Table 9Å-5 Road Inventory, Seg	ment 10	(Hin Dat Yai - Sap Xai Daeng)				A : Width (m)
Table 9A-6 Road Inventory, Seg	ment 11	(Hin Dat Yai - Khao Khat)				B : Height (B)
Table 94-7 Road Inventory. See	ment Ì4	(Khao Khat - Sap Samo Thot (N))				L : Length (m)
					Br-C(WxL)	: CONCRETE BRIDGE
		(Sap Mai Daeng - Sap Samo Thot	(5))		Br-T(WxL)	: TIMBER BRIDGE
Table 9A-9 Road Inventory, Seg						W : Carriageway Wide
Table 9A-10Road Inventory, Seg	ment 28	(Kuái Nam Dam - Lup Pho)	en e			L : Bridge length (
Table 9A-11Road Inventory, Sec	gment 30	(Non Puai - Lup Pho)				: EARTH
	.				S.A.P.	: SOIL AGGREGATE PAVERE
					S.B.S.T.	: SINGLE BITUMINOUS SUR
					D.B.S.T.	: DOUBLE BITUMINOUS SUR
	1					-

Carriageway Width (m)

Bridge length (m)

ABBREVIATION

AGGREGATE PAVEHENT

LE BITUMINOUS SURPACE TREATMENT

E BITUMINOUS SURPACE TREATMENT

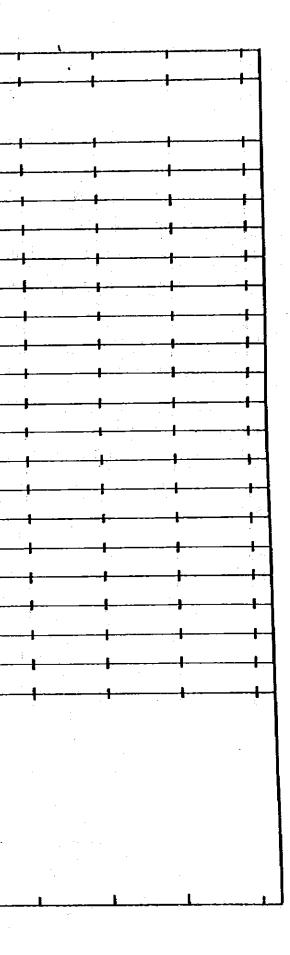
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Toble 9A-1

ROAD INVENTORY

SEGMENT-1 (NONG BUA - ROUTE 11, 2.4 km) MINE ROAD

STATIO	N	(km)	ļ) 1			2 2.	4				Г ⁻¹			· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	·	· · ·	+
NAME OF	VI	LLAGE		► Kong bua	₽ — — ·	RÖL	i ≺ 1 nte 1	1	}			• •				· · · · · · · · · · · · · · · · · · ·			- -
TERRA	N				i Y	TAI	1					+	1					,	- -
LAND	LE	FŤ		VILLAGE	P/	ADDY	-		₽-			•						• •	: +-
UŠE	RI	SHT		VILLAGE	P7	ADDY			1							•	, 	• •	-
CARRIAGEV	YAY	WIDTH (m)	5	.6 6	.0	•	5.3									• •	• •		-
ROAD FOR	MAT	ION WIDTH	10	,0 1Ò	.0		8.8		•	1						• • • • • •		-	: -+
ROAD	1.1.1	PE		SBST		SAP									• •	1 1	- 		ا
SURFACE	ĊÓ	NDITION				PATR	-				· · · · ·	-			•	4	•	- F	
ALIGN-		RIZONTAL				GOOD			-1			•			•	· · · · · · · · · · · · · · · · · · ·	.	.	-
MENT	VE	RTICAL				GOOD			- 1			- -		• •	•		4		_
	μ	CUTTING DEPTH (m) EMBANKMENT HEIGHT (m)		ŧ					-	- 				• • • • • • • • • • • • • • • • • • •	1. 	- 	-	• •	_
EARTH		EMBANKMENT HEIGHT (m)	Γ	Ó).5		0.5			•				• •	- -	· · · · · · · · · · · · · · · · · · ·	- 		<u>.</u>
WORK	i H	CUTTING DEPTH (m)			2 2 4 4 4 1		· · · · · ·	-				_	<u> </u>				- t	_ 	<u>.</u>
	RIG	EMBANKMENT HEIGHT (m)	Ī	, (),6		0.5	· ·		· · ·	• •				- 				
OVERFLOW		NGTH (km)							• 			-+		- I	 	_ 			
SECTION	_	OD HEIGHT	,	• <u>•</u>							· · · · · · · · · · · · · · · · · · ·			- 	······································		- 	- {	
•		WIDTH (m)	- T-		3.0	•	3,0	· · · ·	-+		.		·		_	- 	- ł	- t	
SIDE	μ	DEPTH (m)	Τ		1.5	ing n	1.0				а — ан •				_ _	· · ·	_ }		
DITCH	Ę	WIDTH (m)					5.0				.		· · ·				- 1		. 4
·	RIGHT	DEPTH (m)					0.8			· · ·					· •	_ _ _	-+		
	<u> </u>		T				-•		•					· · · · · · · · · · · · · · · · · · ·	· · · ·	-			
												-	•	:				-	
BRIDGE													-						
DRAINAG	ΕŠ	TRUCTURES			:	ν Ω			·.		• 1 	•		_				. ·	
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							*						- '		•	• •	• •	· : .	
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Toble 94-2

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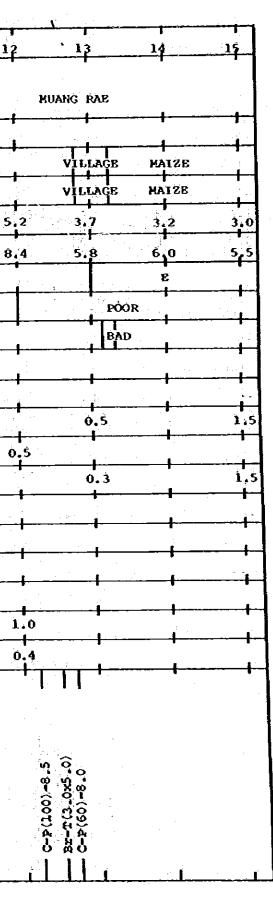
ROAD INVENTORY

SEGMENT 4 (ROUTE 11 - NONG NGU LUAM, 32.0 km)

MINE ROAD & RURAL ROAD

			<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u>.</u>	1				r		· · · · · · · · · · · · · · · · · · ·	ŕ	-	······	
STATIC	DN (km)	Ċ	i i		2	3. 1	4	5		7	÷	، ۲۰۰۰ ۲۰۰۰ ۲۰۰۰	}	10	11	1
NAME OF	VILLAGE		DUTE 11				• •	. <u>.</u>					BAN PAK	DONG	· · · · •	
TERRA	IN	1.		<mark>∦ nainan an </mark>		}	_		******		PLAT					
LAND	LEFŤ			••••••••••••••••••••••••••••••••••••••	•	1	FOREST	/PADDY					-		MAIZE	<u> </u>
USE	ŔĬĠĦŦ			 			FOREST	PADDY							MAIZE	
CARRIAGE	WAY WIDTH (m)	5	3 4	1.8 4	8 5	.0	4 8	3.7	4.	0 Š	. 5 5	5 5	.2	5.0	5.2	5
ROAD FOR	MATION WIDTH	8	.8 6	8.5 8	3.0 7	.5	7.0	5.6	7	4 8	.7	0 7	.2	7,0	7.2	8
ROAD	Ť Y Ď Ĕ			•		- F					S.A.P.			- -	• 	
SURFACE	CONDITION					1			-	PAIR/POOF	en e	· · · · · ·			• •	
ALIGN-	HORIZONTAL				-						FAIR	• 				
MENT	VERTICAL										PAIR	-	•			
		š I		•		0.3	0.3				, ,		• 	1.0		
EARTH	山 EMBANKMEN 山 HÉIGHT(m	Ţ		•						· · · · ·	•	· · ·	.6		0.4	
WORK	CULT TING						0.3				•			0.5	0.3	Ċ
	DEPTH (M BEMBANKMEN CHEIGHT (M	5				0.5				•		- I	5			
OVERFLOW							•			1 	•	• •				
	FLOOD HEIGHT	_								T'	•	• •	• •			
	E WIDTH (m					1.0		0.7		•	• •	•		0.5		
SIDE	DEPTH (M	5	•		•	0.2		0.4						0.4	₽	· · ·
DITCH	H WIDTH (m	55			····	-	0.5	1.0			• •	- t	-	1.5	0.8	
))				• •	0.2	0.3		• •		•		0.3	0.2	
BRIDGE DRAINAG		S	С. 8- (09) 4- 0 09)									- C-2 (60) -9.0			— Br-r (2 . 5x85)	

TABLE 9A-2 1 of 3



Toble 9A-2

ROAD INVENTORY

SEGMENT 4 (ROUTE 11 - HONG NGU LUAM, 32.0 km) - Continued MINE ROAD & RURAL ROAD

STATIC	ON (km)	19	5	16			7	18	-	19		20	2		2	2	23	·	24) 	25	·	26	
NAME OF	VILLAGE		н - -	LAM	PHET	CHUR	UMPON	G				•	BAN MAT	SAMA	KI	•		КD	ong n	(нан)	LUANG			
TERRA	IN						 	1		_ _				PLA	т	- <u></u> -				····· ·				
LAND	LEFT						MAI	ZE					VILLASE			· 1			· · · · ·			MAIZE		
USE	RIGHT						MAI	2B					VILLAGE			- 1 - 1	I			•	<u></u>	MAIZE	;	
CARRIAGE	WAY WIDTH (m)	3	10	3	0	3	8.0	3.	Ó	4.9	•	5.	0	5.0	1	5.2	4	.4	5	0	5.	5	4.	2
ROAD FOR	MATION WIDT	1 5	45	5.	2	5	5.0	5.	0	6.9	5	7.	2	8.2	1	B.O	6	4	7	2	7.	7	6.	2
RÓAD	TYPE					E.		1				- 1				•		Ļ		s.	A.P.			
SURFACE	CONDITION			VĒŔ	(BAĎ) : 	B/	Ŵ			·· · ·	PO	ØR			BAD		.			PÔ	ÓR	- 1	· · · · · ·
ALIGN-	HORIZONTAL				i.	a y là										FAIR			<u>.</u>			<u> </u>		
MÈNT	VERTICAL		3 							•	4 . · · ·	-				PAIR	t							
EARTH	CUTTING DEPTH EMBANKMEN HEIGHT (m	IT 📃	 	ò	; ;7		+		• 	• }	· · · · · · · · · · · · · ·			_		-	· · · · · · · · · · · · · · · · · · ·	₽ <u></u>	1	 5	0.	6		<u>} · </u>
WORK			 					. :	 								·	1 1		• •	0.	5	, 	• •
	EMBANKME	<u> </u>	1 5		8	·	1.0	· · · · ·	i .				· · · · · · · · · · · · · · · · · · ·			- .	0	,5 ,5	j	i .5		• • •		• <u>• · · · · · · · · · · · ·</u>
OVERFLOW		5 E		0.2					1		· · ·	1 1				1	·			·		• • •		• •
	FLOOD HEIGH		}	0.5	•		- -							-			· · · · · ·	• +•		• •		- -	<u></u>	•
-	H WIDTH (i)	₽ <u> </u>	14 J.	1	: 			+				• •					• •		1		• •		•
SIDE							 		4	: 	8		}		. ·	- 1	· · · · · · · · · · · · · · · · · · ·	<u>+</u>	<u></u> :	-		↓		ŧ
DITCH	H WIDTH (+		₽		- 		 	· · ·	₽		}	- 				+	<u> </u>	- -	•	I		•
BRIDGE DRAINAG	AND E STRUCTURE	\$		Br-T(3.2x8.5)				c-p(60)-6.7 c-p(80)-8.0			C-F-Z (80) -10-2		- c-P-2 (60)-10.2			C-P(80)-10-2				Br-r(3.0x14.0)			C-P-2 (80) -9.2	

TABLE 9A-2 2 of 3

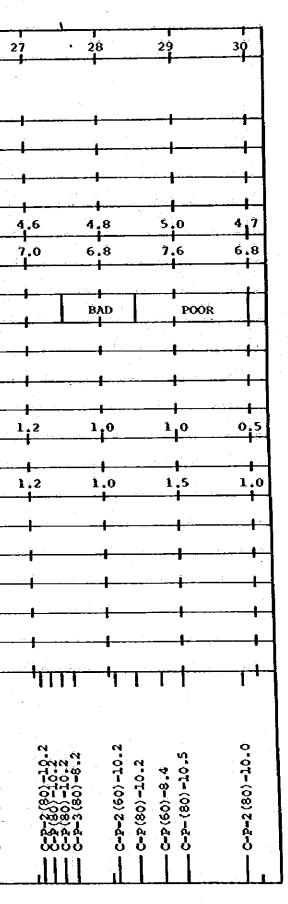


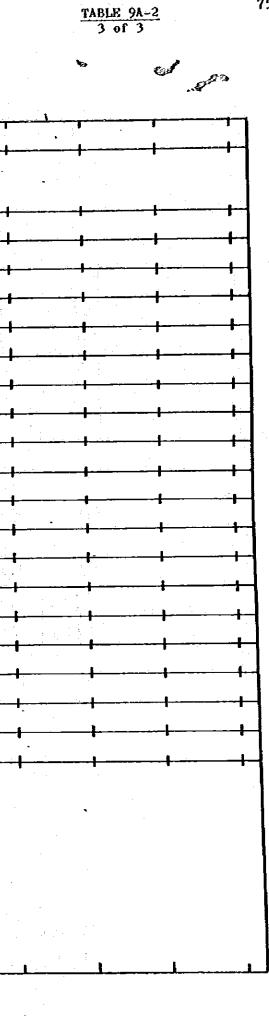
Table 91-2

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ROAD INVENTORY

SEGMENT 4 (ROUTE 11 - NONG NGU LUAN, 32.0 km) - Continued WINE ROAD & RURAL ROAD

			and the second	· · · · ·					· · · · · · · · · · · · · · · · · · ·				
STATIC	DN (km)	30 31	32	- I									
NAME ÓF	VILLAGE		NONG N	gu luam									
TERRA	IN	Plat	inin ne n∦ini Alatan	 †								1	
LAND	LEFT	Mai 2e	VILLAGE	-				-				• • • • • • • • • • • • •	1
UŠE	ŔĬĠĦŦ	KAISE	VILLAGÉ								· · · · · · · · · · · · · · · · · · ·		۱ ۸
CARRIAGE	WAY WIDTH (M)	4.7 5.2	3.8		<u></u>			•				•	•
	MATION WIDTH	6.8 7. 2	e 6.0					•		· · · · · · · · ·		R	• •
ROAD	TYPE	S.A.I	>.	••••••••••••••••••••••••••••••••••••••			•		1			• •	
SURFACE	CONDITION	PAIR									1	• •	• •
ALIGN-	HORIZONTAL	FAIR		*		•				9	l	• •	• •
MENT	VERTIČAL	FAIR					1		• • • •	L	•	••••••••••••••••••••••••••••••••••••••	4
			_				•		1	• <u>• [*]</u>	•	• •	-
EARTH	HEIGHT (m)	0.5 1.	2 0.4					· .		• •		_	· ·
WORK				· · · · · ·		•	1	• 		.	• • • • • •		
	EMBANKMEN CHEIGHT (M	1.0 1.	5				• _•	• •	• •	• •	•		-
OVERFLOW						• 	•		.	• •	• •		- i
SECTION	FLOOD HEIGHT					• • • • • • • •	• •	• •	·	- -	• •		
			F		,	• • • • • • • •	• •	.		• · · · · · · · · · · · · · · · · · · ·			_ i
SIDE	DEPTH (m)		•		I	·	•	• • • • • • • • •	- -		_ _	· · · · · · · · · · · · · · · · · · ·	-
DITCH	부 WIDTH (m				• •	• •ŧ		- -		- I	· · · · · · · · ·		
	H WIDTH (M				• •	• • • • • • • • • • • • • • • • • • •	. • •••	 	аны. • • • • • • • • • • • • • • • • • • •		-		
BRIDGE DRAINAG	AND E STRUCTURES		1										
			6-(80)-6-		1.	. 1				- L	_1		



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Toble 9A-3

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ROAD INVENTORY

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SEGMENT 8 (NONG NGU LUAM - HIN DAT YAI, 13,3 km) RURAL ROAD

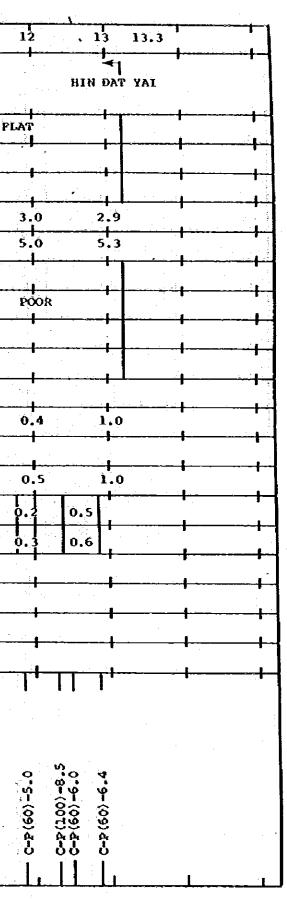
STATI	ÓN	(km)	6		1	1	<u>.</u>	2		3		4			T 5	<u></u>	6		7		8		- T 9	• <u>••••</u> ••	10	<u>, </u>	1		
NAME OF	F V	ILLAGE		ng ng	U LU	i AM		- -				NONG	сна	I KHO	- DI	<u></u>	_ }				•	· · ·	;					<i>.</i>	<u></u>
TERRA	IN					;	-	P	LAT		· · · ·				4			ROLLI	ING		+	<u> </u>		Τ		 		· · ·	PI
LAND	11	EFT				м	A12B/F	ORES	T		· · ·		VII	LAGE		МА	12E	VII	LLAGI	BEA	INS			•		М	AIZE	- 	
USE	Ŕ	GHT				М	aize/f	ORES	Т				VII	LAGE		XA	IZE	VII	LLAGI	BEA	ns				1	א. א	AIZE		
CARRIAGE	WAY	WIDTH (m)	3.	8	4	.3	4	8		4.8	3	3.	4		317		2.8		2.7	- 3	.0		2.	7	2.	.5	3	.2	
ROAD FOR	RMA	TION WIDTH	6.	Ò	6	.8	7	1.0	- -	7.8	3	6.	4	- 1	6.6		4.7		4.7	5	0	·	5.	Ó	5.	0	5	.7	
ROAD		YÞĒ	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1							.,			- : .					S.A.P.								!			
SURFACE	Ċ	NDITION					POOR			<u>1</u> -		B/	D	· · V B	E RY AD		-1		1	BAD					VERY BAD	.			
ALIGN-	H	DRIZONTAL			<u>.</u>			17. i 20										PAIR	. .						-	. .			
MENT		ERTICAL							I		PÓÖ	R				·. :				BAD		:					POÖ	R	
EARTH	E T	CUT TING DEPTH (m) EMBANKMENT		 	· · ·	+						Ò.	3	-1 .	· .				+		- - -		ŧ			; ;	Ô.	 2 	
WORK		EMBANKMENT HEIGHT (m) CUTTING	T	, 4 	(0.5 		- 1					I	. <u></u> .	+				-	<u></u>	.		- 1		· · · · ·	+	· · · · ·	• •	
	1H0	DEPTH (m) EMBANKMENT HEIGHT (m)		f		1 0.5		- -	· · · · · ·			0 .	• 3 • • •		+	-	- 9						}			1		{ -	
			-	, }	· •			-		+			ŧ		+			· · · · · · · · · · · · · · · · · · ·	-		-1	• • •	•••••			 		ŧ	
OVERFLOW SECTION		NGTH _(km) OD HEIGHT		F		- ł		-1		- 1	· . · .		**::*(} :*(<u>.</u>		-	·				J		t	
•				}		-	<u> </u>				<u>.</u>		<u>+</u>		+						-	<u> </u>			<u></u>	1			
SIDE	EFT	WIDTH (m)	;	}		- 		1	·		· · · ·	<u> </u>	₽					•••• <u> </u>			+		-+			+	i	1	
DITCH		DEPTH (m)		!					<u> </u>	+	<u></u>		• • • • •		-1	<u>_</u>	-	<u> </u>			-			:' 	<u> </u>	· • • •		 	
	RIGHT	WIDTH (m) DEPTH (m)		ł	. <u>.</u>	•		-1		-1			1	· · · ·			-+			•* •	-				· · · ·	-		1	
	<u>[</u> <u> </u> <u> </u>			+		1			I			T	}		† 1				1		[††	 				+		 	
BRIDGE	AN	D			-			•	•	-	-		- - -			:	· · ·		• • •							•		-	
DRAINAG	ËŠ	TRUCTURES		1-01-(08)·4-		-P (80) - I0. I	:			• • •	مراجع مراجع	c_T(3.7x9.4)			-P.(40)-7-0	Br-r(3-0X9-0) C-P(40)-7.5	0-P (40)-7.1		C-P (40) -6.0		0-2-2 (00) -0-2 0-2 (40) -6-8	· · · · · · · · · · · · · · · · · · ·		:		-2 (60) -7.0		C-P (40) -7.6	
				ů L		ů			5 - '	l	:	8			ა .1	ੜ`ਠੇ 	5 - 1	• • •	ः ठ ्र		5 6 		• •	F		ः ठ :		ۍ ا ا د	. '

TABLE 9A-3

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Toble 9A-4

ROAD INVENTORY

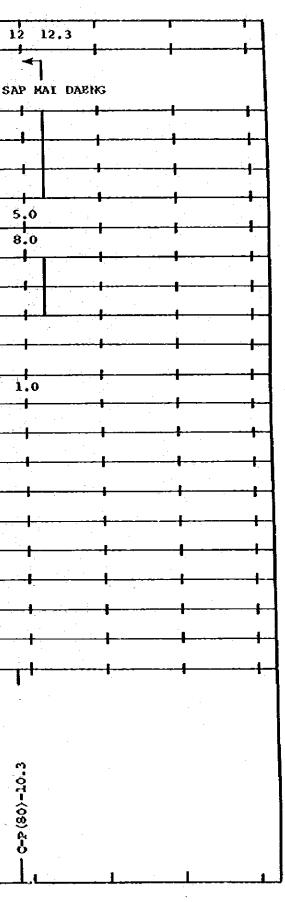
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SEGMENT 9 (WANG PHIKUN - SAP MAI DAENG, 12.3 km)

ARD ROAD

STATI	ON	(km)	0	1		2	3		4		5	6		7	8		9	1	0	11	j
NAME OF	v	ILLAGE	WANG PH	IKUN				BONG B	UN CHA	loen									• •		\$1
TERRA	IN				<u></u>					1			PLAT	•				· · ·		· ·	· · · · ·
LAND	LE	FT	-	j	1	MAIZE			P7	DDY						М	AIZE	· 			
USE	Ř!	GHT				HAIZE	1		Pź	DDY		-				М	ATZE		• •	·····	
CARRIAGE	WAY	WIDTH (m)	6.5	5.	5	6.5	6.	5	3.5		•••	5.	3	5,5	5.	5	4.5	5	.0	5.0	
ROAD FOR	MAT	LION WIDTH	9 . 5	8	3	9.5	8.	8	6.5		7.5	7	5	7.0	7.	3	8.0	Ê	.2	8,	5
ROAD	1.1.1.1.1.1	YPE											S.A.P.	- I		· · · · · · · · · · · · · · · · · · ·					
SURFACE	ĊĊ	NDITIÓN				FAIR	•			BAD						PAI	R		-		
ALIGN-	HC	RIZONTAL							•		- -		'c :			• 			4	• • •	·
MENT	٧I	ERTICAL			•					· · · ·						L					
	-	CUTTING DEPTH (m)									Ď,Ś	1	•5	- J	1	.Ś					
EARTH WORK	Ш	EMBANKMENT HEIGHT (m)	 			• • • • • • • • • • • • • • • • • • •	· ·		0.5	·	-+		 	0.6).5 +	1.	3
Home	1GHT	CUTTING DEPTH (m)						 	 			1	.5	}					+		
	ž	EMBANKMENT HEIGHT (m)		0.4				· · · · ·	0.7	-		-		0.6	1	•0			0.5		-
OVERFLOW		NGTH (km)						 	0.	4	-1-		F					· · · · · · · · · · · · · · · · · · ·	0.3		, .
SECTION	FLO	OD HEIGHT						 	0.	3			•			•	}	· · · ·	1.0		
-	H	WIDTH (m)					. :			<u> </u>		1	.s		3	.5					
SIDE	ÿ	DEPTH (m)		!	· · ·							0	.8		0	5					.
DITCH	H	WIDTH (m)						•			····	4	0			.			- 4		• •
	RIGHT	DEPTH (m)		1		•		• • • • • • • •				Ċ	5			• •					1
					ł																<u> </u>
BRIDGE	ΔN	D						• •				• •									•
	· .	en e			ŝ	o i				a 1960).	-	3)		* .	· · · ·			3			
UKAINAG	ιS	TRUCTURES		-6- -	Br-r(3.5x15.0)	о-о- -			ທີ່ : . ຄູ່	5 5 5 5 5 5 5 5 5 5 5 5 5 7 5 7 5 7		1 T T C	•	0-6-	0 6 1	8-5	0	φ į	0-11-		-11.5
				с-р (80) -9 - 3	- H (3- -	ъ (100)	-		(08) 4- 0	0000 0000 0000 0000 0000				(03) 4	0- 5 (80) -9-0	C-P (80) -8	0-2-(80)-2-0	C-P-3 (80)	C-P (60) -11		11- (09) d-0
				5 .	វ័រដ្ឋ	5 		· · · · ·	3].) 			•	3	3 - 1	3 	5 - 2 	5 J	ծ 		3 . 1

TABLE 9A-4



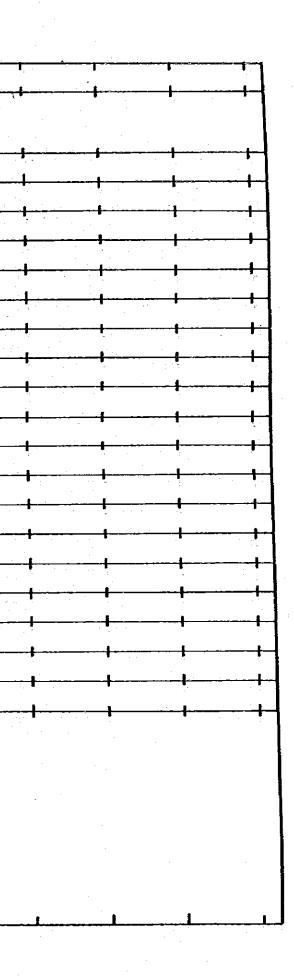
Toble 94-5

ROAD INVENTORY

SEGMENT 10 (HIN DAT YAI - SAP MAI DABNG, 6.0 km) ARD ROAD

STATIC	ON	(km)	0	1 2		3	4	5	6	1		2	
NAME OF	V	ILLAGE	HIN DAT YAI	[SAP PHRA	AIWAN		S	AP MAI DAENG				
TERRA	IN	······	ROLLING	·I	f I	PLAT				<u> </u>		l Ł	• •
LAND	LE	FT		4	ŀ	laize					• •	• • • • • • • • • • • • • • • • • • •	• •
USE	ŔI	GHT	· ·	•	}	AIZE				••••••••••••••••••••••••••••••••••••••		-	•
ĊARRIAĞE	YAY	WIDTH (m)	4.3	5.0	5.2	5.2	5.3	4.8	4.7	- -	1	- 	}
ROAD FOR	MAT	TION WIDTH	7.0	7.8	8.5	8.0	8.5	7.3	8.2		4	ŧ	+
ROAD		YPE			1	S.A.P.				-			.
SURFACE	ĊĊ	NDITION		•	1	PAIR		1		- 	<u>.</u>	 	.
ALIGN-	HC	DRIZONTAL		• •		FAIR				- -		.	
MENT		EŔTICAL				PAIR		<u>.</u>		4	_}		-
EARTH	FT	CUTTING DEPTH (m) EMBANKMENT		+ 1.0	.	<u> </u>	1.3		1.7	- 			• • • • • •
WORK		HEIGHT (m)	++	1.0	1					•	•	•	.
	1	DEPTH (m)	0.5	0.7	+ 1.2	Ô.6	1.3	0,8	1.5	-+	-1	1	- I
OVERFLOW		EMBANKMENT HEIGHT (m) NGTH (km)	1	- i			-+	+		t	1	•	+
		D HEIGH				2	B	•		- t	-	-	
· · · · · ·	H	WIDTH (m)			_ <u></u>					•			- I
SIDE	Ē	DEPTH (m)		•	- }	••••		•					
DITCH	L T	WIDTH (m)								••••••••••••••••••••••••••••		-	-
	RIGHT	DEPTH (m)			•						•		
BRIDGE DRAINAG		ID TRUCTURES				- C-P-3(100)-11.0	(Broken) 	C-P-2 (100) -16_2	2-51-(001)-4-0 -			•	

TABLE 9A-5



Toble 94-6

ROAD INVENTORY

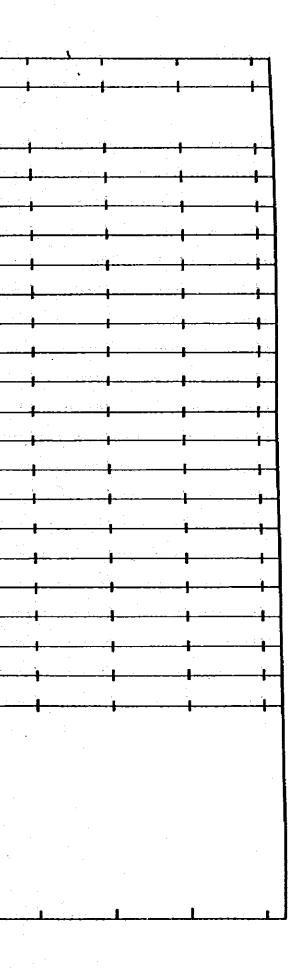
SEGMENT II (HIN DAT YAI - KHAO KHAT, 4.7 km)

RURAL ROAD

							<u></u>	4	4.7	T			<u> </u>	r	 		l	1 .
21411	ON (km)	. Ó	ale eta e	1 2 +	j	ر †				- 			.			<u> </u>	• • • • • • • • • • • • • • • • • • • •	
NAME OF	* VILLAGE		N DAT YAI						khao ki	IAT							<u></u>	
TERRA	IN			ROLI	ING			-	1. 1. (1. (1. (1. (1. (1. (1. (1. (1. (1. (-			
LAND	LEFT			M	IZE			VIL	LAGE PA	12B								•
USE	RIGHT			W	IZB		n a se	VIL	LAGE RA	IZE	1		• •					
CARRIAGE	WAY WIDTH (m)	3.	Ó 2	8	9	3	Ó	3.Ò								• . 		
ROAD FOR	MATION WIDTH	5.	5 5	.2	.7	5	.8	4.5			44 							
ROAD	TYPE	-	-	S	A.P.											• •		
SURFACE	CONDITION			P	OR					• •			n National Action	-		•	• 	• •••••••
ALIGN-	HORIZONTAL			Pi	AIŔ						·		• •		e i e e El el transferencia	•	• •	• •
MENT	VERTICAL	ľ		B	AD			• • • • • •								• · · · · · · · · · · · · · · · · · · ·	• •	
	L DEPTH (m)		(0.2				Ó.2							a a garat			
EARTH	₩ EMBANKMENT - HEIGHT (m)				• <u>•</u> •		-						1		e Second		•	
WORK	는 CUTTING 는 DEPTH (m)				•			0.2			·		-1	····		•		
	EMBANKMENT			-														
OVERFLOW	LENGTH (km)			•	0.3							•			:			
SECTION	FLOOD HEIGHT			•	0.5		1			-1		.			r an chuir a Chuir an chuir an chui	1		
•	H WIDTH (m)			+	<u>, , , , , , , , , , , , , , , , , , , </u>		•	0	3			f			 ÷			
SIDE	DEPTH (m)	T			- 1		1	0.	3			•	- <u>-</u>		· · · · ·		- -	
DITCH	上 WIDTH (m)		1	-			• •	0.	3		· · ·	1				•	• · · · · · · · · · · ·	
	· WIDTH (៣) 发 DEPTH (⋔)		• · · · · ·				• • • • • • •	Ô	3			1		 2		1		
												 	•			-		
in station			•	· . ·	•		. 1	2				 				- -		· . -
BRIDGE	and the second								i e Posta de la c			-	. ·	•			.* .	
DRAINAG	E STRUCTURES		Q		00	9	9	4		-				·		· .		
			0) - 2		00	9	Υ G	9-(0)		•		· .	. •	· . ·				
. · ·	· · · · ·		-P (40)		~P(60)-5.0	C-P (50) -6.	0-5 (50) -6	C-P (60)									•	
			о І		505 11	0 - 1	Ů 	ა 1		14 	• . • • •			e Terres	. •	• • •		
	· · · ·									_ 1		<u> </u>	1			1	1	1

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TABLE 9A-6



Toble 9A-7

ROAD INVENTORY

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SEGMENT 14 (KHAO KHAT - SAP SAMO THOT (N), 6.7 km)

RURAL ROAD

STATI	ON (km)	0 1	2	3 4	5	6	6.7			l		
NAME O	F VILLAGE	кнао кнат					SAP SA	NO THOT (N)			
TERRA	AIN		······	H TAIR	⊧ ∔			 			• · · · · · · · · · · · · · · · · · · ·	<u>.</u>
LAND	LEFT			MAIZE	₽ <u>-</u> ₽	VI	LLAGE			}	.	
USE	RIGHT			MAIŻE		VI	LLAGE	• • • • • • • • • •			•	
CARRIAGE	WAY WIDTH (m)	2.8 3.0	3.2	3.0 3	<u>0</u> 3	0 3	Ó				• • • • •	.
ROAD FOR	MATION WIDTH	5.5 5.5	5.7	5.5 5	.2 5.	36	0				• · · · · · ·	a 1
ROAD	ΤΥΡΈ			S.A.P.			S.B.Ś.	r.				
SURFACE	CONDITION		•	POOR	•		FAIR				1	• •
ALIGN-	HORIZONTAL		· · · ·	FAIR	· · · · · · · · · · · · · · · · · · ·				• 	• •		
MENT	VERTICAL	BAD		PAIR	• •					•	• •	
	CUTTING DEPTH (m)				• •		.	.		•	• •	
EARTH WORK	HEIGHT (m)	0.5 0.	5 0.7	0.5 1	.2	<u> </u>	•	ŧ		• •	• •	
		l I I I I I I I I I I I I I I I I I I I	• • • • • • • • • • • • • • • • • • • •		k {	· · · · · · · · · · · · · · · · · · ·	•		,	•	ŧ	.
	· · · ·	1.0 0.	5 0.7	0.5 1	.0 			1			.	
OVERFLOW SECTION				 	I		#	-	• • • • • • • • • • • • • • • • • • • •	- 	+	• •
SECTION	FLOOD HEIGHT				!	 	•			- I	+ ···· · -	-: ↓
•	WIDTH (m)				•	 	1	-	.		.	•
SID E DITCH	DEPTH (m)	↓	-		4	·	·}	- -	ł	ł	- ł	+
	· WIDTH (m) 쓸 DEPTH (m)				.	на стало се на село се На село село село село село село село село	· · · · · · · · · · · · · · · · · · ·	+	ŧ .			i
	DEPTH (m)	╞┨╺ ┥╴╋╶╴╴╴╋╴				•	+		}		- †	-1
									• • •			
BRIDGE	AND				- -	· · ·						- 1.
DRAINAG	E STRUCTURES	14	0	5.2	5.2		· · ·		· · ·		•	
			80	() () () () () () () () () () () () () ((2,8%9.5) (505-3%9.5) -2 (60)-8	φ φ	• •			· ·		
			(08) - 5	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2	507 507	С-Р (80). С-Р (80).	-					
			ů.					- - - -	•			
·								1	1	. 1		<u> </u>

TABLE 94-7

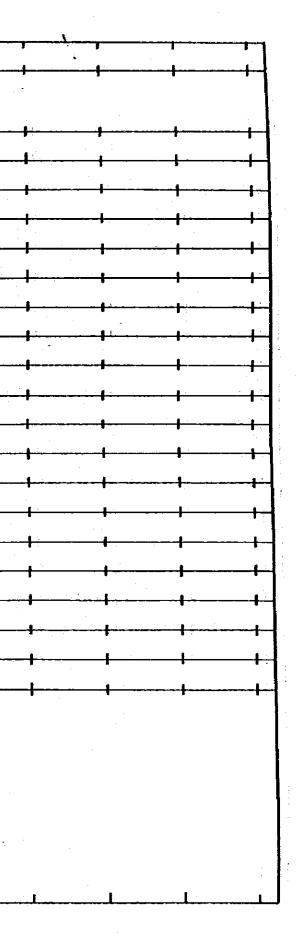


Table 91-8

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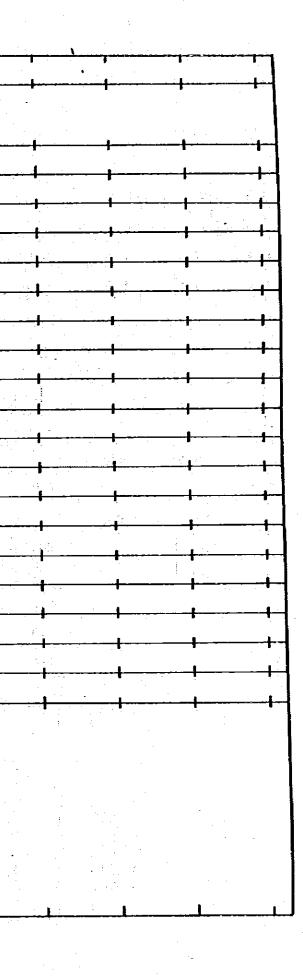
ROAD INVENTORY

SEGMENT 15 (SAP MAI DAENG - SAP SAMO THOT (S), 7.3 km)

ARD ROAD - BEEFER - ALEBER - CLEVELIN

i		<u></u>						- T										· · · · · ·	T		1
STATI	ÓN (km)	6	1	i		2		3	4	 	5		6		, 7.: +	3			f	· · · · · · · · · · · · · · · · · · ·	
NAME OF	VILLAGE		► AP MAI	I DAE	NG									SAP	SAHO	тнот	(s)	·			e
TERRA	IN		RÖLL	ENG				FLAT	r			ROLL	ENG	PLAT				•. 			
LAND	LEFT						•		HAIZE							4	· · · ·			·	
USE	RIGHT				• • • • • •		•		MAIZE					۲۰۰۰ غیر مرکب میروند						· · · · · · · · · · · · · · · · · · ·	
CARRIAGE	WAY WIDTH (m)	4	.7	5.	4	5	.5	5.3	5	.7	5.6	•	5 .	4	.8			· · ·		F	
ROAD FOR	MATION WIDTH	8	2	8.	б Г	8	.5	8.0	á	.2	7.ê	}	7.	87	.3					<u> </u>	
ŔÓAĎ	ΤΥΡΕ				.		1		S.A.P.			· .		S.B.	б.Т. 5.Т.			_ 			
SURFACE	CONDITION	1			r .		Ł		PAIR	•				le tr						}	
ALIGN-	HORIZONTAL				• •		• •		FAIR											} −	
MENT	VERTICAL		BAD			· .	• •		FAIR			ΒA	Ď	FAIR				, e 	· .	I	
EARTH	CUTTING DEPTH (m) EMBANKMENT HEIGHT (m)		+		↓		•		· · · · · ·	I					• :			-+	· · · · · · · · · · · · · · · · · · ·	•	
WORK		Т	 		•	· · · ·	.	-+-	· · · ·			· · ·	+		+		 		-	•	
	EMBANKMENT		1	·	*		+			∔		 		 		·					
OVERFLOW	LENGTH (km)	1	 		•		4							· · · · · ·				1	- - -	- ·	
	FLOOD HEIGHT	1	•				+			1	1		1		••••••		r			·	-
-			<u>↓</u>		+		1			•									· · ·	<u>+</u>	
SIDE											1	1			• • • •		•			_	
DITCH	노 WIDTH (m)				1							·					.			•	+
	부 WIDTH (m) 월 DEPTH (M)		1		1							, 			- -					•	
BRIDGE	AND		•	• • •														•			
DRAINAG	E STRUCTURES			. ')12-0	0. 	0-11-)-12-0 8x18-0)		0.TT		-13.0								
						(00T) & -0	(60) 	C-P(80)					C-P (80)								B

TABLE 9A-8



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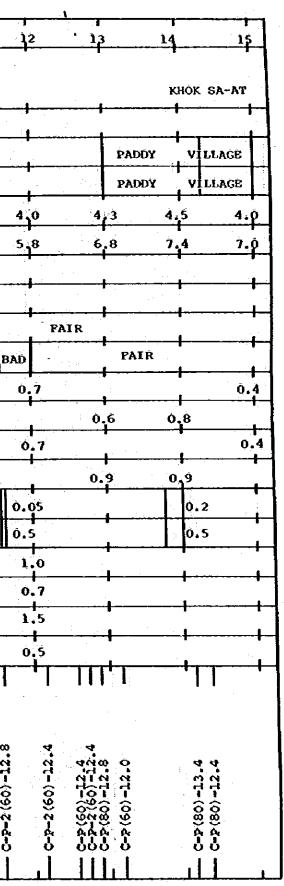
ROAD INVENTORY

SEGMENT 27 & 29 (WANG KATHA - NON PUAL, 33.0 km)

ARD ROAD 11010 & RURAL ROAD

												······	
STATI	ON (km)	Ó Ì		3		1 5		6	7	8 <u>8</u>	10	<u>11</u>	
	-	> ARI	D ROAD		-		• Anno - Transfer • Anno - Transfer • Anno - Transfer	• • • • • • • • • •	•	-	•	•	-
NAME OF	FVILLAGE	I WANG KATHA			HUAI SAPA	AN .			•	•	111 111 111	· · · · · · · · · · · · · · · · · · ·	
TERRA	IN		· I · · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	· · · ·	1	ROLLING		\$	₽₽ ₽₽	ł	
LAND	LEFT							FÓREŚT			.	· · · · · ·	
USE	RIĞHT				1			FOREST					
CARRIAGE	WAY WIDTH (m)	4.3	4.5 3.	9 3	.8 4	<u> </u>	.3 4	1.2 4	1.0 4	2	4.	0 4	3
ROAD FOR	MATION WIDTH	6.1	5.8 5.	8 5	8 7	07.	06	0	5.0 Ś	.2	5.4 5.	5 6.	7
RÓAD	ΤΥΡΕ		· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • •		•	• •	S.A.P.		- -	• • • • •	4	· · · ·
SURFACE	CONDITION		·	• • • • • • • • • • • • • • • • • • •			•	FAIR					
ALIGN-	HORIZONTAL		PA	IR	7	BAD		FAIR		1	BAD		
MENT	VERTICAL		PA	IR		BAD		PAIR		BAD		PAIR	BA
	CUTTING DEPTH (m)		•	ŧ		1	-		1		•	1.	5
EARTH	HEIGHT (m)	1.1	0.8 0	5 0	.6 0	9 0	.5	1	.0).\$ Ó.	8	· .
WORK	도 CUTTING 도 DEPTH (m)			······································				-					
	EMBANKMENT	0.5	0.7	.0	i 3 0	5 0	.5	0	.9		0 1	0 0.	5
OVERFLOW	LENGTH (km)												
SECTION	FLOOD HEIGHT					•							
	H WIDTH (m)					· · · · · · · · · · · · · · · · · · ·]	1.5		1.5		2.	Ŏ.
SIDE	DEPTH (m)	0.3			· · · · · · · · · · · · · · · · · · ·			D.4		0.3		Ó.	5
DITCH	노 WIDTH (m)	1.5	3	.0				2.0		1.2			
	· WIDTH (m) 윤 DEPTH (m)		0	5				0.4		0.5			
· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •					111					1 11	•	
	12. Na 21.								:				•
BRIDGE	AND	en		0	<u>~ ካ</u>	. vo 😅	4 4		N		e e	ú	œ
DRAINAG	E STRUCTURES	с-р-2 (60) -12.3 С-р (60) -12.4			Br-r(4_0x25_3) C-r-2(60)-13_5 C-r(80)-14_4	C-P(50)-12.3 C-P-2(60)-12.6 - C-P-2(60)-13.4	с-р-2 (50) -12.4 С-р-2 (50) -12.4	C-P(50)-12.4 C-P(60)-12.4 C-P-2(60)-12.3	44	С-Р (50)-12-3 Вт-Т (4.0x25.5)	C-P-2 (80) -13.4 C-P-2 (60) -13.4	14	C-P- 2 (60)-12.8
	· .		C-P(60)-12.4 C-P-3(60)-13.4	C-P (60) -12-4 C-P (60) -12-4	-0x (0)-	60)-11 (60)-11	- - - - - - - - - - - - - - - - - - -	C-P(50)-12-4 C-P(60)-12-4 C-P-2(60)-12-4 C-P-2(60)-12	C-F-2(60)-13.4 C-P-2(80)-12	H S		-2 (80)-	60)
	-	200 200 200 200 200 200 200 200 200 200	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	09) A	- 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00000000000000000000000000000000000000		00 00 00 00 00 00 00 00 00		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 88 84		, Б-2
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			<u></u>			<u>111</u>				<u> </u>		<u> </u>	

TABLE 9A-9 1 of 3



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Toble 94-9

ROAD INVENTORY

4.27

SEGMENT 27 6 29 (WANG KATHA - NON PUAL, 33.0 km) - Continued ARD ROAD 11010 & RURAL ROAD

TERRAIN ROLLING PLAT PLAT<	ROAD] ++> RURAL H I I I I CASSAVA I I I 5.1 5.0 I I 6.2 6.0 I I IR I I I BAD I I I 0.3 0.3 I I	ROLLING POREST 5.0 5. 7.0 7 E. VERY BAD
LAND LEFT FOREST PADDY POREST PADDY VILLAGE PADDY USE RIGHT FOREST PADDY POREST PADDY VILLAGE PADDY CARRIAGEWAY WIDTH (m) 4.0 4.0 4.1 4.2 4.3 4.5 5.6 5.5 5.5 ROAD FORMATION WIDTH 7.0 6.2 6.6 6.7 6.8 6.7 7.6 7.5 7.5 ROAD FORMATION WIDTH 7.0 6.2 6.6 6.7 6.8 6.7 7.6 7.5 7.5 ROAD TYPE	5.1 5.0 6.2 6.0 1 1 1 R BAD	FOREST 5.0 5. 7.0 7. E.
LAND LET POREST PADDY FOREST PADDY VILLAGE PADDY CARRIAGEWAY WIDTH (m) 4.0 4.0 4.1 4.2 4.3 4.5 5.6 5.5 5.5 ROAD FORMATION WIDTH (m) 4.0 4.1 4.2 4.3 4.5 5.6 5.5 5.5 ROAD FORMATION WIDTH 7.0 6.2 6.6 6.7 6.8 6.7 7.6 7.5 7.5 ROAD TYPE	5.1 5.0 6.2 6.0 1 1 1 R BAD	5.0 5 7.0 7 E.
CARRIAGEWAY WIDTH (m) 4.0 4.0 4.1 4.2 4.3 4.5 5.6 5.5 ROAD FORMATION WIDTH 7.0 6.2 6.6 6.7 6.8 6.7 7.6 7.5 7.5 ROAD TYPE S.A.P. SURFACE CONDITION PAIR PAIR PAIR ALIGN- HORIZONTAL PAIR PAIR PAIR MENT VERTICAL BAD PAIR BAD PAIR EARTH UEMBANKMENT 0.4 0.7 0.7 0.9 0.8 0.4 0.8 VERTION LENGTH (m) 0.4 0.7 0.7 0.9 0.8 0.4 0.3 OVERFLOW LENGTH (km) 0.1 0.2 0.1 0.3 0.5 0.1 0.3	5.1 5.0 6.2 6.0 1 1 1 R BAD	7.0 7 E.
CARRIAGE WAT WIDTH (m) 1.0 1	6.2 6.0	7.0 7 E.
ROAD SURFACE TYPE S.A.P. ROAD SURFACE TYPE S.A.P. ALIGN- MENT HORIZONTAL PAIR ALIGN- MENT HORIZONTAL PAIR VERTICAL BAD PAIR BAD PAIR WORK CUTTING LEMBANKMENT 0.4 VERTICAL BAD PAIR BAD CUTTING 0.4 EMBANKMENT 0.7 PEDEPTH 0.1 PEDEPTH 0.1 OVERFLOW LENGTH (km) 0.1 FLOOD HEIGHT, V.C 3.0 <td></td> <td>B.</td>		B.
SURFACE CONDITION PAIR BAD PAIR ALIGN- MENT HORIZONTAL PAIR BAD PAIR PAIR<	BAD	
ALIGN- MENTHORIZONTALPAIRALIGN- MENTHORIZONTALPAIRBADPAIRBADPAIRBADPAIRBADPAIRBADCUTTING HEIGHT (m)0.40.7CUTTING HEIGHT (m)0.40.7CUTTING HEIGHT (m)0.40.7CUTTING HEIGHT (m)0.40.7CUTTING CUTTING HEIGHT (m)0.4CUTTING CUTTING HEIGHT (m)0.70.7OVERFLOW SECTIONLENGTH (km)0.1CUTRH FLOOD HEIGHT (m)0.10.2OVERFLOW SECTIONLENGTH (km)0.1CUTCH FLOOD HEIGHT (m)0.10.2CUTCH CUTCH HEIGHT (m)0.10.2CURCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH0.1CURCH CUTCH CUTCH CUTCH CUTCH0.1CURCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH0.1CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH0.1CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH CUTCH0.1CUTCH 	BAD	VERY ÉAD
ALIGN- MENT HORIZONTAL WENT VERTICAL BAD PAIR BAD PAIR BAD PAIR EARTH CUTTING 0.4 0.7 0.9 0.3 0.7 1.4 WORK EMBANKMENT 0.9 0.3 0.7 1.4 WORK EMBANKMENT 0.7 0.7 0.9 0.8 0.4 0.9 VERFLOW LENGTH (m) 0.1 0.1 0.2 0.1 0.3 0.1 0.9 SECTION FLOOD HEIGHT (m) 0.1 0.1 0.2 0.1 0.3 0.1 0.9	── ↓ ↓ ↓ ─∲─	
EARTH CUTTING DEPTH 0.4 0.7 WORK HEIGHT 0.4 0.7 WORK CUTTING DEPTH 0.4 0.7 HEIGHT 0.9 0.3 0.7 WORK CUTTING DEPTH 0.4 0.4 WORK CUTTING DEPTH 0.7 0.7 0.9 0.8 0.4 0.8 1.5 OVERFLOW SECTION LENGTH 0.1 0.2 0.1 0.3 0.1 0.9 SECTION FLOOD HEIGHT 3.0 0.5 0.5 0.7 0.1 0.3	── ↓ ↓ ↓ ─∲─	
EARTH U <t< td=""><td>0.3</td><td>· · · ·</td></t<>	0.3	· · · ·
WORK EUTTING DEPTH 0.4 Product EMBANKMENT EMBANKMENT 0.7 0.9 0.8 0.4 0.8 1.5 OVERFLOW SECTION LENGTH (km) 0.1 0.2 0.1 0.3 0.1 0.9 SECTION FLOOD HEIGHT (m) 0.1 0.5 0.5 0.7 0.1 0.3	0,5	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		
OVERFLOW LENGTH (km) 0.1 0.1 0.2 0.1 0.3 0.1 0.9 SECTION FLOOD HEIGHT, J.C 3.0 0.5 0.5 0.7 0.1 0.3	0.4	
SECTION FLOOD HEIGHT 3.0 0.5 0.7 0.1 0.3	0.3	0.2
	0.2	0.5
	1.0	
SIDE DEPTH (m) 0.2	0.3	•
	0.7	•
DITCH	0.3	•
BRIDGE AND		
DRAINAGE STRUCTURES 0 0 13 3 DRAINAGE STRUCTURES 0 0 13 3 0 0 13 13	c-P(60)-10.0 c-P(60)-11.0 c-P(60)-8.0	

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 $\frac{\text{TABLE 9A-9}}{2 \text{ of } 3}$

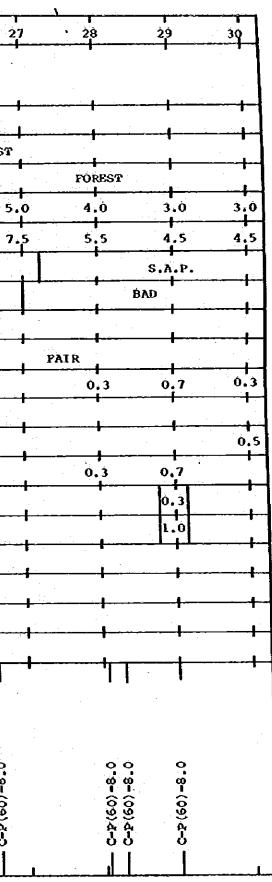


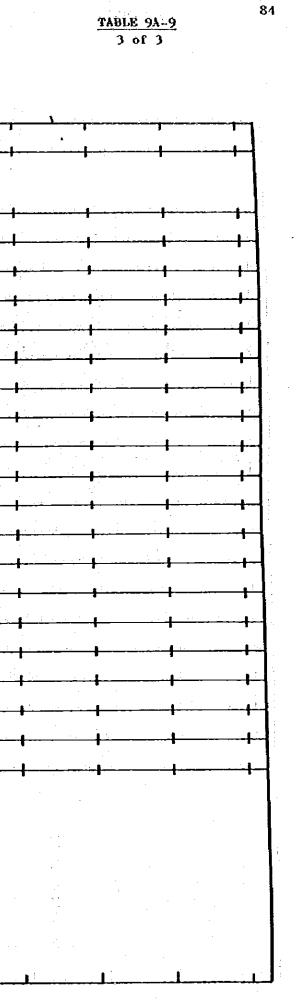
Table 9Å-9

ROAD INVENTORY

SEGMENT 27 6 29 (WANG KATHA - NON PUAL, 33.0 km) - Continued ARD ROAD 11010 & RURAL ROAD

			<u></u>					<u> </u>		<u> </u>	and the second		<u></u>
STATI	DN (km)	30 31	L <u>3</u> 2	33			·			<u></u>	• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · ·	<u>}</u>
NAME OF	VILLAĜE	PAKHAI CHÓNG MAEO	RURAL	NON P	PUAI				n National States		(
TERRA	1N		TERRACE		· . ·		an a		ine da se La constante da seta		•		
LAND	LEFT	FOREST	JUTE/PA	DDY		• • • • • • • • • • • • • • • • • • •					•		• · ·
USE	ŔĬĠĦŦ	FOREST	JUTE/PA	DDY						· · · · · · · · · · · ·	■ 		1 4
CARRIAGE	WAY WIDTH (m)	3.0 3.	.5	1							• •	•	•
	MATION WIDTH	4.5 4	.8 3.	0 4	5	• · · · · · · · · · · · · · · · · · · ·		•				• •	1
ROAD	ΤΥΡΕ		S.A.P.	•			•		•		, ,		
SURFACE	CONDITION		PAIR	-		•		1			• •		
ALIGN-	HORIZONTAL	PAIR	BAD	PAIR			.	•			•		т Г
MÉNT	VERTICAL		FAIR	[]			•				•		•
·····			∮			1	•		•		r		
EARTH	HEIGHT (m)		}	- 		•		eta leg	3			· ·	• •
WORK	EUTTING EDEPTH (m)		F	- 1			1			1			
	EMBANKMENT		8 •• •• •• ••				•			•			•
OVERFLOW			1.1					•		1			
<u></u>	FLOOD HEIGHT		0.5		•		•	•	• • • •	•	•		1 ·····
	WIDTH (m)		+ -	- 1 1		•		•			*		
SIDE	山 DEPTH (៣)		-	· •	•	-	•	•		••••••••••••••••••••••••••••••••••••••			• •
DITCH	H WIDTH (m)			•	1	•			•				
	부 WIDTH (m) 쓸 DEPTH (m)		•	······································	•	•		1		•	•	•	-1-
					1	1	-	-		1	-		1
а С. Б . 24 2 – 82				÷									
BRIDGE			· · · ·										÷
DRAINAG	E STRUCTURES	- C-¥(60) -8.0	- C-P (60)-8.0 - Br-C(7.0x100) UNDER CONST.	- C-P (100) -8.4									
		<u> </u>	<u></u>	<u></u>	<u>l</u> fans a	<u>i</u>	1.5			_ <u>_</u>			<u> </u>

۰.,



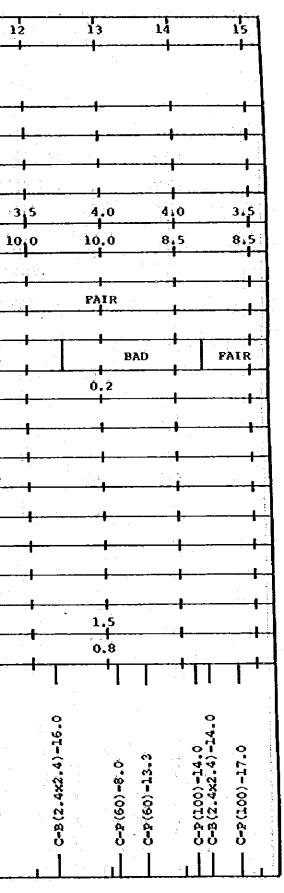
ROAD INVENTORY

SEGMENT 28 (HUAI NAM DAM - LUP PHO, 33.0 km)

IRD ROAD

					e e de la composition								<u></u>										
STATIC	ON (km)	6		1	2	2	3		4		5	· · · · · · · · · · · · · · · · · · ·	6	7		8	9		10	<u></u>	11 	:	
NAME OF	VILLAGE		→ UAT NAI	M DAM		•						<u>, , , , , , , , , , , , , , , , , </u>	• •		: 	-4					ŧ		
TERRA	IN			 				· .		: 				RÔĹĬ	LING						+	+	
LAND	LEFT			_						÷.,	- 1			FÓR	est			· .	4 A			: : 	
USE	RIGHT		-				1				I			FŐR	est						•+		
CARRIAGE	WAY WIDTH (m)		4	3.5	4	0	3	.5	3.	5	4.	0	3.5	3.	5	3.5	3.	5 	3	3	3	.5	
ROAD FOR	MATION WIDTH	4	5	5.0	8	5	7	Ò	6	5	7.	0	7.3	7.	5	7.5	7.	5	7.0	0	8	.0	ľ
ROAD	ΤΥΡΕ					в.						S.A.P			·			• •			в.	· · · · · · · · · · · · · · · · · · ·	-
SURFACE	CONDITION				BAD					• •				PA	IR		· · · · ·	• •			BA	D	
ALIGN-	HORIZONTAL	1												FA	IR .			• {		T		ļ 	
MENT	VERTICAL			FAIR		BA	١D		PAIR		BAD	PAIR		-		BAD	·				ř	PATR	έ
EARTH	CUTTING (DEPTH (m) CEMBANKMEN	0.	3	0.5	Ô	.6	2	.5		• •					• }			 					
WORK	HEIGHT (m)					; ;		ŧ	0	•8 	0.	5 	0.8		ł	0.5 		+				J	
:			 	0.5	Ò	,6 	2	2.5 	<u> </u>	l		I			ŧ			+			·	·	
	EMBANKMEN HEIGHT (m		 	ł		 			1	10 	A 5	 	0.6		 	0.5		+		· .		l	.
OVERFLOW SECTION	LÉNĞTH _(km) FLOOD HEIGHŢ		 			 -		} ;		-		F			•	-		1			. <u>.</u> .	 	
-	WIDTH (m		B			ł		₽		₽ ₽		ŧ			•			-f	i	· .		ł	
SIDE	DEPTH (m)			•				• •			-				<u> </u>			. 		·			
DITCH	H WIDTH (m	5	•			•		•			1	0			• • •		· · · · ·			, 			
	는 WIDTH (m 또 DEPTH (m	3	1							•		.8			• • • • •					-		.	
	4440					•		•		•		•			-			• [[] '	· .			
BRIDGE DRAINAG	AND E STRUCTURES)-7.2)-11-0	-C(6.5x20.0)	0-01-)-12.0 -10.0)-16.0		-10 -1			-10-3)-12-0	-12-0)-12.2)-12.3	
			E				Br-C(6.	- C-P(60)-10-0			C-P(100)-12.0		(100) C-P(100)				-		0-01-(80)-4-0				-

TABLE 9A-10 1 of 3



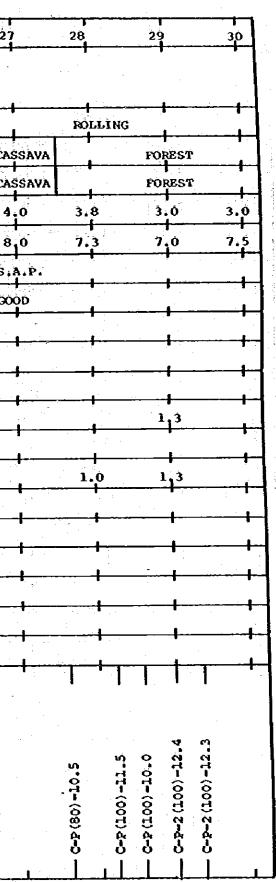
ROAD INVENTORY

SEGMENT 28 (HUAI NAM DAM - LUP PHO, 33.0 km) - Continued

IRD ROAD

NAME OF VILLAGE ROLLING TERRAIN ROLLING LAND LEFT USE RIGHT CARRIAGEWAY WIDTH (m) 3.5	25 26 PLAT PADDY 3.5 3.0 3.5 3.0 4 4 4 4 1 4 1 4 1 4 1 4 PAT PADDY 1 4 1 4 1 4 1 4 1 4 1 4 1 4 1 4	4 8 5, 60
TERRAIN ROLLING ROLLING <t< td=""><td>PADDY PADDY 3.5 3.0 8.5 6.5</td><td>4 8 5, 60</td></t<>	PADDY PADDY 3.5 3.0 8.5 6.5	4 8 5, 60
LAND LEFT FOREST E USE RIGHT FOREST FOREST E CARRIAGEWAY WIDTH (m) 3.5 3.5 3.5 4.0 3.5 3.7 ROAD FORMATION WIDTH 8.5 7.5 7.5 8.5 7.8 7.0 7.5 8.0 7.0 8.0 ROAD TYPE S.A.P.	PADDY PADDY 3.5 3.0 8.5 6.5	4 8 5, 60
LAND POREST USE RIGHT CARRIAGEWAY WIDTH (m) 3.5 3.5 3.5 4.0 3.5 3.5 4.0 4.5 4.5 3.7 ROAD FORMATION WIDTH 8.5 7.5 7.5 8.5 7.8 7.0 7.5 8.0 7.0 8.0 ROAD TYPE S.A.P. S.A.P. Image: Condition width of the second se	PADDY 3.5 3.0 8.5 6.5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 8 5, 60
USE RIGHT FOREST FOREST CARRIAGEWAY WIDTH (m) 3.5 3.5 3.5 4.0 3.5 3.5 4.0 4.5 4.5 3.7 ROAD FORMATION WIDTH 8.5 7.5 7.5 8.5 7.8 7.0 7.5 8.0 7.0 8.0 ROAD FORMATION WIDTH 8.5 7.5 7.5 8.5 7.8 7.0 7.5 8.0 7.0 8.0 ROAD SURFACE CONDITION End FAIR FAIR <t< td=""><td>3.5 3.0 8.5 6.5 1 1 1 1 1 1</td><td>8 S; Ø0</td></t<>	3.5 3.0 8.5 6.5 1 1 1 1 1 1	8 S; Ø0
ROAD FORMATION WIDTH 8.5 7.5 7.5 7.5 7.6 7.6 7.5 8.0 7.0 8.0 ROAD FORMATION WIDTH 8.5 7.5 7.5 8.5 7.8 7.0 7.5 8.0 7.0 8.0 ROAD ID ID <t< td=""><td></td><td>S . I GO</td></t<>		S . I GO
ROAD TYPE SURFACE CONDITION ALIGN - HORIZONTAL		8, S,1 GOO
ROAD TYPE S.A.P. SURFACE CONDITION FAIR ALIGN - HORIZONTAL BAD	- + - + PAIR	GOX
ALIGN - HORIZONTAL BAD FAIR		
	PAIR	
	88	
EARTH LEMBANKMENT 1,6 LEARTH LEMBANKMENT 1,7 LARTH LEMBANKMENT 1,7		
WORK HEIGHT (m) 1.7 213 0.8 0.9 112 WORK CUTTING 1 <		· ·
♀ EMBANKMENT 1.5 2.5 3.5 1.0 0.9 0.8 1.0 ₩ HEIGHT (m)	0.8 1.8 + +	
OVERFLOW LENGTH (km)	• II	
SIDE DEPTH (m)		· · · ·
	}	
		T
BRIDGE AND		
DRAINAGE STRUCTURES		C-P(150)-14.4 Br-C(6.5x20-0)
C-P(100)-14 C-P(100)-14 C-P(100)-14 C-P(100)-16 C-P(100)-16 C-P(100)-16 C-P(100)-16 C-P(100)-16 C-P(100)-16 C-P(100)-16	C-P-2(100)-11. C-P-2(20)-11. Br-C(6.5×20.0	- X - X - X
-1 -1 (00) -1 (100) -1 (100) -1 (100) -1 (11) -1 (12) -1 (13) -1 (14) -1 (15) -1 (16) -1 (17) -1 (18) -1 (10) -		
		របំ <i>ដី</i>

TABLE 9A-10 2 of 3



Sec. Sec. 19

INVENTORY ROAD

SEGMENT 28 (HUAI NAM DAM - LUP PHO, 33.0 km) - Continued

1.12

IRD ROAD

						IRD	ROAD					a Alta anti-	
STATI	ON (km)	30	31 3	2 3	3			· · · · · · · · · · · · · · · · · · ·					
NAME OF	F VILLAGE			LUP	рно								, ,
TERRA	IN		ROLLING	•		· · · · · · · · · · · · · · · · · · ·	• •						T 1
LAND	LEFT)rest	PADDY							• •	J	۲ ا
USE	RIGHT	PC)ŔEST	PADDY				• • • • • • • • • • • • • • • • • • •	·····		•	• •	•
CARRIAGE	WAY WIDTH (m)	3.5	3.5 3.	0 3	5		•				ter in ter in La constant de la cons	• •	• •
ROAD FOR	MATION WIDTH	7.0	7.0 7.	0 6	5				•	•	یں در در دو اور اور اور اور اور اور اور اور اور او		
ROAD	ΤΥΡ́Ε		S.A.P.			na se		a ser en la la Seconda	•		•		
SURFACE	CONDITION		GÓŐÐ			• •	•		• •	.		4	
ALIGN-	HORIZONTAL		PAIR				•		• •	land and a second s		•	+
MENT	VERTICAL		FAIR			• •					• •	4	-
	CUTTING DEPTH (m) EMBANKMENT HEIGHT (m)				-	6	••••••••••••••••••••••••••••••••••••••	•			•		
EARTH WORK	HEIGHT (m)		0	.5	L.3	.	• - •	• 				- 	،
NUNK	「CUTTING 「「DEPTH」(m)			• •		• •		••••••••••••••••••••••••••••••••••••••	4	4	.	•	+
	EMBANKMENT		0 	5	1.3	•	4 - 1 - 2 - 2 - 2	•	- -	• •	•	••••••••••••••••••••••••••••••••••••••	
OVERFLOW			<u> </u>	•		ł		- 	•	•	.	·	
SECTION	FLOOD HEIGHT				4				• •	:	-	- - -	." -+
· · · ·	WIDTH (m)			.	-	+		_ _	•		- 		
SIDE	UEPTH (m)	 		· -			••••••••••••••••••••••••••••••••••••••	-	al 1	- -	- i	-	
DITCH	上 WIDTH (m) ジェ DEPTH (市)				-	ł	-		4			-	-+
	DEPTH (m)					••••••••••••••••••••••••••••••••••••••	-	an a			_ t	-	
BRIDGE DRAINAG	AND E STRUCTURES	- C-P(100)-12.3											

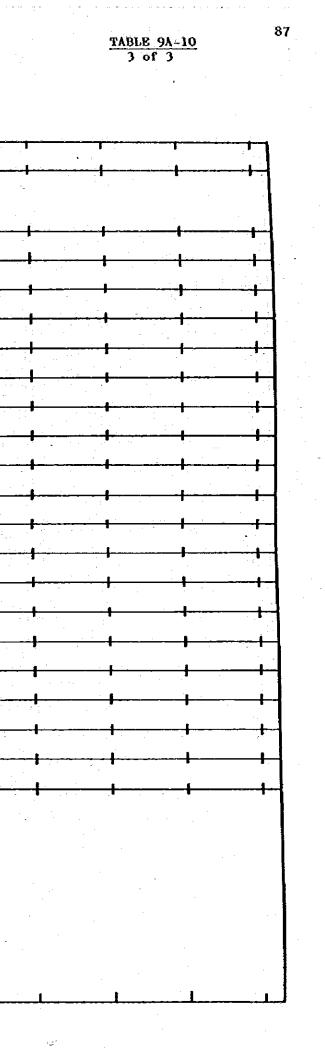


Table 9X-11

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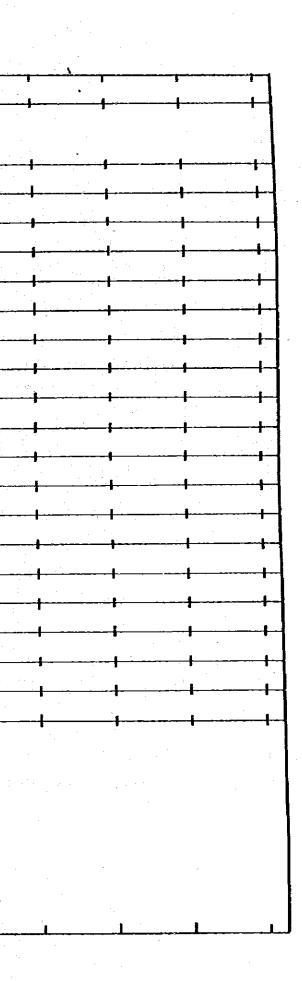
ROAD INVENTORY

SEGMENT 30 (NON PUAL - LUP PHO, 6.0 km)

RURAL ROAD

										·	
STATIC	ON (km)	0	1 2	3	4	5 6	1				
NAME OF	VILLAGE	NON PUAL	• • • • • • • • • • • • • • • • • • •			LUP	рно	<u></u>			
TERRA	IN			PLAT						• •	
LAND	LEFT		PADDY	FOREST/KENAP						• {	· · · · · ·
USE	RIGHT		PADDY	/FOREST/KENAF					}	 	
	WAY WIDTH (m)								}	1	l
ROAD FOR	MATION WIDTH	4.8 5	4 5.	0 5.0	6.0	5.0 4.	4		_		}
ROAD	ΤΥΡΈ			S.A.P.				}		_	£
SURFACE	CONDITION		• •	FAIR		┎╌╍┉╉╌╌╌╌╸	 	}		. 	\$
ALIGN-	HORIZONTAL	•	4			BAD	f	f	.	}	}
MENT	VERTICAL			BAD				• •		· · · · · · · · · · · · · · · · · · ·	#
EARTH	CUTTING DEPTH (m) WEMBANKMENT HEIGHT (m)		•	•			1	f	1	*	*
WORK	LUTTING			f	······		₹	₽	€	₽	₿
	EMBANKMENT HEIGHT (m)			• •			.	4	- 	<u> </u>	
OVERFLOW	LENGTH (km)			• •		1.0		-		-	
SECTION	FLOOD HEIGHT		.			0.3			- 		
	WIDTH (m)	• 	• •	• • •				•	-+		• ••
SID E DITCH	- DEPTH (m)	 	- 	 	-		-	•	+	-1	
Unon	부 WIDTH (m) 쓸 DEPTH (m)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- }	ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا ا 			1	- t		- 	-1
·	DEPTH (m)	 		I I I			l i	-		+	-1
				11				1 	urtu Ali ali ali ali ali		· · · · · · · · · · · · · · · · · · ·
BRIDGE	AND										
DRAINAG	E STRUCTURES				•	9.8F	0		· · · · · · · · · · · · · · · · · · ·		. · · · ·
	· · · · ·		C-P (50)-7_0 C-P (50)-8_2	000 000 11		6x15.5 (6x6.0) (6x11.7	4×17				
			6 (0 (0 (0) 4	0-7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -	С-Р (40) - 8 С-Р (40) -7	ម ម ម ម ព ព ព ព ព ព	ġ H				
	· · ·		↓ ↓ ↓ ↓ ↓	<u>88</u>		. X X X	ង]	- J			

TABLE 9A-11



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Appendix 10

SOIL AND MATERIAL INVESTIGATION

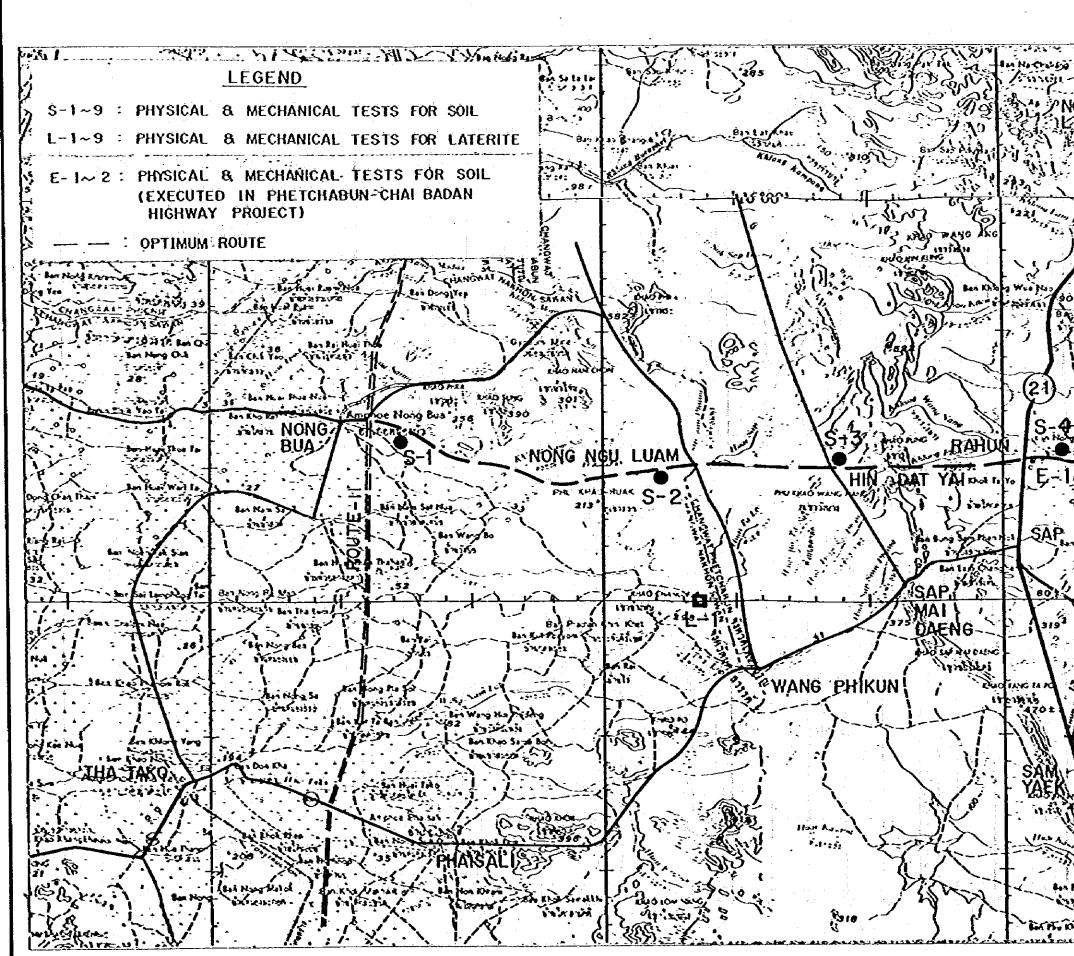
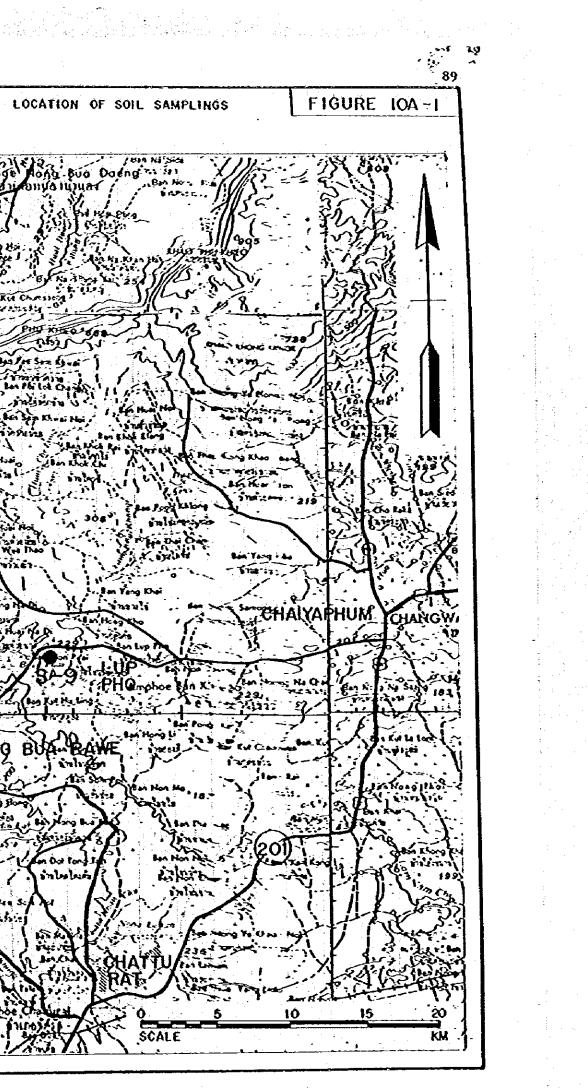
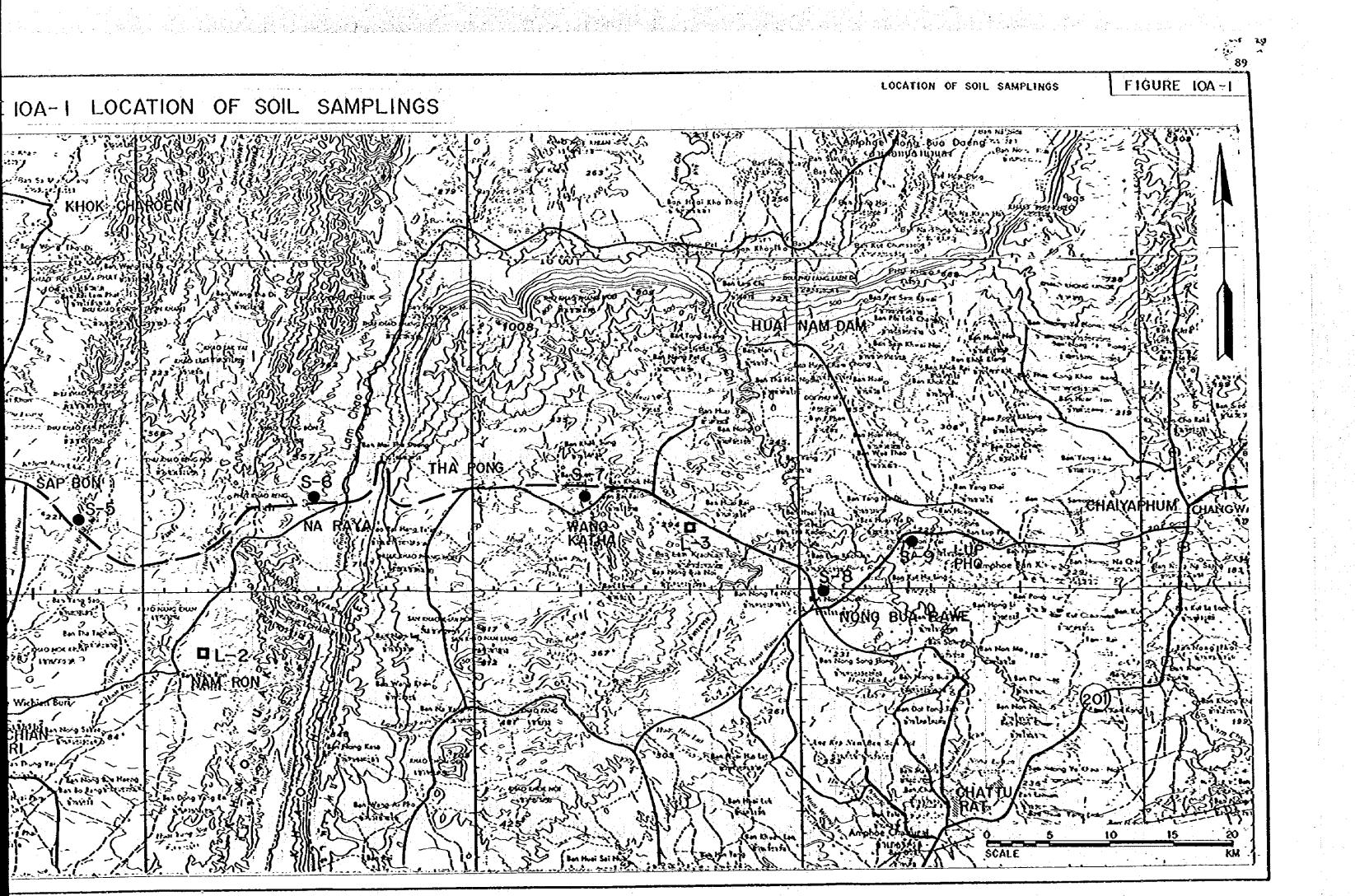


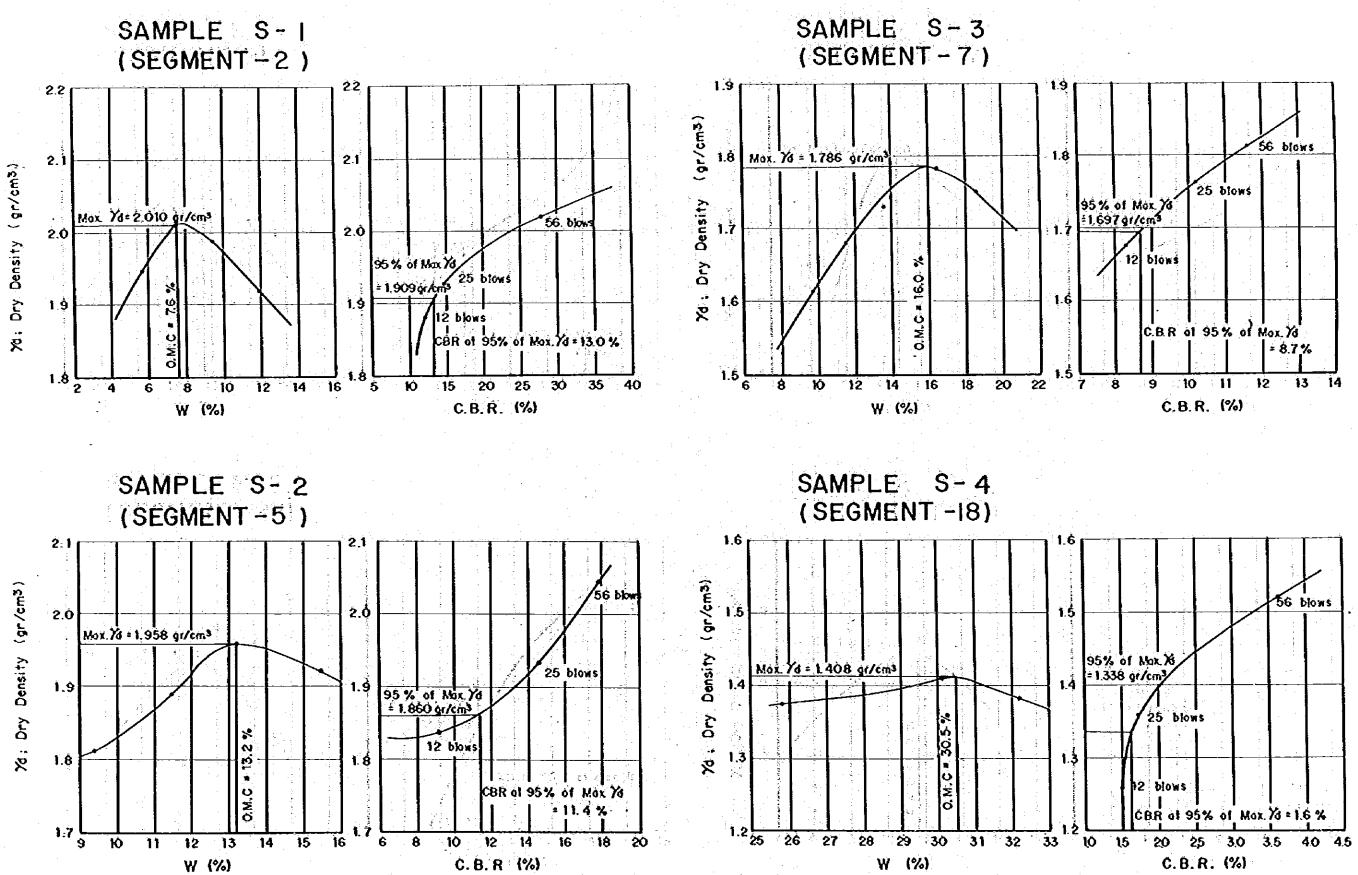
FIGURE IOA-I LOCATION OF 163 220 Nord Kraz 1 00000000 グNONG KHOK CH Amphoé Hong Pha •้ อำเกอหงอาไม่ AP BON E-17-NONG DAENG Generation of - SAMO, THOT Ban Rhol P าทโครด 11.7.4 the phat to <u>his</u>lesie duo noe un di ^{anna} L-24 invis ? NAM RON Amphoe Wichim Buri WICHIAN BURL Les Norg L's Hers 45 B3 J 1-03











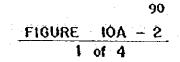
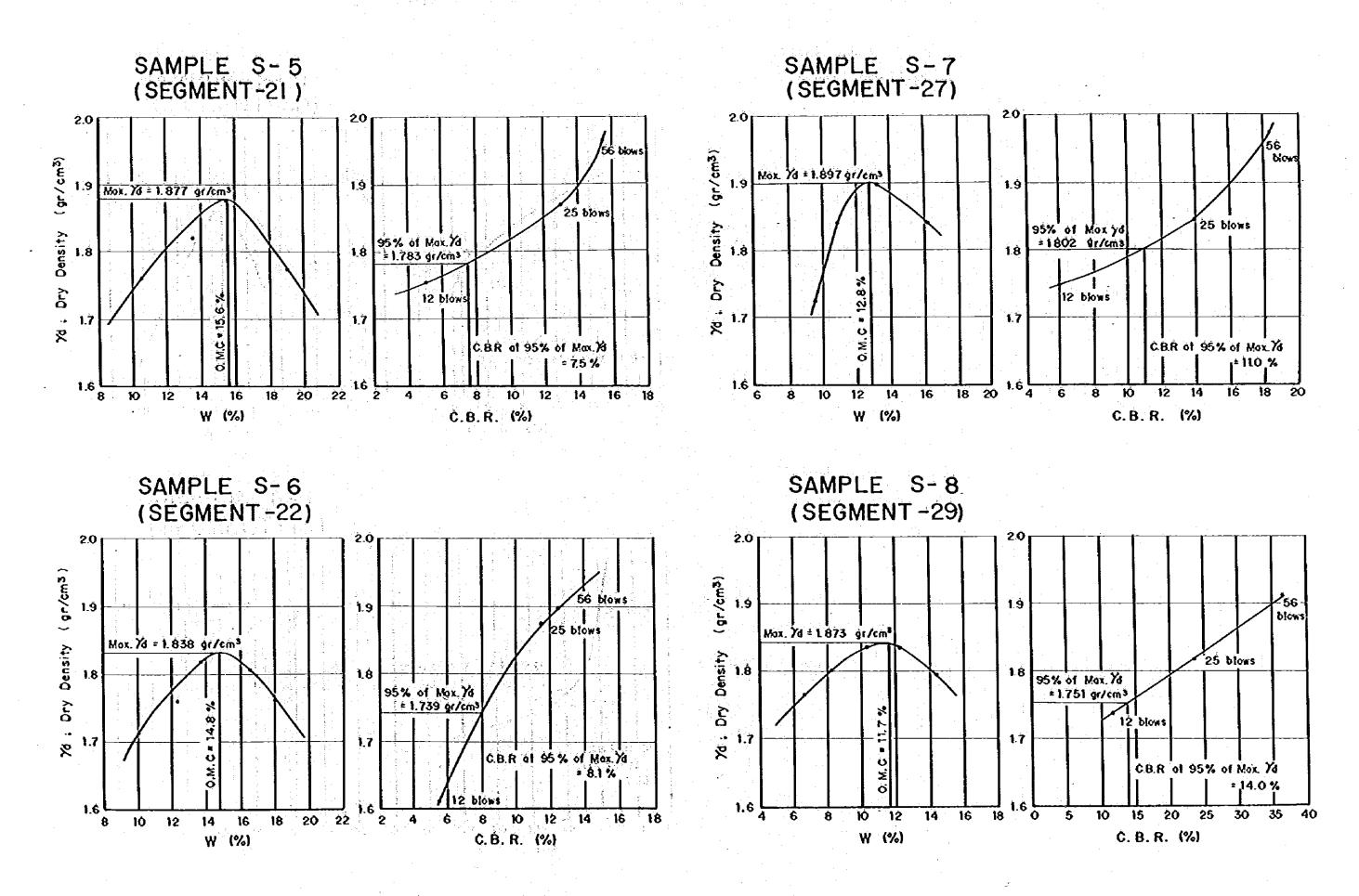


Figure IOA-2 SOIL TEST RESULTS (2)



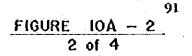
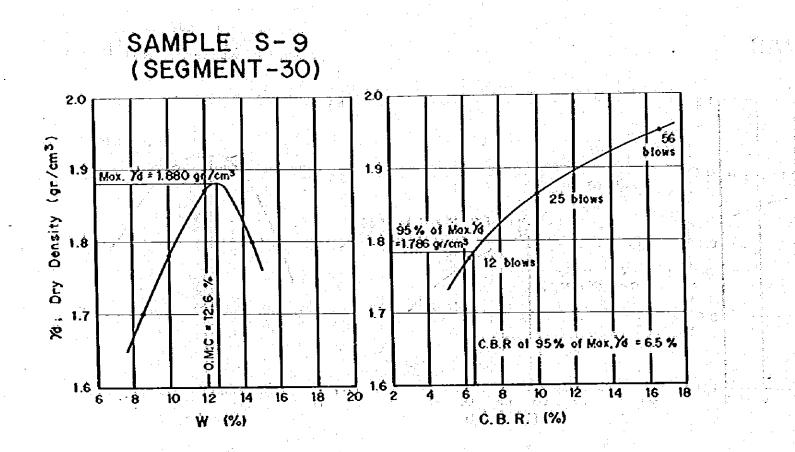
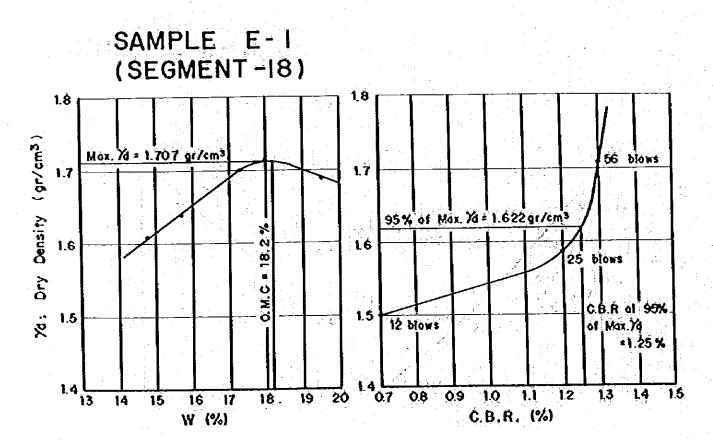
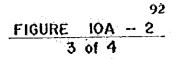
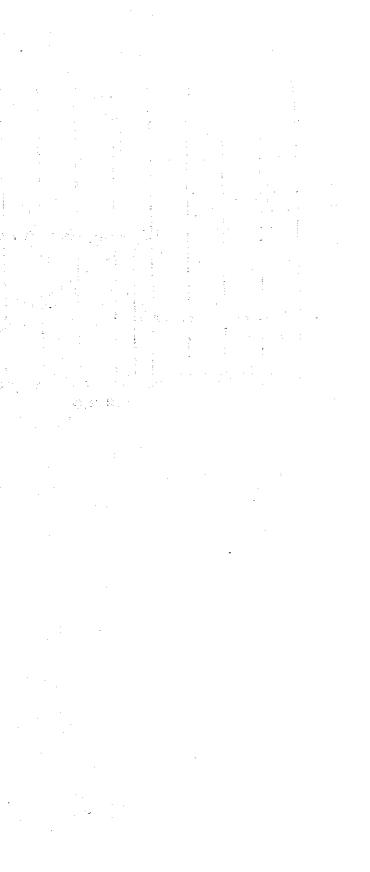


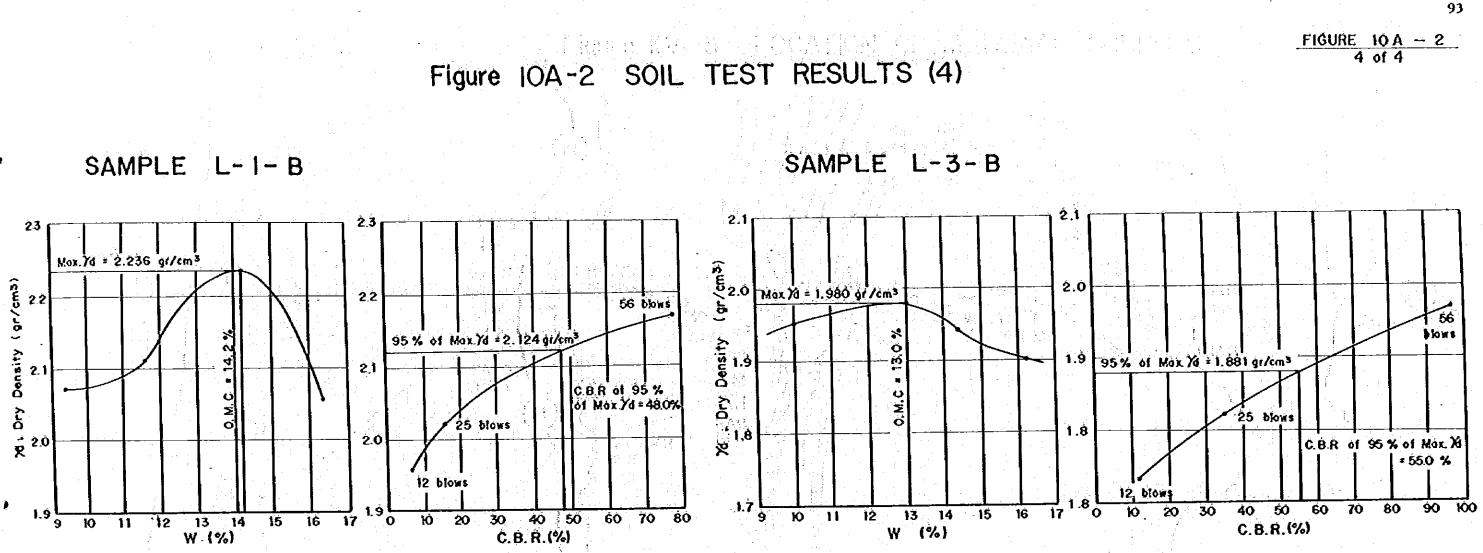
Figure IOA-2 SOIL TEST RESULTS (3)



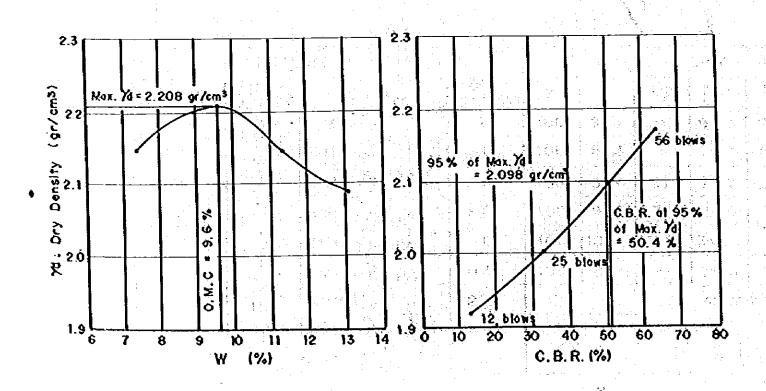


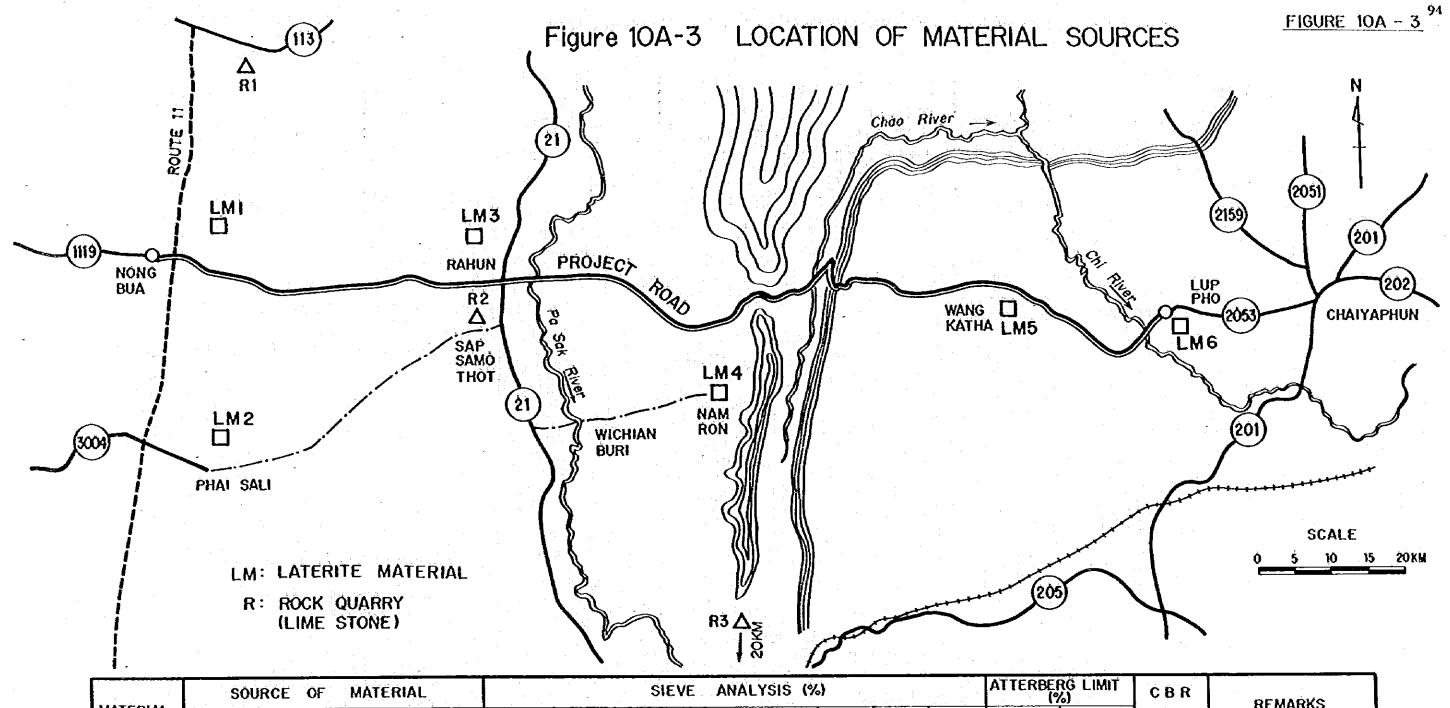






SAMPLE L-2-B





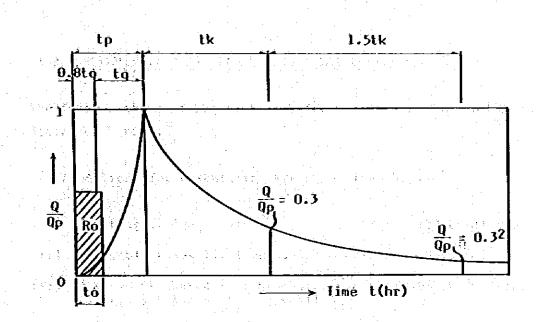
	SÖU	RCE OF MATERI	AL				SIEVE	ANAL	YSIS (9	6)			ATTERBEI (%	RG LIMIT %)	ĆBR	REMARKS
MATERIAL	ROAD	LOCATION	OFF SET (KM)	2*	1*	1/2"	3/4"	3/8*	#4	# 10	# 40	[#] 200	LL	ΡΙ	(%)	ALMANNO
LMI	MINE ROAD	5KM FROM NONG	0	100	943		91.3	79.6	62.6	44.5	31.8	26.6	43.0	18.0	36.0	
LM2	RURAL ROAD	3KM FROM PHAI	0	100	89.3		85.7	59.3	41.5	28.3	15.3	6.2	26.0	9.8	28.0	
LM 3	ROUTE	IOKM FROM SAP	5.0	100	99.0	81.0	71.0	68.0	55.0	44.0	32.0	28.0	_		-	
LM4	ARD ROAD	18KM FROM WICHIAN BURI	3.0	100	99.0	79.0	70.0	65.0	56.0	46.0	30.0	20.0	33.0	11.8	-	BAN NAM RON
LM5	ARD ROAD	ISKM FROM NONG	2.0	100	100	100	100	99.0	72.0	27.0	10.0	2,0	26.5	6.6		BAN DON MA KOK
LM 6	ROUTE 2053	3KM FROM	0.3	100	86.4		36.8	29.5	12.5	39.0	28.0	23.5	35.0	11.0	-	
RI	ROUTE 113	JOKM FROM BUA	2.0				ABRA	SION 1	TEST 3	60.0 %		. · · ·				BAN KHAO SAI
R 2	ROUTE 21	2KM FROM SAP SAMO THOT	4.0	•			· · · ·		-		· .	-				
R 3	ROUTE 205	20KM FROM LAM	1.0				ABRA	SION	TEST 2	26.8 %				· .	87.0	BAN KHAO TAMBON

Appendix 11 HYDROLOGICAL STUDY

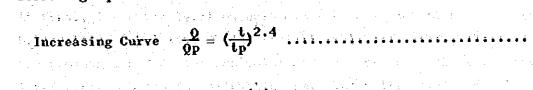
Appendix 11 HYDROLOGICAL STUDY

discharge occurred in unit time. The calculation method used in the study was Nakayasu's Method, which is explained herein.

The unit hydrograph is considered to have the form shown in the following figure:

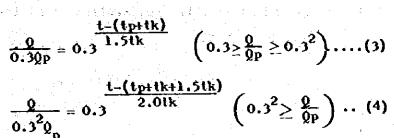


The increasing and decreasing curves in the figure are expressed by the following equations:



ري الفيدة العرب المؤلم أخرار و

Decreasing Curve $\frac{Q}{Qp} = 0.3$ tk



11-1 UNIT HYDROGRAPH METHOD

The Unit Hydrograph Method was advocated by Sherman. This method bases on the following three assumptions:

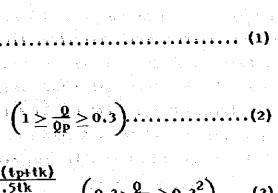
a) In the same river basin, the time between the beginning of flood and the occurrence of peak discharge and duration of flood discharge are constant regardless of the rainfall intensity.

أراقيك الطأر وتوجيع والالتار فرداد

- b) In the same river basin, the time proportion corresponding to the changes of discharge is kept constant regardless of the intensity of the effective rainfall.
- c) The discharge by the effective rainfall in long duration can be calculated by the sum of discharges corresponding to the rainfalls in short divided durations.

In other words, the factors which specify the form of unit hydrograph are the characteristics of the respective river basin rather than those of rainfall.

Many calculation methods have been studied to formulate the unit hydrograph which shows the relationship between unit effective rainfall and unit



Where,	Q:	Discharge at time t (m ³ /sec)	
	Qp:	Peak discharge by the effective	rainfall Ro
:	1.5	in a time of to (m ³ /sec)	
	tp:	Time in which the discharge incl	reases from
×		zero to the peak (hr)	
	• • •		

Time in which the discharge decreases from Qp to 0.3Qp (hr)

These equations are for the case that the unit time (to) is taken as 0.5 to 1.0 times of the time lag between the beginning and the peak of flood (tg), which is measured starting from the time point of 0.8 to.

The lotal flood discharge (Qt) is calculated as follows by the integration of Q, based on the above equations, (1), (2), (3) and (4):

 $\hat{Q}t = \int_{Q} dt = \hat{Q}p(0.3tp + tk) \dots (5)$ Where, $\hat{Q}t$: Total flood discharge (m³)

On the other hand, the total flood discharge is also given by the following equation:

Where, Ro: Effective rainfall (mm)

A : Catchment area (km²)

Therefore, the peak discharge (Qp) is calculated from the equations (5) and (6).

tp is expressed from the previous figure as follows:

The figures of tg and tk are given as follows:

 $tg = 0.21L^{0.7}$ (L<15)

tg = 0.4 + 0.058L (L>15)

Where, tgi Time lag between the beginning and the peak of flood (hr)

L : Length of river channel (km)

tk = 1.5tg (for the river that the flood appears slovly and disappears quickly) (hr) tk = 3.0tg (for the river that the flood appears quickly and disappears slowly) (hr) Time in which the discharge increases from tp: zero to the peak (Qp) (hr)

11-2 DETERMINATION OF BRIDGE LENGTH FOR RELIEF OPEN

The determination of bridge length for relief open for Road Segment 18 is described herein.

The conditions for calculation are summarized below:

i) Existing bridge length

ii) Allovable vater level on upstream area t

iii) Maximum discharge (Re: Discharge curve : 1987.0 (m³/sec) in Figure 11A-2 of Appendix-11)

iv) Vater level - Reserved volume curve, shown in Figure 11A-3

v) Vater level - Discharge curve at downstream, shown in Figure 11A-4

At first, the vater level on upstream area was checked for the existing bridge length, but it exceeded the allovable one. Then, the bridge length vas prolonged and another calculation was made until the calculated water level becomes below the allowable one. The water level - discharge curves are shown in Figure's 11A-5, 11A-6, 11A-7, and 11A-8 for the existing bridge length of 34.4 meters and the prolonged 233, 283 and 333 meters, respectively. The results are summarized as follows and illustrated in Pigure 11A-9.

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133.8 (m)

- 80.0 (m)

Bridge	Inflów	Base Plov	Calculated
Length (m)	Yolume (m ³ /sec)	Discharge (m3/sec)	Yater Level (m)
133.8	1987	739.4	80.60
233.0	1987	852.3	80.62
283.0	1987	888.4	80.26
333.0	1987	936.1	79.84

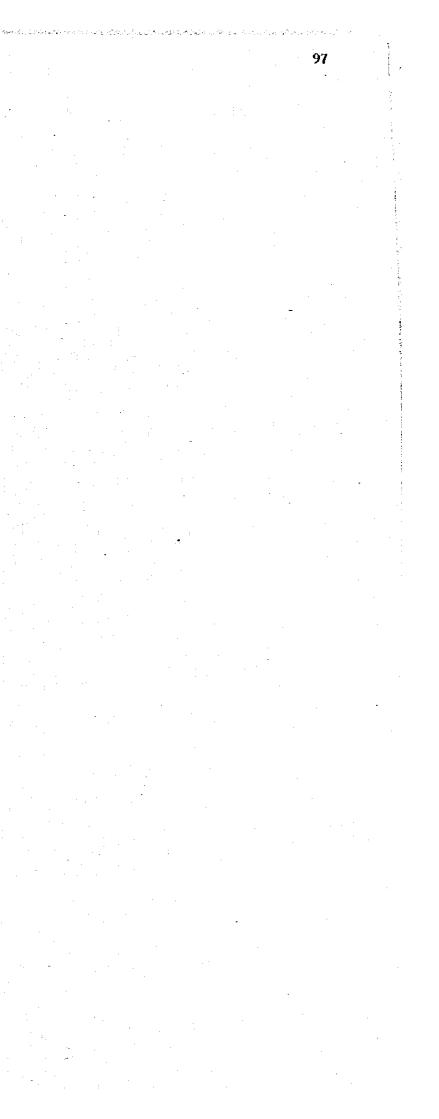
1947年,1月14日和北京市场上安全了大学业会市场中的时间来自己的合理编辑教育的研究中,将自己注意的新闻中的"美国"是"这个公司把他们的",这些一个时间,自己还有一些新

Note: Allovable water level is 80.0 (m).

Based on the above, the required bridge length for relief open was concluded as 176 meters.

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limé	Total	Loss	(mm) Effective
<u>(hr)</u>	<u>Reinfall</u>		<u>Rainfall</u>
1	0.0	0.0	0.0
2	0.0	0.0	0,0
3	8.1	8.0	0.1
4	0.0	0.0	Ó.Ó
5	0.0	0.0	D.O
6	0.0	Ò.O	0.0
7	0. 0	0.0	0. Ó
8	0.0	0.0	0. 0
9	0.4	Ó.4	Ò. Ö
10	0.0	0.0	0. 0
11	0.0	0.0	0.0
12	0.2	0.2	0.0
13	3.7	3.6	0.1
14	12.1	11.2	0.9
15	129.4	40.6	88.8
16	0.0	0.0	0.0
17	0.0	0.0	0.0
18	0.0	Ŭ•Ò	0.0
19	0.0	0.0	0.0
20	0.0	0.0	0.0
21	0.0	0.0	0.0
22	0,0	Ò,Ò	0,0
23	0.0	0.0	0.0
24	0.0	0.0	0.0
Total	153.9		89.9

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Table 11A-1 RAINFALL PATTERN (Effective Rainfall)

e produče . .• 18 F_ 승규는 물건을 가지? i de la composición d $\{1,1,\dots,n\}$ 40.0 . . 가이는 사람들과 공원 经合计运行 的 圣人的 法制度制证券 $\partial \left(\frac{1}{2} \right)$ • $\mathbf{1} = \mathbf{1}$ 금 문화 문제 소문 ener Finite Bint Pa

1. I I

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 $\sum_{i=1}^{n-1} \left\{\sum_{j=1}^{n-1} \left(\sum_{i=1}^{n-1} \left(\sum_{j=1}^{n-1} \left(\sum_{j=1}^{n-1$

1.57

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 $1 \le 1$

승규는 문제 동물 医马克曼氏管 24.55 문문 $|\lambda|<|\lambda|_{1}$ 1.57 a distance 1 고 한 감독

1月月 白田市 山市 $(a_{i},a_{i}) \in \{a_{i},a_{i}\} \in \{a_{i}\}$

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这一些人们还不能是你们的我们是你们我们是你的你的你的你的你的你们就是你的你是你的你的你们,你们还没有你的你的你们还没有这些的你的。"他说道:"你是你们还没有了这些的,你们还没有有没有了。""你们,我们 98 TABLE 11A-1 41 3 4 7 F .

TABLE 11A-2 DRAINAGE CAPACITY OF BRIDGES AND CULVERTS IN OPTIMUM ROUTE

• .	Existing	Structure			Discharge	e Calculatio	<u> </u>		· · · · · · · · · · · · · · · · · · ·	Capacit	y Calculatio	n	· · · · · · · · · · · · · · · · · · ·
Catching Basin No.	Station (km)	Type of Structure	Catchment Area (km ²)	Length of River Channel (km)	Height Differ- ence (m)	<u>Unit Hyd</u> Time lag tp(hr)	Peak dis- charge	Design Dis- charge (m ³ /sec)	Proposed Structure	Area of Water Way (m ²)	Hydraulic Radius (m)	Velo- city (m/sec)	Capacity (m ³ /sec)
1	5 + 850		1.9	4.0	45	Ó.82	0 . 28	25	Box Culvert 2(2.1x2.1)	8.8	0,70	3.94	27
2	8 + 150		1.5	2.0 0.8	25 120	0.42	0.43	39	Box Culvert 2(2.1x2.1)	8.8	Ó.70	4,80	42
3	10 + 700		8.8	4.3 0.9	25 290	1,34	0.79	71	Concrete Bridge (7.0x20.0)	40.5	2.04	1.91	77
4	12 + 50	++	1.0	2.0	20	0.44	0.27	24	Box Culvert 2(2.1x2.1)	8.8	0.70	3.94	27
5	12 + 400	<u> </u>	3.3	3.0 0.6	20 220	0.86	0.46	42	Concrete Bridge (7.0x15.0)	25.5	1,72	2.03	51
6	13 + 50		43.5	15.0	65	5.46	0.96	86	Concrete Bridge (7.0x25.0)	62.1	2.47	2.58	160
7	15 + 350		118.0	27.0 3.0	105 140	10.74	1.33	119	Concrete Bridge (7.0x25.0)	62.1	2.47	2.58	160
8	37 + 100	-	1.6	3.1 1.3	100 260	0.39	0.50	45	Box Culvert 2(2.1x2.1)	8.8	0.70	6.23	48
9	42 + 950		4.7	4.5 0.3	100 90	0.62	0.92	83	Concrete Bridge (7.0x25.0)	62.1	2.47	1.64	102
	50 + 300	Timber Bridg (4,3x18.3)	ġ e						Concrete Bridge (7.0x21.0)			••••	
10	50 + 600	Timber Bridg (4.4x25.0)	3e 6820	217	230	92.6	8.90	1987	Concrète Bridge (7.0x24.0)		lge for ief Open		o Hydrologics n Appendix-11
	50 + 900	Timber Bridg (4.4x15.5)	ge						Concrete Bridge (7.0x16.0)		tei open	Utuly 1	а курских-и
	51 + 700								Concrete Bridge (7.0x176.0				
11	53 + 950	Timber Brid (4.2x5.0)	ge 1.3	2.0	10	0.67	0.23	21	Box Culver 2(2.1x2.1	gen i e se s	0`.70	3.94	27

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TABLE 11A-2 1 of 3

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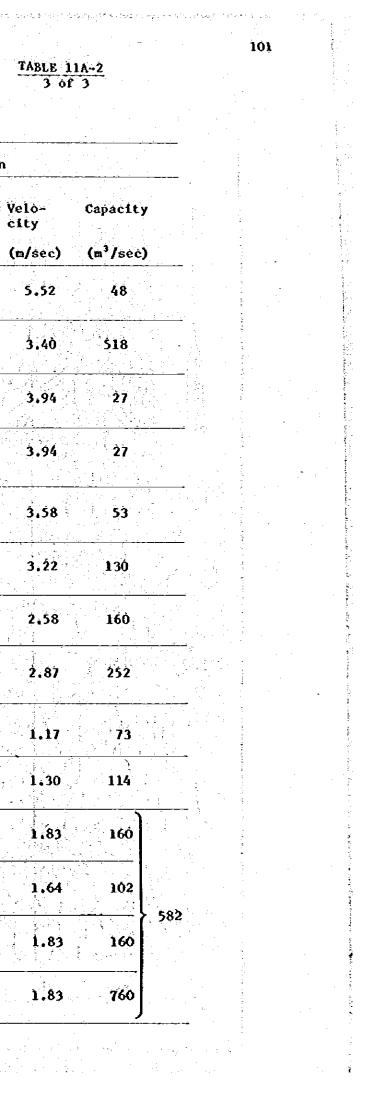
		· ·									(<u>TABLE 1</u> 2 of	
	. •		· · · · · · · · · · · · · · · · · · ·		TABLE II	A-2 DRAIN	AGE CAPACITI	OF BRIDGES	AND CULVE	RTS IN OPTIMUN	A ROUTE (CO	ont'd)		
	<u></u>		· · · · · · · · · · · · · · · · · · ·										· · · ·	·
	Ex	isting	Structure			Dischar	ge Calculat:				Capacity	Calculation	·	·
Catchín Basin	ng Sta	tion	Type of Structure	Catchnenț Area	of River			drograph Peak Dis-	Design Dis-	Proposed Structure	Area of Water	Hydraulic Radius	Yelò- city	Capacity
No.) (k	m)		(km²)	Channel (km)	ence (2)	tp(hr)	charge Qp(m³/sec)	charge) (m³/séc)		Way (m²)	(13)	(m/sec)	(a ³ /sec)
12	56	+ 100		1.8	2.5	30	Ó.49	0.44	39	Box Culvert 2(2.1x2.1)	8.8	0.70	4.80	42
13	63	+ 100	Timber Bridg (4.2 x 15.0)	e 5.8	3.0 1.0	10 60	1.36	0.52	46	Concrete Bridge (7.0x15.0)	25.5	1.72	2.03	51
14	66	+ 950		3.1	3.0 0.8	40 140	0.59	0.64	57	Concreté Bridge (7.0x15.0)	25.5	1.72	2.87	73
15	71	+ 200	-	23.9	14,5 2.0	120 120	3.73	0.77	70	Concrété Bridge (7.0x15.0)	25.5	1.72	4.05	104
16	72	+ 900	- -	78.0	16.2 7.7	120 315	4.90	1.92	169	Concrete Bridge (7.0x30.0)	88.0	2.89	2.87	252
17	77	' + 300	<u>-</u>	2.3	3.5 1.3	60 100	Ó.6 4	0.4 3	38	Box Culvert 2(2.1x2.1)	8.8	0.70	4,80	42
18	80	+ 100	· · · · · · · · · · · ·	1.9	3.5	70	ó. 51	0.45	40	Box Culvert 2(2.1x2.1)	8.8	0.70	4.80	42
19	84	+ 800	_	0.8	2.5	65 80	0.24	0.4 0	26	Box Culvert 2(2.1x2.1)	8.8	0.70	3.94	27
20	80	+ 800	-	6.6	7.8	180	1.04	0.77	69	Concrete Bridge (7.0x15.0)	25.5	1.72	2.73	70
21	- 89	+ 100		1.5	3.0 0.8	38 110	0.61	0.30	26	Bóx Cúlvert 2(2.1x2.1)	8.8	0.70	3.94	27
22	89	9 + 400		1.3	3.5 0.8	40 130	0.74	0.21	- 19	Box Culvert 2(2.1x2.1)	8.8	0.70	3.94	27
23	8	0 + 800		1.5	3.5 0.4	40 70	0.73	0.25	22	Box Culvert 2(2.1x2.1)	8.8	0.70	3.94	27
24	9	2 + 900		10.9	7.2 2.8	70 180	1.81	0.73	65	Concrete Bridge (7.0x20.0)	40,5	2.04	2,27	92
25	9	5 + 50		53.2	10.7 0.8	120 120	2,24	2.87	258	Concrete Bridge (7.0x40.0)	152.5	3.72	2.16	330

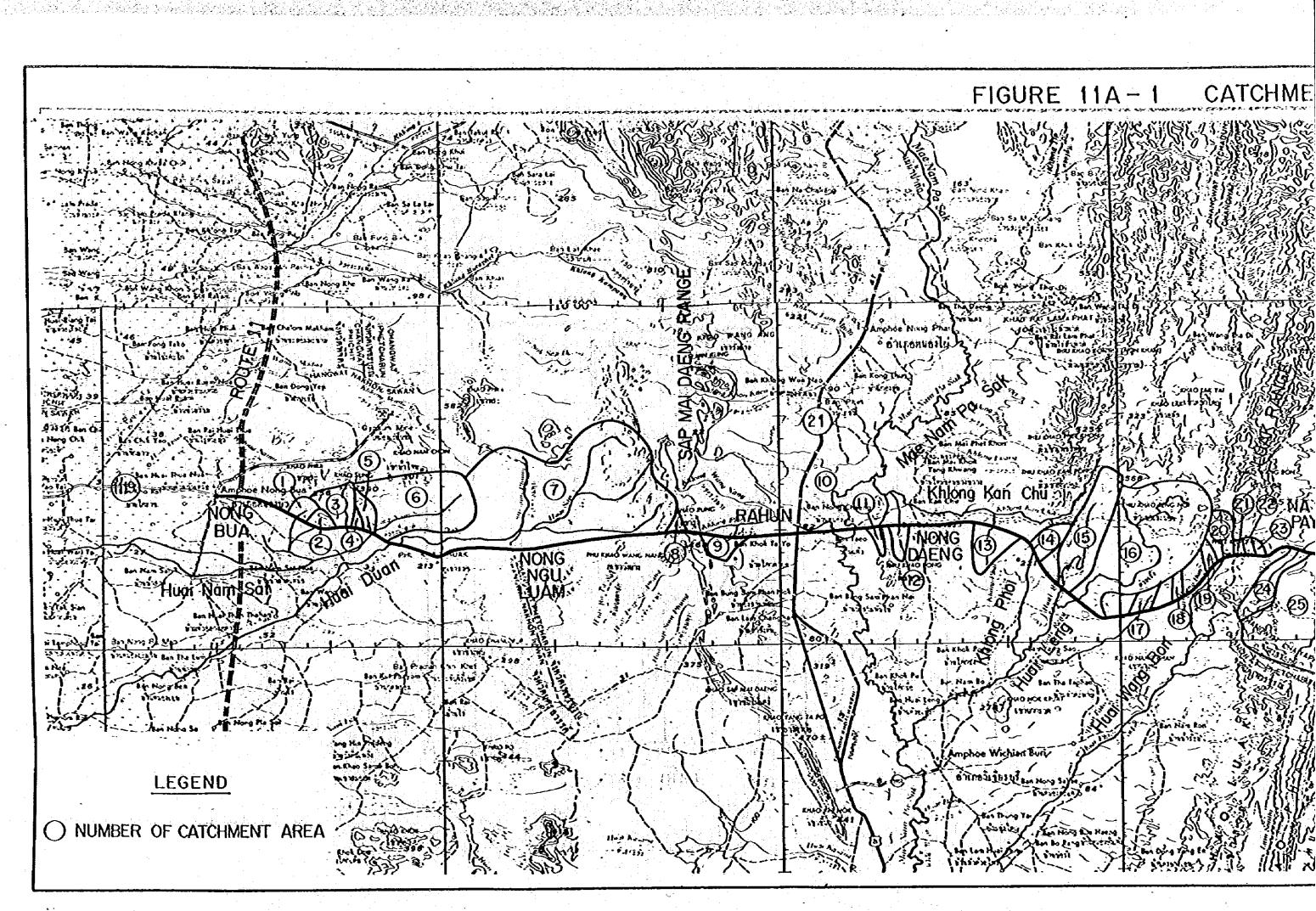
	Existing	Structure			Discharg	é Calculati	ÒŇ			Capacit	y Calculation	
Catching Basin No.	Station (km)	Typė of Structure	Catchment Area (km ²)	Length of River Channel (km)	Height Differ- ence (m)	Unit Ky Timé lág tp(hr)	'drograph Peak Dis- charge Qp(m ³ /sec)	Design Dis- charge (m ³ /sec)	Proposed Structure	Area of Hater Way (m ²)	Hydraulic Radius (m)	
26	106 + 650	-	2.7	5.0	140	0.59	0.55	48	Box Culvert 2(2.1x2.1)	8,8	0.70	
27	112 + 400		121.7	9.0 12.0	80 480	3.28	4.48	. 404	Čončrété Bridge (7.0x40.0)	152.5	3.72	
28	114 + 400		1.5	2.5 0.5	25 50	0.3 7	0.4 9	27	Box Culvert 2(2.1x2.1)	8.8	Ó.70	
29	116 + 300		0.9	2.5	35	0,45	0.24	22	Box Culvert 2(2.1x2.1)	8.8	Ŏ. 70	
30	121 + 100		6.8	5.5 1.0	40 40	1,56	0.53	47	Cóncrete Bridge (7.0x10.0)	15.0	1.43	
31	121 + 900	-	24.2	7.5 3.5	60 250	2.13	1.37	123	Concrete Bridge (7.0x20.0)	40.5	2.04	
32	126 + 500		10.0	5.0	100	0.73	1.65	149	Concrete Bridge (7.0x25.0)	62.1	2.47	
33	131 + 250	-	26.0	5.0 1.0	80 20	1.41	2.23	200	Çónčrete Bridge (7.0x30.0)	88.0	2.89	
34	141 + 250	Timber Bridg (4.0 x 20.3)	^e 16.5	7.0 5.0	25 40	4.12	0.48	43	Cóncrete Bridge (7:0x25.0)	62.1	2.47	
35	143 + 700	Timber Bridg (4.0 x 20.4)	^e 57.7	12.0 6.0	25 50	8.25	0.84	76	Cóncrete Bridgé (7.0x30.0)	88.0	2.89	
	158 + 900	Timber Bridg (3.6 x 15.5)	e)						Concrete Bridge (7.0x30.0)	88.0		
36	159 + 100	Timber Bridg (3.6 x 6.0)	e 313.4	30.0 10.0	100 500	13.61	2.78	250	Concreté Bridge (7.0x25.0)	62.1	2.47	
	159 + 250	Timber Bridg (3.6 x 11.7)		i i i i i i i i i i i i i i i i i i i					Concrete Bridge (7.0x30.0)	88.0	2.89	
	159 + 800	Timber Bridg (3.4 x 17.8)	•						Concrete Bridge (7.0x30.0)	88.0	2.89	

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TABLE 11A-2 DRAINAGE CAPACITY OF BRIDGES AND CULVERTS IN OPTIMUM ROUTE (Cont'd)





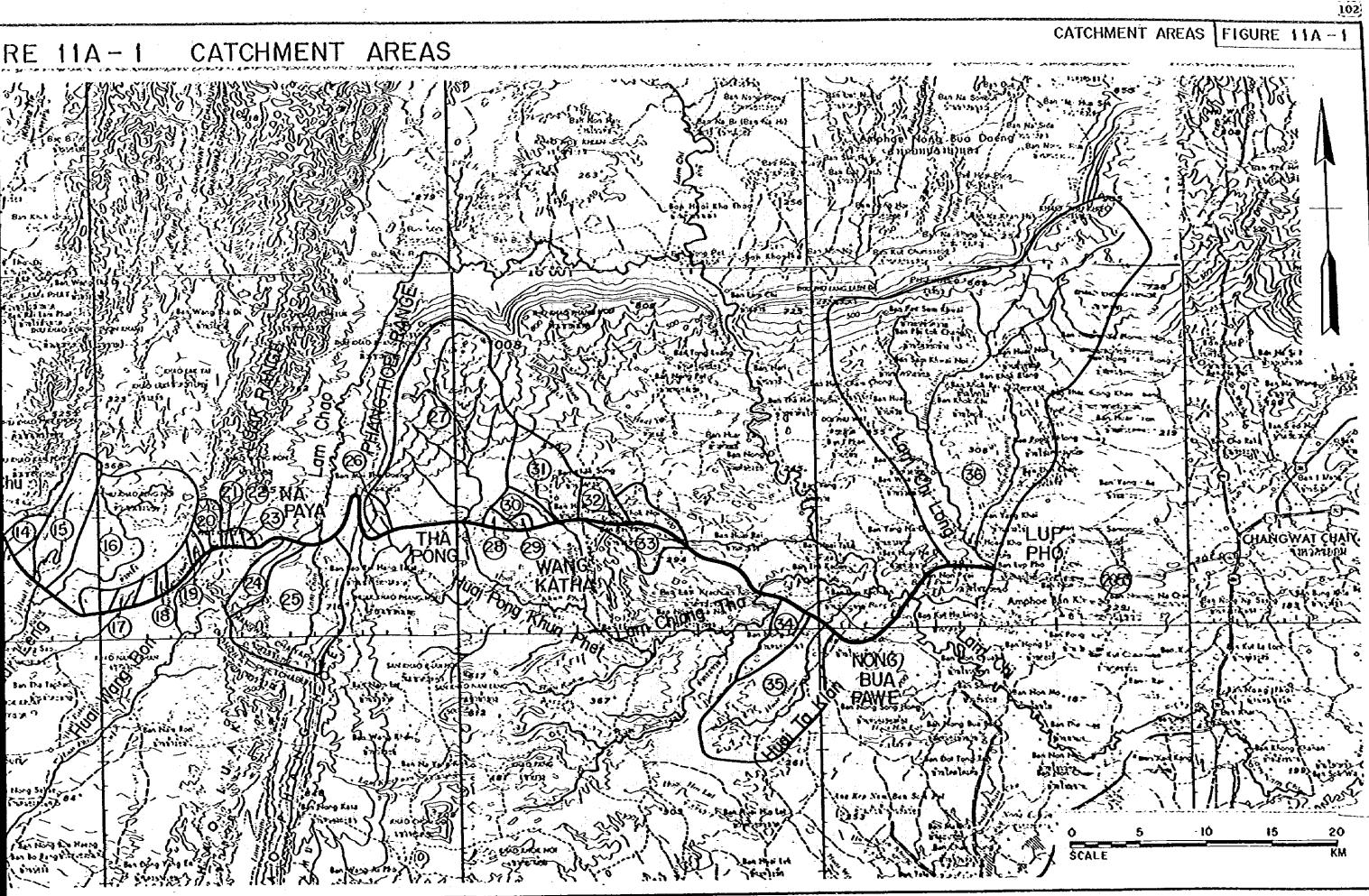
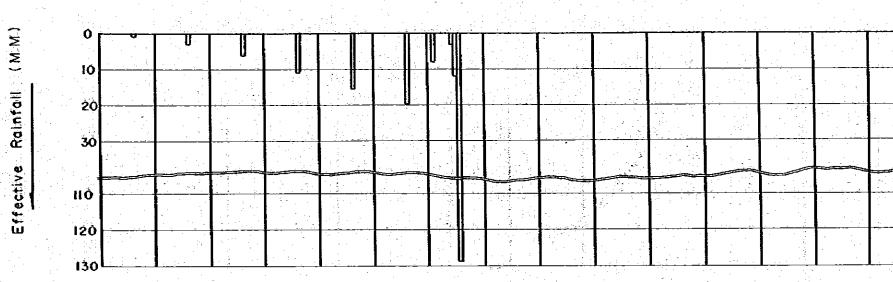
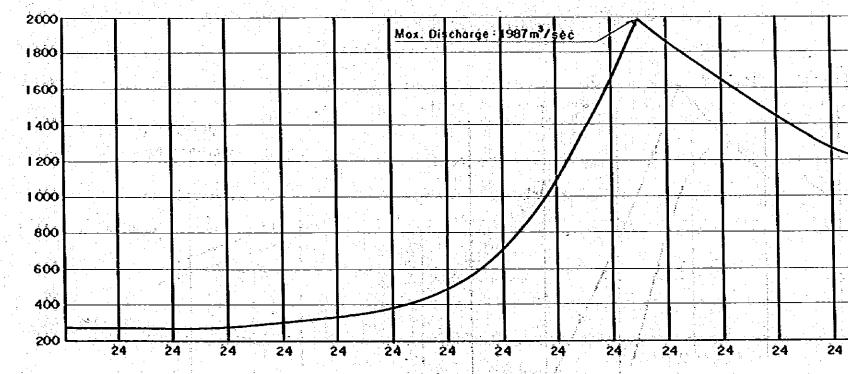


Figure 11A - 2 DISCHARGE CURVE

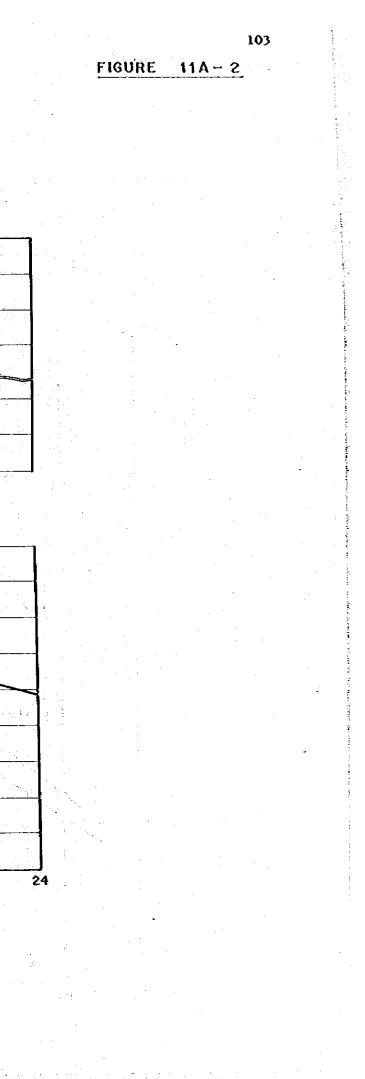




(M³/sec)

Discharge

Time (HR).



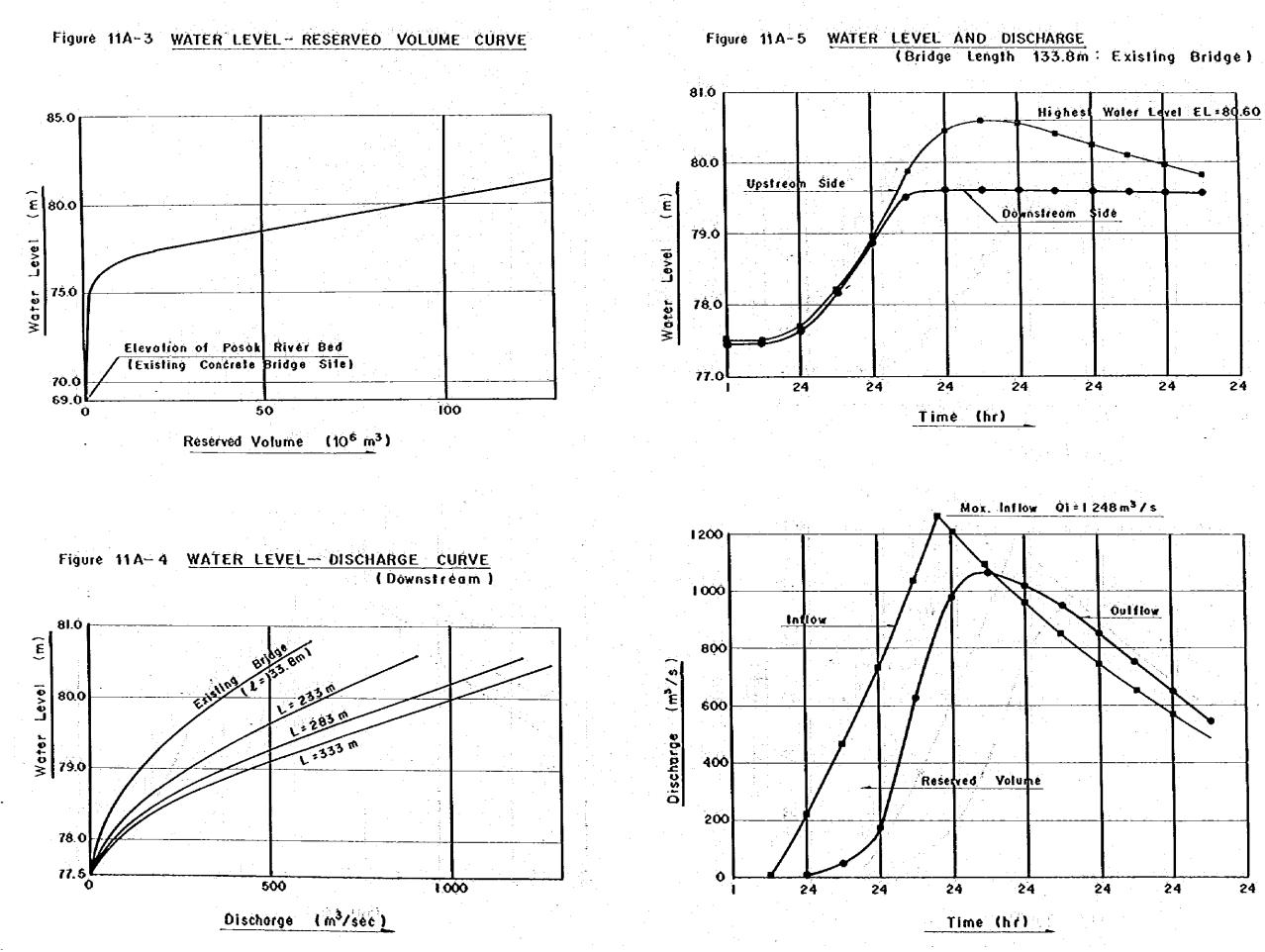
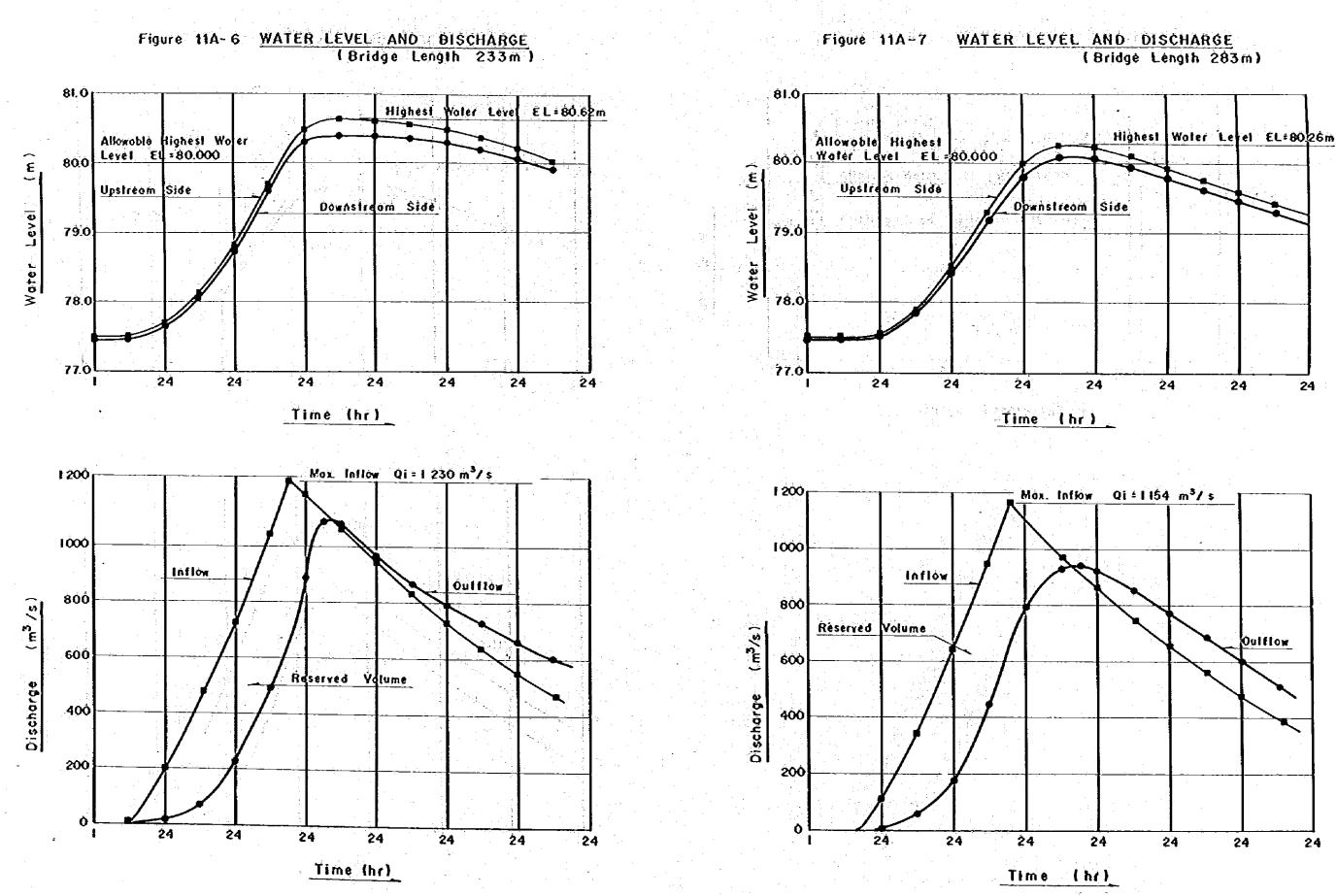


FIGURE 11A-3 10 5

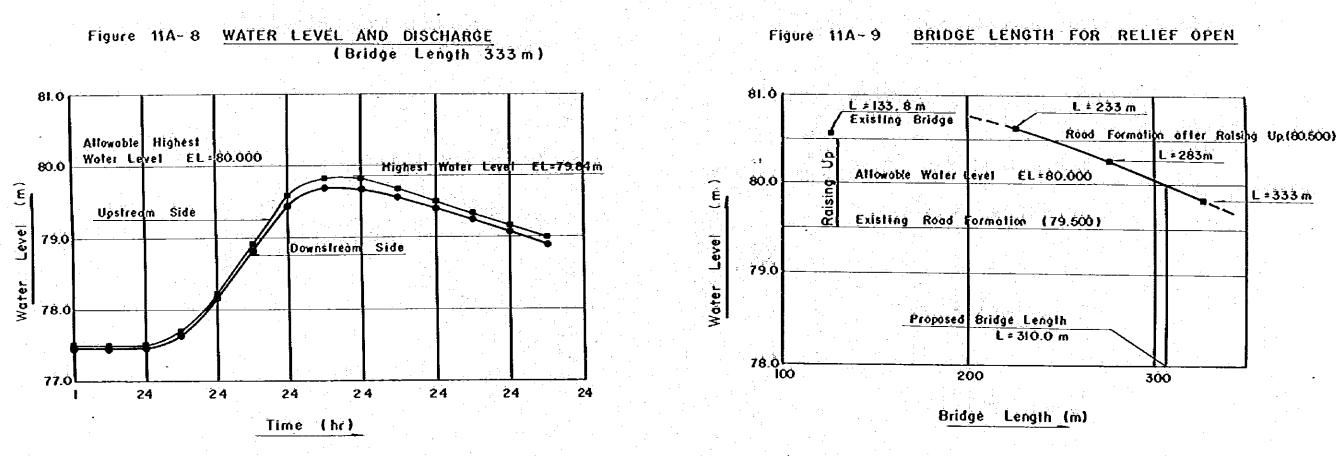
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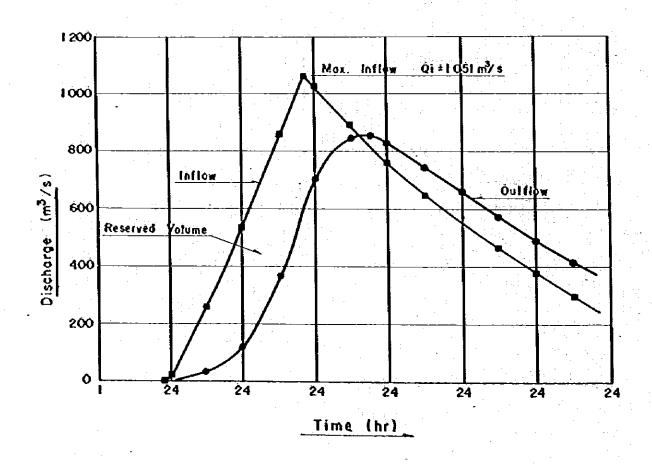


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105 FIGURE 11A-6 to 7



化温滞药和气化医疗过度



したとう ふかたらい

106 FIGURE 11A-8 to 9

经推销工具工程的保证表出现工具工程的行用和公司的基本行用工具工作和必须通过方式和专家的工具工作的作用工具主题

Appendix 12 LIST OF BRIDGES

						TABLE	124-1 <u>F184</u>	<u>r of Bridges</u>		ander son de la companya de la comp Na companya de la comp			TABLE 12A-1 1 of 2
	· · · · · · · · · · · · · · · · · · ·	EXIST	ING BRIDGE	PROPOSI	ed bridge			······	EXIST	ING BRIDGE	PROPOSE	D BRIDGE	
RÓAD SECHENT NÓ.	LOCATION	түре <u>2</u> /	WIDTH & LENGTH (m)	түре <u>3</u> /	Length (m)	REMARKS	ROAD SEGHENT NO.	LOCATION	түре <u>2</u> /	WIDTH & Length (m)	түрв <u>3</u> /	LENGIH (m)	REMARKS
3*	3.6	.		Ć-S	20.0	Long Du River	10	3.4	Т	3.0x9.0	C-S	15.0	
4	4.7	T	3,5×13,0	Ĉ–S	20.0		10	415			C-S	15.0	
4	10.7	Т	2,5x8,5	Ċ-S	15.0		11	2.4	<u>_</u>	÷ .	C-S	15.0	
4	15.8	Т	3.2x8.5	C-S	15.0		12*	7.6		-	C-S	25.0	
4	23.3	T	3.2x12.6	Ċ-S	20.0		14	5.2	T	3.0x4.5	-		To be replaced with Box Culvert
4	24.1	Т	3.0x14.0	C-S	20.0		14	5.9	Ť	2.8x9.5			đo
4	24.7	-		C-S	30.0	a la terre de la compañía de la comp	15	3,5	T	3,8x18.0	C-S	20.0	
4	30.6	T	3.0x24.5	C–S	15.0		16	1.6	-		C-S	15.0	
4	30.8	T	3.0x11.5	C-S	15.0		16	3.5	_		Č-S	25.0	
5*	0.7	÷		C-S	15.0		16	5.0		nin	Ć-S	25.0	
5*	1.4	_	••••••••••••••••••••••••••••••••••••••	C-S	25.0	Nám Sát Ríver	17	6.2		-	C-S	25.0	
5*	3.7		<u> </u>	C–S	25.0	Duan River	18*	3.0	T	(4,3x18,3)	C-S	21.0	No Bridge (Carried away)
6	4.4			C-S	20.0		18*	3.3	T	(4.4x25.0)	C-S		do
6	5.3			C-S	40.0		18*	3.6	T	4.4x15.5	C-S	16.0	
6	11.7	<u> </u>	<u> </u>	C-S	30.0		18*	4.4	-		C-S	105.0	Relief Open
6	19.3	· .	-	CS	25.0		18*	4.8	C	7.0x75.0			Pasak River
6	19.8		÷	C-S	30.0		18*	6.7	T	4.2x5.0	-	-	To be replaced with Box Culvert
6	21.8	 		C-S	40.0		194/	3.0	Т	4.2x15.0	C-S	15.0	
8	3.8	Т	3.7x9.4	C-S	15.0		20	0.0	-	-	C-S	100.0	Pasak River
8	5.5	Ţ	3.0x9.0	C-S	15.0		20	1.0			C-S	100.0	Relief Open
8	11.0		-	C-S	15.0		20	2.3	<u> </u>	-	C-S	; 20.0	
8	12.0		-	C-S	20.0		20	5.4	_	-	C-S	\$ 20.0	· · · · · · · · · · · · · · · · · · ·
9	1.6	Ť	3.5x15.0	C-S	25.0		20	9.4		-	C-5	30.0	
9	5,6	Ť	4.0x11.3		20.0		20	11,3		<u> </u>	C-8	\$ 20.0	
10	1.2			C-S	15.0		20	11.8		••••••••••••••••••••••••••••••••••••••	C-5	\$ 20.0	
10	2,0			C-S	20.0		20	14.1			C-5		
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TABLE 12A-1 1 of 2

107

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		EXISTI	NG BRIDGE	PROPÓS	SED BRIDGE				EXISTIN	G BRIDĜE	PRÓPOS	SED BRI
ROAD SECMENT NO.	LOCATION <u>1</u> /	түрв <u>2</u> /	WIDTH & Length (m)	түре <u>3</u> /	Length (d)	REMARKS	ROAD Segment NO.	LOCATION <u>1</u> /	түре <u>2</u> /	WIDTH & Length (D)	түрв <u>3</u> /	LENGI (D)
21*	1.6	-	-	C-S	15.0		27*	4,5	Ť	4.0x25.3	C-S	25
21*	5.8	_	-	C-S	15.0		27*	9.3	Ţ	4,0x22,5	Č–S	30
21*	7.5	· <u>-</u>	: _	Ċ-S	30.0	Leng River	27*	15.5	C	7.0x105.0	<u> </u>	
22*	11.2		_	C\$	15.0		27*	19.3	T	4.0x20.3	C-S	25
23*	1.2	-	-	C-S	20.0		28	0.0			C-S	100
23*	3.4		.	C-S	40.0	Chảo River	28	2.6	C	6.5x20.0		
23*	20.7		-	Ċ-S	40.0	Pong Khun Phet River	28	3.9	Ċ	6.5x20.0	.	
25*	3.8	-		C-S	10.0		28	20.8	<u> </u>		C-S	15
25*	4.6	<u>~</u>		C–S	20.0		28	25.9	C	6.5x20.0		
26	1.3			C-S	15.0		28	26.6	С	6.5×20.0	- t	
26	8.4	-	-	C-S	20.0		29*	0.7	Ť	4.0x20.4	C-S	30
26	9.2	-		C-S	25.0	**************************************	29*	9.3	C	7.0x100.0	_	
26	12.4	-	<u>~</u>	C-S	25.0		30*	4.6	ŕ	3.6x15.5	C-S	30
26	14.5	-		C-S	20.0	• •	30*	4.8	T	3.6x6.0	C-S	25
26	15.2	-	-	C-S	20.0		30*	5.0	T	3.6x11.7	C–S	30
26	19.1	-		C-S	20.0		30*	5,5	T	3.4x17.8	C-S	30
26	20.6		- ,	C-S	25.0						-	
						·		the second s	· · · · · · · · · · · · · · · · · · ·			

TABLE 12A-1 LIST OF BRIDGES (cont'd)

Note:

1/ Location means distance (km) from the beginning point of each road segment.

 $\frac{2}{C}$: Concreté Bridge.

T : Timber Bridge.

3/ C-S : Short Span Concrete Bridge

4/ Segment No. 19 is included in Phetchabun - Chai Badan Bighway Project.

5/ Under Construction as of August 1979.

* Marks show the segments in the Optimum route.

	<u>TABLE 12A-1</u> 2 of 2
ŔIDGE	
стн)	REMARKS
5.0	
0.0	
-	Chang Tha River
5.0	
0.05/	Chi River
-	
15.0	<u> </u>
_	
_	
30.0	
-	Chi Rivèr
30.0	Chi Long River
25.0	đó
30.Ò	do
30.0	do

108