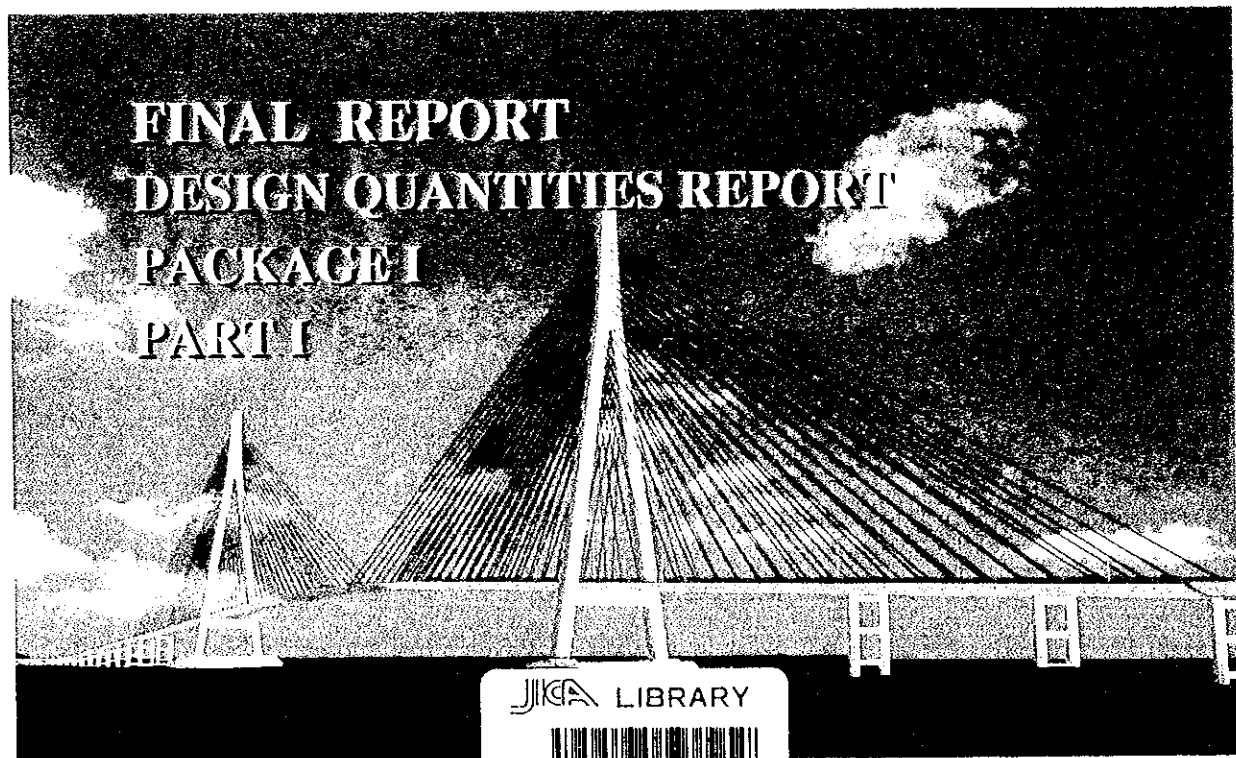JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF TRANSPORT
SOCIALIST REPUBLIC OF VIET NAM

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

FINAL REPORT
DESIGN QUANTITIES REPORT
PACKAGE I
PART I

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

FINAL REPORT
DESIGN QUANTITIES REPORT
PACKAGE I
PART I

OCTOBER 2000

NIPPON KOEI CO., LTD.

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Package I

Part - 1

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Notes

1. General

Unless otherwise noted these notes are applied to all design quantities.

2. Concrete

Concrete strengths are specified as followings base on 28 days cylinder strength.

Concrete class	Strength	Typical use
Concrete class E	24MPa	Wing wall, Retaining wall, Box culvert, Pipe culvert
Concrete class G	15MPa	Lean concrete, Plain concrete

3. Reinforcement

Reinforcements are specified as SD345.

1. Road Works

1.1. Site Clearing And Demolition

QUANTITY OF CLEARING (throughway)

SECTION No.	BRIDGE NAME	STATION	SECTION LENGTH (m)		QUANTITY (m2)		REMARKS
			BRIDGE	EARTH WORK	REMOVAL OF EXISTING TREE	RICE FIELD	
1	BP	0 + -500.00		1052.2	13 580	-	
	LARGE TRA VA	0 + 552.20	316.9				
2		0 + 869.10		997	24 804	38 697	
	SMALL TRA VA	1 + 866.25	87.5				
3		1 + 953.75		1 634	28 089	34 455	
	TRA ON	3 + 587.80	260.3				
4		3 + 848.10		1 062	46 331	48 526	
	MAIN BRIDGE	4 + 910.00	-				
	TOTAL		664.7	4 745.3	112 804	121 678	

QUANTITY OF CLEARING (interchange)

No	ITEM	QUANTITY (m²)		REMARKS
		REMOVAL OF EXISTING TREE	RICE FIELD	
1	INTERCHANGE NH No.1(IC1)	44 616	40 303	
2	INTERCHANGE NH No.54(IC2)	3 875	173 306	
	TOTAL	48 491	213 609	

1.2. Earth Works

QUANTITY OF EARTH WORK (throughway+interchange+service area+service road)

No	ITEM	SAND BLANKET	CLAY	SAND FILL	SELECTED MATERIAL	EXCAVATION SOIL	GRAVEL	REMARKS
		m2	m3	m3	m3	m3	m3	
1	THROUGHWAY	191 333	37 935	227 448	34 315	1 661		
2	INTERCHANGE	58 921	13 482	34 507	10 120	5 610		
3	SERVICE AREA	22 716	1 455	88 295	2 787	0		
4	SERVICE ROAD			15 384			919	
	TOTAL	272 969	52 872	365 634	47 222	7 271	919	

QUANTITY OF EARTH WORK (throughway)

No	BRIDGE NAME	STATION	SECTION LENGTH (m)		AREA (m2)	QUANTITY OF EARTH WORK (m3)				REMARKS
			BRIDGE	EARTH WORK	SAND BLANKET	EXCAVATION SOIL	SAND (FILL+BLANKET)	SELECTED MATERIAL	CLAY	
1	BP	0 + -500.00		1 052	29 555	1 661	61 847	6 426	7 218	
	LARGE TRA VA	0 + 552.20	316.9							
2		0 + 869.10		997	44 810	-	66 604	6 471	7 083	
	SMALL TRA VA	1 + 866.25	87.5							
3		1 + 953.75		1 634	67 037	-	113 414	13 074	12 203	
	TRA ON	3 + 587.80	260.3							
4		3 + 848.10		1 062	49 931	-	119 516	8 345	11 431	
	MAIN BRIDGE	4 + 910.00	-							
	TOTAL		664.7	4 745.3	191 333	1 661	361 381	34 315	37 935	

* Quantity sand fill = Sand (fill + blanket) - Area of sand blanket x 0.7m
* Quantity sand fill :   361 381-191,333*0.7 =   227 448 m3

QUANTITY OF EARTH WORK (throughway+interchange+service area+service road)

No	ITEM	SAND BLANKET	CLAY	SAND FILL	SELECTED MATERIAL	EXCAVATION SOIL	GRAVEL	REMARKS
		m2	m3	m3	m3	m3	m3	
1	THROUGHWAY	191 333	37 935	227 448	34 315	1 661		
2	INTERCHANGE	58 921	13 482	34 507	10 120	5 610		
3	SERVICE AREA	22 716	1 455	88 295	2 787	0		
4	SERVICE ROAD			15 384			919	
	TOTAL	272 969	52 872	365 634	47 222	7 271	919	

QUANTITY OF EARTH WORK (throughway)

No	BRIDGE NAME	STATION	SECTION LENGTH (m)		AREA (m2)	QUANTITY OF EARTH WORK (m3)				REMARKS
			BRIDGE	EARTH WORK	SAND BLANKET	EXCAVATION SOIL	SAND (FILL+BLANKET)	SELECTED MATERIAL	CLAY	
1	BP	0 + -500.00		1 052	29 555	1 661	61 847	6 426	7 218	
	LARGE TRA VA	0 + 552.20	316.9							
2		0 + 869.10		997	44 810	-	66 604	6 471	7 083	
	SMALL TRA VA	1 + 866.25	87.5							
3		1 + 953.75		1 634	67 037	-	113 414	13 074	12 203	
	TRA ON	3 + 587.80	260.3							
4		3 + 848.10		1 062	49 931	-	119 516	8 345	11 431	
	MAIN BRIDGE	4 + 910.00	-							
	TOTAL		664.7	4 745.3	191 333	1 661	361 381	34 315	37 935	

* Quantity sand fill = Sand (fill + blanket) - Area of sand blanket x 0.7m

* Quantity sand fill :   361 381-191,333*0.7 =   227 448 m3

QUANTITY OF EARTH WORK (throughway+interchange+service area+service road)

No	ITEM	SAND BLANKET	CLAY	SAND FILL	SELECTED MATERIAL	EXCAVATION SOIL	GRAVEL	REMARKS
		m2	m3	m3	m3	m3	m3	
1	THROUGHWAY	191 333	37 935	227 448	34 315	1 661		
2	INTERCHANGE	58 921	13 482	34 507	10 120	5 610		
3	SERVICE AREA	22 716	1 455	88 295	2 787	0		
4	SERVICE ROAD			15 384			919	
	TOTAL	272 969	52 872	365 634	47 222	7 271	919	

QUANTITY OF EARTH WORK (throughway)

No	BRIDGE NAME	STATION	SECTION LENGTH (m) BRIDGE	EARTH WORK	AREA (m2) SAND BLANKET	QUANTITY OF EARTH WORK (m3) EXCAVATION SOIL	SAND (FILL+BLANKET)	SELECTED MATERIAL	CLAY	REMARKS
1	BP	0 + -500.00		1 052	29 555	1 661	61 847	6 426	7 218	
	LARGE TRA VA	0 + 552.20	316.9							
2		0 + 869.10		997	44 810	-	66 604	6 471	7 083	
	SMALL TRA VA	1 + 866.25	87.5							
3		1 + 953.75		1 634	67 037	-	113 414	13 074	12 203	
	TRA ON	3 + 587.80	260.3							
4		3 + 848.10		1 062	49 931	-	119 516	8 345	11 431	
	MAIN BRIDGE	4 + 910.00	-							
	TOTAL		664.7	4 745.3	191 333	1 661	361 381	34 315	37 935	

* Quantity sand fill = Sand (fill + blanket) - Area of sand blanket x 0.7m

* Quantity sand fill :   361 381-191,333*0.7 =   227 448 m3

QUANTITY OF EARTH WORK
BP - LARGE TRA VA (KM0-500 - KM0+552.20)

#	Station	Distance (m)	Length of taluy	Width of pavement surface	Area (m2) Total	Area Ex. soil	Area Sand (fill+blanket)	Area Selected material	Area Pavement	Area Clay	Quantity (m3) Ex. soil	Quantity Sand (fill+blanket)	Quantity Selected material	Quantity Clay
1	Km0 -500		0.84	11.00		0.000		0.00		0.42				
2	Km0 -460	40.000	1.10	13.90		8.390	2.94	2.94		0.55	167.80	58.80	58.80	19.40
3	Km0 -420	40.000	2.32	16.72		7.440	3.77	3.77		1.16	316.60	134.10	134.10	34.20
4	Km0 -380	40.000	4.05	19.50		8.860	4.89	3.00		2.025	326.00	173.05	135.30	63.70
5	Km0 -340	40.000	3.94	20.00	27.02	1.540	7.28	3.00	17.16	1.97	208.00	243.40	120.00	79.90
6	Km0 -300	40.000	5.43	20.00	30.16	4.970	4.37	3.00	17.16	2.715	130.20	233.10	120.00	93.70
7	Km0 -260	40.000	4.19	20.00	26.63	4.550	7.10	3.00	17.16	2.095	190.40	229.50	120.00	96.20
8	Km0 -220	40.000	4.51	20.00	29.52	3.300	5.54	3.17	17.16	2.255	157.00	252.84	123.36	87.00
9	Km0 -180	40.000	5.82	20.56	29.20	2.470	7.09	3.78	17.58	2.91	115.40	252.64	138.96	103.30
10	Km0 -140	40.000	5.55	22.60	32.76	0.000	20.04	10.21	19.11	2.775	49.40	542.66	279.84	113.70
11	Km0 -100	40.000	5.97	30.64	58.38	0.000	26.80	9.75	25.14	2.985	0.00	936.75	399.30	115.20
12	Km0 -60	40.000	7.13	29.11	64.11	0.000	20.11	9.75	24.00	3.565	0.00	469.09	195.06	131.00
13	Km0 -40	20.000	6.46	29.11	57.09	0.000	23.63	7.47	24.00	3.23	0.00	874.89	344.46	67.95
14	Km0 +0	40.000	9.62	21.50	54.20	0.000	31.17	7.47	18.29	4.81	0.00	1096.10	298.80	160.80
15	Km0 +40	40.000	11.92	21.50	62.89	0.000	56.83	7.47	18.29	5.96	0.00	1760.00	298.80	215.40
16	Km0 +80	40.000	10.89	21.50	88.03	0.000	63.58	7.47	18.29	5.445	0.00	2408.10	298.80	228.10
17	Km0 +120	40.000	16.61	21.50	97.64	0.000	56.08	7.47	18.29	8.305	0.00	2393.20	298.80	275.00
18	Km0 +160	40.000	16.14	21.50	89.91	0.000	50.67	7.47	18.29	8.07	0.00	2135.00	298.80	327.50
19	Km0 +200	40.000	14.39	21.50	83.62	0.000	52.67	7.47	18.29	7.195	0.00	2066.82	302.88	305.30
20	Km0 +240	40.000	12.55	22.18	85.42	0.000	59.93	7.67	18.80	6.275	0.00	2252.02	312.48	269.40
21	Km0 +280	40.000	13.93	23.10	94.33	0.000	75.47	7.95	19.49	6.965	0.00	2707.90	318.00	264.80
22	Km0 +320	40.000	15.95	23.10	110.88	0.000	128.78	7.95	19.49	7.975	0.00	4085.00	318.00	298.80
23	Km0 +360	40.000	19.60	23.10	166.02	0.000	91.04	7.95	19.49	9.8	0.00	4396.40	318.00	355.50
24	Km0 +400	40.000	19.11	23.10	128.03	0.000	177.63	7.95	19.49	9.555	0.00	5373.40	318.00	387.10
25	Km0 +440	40.000	37.16	23.10	223.65	0.000	218.43	7.95	19.49	18.58	0.00	7921.30	318.00	562.70
26	Km0 +480	40.000	42.86	23.10	267.30	0.000	279.35	7.73	19.49	21.43	0.00	9955.62	313.68	800.20
27	Km0 +520	40.000	49.70	22.38	330.88	0.000	274.22	7.47	18.95	24.85	0.00	5535.71	152.04	925.60
28	Km0 +540	20.000	52.84	21.50	326.40	0.000	274.22	7.47	18.29	26.42	0.00	3359.23	91.51	512.70
29	Km0 +552.25	12.250	52.84	21.50	326.40	0.000	274.22	7.47	18.29	26.42	0.00			323.65
										SUM	1661	61847	6426	7218

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QUANTITY OF EARTH WORK

LARGE TRA VA - SMALL TRA VA (KM0+869.10 - KM1+866.25)

	Station	Distance (m)	Length of taluy	Width of pavement surface	Area(m2)					Quantity (m3)		
					Total	Sand (fill+blanket)	Selected material	Pavement	Clay	Sand (fill+blanket)	Selected material	Clay
1	Km0 +869.10		52.76	21.50	316.51	264.37	7.47	18.29	26.38			
2	Km0 +880	10.90	52.76	21.50	316.51	264.37	7.47	18.29	26.38	2 881.66	81.42	287.54
3	Km0 +900	20.00	53.34	21.50	319.08	266.65	7.47	18.29	26.67	5 310.25	149.40	530.50
4	Km0 +920	20.00	53.81	21.50	287.24	234.58	7.47	18.29	26.91	5 012.30	149.40	535.75
5	Km0 +940	20.00	51.13	21.50	303.51	252.19	7.47	18.29	25.57	4 867.65	149.40	524.70
6	Km0 +960	20.00	49.74	21.50	275.64	225.01	7.47	18.29	24.87	4 772.00	149.40	504.35
7	Km0 +980	20.00	50.18	21.50	276.80	225.95	7.47	18.29	25.09	4 509.65	149.40	499.60
8	Km1 +000	20.00	46.93	21.50	255.35	206.13	7.47	18.29	23.47	4 320.80	149.40	485.55
9	Km1 +20	20.00	24.06	21.50	190.61	152.82	7.47	18.29	12.03	3 589.50	149.40	354.95
10	Km1 +60	40.00	22.24	21.50	166.62	129.74	7.47	18.29	11.12	5 651.30	298.80	463.00
11	Km1 +80	20.00	20.21	21.50	164.50	128.64	7.47	18.29	10.11	2 583.80	149.40	212.25
12	Km1 +120	40.00	17.29	21.50	118.24	83.84	7.47	18.29	8.65	4 249.50	298.80	375.00
13	Km1 +160	40.00	14.95	21.50	108.30	75.07	7.47	18.29	7.48	3 178.10	298.80	322.40
14	Km1 +220	60.00	11.30	21.50	78.51	47.10	7.47	18.29	5.65	3 665.10	448.20	393.75
15	Km1 +260	40.00	9.43	21.50	63.56	33.09	7.47	18.29	4.72	1 603.80	298.80	207.30
16	Km1 +300	40.00	8.16	21.50	54.54	24.70	7.47	18.29	4.08	1 155.80	298.80	175.90
17	Km1 +340	40.00	8.50	21.50	56.59	26.58	7.47	18.29	4.25	1 025.70	298.80	166.60
18	Km1 +380	40.00	9.60	21.50	65.21	34.65	7.47	18.29	4.80	1 224.70	298.80	181.00
19	Km1 +420	40.00	10.87	21.50	76.45	45.26	7.47	18.29	5.44	1 598.20	298.80	204.70
20	Km1 +460	40.00	11.97	21.50	85.01	53.27	7.47	18.29	5.99	1 970.50	298.80	228.40
21	Km1 +500	40.00	14.10	21.50	104.84	72.03	7.47	18.29	7.05	2 506.00	298.80	260.70
22	Km1 +540	40.00	14.79	21.50	97.96	64.81	7.47	18.29	7.40	2 736.80	298.80	288.90
23	Km1 +580	40.00	16.36	21.50	118.11	84.17	7.47	18.29	8.18	2 979.60	298.80	311.50
24	Km1 +620	40.00	15.22	21.50	105.64	72.27	7.47	18.29	7.61	3 128.90	298.30	315.80
25	Km1 +660	40.00	13.52	21.50	95.28	62.76	7.47	18.29	6.76	2 700.70	298.80	287.40
26	Km1 +700	40.00	12.11	21.50	83.52	51.71	7.47	18.29	6.06	2 289.40	298.80	256.30
27	Km1 +740	40.00	13.06	21.50	91.12	58.83	7.47	18.29	6.53	2 210.80	298.80	251.70
28	Km1 +780	40.00	16.91	21.50	123.90	89.69	7.47	18.29	8.46	2 970.40	298.80	299.70
29	Km1 +820	40.00	40.07	21.50	215.26	169.47	7.47	18.29	20.04	5 183.10	298.80	569.80

QUANTITY OF EARTH WORK
LARGE TRA VA - SMALL TRA VA (KM0+869.10 - KM1+866.25)

	Station		Distance (m)	Length of taluy	Width of pavement surface	Area(m2)					Quantity (m3)		
						Total	Sand (fill+blanket)	Selected material	Pavement	Clay	Sand (fill+blanket)	Selected material	Clay
30	Km1	+840	20.00	41.09	21.50	226.88	180.58	7.47	18.29	20.55	3 500.45	149.40	405.80
31	Km1	+860	20.00	42.44	21.50	237.49	190.51	7.47	18.29	21.22	3 710.90	149.40	417.65
32	Km1	+866.25	6.25	42.44	21.50	237.49	190.51	7.47	18.29	21.22	1 190.70	46.69	132.63
	SUM										66 604	6 471	7 383

QUANTITY OF EARTH WORK
SMALL TRA VA - TRA ON (KM1+953.75 - KM3+587.80)

#	Station		Distance (m)	Length of taluy	Width of pavement surface	Area(m2)					Quantity (m3)		
						Total	Sand (fill+blanket)	Selected material	Pavement	Clay	Sand (fill+blanket)	Selected material	Clay
1	Km1	+953.75		41.33	21.50	219.97	173.55	7.47	18.29	20.665			129.16
2	Km1	+960	6.250	41.33	21.50	219.97	173.55	7.47	18.29	20.665	1084.67	46.69	415.05
3	Km1	+980	20.000	41.68	21.50	216.49	169.89	7.47	18.29	20.84	3434.40	149.40	401.95
5	Km2	+00	20.000	38.71	21.50	200.62	155.51	7.47	18.29	19.355	3254.00	149.40	556.70
6	Km2	+40	40.000	16.96	21.50	120.00	85.76	7.47	18.29	8.48	4825.40	298.80	278.00
7	Km2	+80	40.000	10.84	21.50	82.14	50.96	7.47	18.29	5.42	2734.50	298.80	217.00
8	Km2	+120	40.000	10.86	21.50	69.84	38.65	7.47	18.29	5.43	1792.30	298.80	220.70
9	Km2	+160	40.000	11.21	21.50	68.40	37.04	7.47	18.29	5.605	1513.80	298.80	204.50
10	Km2	+200	40.000	9.24	21.50	60.90	30.52	7.47	18.29	4.62	1351.20	298.80	182.60
11	Km2	+240	40.000	9.02	21.50	61.11	30.84	7.47	18.29	4.51	1227.30	298.80	173.70
12	Km2	+280	40.000	8.35	21.50	57.11	27.18	7.47	18.29	4.175	1160.40	298.80	165.70
13	Km2	+320	40.000	8.22	21.50	55.14	25.27	7.47	18.29	4.11	1049.00	298.80	164.20
14	Km2	+360	40.000	8.20	21.50	55.91	26.05	7.47	18.29	4.1	1026.50	298.80	167.70
15	Km2	+400	40.000	8.57	21.50	57.19	27.15	7.47	18.29	4.285	1064.00	298.80	300.45
16	Km2	+460	60.000	11.46	21.50	78.84	47.35	7.47	18.29	5.73	2235.00	448.20	248.50
17	Km2	+500	40.000	13.39	21.50	96.11	63.66	7.47	18.29	6.695	2220.20	298.80	305.00
18	Km2	+540	40.000	17.11	21.50	122.64	88.33	7.47	18.29	8.555	3039.70	298.80	360.10
19	Km2	+580	40.000	18.90	21.50	141.02	105.81	7.47	18.29	9.45	3882.80	298.80	392.50
20	Km2	+620	40.000	20.35	21.50	152.90	116.97	7.47	18.29	10.175	4455.60	298.80	403.60
21	Km2	+660	40.000	20.01	21.50	162.67	126.91	7.47	18.29	10.005	4877.50	298.80	385.40
22	Km2	+700	40.000	18.53	21.50	140.05	105.03	7.47	18.29	9.265	4638.70	298.80	347.00
23	Km2	+740	40.000	16.17	21.50	128.79	94.95	7.47	18.29	8.085	3999.50	298.80	318.70
24	Km2	+780	40.000	15.70	26.47	133.62	94.79	8.96	22.02	7.85	3794.83	328.62	289.50
25	Km2	+820	40.000	13.25	29.50	116.65	75.87	9.87	24.29	6.625	3413.23	376.62	271.50
26	Km2	+860	40.000	13.90	31.00	128.50	85.82	10.32	25.41	6.95	3233.70	403.80	264.80
27	Km2	+900	40.000	12.58	28.20	130.03	90.95	9.48	23.31	6.29	3535.30	396.00	236.30
28	Km2	+940	40.000	11.05	21.50	98.26	66.98	7.47	18.29	5.525	3158.50	339.00	207.70
29	Km2	+980	40.000	9.72	21.50	65.85	35.23	7.47	18.29	4.86	2044.20	298.80	

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QUANTITY OF EARTH WORK
SMALL TRA VA - TRA ON (KM1+953.75 - KM3+587.80)

Station		Distance (m)	Length of taluy	Width of pavement surface	Area(m2)					Quantity (m3)		
					Total	Sand (fill+blanket)	Selected material	Pavement	Clay	Sand (fill+blanket)	Selected material	Clay
31 Km3	+00	20.000	9.72	21.50	65.85	35.23	7.47	18.29	4.86	704.65	149.40	97.20
32 Km3	+20	20.000	8.59	21.50	57.52	27.47	7.47	18.29	4.295	627.00	149.40	91.55
33 Km3	+60	40.000	7.63	21.50	53.35	23.78	7.47	18.29	3.815	1024.90	298.80	162.20
34 Km3	+100	40.000	7.69	21.50	45.40	15.80	7.47	18.29	3.845	791.50	298.80	153.20
35 Km3	+140	40.000	6.84	21.50	52.16	22.98	7.47	18.29	3.42	775.60	298.80	145.30
36 Km3	+180	40.000	8.21	21.50	43.78	13.92	7.47	18.29	4.105	738.00	298.80	150.50
37 Km3	+220	40.000	8.56	21.50	57.66	27.62	7.47	18.29	4.28	830.80	298.80	167.70
38 Km3	+260	40.000	9.26	21.50	63.61	33.22	7.47	18.29	4.63	1216.90	298.80	178.20
39 Km3	+300	40.000	9.28	21.50	65.10	34.70	7.47	18.29	4.64	1358.50	298.80	185.40
40 Km3	+320	20.000	9.24	41.80	105.23	53.54	13.56	33.51	4.62	882.40	210.30	92.60
41 Km3	+360	40.000	10.27	35.14	108.62	63.41	11.56	28.52	5.135	2338.86	502.44	195.10
42 Km3	+400	40.000	11.33	28.50	90.67	51.90	9.57	23.54	5.665	2306.06	422.64	216.00
43 Km3	+440	40.000	11.17	25.25	86.63	51.35	8.60	21.10	5.585	2064.95	363.30	225.00
44 Km3	+480	40.000	15.67	25.00	131.02	93.75	8.52	20.91	7.835	2902.05	342.30	268.40
45 Km3	+520	40.000	44.77	21.50	227.23	179.09	7.47	18.29	22.385	5456.80	319.80	604.40
46 Km3	+540	20.000	47.49	21.50	253.94	204.44	7.47	18.29	23.745	3835.25	149.40	461.30
47 Km3	+560	20.000	50.60	21.50	301.76	250.70	7.47	18.29	25.3	4551.40	149.40	490.45
48 Km3	+587.8	27.800	51.60	21.50	301.76	250.20	7.47	18.29	25.8	6962.58	207.67	710.29
SUM										113.414	13.074	12.203

QUANTITY OF EARTH WORK
TRA ON - MAIN BRIDGE(KM3+848.10 - KM4+910.00)

	Station	Distance (m)	Length of taluy	Width of pavement surface	Area(m2)					Quantity (m3)		
					Total	Sand (fill+blanket)	Selected material	Pavement	Clay	Sand (fill+blanket)	Selected material	Clay
1	Km3 +848.10		53.65	21.50	345.12	292.54	7.47	18.29	26.83	3 481.20	88.89	319.22
2.	Km3 +860	11.90	53.65	21.50	345.12	292.54	7.47	18.29	26.83	5 194.35	149.40	519.20
3	Km3 +880	20.00	50.19	21.50	277.75	226.90	7.47	18.29	25.10	4 235.40	149.40	484.45
4	Km3 +900	20.00	46.70	21.50	245.75	196.64	7.47	18.29	23.35	7 840.20	448.20	900.75
5	Km3 +960	60.00	13.35	21.50	97.13	64.70	7.47	18.29	6.68	995.40	149.40	122.35
6	Km3 +980	20.00	11.12	21.50	66.16	34.84	7.47	18.29	5.56	1 114.90	298.80	196.20
7	Km4 +020	40.00	8.50	21.50	50.91	20.90	7.47	18.29	4.25	1 248.20	298.80	189.90
8	Km4 +060	40.00	10.49	21.50	72.51	41.51	7.47	18.29	5.25	1 727.60	298.80	227.10
9	Km4 +100	40.00	12.22	21.50	76.74	44.87	7.47	18.29	6.11	1 718.20	298.80	230.50
10	Km4 +140	40.00	10.83	21.50	72.21	41.04	7.47	18.29	5.42	814.20	149.40	109.45
11	Km4 +160	20.00	11.06	21.50	71.67	40.38	7.47	18.29	5.53	2 153.75	302.70	252.90
12	Km4 +200	40.00	14.23	22.15	100.86	67.31	7.67	18.78	7.12	2 850.33	322.02	283.90
13	Km4 +240	40.00	14.16	24.72	111.43	75.21	8.44	20.70	7.08	5 235.15	546.30	436.05
14	Km4 +300	60.00	14.91	29.18	140.57	99.29	9.77	24.05	7.46	3 952.32	344.88	233.10
15	Km4 +340	40.00	8.40	21.50	128.28	98.32	7.47	18.29	4.20	1 876.10	149.40	86.65
16	Km4 +360	20.00	8.93	21.50	119.51	89.29	7.47	18.29	4.47	3 617.30	298.80	176.40
17	Km4 +400	40.00	8.71	21.50	121.69	91.58	7.47	18.29	4.36	3 776.20	298.80	174.70
18	Km4 +440	40.00	8.76	21.50	127.37	97.23	7.47	18.29	4.38	3 900.70	298.80	177.60
19	Km4 +480	40.00	9.00	21.50	128.06	97.80	7.47	18.29	4.50	4 022.40	298.80	174.70
20	Km4 +520	40.00	8.47	21.50	133.31	103.32	7.47	18.29	4.24	4 318.70	298.80	192.00
21	Km4 +560	40.00	10.73	21.50	143.74	112.62	7.47	18.29	5.37	4 674.50	298.80	206.60
22	Km4 +600	40.00	9.93	21.50	151.83	121.11	7.47	18.29	4.97	5 485.77	340.98	320.30
23	Km4 +640	40.00	22.10	28.53	197.37	153.18	9.58	23.56	11.05	6 343.00	364.20	429.60
24	Km4 +680	40.00	20.86	25.37	204.22	163.97	8.63	21.19	10.43	7 033.58	341.52	639.00
25	Km4 +720	40.00	43.04	24.75	238.40	187.71	8.45	20.73	21.52	7 666.90	337.80	871.90
26	Km4 +760	40.00	44.15	24.75	246.88	195.64	8.45	20.73	22.08	7 808.82	332.88	884.20
27	Km4 +800	40.00	44.27	23.93	245.25	194.81	8.20	20.11	22.14	7 808.82	314.88	900.10
28	Km4 +840	40.00	45.74	21.75	244.94	196.05	7.55	18.48	22.87	7 817.12	314.88	938.60
29	Km4 +880	40.00	48.12	21.50	269.57	219.75	7.47	18.29	24.06	8 316.05	300.30	

QUANTITY OF EARTH WORK
TRA ON - MAIN BRIDGE(KM3+848.10 - KM4+910.00)

	Station		Distance (m)	Length of taluy	Width of pavement surface	Area(m2)					Quantity (m3)		
						Total	Sand (fill+blanket)	Selected material	Pavement	Clay	Sand (fill+blanket)	Selected material	Clay
30	Km4	+900	20.00	51.34	21.50	304.86	253.43	7.47	18.29	25.67	4 731.85	149.40	497.30
31	Km4	+910	10.00	51.34	21.50	304.86	253.43	7.47	18.29	25.67	2 534.33	74.70	256.70
	SUM										119 516	8 345	11 431

Quantity of Earth Work (Ramp) IC1 - IC2 - P1

SECTION No.	RAMP NAME	CHAINAGE	SECTION LENGTH (m)		AREA(m²)	QUANTITY OF EARTH WORK (m³)				REMARKS
			BRIDGE	EARTH WORK	SAND BLANKET	SAND (FILL+BLANKET)	SELECTED MATERIAL	EX. SOIL	CLAY	
IC - 1	"A" RAMP	0 + 233.34 / 1 + 125.47		892.13	12,101.03	13,554.02	2,063.01	267.30	2,011.37	
	"B" RAMP	0 + 81.37 / 0 + 750.40		669.03	0.00	10,392.82	929.10	5,342.98	689.58	
	"A" RAMP	0 + 0.00 / 0 + 461.14		461.14	6,956.83	4,804.72	1,118.07		1,784.25	
	"B" RAMP	0 + 63.89 / 0 + 428.42		364.52	8,627.28	3,546.73	1,616.49		1,560.45	
IC - 2	"C" RAMP	0 + 75.41 / 0 - 426.34		350.93	5,224.61	2,729.90	910.17		1,321.68	
	"D" RAMP	0 - 0.00 / 0 - 445.83		445.83	9,724.08	5,466.98	1,763.42		1,615.89	
	NH No.54	0 - 0.00 / 0 - 600.00	132.70	600.00	16,286.95	35,255.94	1,719.61		4,499.04	
TOTAL			132.70	3,783.58	58,920.78	75,751.12	10,119.87	5,610.28	13,482.26	

Sand fill quantity = Sand (fill+blanket) quantity - Sand blanket area x 0.70m

Sand fill quantity = 75,751.12 - 58,920.78 x 0.70 = 34,506.57 m³

INTERCHANGE 1 - "A" RAMP
QUANTITY OF EARTH WORK

No	Chainage	Distance(m)	Length of Talus	Width of pavement surface (m)	Total	Area (m²) Sand (fill+blanket)	Ex. Soil	Selected Material	Clay	Quantity (m³) Sand (fill+blanket)	Ex. Soil	Selected Material	Clay
1	Km0+ 233.336		3.52	6.00	15.52	6.36	0.00	2.34	1.76				
2	Km0+ 267.440	34.10	3.52	6.00	15.52	6.36	0.00	2.34	1.76	216.90	0.00	79.80	60.02
3	Km0+ 304.171	36.73	3.76	6.00	25.71	16.43	0.00	2.34	1.88	418.55	0.00	85.95	66.85
4	Km0+ 342.740	38.57	5.29	6.00	23.89	13.85	0.00	2.34	2.65	583.84	0.00	90.25	87.26
5	Km0+ 380.000	37.26	4.61	6.00	30.64	20.94	0.00	2.34	2.31	647.95	0.00	87.19	92.22
6	Km0+ 418.000	38.00	6.98	6.00	35.44	24.52	0.00	2.34	3.49	863.65	0.00	88.92	110.11
7	Km0+ 458.270	40.27	5.47	6.00	31.45	21.30	0.00	2.34	2.74	922.49	0.00	94.23	125.34
8	Km0+ 498.000	39.73	5.43	6.00	31.61	21.49	0.00	2.34	2.72	849.82	0.00	92.97	108.26
9	Km0+ 538.210	40.21	5.20	6.00	29.81	19.80	0.00	2.34	2.60	830.03	0.00	94.09	106.86
10	Km0+ 589.741	51.53	5.18	6.00	27.74	17.75	0.00	2.34	2.59	967.49	0.00	120.58	133.72
11	Km0+ 644.203	54.46	7.40	10.50	42.46	31.36	0.00	3.69	3.70	1337.31	0.00	127.44	171.28
12	Km0+ 687.926	43.72	5.68	10.50	39.37	23.92	0.00	3.69	2.84	1208.50	0.00	131.82	142.97
13	Km0+ 730.000	52.07	5.92	10.50	41.84	26.73	0.00	3.69	2.96	1318.77	0.00	192.15	151.01
14	Km0+ 789.790	49.79	5.92	10.50	37.05	21.94	0.00	3.69	2.96	1211.64	0.00	183.73	147.38
15	Km0+ 843.000	53.21	3.98	10.50	25.47	11.33	0.00	3.69	1.99	885.15	0.00	196.34	131.89
16	Km0+ 860.000	17.00	4.71	10.50	34.43	19.93	0.00	3.69	2.36	265.67	0.00	62.73	36.93
17	Km0+ 880.000	20.00	3.58	10.50	21.88	7.95	2.80	3.69	1.79	278.75	28.00	73.80	41.45
18	Km0+ 920.000	40.00	5.98	6.00	18.22	7.82	-4.16	2.34	2.99	315.40	139.20	120.60	95.60
19	Km0+ 960.000	40.00	8.33	6.00	20.78	9.11	0.00	2.34	4.17	338.50	83.20	93.60	143.10
20	Km0+ 980.000	20.00	3.53	6.00	9.42	0.26	1.69	2.34	1.77	93.60	16.90	46.80	59.30
TOTAL										13554.02	267.30	2063.01	2011.37

INTERCHANGE I - "B" RAMP
QUANTITY OF EARTH WORK

No	Chainage	Distance(m)	Length of Talus	Width of pavement surface (m)	Area (m²) Total	Area Sand (fill+blanket)	Area Ex. Soil	Area Selected Material	Area Clay	Quantity (m³) Sand (fill+blanket)	Quantity Ex. Soil	Quantity Selected Material	Quantity Clay
1	Km0+ 81.373		4.17	6.00	8.41	5.13	0.00	0.90	2.09			34.76	94.64
2	Km0+ 120.000	38.627	5.63	6.00	8.22	4.21	0.00	0.90	2.82	180.19	0.00	36.00	97.10
3	Km0+ 160.000	40.000	4.08	6.00	7.59	4.35	0.00	0.90	2.04	171.10	0.00	398.98	133.85
4	Sub-Intersection	77.820	2.80	8.00						2559.54	0.00		
5	Km0+ 240.000	40.000	3.88	10.50	11.04	7.67	3.04	0.90	1.94	287.30	140.80	36.00	55.30
6	Km0+ 280.000	40.000	1.65	10.50	8.95	6.70	4.00	0.90	0.83	233.50	151.80	36.00	31.10
7	Km0+ 320.000	40.000	1.46	10.50	7.14	4.98	3.59	0.90	0.73	195.70	161.00	36.00	22.30
8	Km0+ 360.000	40.000	0.77	10.50	6.62	4.81	4.46	0.90	0.39	200.90	189.80	36.00	10.70
9	Km0+ 400.000	40.000	0.30	10.50	6.82	5.24	5.03	0.90	0.15	210.00	199.40	36.00	6.20
10	Km0+ 440.000	40.000	0.32	10.50	6.85	5.26	4.94	0.90	0.16	211.60	200.00	36.00	7.00
11	Km0+ 480.000	40.000	0.38	10.50	6.94	5.32	5.06	0.90	0.19	219.10	190.20	36.00	12.30
12	Km0+ 520.000	40.000	0.85	10.50	7.49	5.64	4.45	0.90	0.43	228.40	150.20	36.00	34.80
13	Km0+ 560.000	40.000	2.63	10.50	8.53	5.79	3.06	0.90	1.32	233.10	151.80	36.00	35.30
14	Km0+ 600.000	40.000	0.90	10.50	7.75	5.87	4.53	0.90	0.45	1944.40	1388.20	36.00	36.80
15	Km0+ 640.000	40.000	2.78	50.58	96.17	91.35	64.88	0.90	1.39	2339.50	1557.80	36.00	57.50
16	Km0+ 680.000	40.000	2.97	14.58	28.74	25.63	13.01	0.90	1.49	772.50	499.00	36.00	43.90
17	Km0+ 720.000	40.000	1.42	12.83	15.25	13.00	11.94	0.90	0.71	405.99	362.98	27.36	10.79
18	Km0+ 750.400	30.400	0.00	12.00	15.25	13.71	11.94	0.90	0.00				
TOTAL										10392.82	5342.98	929.10	689.58

INTERCHANGE 2 - "A" RAMP
QUANTITY OF EARTH WORK

No	Chainage	Distance(m)	Length of Talus	Width of pavement surface (m)	Area (m²) Total	Area Sand (fill+blanket)	Area Selected Material	Area Clay	Quantity (m³) Sand (fill+blanket)	Quantity Selected Material	Quantity Clay
1	Km0+ 40.000		8.17	12.60	29.63	11.21	4.32	4.09			
2	Km0+ 80.000	40.000	8.58	11.94	34.99	17.43	4.12	4.29	572.66	168.84	167.50
3	Km0+ 120.000	40.000	9.39	6.69	26.50	13.67	2.55	4.70	621.92	133.38	179.70
4	Km0+ 160.000	40.000	9.06	6.00	23.56	11.61	2.34	4.53	505.56	97.74	184.50
5	Km0+ 200.000	40.000	9.31	6.00	24.89	12.82	2.34	4.66	488.50	93.60	183.70
6	Km0+ 240.000	40.000	7.55	6.00	20.03	8.84	2.34	3.78	433.00	93.60	168.60
7	Km0+ 280.000	40.000	6.76	6.00	16.48	5.68	2.34	3.38	290.30	93.60	143.10
8	Km0+ 320.000	40.000	8.13	6.00	20.72	9.24	2.34	4.07	298.30	93.60	148.90
9	Km0+ 360.000	40.000	8.38	6.80	23.04	10.60	2.58	4.19	396.70	98.40	165.10
10	Km0+ 400.000	40.000	7.73	6.32	21.13	9.53	2.44	3.87	402.58	100.32	161.10
11	Km0+ 440.000	40.000	9.45	6.00	25.22	13.08	2.34	4.73	452.08	95.52	171.80
12	Km0+ 461.141	21.141	11.41	6.00	32.49	19.39	2.34	5.71	343.12	49.47	110.25
TOTAL									4804.72	1118.07	1784.25

INTERCHANGE 2 - "B" RAMP
QUANTITY OF EARTH WORK

No	Chainage	Distance(m)	Length of Talus	Width of pavement surface (m)	Area (m²)				Quantity (m³)		
					Total	Sand (fill+blanket)	Selected Material	Clay	Sand (fill+blanket)	Selected Material	Clay
1	Km0+ 63.894		9.50	6.00	25.30	13.15	2.34	4.75	161.32	38.68	67.85
2	Km0+ 80.000	16.106	7.35	6.41	18.39	6.88	2.46	3.68	365.44	100.86	156.90
3	Km0+ 120.000	40.000	8.34	6.80	23.81	11.39	2.58	4.17	355.26	102.24	153.50
4	Km0+ 160.000	40.000	7.01	6.64	17.96	6.37	2.53	3.51	294.66	97.44	138.70
5	Km0+ 200.000	40.000	6.86	6.00	19.21	8.36	2.34	3.43	312.80	93.60	142.20
6	Km0+ 240.000	40.000	7.36	6.00	18.38	7.28	2.34	3.68	296.08	94.02	150.30
7	Km0+ 280.000	40.000	7.67	6.07	18.84	7.52	2.36	3.84	337.86	106.14	153.80
8	Km0+ 320.000	40.000	7.71	8.02	22.78	9.37	2.95	3.86	450.50	134.10	156.80
9	Km0+ 360.000	40.000	7.97	10.73	29.54	13.16	3.76	3.99	320.02	157.98	132.20
10	Km0+ 400.000	40.000	5.25	12.00	19.19	2.85	4.14	2.63	652.80	691.43	308.21
11	Intersection										
TOTAL									3546.73	1616.49	1560.45

INTERCHANGE 2 - "C" RAMP
QUANTITY OF EARTH WORK

No	Chainage	Distance(m)	Length of Talus	Width of pavement surface (m)	Area (m²)				Quantity (m³)		
					Total	Sand (fill+blanket)	Selected Material	Clay	Sand (fill+blanket)	Selected Material	Clay
1	Km0+ 75.410		12.96	6.00	39.37	25.49	2.34	6.48		10.83	27.98
2	Km0+ 80.000	4.590	11.42	6.13	32.97	19.80	2.38	5.71	103.94	99.18	208.90
3	Km0+ 120.000	40.000	9.47	6.80	26.99	14.01	2.58	4.74	676.12	103.20	169.70
4	Km0+ 160.000	40.000	7.50	6.80	20.64	8.64	2.58	3.75	452.90	100.80	157.90
5	Km0+ 200.000	40.000	8.29	6.40	21.65	9.68	2.46	4.15	366.30	96.00	187.30
6	Km0+ 240.000	40.000	10.44	6.00	20.87	8.23	2.34	5.22	358.10	94.62	176.60
7	Km0+ 280.000	40.000	7.22	6.17	16.37	5.17	2.39	3.61	267.98	108.00	140.40
8	Km0+ 320.000	40.000	6.82	8.23	18.20	5.02	3.01	3.41	203.80	137.46	133.20
9	Km0+ 360.000	40.000	6.50	11.08	19.35	3.34	3.86	3.25	167.14	160.08	119.70
10	Km0+ 400.000	40.000	5.47	12.00	19.80	3.35	4.14	2.74	133.62		
TOTAL									2729.90	910.17	1321.68

INTERCHANGE 2 - "D" RAMP
QUANTITY OF EARTH WORK

No	Chainage	Distance(m)	Length of Talus	Width of pavement surface (m)	Area (m²)				Quantity (m³)		
					Total	Sand (fill+blanket)	Selected Material	Clay	Sand (fill+blanket)	Selected Material	Clay
1	Km0+ 40.000		8.00	12.40	31.45	13.32	4.26	4.00			
2	Km0+ 80.000	40.000	7.76	11.42	30.35	13.34	3.97	3.88	533.28	164.52	157.60
3	Km0+ 120.000	40.000	7.97	6.69	21.48	9.36	2.55	3.99	454.04	130.26	157.30
4	Km0+ 160.000	40.000	7.84	6.00	19.92	8.58	2.34	3.92	358.76	97.74	158.10
5	Km0+ 200.000	40.000	7.51	6.00	16.82	5.65	2.34	3.76	284.50	93.60	153.50
6	Km0+ 240.000	40.000	8.36	6.00	21.41	9.81	2.34	4.18	309.10	93.60	158.70
7	Km0+ 280.000	40.000	7.43	6.00	18.47	7.34	2.34	3.72	342.90	93.60	157.90
8	Km0+ 320.000	40.000	8.34	6.18	21.35	9.59	2.39	4.17	338.42	94.68	157.70
9	Km0+ 360.000	40.000	7.47	6.80	20.05	8.07	2.58	3.74	353.02	99.48	158.10
10	Km0+ 400.000	40.000	8.19	6.40	21.55	9.64	2.46	4.10	354.00	100.80	156.60
11	Km0+ 445.830	45.830	9.30	6.00	24.62	12.55	2.34	4.65	508.37	109.99	200.39
12	Intersection								1630.59	685.15	0.00
TOTAL									5466.98	1763.42	1615.89

INTERCHANGE 2 - NATIONAL HIGHWAY No. 54
QUANTITY OF EARTH WORK

No	Chainage	Distance(m)	Length of Talus	Width of pavement surface (m)	Area (m²)				Quantity (m³)		
					Total	Sand (fill+blanket)	Selected Material	Clay	Sand (fill+blanket)	Selected Material	Clay
1	Km0+ 40.000		7.52	13.00	25.68	7.17	4.44	3.76		177.60	157.30
2	Km0+ 80.000	40.000	8.21	13.00	29.98	11.13	4.44	4.11	365.90	177.60	190.00
3	Km0+ 120.000	40.000	10.79	13.00	39.61	19.47	4.44	5.40	611.80	177.60	313.10
4	Km0+ 160.000	40.000	20.52	13.00	117.29	92.28	4.44	10.26	2234.90	177.60	708.80
5	Km0+ 200.000	40.000	50.36	13.00	262.52	222.59	4.44	25.18	6297.40	177.60	871.28
6	Km0+ 233.650	33.650	53.21	13.00	301.10	259.75	4.44	26.61	8115.29	149.41	
	Fly over Bridge	132.700									
7	Km0+ 366.350		54.18	13.00	299.28	257.44	4.44	27.09			877.76
8	Km0+ 400.000	33.650	50.16	13.00	262.94	223.11	4.44	25.08	8085.25	149.41	714.70
9	Km0+ 440.000	40.000	21.31	13.00	122.71	97.31	4.44	10.66	6408.30	177.60	319.70
10	Km0+ 480.000	40.000	10.66	13.00	38.90	18.82	4.44	5.33	2322.50	177.60	185.60
11	Km0+ 520.000	40.000	7.90	13.00	26.06	7.36	4.44	3.95	523.60	177.60	160.80
12	Km0+ 560.000	40.000	8.18	13.00	26.03	7.19	4.44	4.09	291.00	177.60	
TOTAL									35255.94	1719.61	4499.04

QUANTITY OF EARTH WORK
SERVICE AREA(KM4+320.00 - KM4+625.00)

	Station	Distance (m)	Length of taluy	Width of pavement	Area(m2)			Quantity (m3)	
					Total	Sand (fill+blanket)+selected material + pavement	Clay	Sand (fill+blanket)+selected material + pavement (A)	Clay
1	Km4 +320		7.45	29.18	140.57	136.85	3.73		
2	Km4 +340	20.00	7.45	21.50	181.73	178.01	3.73	3 148.50	74.50
3	Km4 +360	20.00	7.49	21.50	268.76	265.02	3.75	4 430.20	74.70
4	Km4 +400	40.00	8.90	21.50	396.49	392.04	4.45	13 141.10	163.90
5	Km4 +440	40.00	9.29	21.50	487.29	482.65	4.65	17 493.70	181.90
6	Km4 +480	40.00	9.87	21.50	518.21	513.28	4.94	19 918.40	191.60
7	Km4 +520	40.00	10.21	21.50	542.14	537.04	5.11	21 006.20	200.80
8	Km4 +560	40.00	11.08	21.50	548.51	542.97	5.54	21 600.10	212.90
9	Km4 +600	40.00	10.83	21.50	216.42	211.01	5.42	15 079.50	219.10
10	Km4 +625	25.00	10.83	28.53	202.57	197.16	5.42	5 102.00	135.38
	SUM							113 951	1 455

*Area sand blanket :   22716   m2

*Area pavement :   9291   m2

*Quantity seleted material :   9291*0.3 =   2787 m3

*Quantity sand fill = A - sand blanket - pavement - seleted material   88295 m3

QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
MAIN WAY

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
1/ BEGINNING POINT - LARGE TRA VA										
KM-0+500		1.740	1.750	0.010	0.11	0.00	0.00			
KM-0+480	20.00	1.740	1.818	0.078	0.87	0.00	0.00	9.86	0.00	0.00
KM-0+460	20.00	1.700	1.886	0.186	2.08	0.00	0.00	29.57	0.00	0.00
KM-0+440	20.00	1.680	1.954	0.274	3.07	0.00	0.00	51.52	0.00	0.00
KM-0+420	20.00	1.620	2.022	0.402	4.50	0.00	0.00	75.71	0.00	0.00
KM-0+400	20.00	1.620	2.090	0.470	5.26	0.00	0.00	97.66	0.00	0.00
KM-0+380	20.00	1.620	2.158	0.538	6.03	0.00	0.00	112.90	0.00	0.00
KM-0+360	20.00	1.600	2.226	0.626	7.01	0.00	0.00	130.37	0.00	0.00
KM-0+350	10.00	1.630	2.256	0.626	7.01	0.00	0.00	70.11	0.00	0.00
KM-0+340	10.00	1.660	2.294	0.634	7.10	0.00	0.00	70.56	0.00	0.00
KM-0+320	20.00	1.660	2.362	0.702	7.86	0.00	0.00	149.63	0.00	0.00
KM-0+312.2	7.80	1.690	2.388	0.698	7.82	0.00	0.00	61.15	0.00	0.00
KM-0+300	12.20	1.720	2.430	0.710	7.95	0.00	0.00	96.19	0.00	0.00
KM-0+280	20.00	1.750	2.498	0.748	8.38	0.00	0.00	163.30	0.00	0.00
KM-0+270	10.00	1.770	2.521	0.751	8.41	0.00	0.00	83.94	0.00	0.00
KM-0+260	10.00	1.790	2.566	0.776	8.69	0.00	0.00	85.51	0.00	0.00
KM-0+250.0	10.00	1.760	2.600	0.840	9.41	0.00	0.00	90.50	0.00	0.00
KM-0+240	10.00	1.740	2.620	0.880	9.86	0.00	0.00	96.32	0.00	0.00
KM-0+223.3	16.70	1.790	2.654	0.864	9.68	0.00	0.00	163.10	0.00	0.00
KM-0+220	3.30	1.790	2.661	0.871	9.76	0.00	0.00	32.06	0.00	0.00
KM-0+200	20.00	1.790	2.701	0.911	10.20	0.00	0.00	199.58	0.00	0.00
KM-0+180	20.00	1.800	2.741	0.941	10.54	0.00	0.00	207.42	0.00	0.00
KM-0+170	10.00	1.830	2.755	0.925	10.36	0.00	0.00	104.50	0.00	0.00
KM-0+160	10.00	1.870	2.782	0.912	10.21	0.00	0.00	102.87	0.00	0.00
KM-0+140	20.00	1.720	2.822	1.102	13.34	0.00	0.00	235.56	0.00	0.00
KM-0+120	20.00	1.700	2.862	1.162	14.60	0.00	0.00	279.44	0.00	0.00
KM-0+100	20.00	1.010	2.903	1.893	29.95	0.00	0.00	445.55	0.00	0.00
KM-0+80	20.00	1.490	2.943	1.453	20.71	0.00	0.00	506.66	0.00	0.00
KM-0+60	20.00	0.710	2.983	2.273	42.06	0.00	0.00	627.68	0.00	0.00
KM-0+40	20.00	1.220	3.024	1.804	28.08	0.00	0.00	701.39	0.00	0.00
KM-0+26.1	13.90	1.370	3.052	1.682	25.52	0.00	0.00	372.56	0.00	0.00
KM-0+20	6.10	1.320	3.064	1.744	26.82	0.00	0.00	159.66	0.00	0.00
KM0+000	20.00	1.160	3.104	1.944	31.02	0.00	0.00	578.48	0.00	0.00
KM0+020	20.00	1.230	3.145	1.915	30.42	0.00	0.00	614.39	0.00	0.00
KM0+040	20.00	0.970	3.185	2.215	39.96	0.00	0.00	703.77	0.00	0.00
KM0+060	20.00	0.620	3.185	2.565	52.60	0.00	0.00	925.58	0.00	0.00
KM0+080	20.00	0.420	3.186	2.766	59.85	0.00	0.00	1124.49	0.00	0.00
KM0+100	20.00	0.130	3.186	3.056	70.39	22.10	22.28	1302.41	221.00	222.85
KM0+120	20.00	0.210	3.186	2.976	67.43	0.00	0.00	1378.22	221.00	222.85
KM0+130	10.00	0.210	3.186	2.976	67.43	0.00	0.00	674.34	0.00	0.00
KM0+140	10.00	0.040	3.186	3.146	73.75	22.10	22.58	705.90	110.50	112.91
KM0+160	20.00	0.360	3.187	2.827	62.05	0.00	0.00	1358.01	221.00	225.82
KM0+171	11.00	0.510	3.187	2.677	56.64	0.00	0.00	652.82	0.00	0.00
KM0+180	9.00	0.050	3.187	3.137	73.41	22.10	22.55	585.22	99.45	101.48
KM0+200	20.00	0.460	3.187	2.727	58.44	0.00	0.00	1318.55	221.00	225.52

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+220	20.00	0.460	3.188	2.728	58.48	0.00	0.00	1169.26	0.00	0.00
KM0+230	10.00	0.450	3.188	2.738	58.84	0.00	0.00	586.61	0.00	0.00
KM0+240	10.00	0.590	3.193	2.603	53.97	0.00	0.00	564.05	0.00	0.00
KM0+243.5	3.50	0.570	3.197	2.627	54.83	0.00	0.00	190.41	0.00	0.00
KM0+260	16.50	0.510	3.234	2.724	58.34	0.00	0.00	933.66	0.00	0.00
KM0+270	10.00	0.490	3.255	2.765	59.82	0.00	0.00	590.76	0.00	0.00
KM0+280	10.00	0.520	3.316	2.796	60.94	0.00	0.00	603.76	0.00	0.00
KM0+300	20.00	0.420	3.439	3.019	69.01	22.10	22.16	1299.44	221.00	221.63
KM0+320	20.00	0.570	3.603	3.033	69.53	22.10	22.21	1385.40	442.00	443.72
KM0+340	20.00	0.450	3.807	3.357	81.62	22.10	23.28	1511.47	442.00	454.87
KM0+360	20.00	-0.600	4.053	4.653	109.39	31.65	27.23	1910.04	537.50	505.07
KM0+380	20.00	1.280	4.339	3.059	70.50	22.10	22.29	1798.88	537.50	495.23
KM0+382.8	2.80	1.370	4.383	3.013	68.78	22.10	22.14	195.00	61.88	62.21
KM0+400	17.20	1.140	4.666	3.526	87.92	22.10	23.84	1347.66	380.12	395.42
KM0+420	20.00	0.560	5.035	4.475	108.36	31.65	26.73	1962.75	537.50	505.66
KM0+440	20.00	0.330	5.444	5.114	113.68	40.20	27.71	2220.35	718.50	544.40
KM0+460	20.00	0.350	5.893	5.543	122.26	40.20	25.87	2359.40	804.00	535.75
KM0+480	20.00	0.350	6.384	6.034	132.26	40.20	23.77	2545.24	804.00	496.36
KM0+490	10.00	0.120	6.904	6.784	151.31	40.20	20.92	1417.89	402.00	223.46
KM0+500	10.00	0.120	6.916	6.796	151.62	40.20	20.88	1514.66	402.00	208.98
KM0+520	20.00	0.440	7.488	7.048	157.88	40.20	19.89	3094.98	804.00	407.64
KM0+522.1	2.10	0.650	7.550	6.900	154.26	40.20	20.48	327.75	84.42	42.39
KM0+540	17.90	1.240	8.097	6.857	153.17	40.20	20.64	2751.48	719.58	368.05
KM0+552.1	12.10	1.250	8.460	7.210	161.53	40.20	19.18	1903.89	486.42	240.91
TOTAL (I)								51720	9478	7263
2/ LARGE TRA VA - SMALL TRA VA										
KM0+869.1		0.670	8.350	7.680	172.10	40.20	17.11			
KM0+880	10.90	0.670	8.190	7.520	168.50	40.20	17.81	1856.27	438.18	190.31
KM0+900	20.00	0.730	7.905	7.175	160.74	40.20	19.33	3292.38	804.00	371.42
KM0+920	20.00	1.120	7.620	6.500	144.10	40.20	22.00	3048.38	804.00	413.30
KM0+940	20.00	0.390	7.335	6.945	155.40	40.20	20.31	2995.03	804.00	423.09
KM0+960	20.00	0.580	7.049	6.469	143.31	40.20	22.12	2987.16	804.00	424.27
KM0+980	20.00	0.510	6.764	6.254	137.85	40.20	22.93	2811.64	804.00	450.53
KM1+000	20.00	0.580	6.479	5.899	129.38	40.20	24.33	2672.32	804.00	472.69
KM1+020	20.00	0.620	6.194	5.574	122.88	40.20	25.73	2522.60	804.00	500.66
KM1+040	20.00	0.630	5.909	5.279	116.98	40.20	27.00	2398.60	804.00	527.32
KM1+060	20.00	0.530	5.623	5.093	113.26	40.20	27.80	2302.40	804.00	548.00
KM1+080	20.00	-0.100	5.338	5.438	120.16	40.20	26.32	2334.20	804.00	541.17
KM1+100	20.00	1.010	5.053	4.043	105.85	31.65	25.52	2260.09	718.50	518.37
KM1+120	20.00	1.050	4.768	3.718	95.08	22.10	24.47	2009.31	537.50	499.90
KM1+140	20.00	0.480	4.483	4.003	105.62	31.65	25.41	2006.99	537.50	498.78
KM1+160	20.00	0.520	4.197	3.677	93.55	22.10	24.33	1991.70	537.50	497.43
KM1+180	20.00	0.350	3.912	3.562	89.26	22.10	23.95	1828.15	442.00	482.89
KM1+200	20.00	1.180	3.627	2.447	48.34	0.00	0.00	1375.99	221.00	239.55
KM1+220	20.00	0.480	3.342	2.862	63.32	0.00	0.00	1116.55	0.00	0.00
KM1+240	20.00	0.500	3.065	2.565	52.60	0.00	0.00	1159.15	0.00	0.00
KM1+260	20.00	0.490	2.848	2.358	45.12	0.00	0.00	977.20	0.00	0.00
KM1+280	20.00	0.510	2.699	2.189	39.02	0.00	0.00	841.47	0.00	0.00
KM1+300	20.00	0.540	2.619	2.079	35.05	0.00	0.00	740.75	0.00	0.00
KM1+320	20.00	0.510	2.606	2.096	35.67	0.00	0.00	707.18	0.00	0.00
KM1+340	20.00	0.530	2.662	2.132	36.97	0.00	0.00	726.31	0.00	0.00

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM1+360	20.00	0.490	2.786	2.296	42.89	0.00	0.00	798.51	0.00	0.00
KM1+380	20.00	0.550	2.969	2.419	47.33	0.00	0.00	902.12	0.00	0.00
KM1+400	20.00	0.510	3.161	2.651	55.70	0.00	0.00	1030.27	0.00	0.00
KM1+420	20.00	0.540	3.353	2.813	61.55	0.00	0.00	1172.50	0.00	0.00
KM1+440	20.00	0.520	3.545	3.025	69.23	22.10	22.18	1307.82	221.00	221.83
KM1+460	20.00	0.630	3.737	3.107	72.29	22.10	22.45	1415.24	442.00	446.36
KM1+480	20.00	0.030	3.929	3.899	101.83	22.10	25.07	1741.24	442.00	475.20
KM1+490	10.00	0.620	4.025	3.405	83.41	22.10	23.44	926.20	221.00	242.52
KM1+500	10.00	0.570	4.121	3.551	88.85	22.10	23.92	861.29	221.00	236.77
KM1+520	20.00	0.710	4.313	3.603	90.79	22.10	24.09	1796.44	442.00	480.08
KM1+540	20.00	1.480	4.460	2.980	67.58	0.00	0.00	1583.70	221.00	240.90
KM1+560	20.00	0.520	4.518	3.998	105.53	22.10	25.39	1731.03	221.00	253.93
KM1+580	20.00	0.620	4.487	3.867	100.64	22.10	24.96	2061.65	442.00	503.55
KM1+600	20.00	0.670	4.365	3.695	94.22	22.10	24.39	1948.63	442.00	493.55
KM1+620	20.00	0.620	4.200	3.580	89.93	22.10	24.01	1841.58	442.00	484.08
KM1+640	20.00	0.740	4.034	3.294	79.27	22.10	23.07	1692.00	442.00	470.84
KM1+660	20.00	0.580	3.868	3.288	79.04	22.10	23.05	1583.09	442.00	461.21
KM1+680	20.00	0.540	3.702	3.162	74.34	22.10	22.63	1533.85	442.00	456.85
KM1+700	20.00	0.640	3.583	2.943	66.24	0.00	0.00	1405.85	221.00	226.35
KM1+720	20.00	0.670	3.624	2.954	66.64	0.00	0.00	1328.82	0.00	0.00
KM1+730	10.00	0.670	3.707	3.037	69.68	22.10	22.22	681.60	110.50	111.11
KM1+740	10.00	0.670	3.831	3.161	74.31	22.10	22.63	719.93	221.00	224.27
KM1+760	20.00	0.610	4.204	3.594	90.46	22.10	24.06	1647.62	442.00	466.92
KM1+780	20.00	0.690	4.736	4.046	105.87	31.65	25.53	1963.23	537.50	495.89
KM1+800	20.00	0.730	5.304	4.574	108.93	31.65	27.01	2147.96	633.00	525.36
KM1+820	20.00	0.670	5.786	5.116	113.72	40.20	27.70	2226.49	718.50	547.08
KM1+840	20.00	0.770	6.173	5.403	119.46	40.20	26.47	2331.80	804.00	541.68
KM1+860	20.00	0.810	6.462	5.652	124.44	40.20	25.40	2439.00	804.00	518.64
KM1+866.25	6.25	0.810	6.530	5.720	125.80	40.20	25.10	782.00	251.25	157.81
TOTAL (II)								90563	21298	16882
3/ SMALL TRA VA - TRA ON										
KM1+953.75		0.610	6.530	5.920	129.80	40.20	24.24			
KM1+960	6.25	0.610	6.462	5.852	128.44	40.20	24.54	807.00	251.25	152.44
KM1+980	20.00	1.260	6.173	4.913	110.90	31.65	27.96	2393.35	718.50	524.93
KM1+988	8.00	1.130	6.013	4.883	110.72	31.65	27.87	886.47	253.20	223.32
KM2+000	12.00	1.150	5.786	4.636	109.29	31.65	27.18	1320.06	379.80	330.32
KM2+020	20.00	0.690	5.304	4.614	109.16	31.65	27.12	2184.50	633.00	543.00
KM2+040	20.00	0.710	4.736	4.026	105.75	31.65	25.47	2149.12	633.00	525.92
KM2+060	20.00	1.190	4.157	2.967	67.11	0.00	0.00	1728.60	316.50	254.73
KM2+080	20.00	0.080	3.655	3.575	89.75	22.10	24.00	1568.56	221.00	239.98
KM2+095	15.00	0.410	3.382	2.972	67.29	0.00	0.00	1177.78	165.75	179.98
KM2+100	5.00	0.670	3.310	2.640	55.30	0.00	0.00	306.48	0.00	0.00
KM2+120	20.00	0.700	3.120	2.420	47.36	0.00	0.00	1026.66	0.00	0.00
KM2+140	20.00	0.620	3.067	2.447	48.34	0.00	0.00	956.99	0.00	0.00
KM2+160	20.00	0.980	3.034	2.054	34.15	0.00	0.00	824.86	0.00	0.00
KM2+180	20.00	0.690	3.000	2.310	43.39	0.00	0.00	775.40	0.00	0.00
KM2+200	20.00	0.740	2.966	2.226	40.36	0.00	0.00	837.50	0.00	0.00
KM2+209	9.00	0.720	2.950	2.230	40.50	0.00	0.00	363.88	0.00	0.00
KM2+220	11.00	0.700	2.933	2.233	40.61	0.00	0.00	446.13	0.00	0.00
KM2+240	20.00	0.600	2.899	2.299	42.99	0.00	0.00	836.05	0.00	0.00
KM2+260	20.00	0.680	2.865	2.185	38.88	0.00	0.00	818.72	0.00	0.00

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM2+280	20.00	0.660	2.832	2.172	38.41	0.00	0.00	772.88	0.00	0.00
KM2+300	20.00	0.650	2.798	2.148	37.54	0.00	0.00	759.52	0.00	0.00
KM2+320	20.00	0.660	2.765	2.105	35.99	0.00	0.00	735.33	0.00	0.00
KM2+340	20.00	0.630	2.731	2.101	35.85	0.00	0.00	718.37	0.00	0.00
KM2+360	20.00	0.540	2.697	2.157	37.87	0.00	0.00	737.14	0.00	0.00
KM2+380	20.00	0.600	2.690	2.090	35.45	0.00	0.00	733.17	0.00	0.00
KM2+400	20.00	0.620	2.773	2.153	37.72	0.00	0.00	731.72	0.00	0.00
KM2+420	20.00	0.680	2.974	2.294	42.81	0.00	0.00	805.37	0.00	0.00
KM2+432	12.00	0.720	3.104	2.384	46.06	0.00	0.00	533.25	0.00	0.00
KM2+450	18.00	0.730	3.362	2.632	55.02	0.00	0.00	909.70	0.00	0.00
KM2+460	10.00	0.690	3.508	2.818	61.73	0.00	0.00	583.73	0.00	0.00
KM2+470	10.00	0.680	3.655	2.975	67.40	0.00	0.00	645.64	0.00	0.00
KM2+480	10.00	0.740	3.801	3.061	70.58	22.10	22.30	689.86	110.50	111.51
KM2+500	20.00	0.780	4.094	3.314	80.01	22.10	23.14	1505.88	442.00	454.38
KM2+520	20.00	0.820	4.386	3.566	89.41	22.10	23.97	1694.24	442.00	471.04
KM2+540	20.00	0.740	4.679	3.939	103.32	22.10	25.20	1927.37	442.00	491.67
KM2+560	20.00	0.780	4.972	4.192	106.71	31.65	25.94	2100.38	537.50	511.36
KM2+580	20.00	0.810	5.258	4.448	108.20	31.65	26.65	2149.12	633.00	525.92
KM2+600	20.00	0.740	5.469	4.729	109.83	31.65	27.44	2180.27	633.00	540.96
KM2+620	20.00	0.660	5.587	4.927	110.98	31.65	28.00	2208.05	633.00	554.37
KM2+640	20.00	0.850	5.611	4.761	110.01	31.65	27.53	2209.90	633.00	555.26
KM2+660	20.00	1.100	5.542	4.442	108.16	31.65	26.64	2181.77	633.00	541.68
KM2+680	20.00	1.270	5.398	4.128	106.34	31.65	25.76	2145.06	633.00	523.96
KM2+700	20.00	0.700	5.248	4.548	108.78	31.65	26.93	2151.21	633.00	526.93
KM2+720	20.00	0.590	5.097	4.507	108.54	31.65	26.82	2173.19	633.00	537.54
KM2+740	20.00	0.310	4.947	4.637	109.29	31.65	27.18	2178.35	633.00	540.03
KM2+751	11.00	0.850	4.857	4.007	105.64	31.65	25.42	1182.14	348.15	289.32
KM2+760	9.00	-0.330	4.796	5.126	113.92	40.20	27.66	988.02	323.33	238.85
KM2+780	20.00	1.410	4.646	3.236	77.10	22.10	22.88	1910.23	623.00	505.37
KM2+800	20.00	1.120	4.495	3.375	82.29	22.10	23.34	1593.90	442.00	462.16
KM2+820	20.00	1.150	4.340	3.190	75.39	22.10	22.73	1576.75	442.00	460.65
KM2+840	20.00	1.010	4.194	3.184	75.16	22.10	22.71	1505.50	442.00	454.34
KM2+860	20.00	0.360	4.044	3.684	93.81	22.10	24.36	1689.76	442.00	470.64
KM2+880	20.00	0.740	3.893	3.153	74.01	22.10	22.60	1678.20	442.00	469.62
KM2+900	20.00	0.710	3.743	3.033	69.53	22.10	22.21	1435.38	442.00	448.14
KM2+920	20.00	0.690	3.592	2.902	64.76	0.00	0.00	1342.93	221.00	222.09
KM2+940	20.00	0.730	3.442	2.712	57.90	0.00	0.00	1226.65	0.00	0.00
KM2+960	20.00	0.680	3.291	2.611	54.26	0.00	0.00	1121.60	0.00	0.00
KM2+980	20.00	0.700	3.141	2.441	48.12	0.00	0.00	1023.77	0.00	0.00
KM3+000	20.00	0.670	2.991	2.321	43.79	0.00	0.00	919.08	0.00	0.00
KM3+020	20.00	0.700	2.861	2.161	38.01	0.00	0.00	818.00	0.00	0.00
KM3+040	20.00	0.710	2.758	2.048	33.93	0.00	0.00	719.45	0.00	0.00
KM3+060	20.00	0.580	2.682	2.102	35.88	0.00	0.00	698.15	0.00	0.00
KM3+071	11.00	1.320	2.650	1.330	18.13	0.00	0.00	297.07	0.00	0.00
KM3+080	9.00	1.130	2.633	1.503	21.76	0.00	0.00	179.52	0.00	0.00
KM3+100	20.00	0.610	2.611	2.001	32.24	0.00	0.00	539.99	0.00	0.00
KM3+120	20.00	0.640	2.616	1.976	31.70	0.00	0.00	639.32	0.00	0.00
KM3+140	20.00	0.560	2.649	2.089	35.41	0.00	0.00	671.09	0.00	0.00
KM3+160	20.00	0.670	2.708	2.038	33.57	0.00	0.00	689.85	0.00	0.00
KM3+170	10.00	0.850	2.747	1.897	30.04	0.00	0.00	318.04	0.00	0.00
KM3+180	10.00	1.090	2.787	1.697	25.84	0.00	0.00	279.37	0.00	0.00
KM3+200	20.00	0.860	2.867	2.007	32.45	0.00	0.00	582.90	0.00	0.00

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM3+220	20.00	0.760	2.947	2.187	38.95	0.00	0.00	714.03	0.00	0.00
KM3+240	20.00	0.800	3.026	2.226	40.36	0.00	0.00	793.09	0.00	0.00
KM3+260	20.00	0.680	3.106	2.426	47.58	0.00	0.00	879.37	0.00	0.00
KM3+280	20.00	0.840	3.189	2.349	44.80	0.00	0.00	923.78	0.00	0.00
KM3+294	14.00	0.770	3.243	2.473	49.28	0.00	0.00	658.52	0.00	0.00
KM3+300	6.00	0.780	3.266	2.486	49.74	0.00	0.00	297.06	0.00	0.00
KM3+320	20.00	0.860	3.345	2.485	49.71	0.00	0.00	994.53	0.00	0.00
KM3+340	20.00	0.350	3.425	3.075	71.10	22.10	22.35	1208.06	221.00	223.48
KM3+360	20.00	0.910	3.505	2.595	53.68	0.00	0.00	1247.77	221.00	223.48
KM3+380	20.00	1.250	3.585	2.335	44.29	0.00	0.00	979.73	0.00	0.00
KM3+400	20.00	1.230	3.665	2.435	47.90	0.00	0.00	921.97	0.00	0.00
KM3+420	20.00	1.330	3.744	2.414	47.15	0.00	0.00	950.49	0.00	0.00
KM3+430	10.00	1.380	3.809	2.429	47.69	0.00	0.00	474.16	0.00	0.00
KM3+440	10.00	1.420	3.923	2.503	50.36	0.00	0.00	490.23	0.00	0.00
KM3+460	20.00	1.650	4.299	2.649	55.63	0.00	0.00	1059.87	0.00	0.00
KM3+480	20.00	-0.100	4.872	4.972	111.24	31.65	28.12	1668.67	316.50	281.22
KM3+500	20.00	0.240	5.644	5.404	119.48	40.20	26.46	2307.18	718.50	545.84
KM3+520	20.00	1.390	6.513	5.123	113.86	40.20	27.67	2333.40	804.00	541.34
KM3+540	20.00	1.460	7.383	5.923	129.86	40.20	24.23	2437.20	804.00	519.02
KM3+560	20.00	1.460	8.204	6.744	150.30	40.20	21.07	2801.58	804.00	453.04
KM3+580	20.00	0.020	8.924	8.904	199.64	40.20	15.70	3499.38	804.00	367.73
KM3+587.8	7.80	1.460	9.180	7.720	173.00	40.20	16.93	1453.30	313.56	127.26
TOTAL (III)								112289	20417	17165
4/ TRA ON - MAIN BRIDGE (CAN THO)										
KM3+848.1		1.470	8.990	7.520	168.50	40.20	17.81			
KM3+860	11.90	1.470	8.577	7.107	159.21	40.20	19.63	1949.86	478.38	222.78
KM3+880	20.00	1.450	7.806	6.356	140.44	40.20	22.55	2996.50	804.00	421.76
KM3+900	20.00	1.720	6.949	5.229	115.98	40.20	27.22	2564.22	804.00	497.63
KM3+920	20.00	1.440	6.079	4.639	109.31	31.65	27.19	2252.86	718.50	544.05
KM3+940	20.00	1.220	5.209	3.989	105.19	22.10	25.36	2144.96	537.50	525.53
KM3+960	20.00	1.340	4.391	3.051	70.20	22.10	22.27	1753.92	442.00	476.32
KM3+970	10.00	1.350	4.049	2.699	57.43	0.00	0.00	638.18	110.50	111.34
KM3+980	10.00	1.550	3.752	2.202	39.49	0.00	0.00	484.63	0.00	0.00
KM3+990	10.00	1.370	3.502	2.132	36.97	0.00	0.00	382.29	0.00	0.00
KM4+000	10.00	1.370	3.298	1.928	30.69	0.00	0.00	338.27	0.00	0.00
KM4+020	20.00	1.340	3.029	1.689	25.67	0.00	0.00	563.57	0.00	0.00
KM4+040	20.00	0.230	2.945	2.715	58.01	0.00	0.00	836.81	0.00	0.00
KM4+060	20.00	0.990	3.039	2.049	33.97	0.00	0.00	919.80	0.00	0.00
KM4+080	20.00	1.000	3.186	2.186	38.91	0.00	0.00	728.84	0.00	0.00
KM4+100	20.00	1.160	3.332	2.172	38.41	0.00	0.00	773.24	0.00	0.00
KM4+120	20.00	1.150	3.479	2.329	44.08	0.00	0.00	824.86	0.00	0.00
KM4+130	10.00	1.120	3.552	2.432	47.80	0.00	0.00	459.36	0.00	0.00
KM4+140	10.00	1.150	3.625	2.475	49.35	0.00	0.00	485.71	0.00	0.00
KM4+160	20.00	1.350	3.772	2.422	47.43	0.00	0.00	967.82	0.00	0.00
KM4+180	20.00	1.160	3.918	2.758	59.56	0.00	0.00	1069.98	0.00	0.00
KM4+200	20.00	0.950	4.064	3.114	72.55	22.10	22.48	1321.16	221.00	224.76
KM4+220	20.00	0.900	4.211	3.311	79.90	22.10	23.13	1524.53	442.00	456.03
KM4+240	20.00	0.880	4.357	3.477	86.09	22.10	23.67	1659.92	442.00	468.00
KM4+260	20.00	0.870	4.504	3.634	91.95	22.10	24.19	1780.40	442.00	478.66
KM4+270	10.00	0.840	4.577	3.737	95.79	22.10	24.53	938.69	221.00	243.62
KM4+280	10.00	0.810	4.611	3.801	98.18	22.10	24.74	969.84	221.00	246.38

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Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM4+300	20.00	0.780	4.679	3.899	101.83	22.10	25.07	2000.10	442.00	498.10
KM4+320	20.00	0.760	4.747	3.987	105.12	22.10	25.36	2069.48	442.00	504.24
KM4+340	20.00	0.790	4.814	4.024	105.74	31.65	25.47	2108.54	537.50	508.24
KM4+360	20.00	0.780	4.882	4.102	106.19	31.65	25.69	2119.31	633.00	511.53
KM4+380	20.00	0.770	4.950	4.180	106.64	31.65	25.90	2128.36	633.00	515.90
KM4+400	20.00	0.780	5.018	4.238	106.98	31.65	26.07	2136.24	633.00	519.70
KM4+420	20.00	0.790	5.086	4.296	107.32	31.65	26.23	2142.97	633.00	522.95
KM4+440	20.00	0.840	5.154	4.314	107.42	31.65	26.28	2147.38	633.00	525.08
KM4+460	20.00	0.790	5.221	4.431	108.10	31.65	26.61	2155.21	633.00	528.86
KM4+480	20.00	0.810	5.289	4.479	108.38	31.65	26.74	2164.78	633.00	533.48
KM4+500	20.00	0.940	5.357	4.417	108.02	31.65	26.57	2163.97	633.00	533.09
KM4+520	20.00	1.070	5.425	4.355	107.66	31.65	26.39	2156.78	633.00	529.62
KM4+540	20.00	1.000	5.493	4.493	108.46	31.65	26.78	2161.18	633.00	531.74
KM4+560	20.00	0.770	5.561	4.791	110.19	31.65	27.61	2186.47	633.00	543.95
KM4+580	20.00	0.810	5.628	4.818	110.34	31.65	27.69	2205.32	633.00	553.05
KM4+600	20.00	0.990	5.696	4.706	109.69	31.65	27.38	2200.39	633.00	550.67
KM4+620	20.00	0.980	5.764	4.784	110.15	31.65	27.60	2198.42	633.00	549.72
KM4+640	20.00	0.690	5.832	5.142	114.24	40.20	27.59	2243.87	718.50	551.85
KM4+660	20.00	-0.570	5.900	6.470	143.34	40.20	22.11	2575.78	804.00	497.03
KM4+680	20.00	0.100	5.968	5.868	128.76	40.20	24.47	2720.98	804.00	465.82
KM4+700	20.00	0.740	6.035	5.295	117.30	40.20	26.93	2460.60	804.00	513.99
KM4+720	20.00	0.750	6.103	5.353	118.46	40.20	26.68	2357.60	804.00	536.14
KM4+740	20.00	0.770	6.171	5.401	119.42	40.20	26.48	2378.80	804.00	531.58
KM4+760	20.00	0.900	6.239	5.339	118.18	40.20	26.74	2376.00	804.00	532.18
KM4+780	20.00	0.850	6.307	5.457	120.54	40.20	26.23	2387.20	804.00	529.77
KM4+800	20.00	0.840	6.375	5.535	122.10	40.20	25.90	2426.40	804.00	521.34
KM4+820	20.00	0.860	6.442	5.582	123.04	40.20	25.70	2451.40	804.00	515.97
KM4+840	20.00	0.880	6.529	5.649	124.38	40.20	25.41	2474.20	804.00	511.07
KM4+860	20.00	0.880	6.745	5.865	128.70	40.20	24.48	2530.80	804.00	498.90
KM4+865	5.00	0.880	6.823	5.943	130.26	40.20	24.15	647.40	201.00	121.56
KM4+880	15.00	0.890	7.111	6.221	137.01	40.20	23.06	2004.55	603.00	354.04
KM4+900	20.00	0.860	7.625	6.765	150.83	40.20	20.99	2878.44	804.00	440.53
KM4+910	10.00	0.860	7.920	7.060	158.15	40.20	19.84	1544.91	402.00	204.15
TOTAL (IV)								104234	27740	21203
TOTAL (I+II+III+IV)								358806	78933	62513

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QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
INTERCHANGE 1 - RAMP A

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+233.3		1.230	2.697	1.467	11.64	0.00	0.00			
KM0+240.0	6.67	1.250	2.697	1.447	11.39	0.00	0.00	76.79	0.00	0.00
KM0+260.0	20.00	-0.010	2.697	2.707	37.74	0.00	0.00	491.30	0.00	0.00
KM0+280.0	20.00	0.800	2.697	1.897	17.01	0.00	0.00	547.55	0.00	0.00
KM0+300.0	20.00	0.200	2.750	2.550	33.43	0.00	0.00	504.38	0.00	0.00
KM0+320.0	20.00	0.330	2.803	2.473	31.31	0.00	0.00	647.33	0.00	0.00
KM0+340.0	20.00	0.660	2.856	2.196	23.69	0.00	0.00	549.98	0.00	0.00
KM0+360.0	20.00	0.790	2.909	2.119	21.57	0.00	0.00	452.63	0.00	0.00
KM0+380.0	20.00	0.340	2.961	2.621	35.38	0.00	0.00	569.50	0.00	0.00
KM0+390.0	10.00	0.400	2.997	2.597	34.72	0.00	0.00	350.48	0.00	0.00
KM0+400.0	10.00	0.390	3.014	2.624	35.46	0.00	0.00	350.89	0.00	0.00
KM0+420.0	20.00	0.550	3.067	2.517	32.52	0.00	0.00	679.78	0.00	0.00
KM0+440.0	20.00	0.560	3.120	2.560	33.70	0.00	0.00	662.18	0.00	0.00
KM0+460.0	20.00	0.540	3.120	2.580	34.25	0.00	0.00	679.50	0.00	0.00
KM0+470.0	10.00	0.560	3.120	2.560	33.70	0.00	0.00	339.75	0.00	0.00
KM0+480.0	10.00	0.540	3.120	2.580	34.25	0.00	0.00	339.75	0.00	0.00
KM0+500.0	20.00	0.460	3.120	2.660	36.45	0.00	0.00	707.00	0.00	0.00
KM0+520.0	20.00	0.510	3.120	2.610	35.08	0.00	0.00	715.25	0.00	0.00
KM0+530.0	10.00	0.580	3.120	2.540	33.15	0.00	0.00	341.13	0.00	0.00
KM0+540.0	10.00	0.540	3.120	2.580	34.25	0.00	0.00	337.00	0.00	0.00
KM0+560.0	20.00	0.710	3.120	2.410	29.58	0.00	0.00	638.25	0.00	0.00
KM0+580.0	20.00	1.040	3.120	2.080	20.50	0.00	0.00	500.75	0.00	0.00
KM0+600.0	20.00	0.860	3.120	2.260	25.45	0.00	0.00	459.50	0.00	0.00
KM0+620.0	20.00	0.730	3.120	2.390	29.03	0.00	0.00	544.75	0.00	0.00
KM0+640.0	20.00	0.110	3.120	3.010	46.11	22.10	5.51	751.37	221.00	55.05
KM0+660.0	20.00	0.120	3.120	3.000	45.80	0.00	5.50	919.12	221.00	110.05
KM0+680.0	20.00	0.610	3.120	2.510	36.70	0.00	0.00	824.96	0.00	55.00
KM0+700.0	20.00	0.710	3.120	2.410	33.74	0.00	0.00	704.32	0.00	0.00
KM0+720.0	20.00	0.950	3.080	2.130	25.45	0.00	0.00	591.84	0.00	0.00
KM0+740.0	20.00	0.420	3.040	2.620	39.95	0.00	0.00	654.00	0.00	0.00
KM0+760.0	20.00	0.440	3.000	2.560	38.18	0.00	0.00	781.28	0.00	0.00
KM0+780.0	20.00	0.440	2.960	2.520	36.99	0.00	0.00	751.68	0.00	0.00
KM0+800.0	20.00	0.590	2.920	2.330	31.37	0.00	0.00	683.60	0.00	0.00
KM0+820.0	20.00	0.770	2.880	2.110	24.86	0.00	0.00	562.24	0.00	0.00
KM0+840.0	20.00	1.060	2.840	1.780	18.41	0.00	0.00	432.66	0.00	0.00
KM0+850.0	10.00	1.130	2.833	1.703	17.29	0.00	0.00	178.52	0.00	0.00
KM0+860.0	10.00	0.650	2.800	2.150	26.04	0.00	0.00	216.67	0.00	0.00
KM0+880.0	20.00	1.170	2.760	1.590	15.66	0.00	0.00	416.95	0.00	0.00
KM0+900.0	20.00	1.240	2.720	1.480	11.80	0.00	0.00	274.55	0.00	0.00
KM0+910.0	10.00	1.250	2.708	1.458	11.53	0.00	0.00	116.63	0.00	0.00
KM0+920.0	10.00	1.250	2.680	1.430	11.18	0.00	0.00	113.50	0.00	0.00
KM0+940.0	20.00	1.390	2.640	1.250	8.93	0.00	0.00	201.00	0.00	0.00
KM0+950.0	10.00	0.850	2.618	1.768	15.40	0.00	0.00	121.63	0.00	0.00

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+960.0	10.00	0.590	2.600	2.010	18.58	0.00	0.00	169.88	0.00	0.00
KM0+980.0	20.00	0.750	2.370	1.620	13.55	0.00	0.00	321.25	0.00	0.00
KM1+000.0	20.00	1.270	2.141	0.871	5.05	0.00	0.00	186.02	0.00	0.00
KM1+010.0	10.00	1.300	2.026	0.726	4.21	0.00	0.00	46.31	0.00	0.00
KM1+020.0	10.00	1.330	1.924	0.594	3.45	0.00	0.00	38.28	0.00	0.00
KM1+040.0	20.00	1.200	1.798	0.598	3.47	0.00	0.00	69.14	0.00	0.00
KM1+060.0	20.00	0.810	1.775	0.965	5.60	0.00	0.00	90.65	0.00	0.00
KM1+070.0	10.00	1.710	1.844	0.134	0.78	0.00	0.00	31.87	0.00	0.00
KM1+080.0	10.00	1.750	1.852	0.102	0.59	0.00	0.00	6.84	0.00	0.00
KM1+100.0	20.00	1.770	1.794	0.024	0.14	0.00	0.00	7.31	0.00	0.00
KM1+120.0	20.00	1.690	1.728	0.038	0.22	0.00	0.00	3.60	0.00	0.00
KM1+125.5	5.46	1.710	1.710	0.000	0.00	0.00	0.00	0.60	0.00	0.00
TOTAL								21754	442	220

QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
INTERCHANGE 1 - RAMP B

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+081.4		1.770	2.629	0.859	4.98	0.00	0.00		0.00	0.00
KM0+090.0	8.63	1.750	2.626	0.876	5.08	0.00	0.00	43.41	0.00	0.00
KM0+100.0	10.00	1.720	2.590	0.870	5.05	0.00	0.00	50.63	0.00	0.00
KM0+120.0	20.00	1.760	2.551	0.791	4.59	0.00	0.00	96.34	0.00	0.00
KM0+140.0	20.00	1.690	2.512	0.822	4.77	0.00	0.00	93.55	0.00	0.00
KM0+160.0	20.00	1.690	2.474	0.784	4.55	0.00	0.00	93.15	0.00	0.00
KM0+180.0	20.00	1.720	2.435	0.715	4.15	0.00	0.00	86.94	0.00	0.00
KM0+200.0	20.00	1.690	2.396	0.706	4.09	0.00	0.00	82.42	0.00	0.00
KM0+220.0	20.00	1.720	2.311	0.591	4.31	0.00	0.00	84.09	0.00	0.00
KM0+240.0	20.00	1.730	2.226	0.496	3.62	0.00	0.00	79.35	0.00	0.00
KM0+260.0	20.00	1.700	2.141	0.441	3.22	0.00	0.00	68.40	0.00	0.00
KM0+280.0	20.00	1.720	2.055	0.335	2.45	0.00	0.00	56.65	0.00	0.00
KM0+300.0	20.00	1.740	1.970	0.230	1.68	0.00	0.00	41.25	0.00	0.00
KM0+320.0	20.00	1.730	1.885	0.155	1.13	0.00	0.00	28.11	0.00	0.00
KM0+340.0	20.00	1.730	1.800	0.070	0.51	0.00	0.00	16.43	0.00	0.00
KM0+360.0	20.00	1.720	1.816	0.096	0.70	0.00	0.00	12.12	0.00	0.00
KM0+380.0	20.00	1.730	1.831	0.101	0.74	0.00	0.00	14.38	0.00	0.00
KM0+400.0	20.00	1.750	1.847	0.097	0.71	0.00	0.00	14.45	0.00	0.00
KM0+420.0	20.00	1.730	1.862	0.132	0.96	0.00	0.00	16.72	0.00	0.00
KM0+440.0	20.00	1.780	1.878	0.098	0.72	0.00	0.00	16.79	0.00	0.00
KM0+460.0	20.00	1.810	1.893	0.083	0.61	0.00	0.00	13.21	0.00	0.00
KM0+480.0	20.00	1.810	1.909	0.099	0.72	0.00	0.00	13.29	0.00	0.00
KM0+500.0	20.00	1.850	1.924	0.074	0.54	0.00	0.00	12.63	0.00	0.00
KM0+520.0	20.00	1.760	1.940	0.180	1.31	0.00	0.00	18.54	0.00	0.00
KM0+540.0	20.00	1.810	1.944	0.134	0.98	0.00	0.00	22.92	0.00	0.00
KM0+560.0	20.00	1.720	1.948	0.228	1.66	0.00	0.00	26.43	0.00	0.00
KM0+580.0	20.00	1.780	1.953	0.173	1.26	0.00	0.00	29.27	0.00	0.00
KM0+600.0	20.00	1.750	1.957	0.207	1.51	0.00	0.00	27.74	0.00	0.00
KM0+620.0	20.00	1.790	1.961	0.171	1.25	0.00	0.00	27.59	0.00	0.00
KM0+640.0	20.00	1.760	1.965	0.205	1.19	0.00	0.00	24.37	0.00	0.00
KM0+660.0	20.00	1.760	1.969	0.209	1.21	0.00	0.00	24.01	0.00	0.00
KM0+680.0	20.00	1.720	1.974	0.254	1.47	0.00	0.00	26.85	0.00	0.00
KM0+700.0	20.00	1.760	1.978	0.218	1.26	0.00	0.00	27.38	0.00	0.00
KM0+705.0	5.00	1.760	1.979	0.219	1.27	0.00	0.00	6.34	0.00	0.00
KM0+710.0	5.00	1.760	1.980	0.220	1.28	0.00	0.00	6.37	0.00	0.00
KM0+720.0	10.00	1.760	1.913	0.153	0.89	0.00	0.00	10.82	0.00	0.00
KM0+740.0	20.00	1.720	1.780	0.060	0.35	0.00	0.00	12.35	0.00	0.00
KM0+750.4	10.43	1.710	1.710	0.000	0.00	0.00	0.00	1.81	0.00	0.00
TOTAL								1327	0	0

QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
INTERCHANGE 2 - RAMP A

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+000.0		1.180	2.600	1.420	11.05	0.00	0.00			
KM0+020.0	20.00	0.540	2.605	2.065	20.09	0.00	0.00	311.38	0.00	0.00
KM0+030.0	10.00	0.960	2.606	1.646	13.88	0.00	0.00	169.81	0.00	0.00
KM0+040.0	10.00	1.370	2.609	1.239	8.79	0.00	0.00	113.31	0.00	0.00
KM0+050.0	10.00	0.940	2.612	1.672	14.20	0.00	0.00	114.94	0.00	0.00
KM0+060.0	10.00	0.510	2.614	2.104	21.16	0.00	0.00	176.80	0.00	0.00
KM0+080.0	20.00	0.550	2.619	2.069	20.20	0.00	0.00	413.58	0.00	0.00
KM0+100.0	20.00	0.560	2.623	2.063	20.03	0.00	0.00	402.30	0.00	0.00
KM0+110.0	10.00	0.560	2.628	2.068	20.17	0.00	0.00	201.01	0.00	0.00
KM0+120.0	10.00	0.490	2.628	2.138	22.10	0.00	0.00	211.33	0.00	0.00
KM0+140.0	20.00	0.490	2.633	2.143	22.23	0.00	0.00	443.28	0.00	0.00
KM0+150.0	10.00	0.510	2.634	2.124	21.71	0.00	0.00	219.71	0.00	0.00
KM0+160.0	10.00	0.520	2.637	2.117	21.52	0.00	0.00	216.14	0.00	0.00
KM0+180.0	20.00	0.750	2.642	1.892	16.95	0.00	0.00	384.68	0.00	0.00
KM0+200.0	20.00	0.450	2.647	2.197	23.72	0.00	0.00	406.68	0.00	0.00
KM0+220.0	20.00	0.520	2.651	2.131	21.90	0.00	0.00	456.20	0.00	0.00
KM0+240.0	20.00	0.790	2.656	1.866	16.63	0.00	0.00	385.28	0.00	0.00
KM0+260.0	20.00	0.460	2.661	2.201	23.83	0.00	0.00	404.53	0.00	0.00
KM0+280.0	20.00	1.050	2.666	1.616	13.50	0.00	0.00	373.28	0.00	0.00
KM0+300.0	20.00	0.760	2.670	1.910	17.18	0.00	0.00	306.75	0.00	0.00
KM0+320.0	20.00	0.750	2.675	1.925	17.36	0.00	0.00	345.38	0.00	0.00
KM0+330.0	10.00	0.740	2.676	1.936	17.50	0.00	0.00	174.31	0.00	0.00
KM0+340.0	10.00	0.730	2.680	1.950	17.68	0.00	0.00	175.88	0.00	0.00
KM0+350.0	10.00	0.710	2.683	1.973	17.96	0.00	0.00	178.19	0.00	0.00
KM0+360.0	10.00	0.700	2.684	1.984	18.10	0.00	0.00	180.31	0.00	0.00
KM0+380.0	20.00	0.760	2.689	1.929	17.41	0.00	0.00	355.13	0.00	0.00
KM0+390.0	10.00	0.740	2.690	1.950	17.68	0.00	0.00	175.44	0.00	0.00
KM0+400.0	10.00	0.720	2.694	1.974	17.98	0.00	0.00	178.25	0.00	0.00
KM0+410.0	10.00	0.710	2.714	2.004	18.41	0.00	0.00	181.93	0.00	0.00
KM0+420.0	10.00	0.700	2.750	2.050	19.68	0.00	0.00	190.43	0.00	0.00
KM0+440.0	20.00	0.690	2.910	2.220	24.35	0.00	0.00	440.25	0.00	0.00
KM0+461.1	21.14	0.690	3.134	2.444	30.51	0.00	0.00	579.87	0.00	0.00
TOTAL								8866	0	0

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QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
INTERCHANGE 2 - RAMP B

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+063.9		1.060	3.015	1.955	17.74	0.00	0.00			
KM0+070.0	6.11	1.100	3.009	1.909	17.16	0.00	0.00	106.55	0.00	0.00
KM0+080.0	10.00	1.210	2.885	1.675	14.24	0.00	0.00	157.00	0.00	0.00
KM0+090.0	10.00	0.950	2.793	1.843	16.34	0.00	0.00	152.88	0.00	0.00
KM0+100.0	10.00	0.690	2.723	2.033	19.21	0.00	0.00	177.73	0.00	0.00
KM0+110.0	10.00	0.540	2.642	2.102	21.11	0.00	0.00	201.56	0.00	0.00
KM0+120.0	10.00	0.580	2.641	2.061	19.98	0.00	0.00	205.41	0.00	0.00
KM0+140.0	20.00	0.840	2.638	1.798	15.78	0.00	0.00	357.53	0.00	0.00
KM0+150.0	10.00	0.940	2.636	1.696	14.50	0.00	0.00	151.38	0.00	0.00
KM0+160.0	10.00	1.030	2.635	1.605	13.36	0.00	0.00	139.31	0.00	0.00
KM0+180.0	20.00	0.580	2.633	2.053	19.76	0.00	0.00	331.20	0.00	0.00
KM0+190.0	10.00	0.640	2.632	1.992	18.20	0.00	0.00	189.79	0.00	0.00
KM0+200.0	10.00	0.700	2.630	1.930	17.43	0.00	0.00	178.13	0.00	0.00
KM0+220.0	20.00	0.770	2.627	1.857	16.51	0.00	0.00	339.38	0.00	0.00
KM0+240.0	20.00	0.880	2.625	1.745	15.11	0.00	0.00	316.25	0.00	0.00
KM0+260.0	20.00	0.730	2.622	1.892	16.95	0.00	0.00	320.63	0.00	0.00
KM0+270.0	10.00	0.780	2.620	1.840	16.30	0.00	0.00	166.25	0.00	0.00
KM0+280.0	10.00	0.830	2.620	1.790	15.68	0.00	0.00	159.88	0.00	0.00
KM0+300.0	20.00	0.840	2.617	1.777	15.51	0.00	0.00	311.88	0.00	0.00
KM0+310.0	10.00	0.860	2.616	1.756	15.25	0.00	0.00	153.81	0.00	0.00
KM0+320.0	10.00	0.880	2.614	1.734	14.98	0.00	0.00	151.13	0.00	0.00
KM0+340.0	20.00	0.810	2.612	1.802	15.83	0.00	0.00	308.00	0.00	0.00
KM0+360.0	20.00	0.770	2.609	1.839	16.29	0.00	0.00	321.13	0.00	0.00
KM0+370.0	10.00	1.050	2.607	1.557	12.76	0.00	0.00	145.25	0.00	0.00
KM0+380.0	10.00	1.330	2.606	1.276	9.25	0.00	0.00	110.06	0.00	0.00
KM0+390.0	10.00	1.290	2.604	1.314	9.73	0.00	0.00	94.88	0.00	0.00
KM0+400.0	10.00	1.250	2.604	1.354	10.23	0.00	0.00	99.75	0.00	0.00
KM0+420.0	20.00	1.200	2.601	1.401	10.81	0.00	0.00	210.38	0.00	0.00
KM0+428.4	8.42	1.400	2.600	1.200	8.30	0.00	0.00	80.43	0.00	0.00
TOTAL								5638	0	0

QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
INTERCHANGE 2 - RAMP C

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+075.4		0.720	3.407	2.687	37.19	0.00	0.00			
KM0+080.0	4.59	0.720	3.368	2.648	36.12	0.00	0.00	168.25	0.00	0.00
KM0+100.0	20.00	0.720	3.165	2.445	30.54	0.00	0.00	666.58	0.00	0.00
KM0+110.0	10.00	0.720	3.137	2.417	29.77	0.00	0.00	301.53	0.00	0.00
KM0+120.0	10.00	0.730	2.963	2.233	24.71	0.00	0.00	272.38	0.00	0.00
KM0+140.0	20.00	0.880	2.808	1.928	17.40	0.00	0.00	421.08	0.00	0.00
KM0+160.0	20.00	0.820	2.749	1.929	17.41	0.00	0.00	348.13	0.00	0.00
KM0+180.0	20.00	0.830	2.738	1.908	17.15	0.00	0.00	345.63	0.00	0.00
KM0+190.0	10.00	0.820	2.733	1.913	17.21	0.00	0.00	171.81	0.00	0.00
KM0+200.0	10.00	0.810	2.726	1.916	17.25	0.00	0.00	172.31	0.00	0.00
KM0+210.0	10.00	0.820	2.718	1.898	17.03	0.00	0.00	171.38	0.00	0.00
KM0+220.0	10.00	0.820	2.715	1.895	16.99	0.00	0.00	170.06	0.00	0.00
KM0+240.0	20.00	1.170	2.704	1.534	12.48	0.00	0.00	294.63	0.00	0.00
KM0+260.0	20.00	1.150	2.693	1.543	12.59	0.00	0.00	250.63	0.00	0.00
KM0+270.0	10.00	1.170	2.685	1.515	12.24	0.00	0.00	124.13	0.00	0.00
KM0+280.0	10.00	1.190	2.682	1.492	11.95	0.00	0.00	120.94	0.00	0.00
KM0+290.0	10.00	1.090	2.670	1.580	13.05	0.00	0.00	125.00	0.00	0.00
KM0+320.0	30.00	1.210	2.659	1.449	11.41	0.00	0.00	366.94	0.00	0.00
KM0+340.0	20.00	1.280	2.648	1.368	10.40	0.00	0.00	218.13	0.00	0.00
KM0+360.0	20.00	1.390	2.637	1.247	8.89	0.00	0.00	192.88	0.00	0.00
KM0+370.0	10.00	1.370	2.633	1.263	9.09	0.00	0.00	89.88	0.00	0.00
KM0+380.0	10.00	1.340	2.626	1.286	9.38	0.00	0.00	92.31	0.00	0.00
KM0+390.0	10.00	1.340	2.618	1.278	9.28	0.00	0.00	93.25	0.00	0.00
KM0+400.0	10.00	1.330	2.615	1.285	9.36	0.00	0.00	93.19	0.00	0.00
KM0+420.0	20.00	0.560	2.604	2.044	19.51	0.00	0.00	288.73	0.00	0.00
KM0+426.3	6.34	1.280	2.600	1.320	9.80	0.00	0.00	92.97	0.00	0.00
TOTAL								5653	0	0

QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
INTERCHANGE 2 - RAMP D

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+000.0		1.150	2.600	1.450	11.43	0.00	0.00		0.00	0.00
KM0+020.0	20.00	0.810	2.602	1.792	15.70	0.00	0.00	271.25	0.00	0.00
KM0+030.0	10.00	0.780	2.603	1.823	16.09	0.00	0.00	158.94	0.00	0.00
KM0+040.0	10.00	0.740	2.604	1.864	16.60	0.00	0.00	163.44	0.00	0.00
KM0+050.0	10.00	0.770	2.605	1.835	16.24	0.00	0.00	164.19	0.00	0.00
KM0+060.0	10.00	0.810	2.606	1.796	15.75	0.00	0.00	159.94	0.00	0.00
KM0+080.0	20.00	0.800	2.608	1.808	15.90	0.00	0.00	316.50	0.00	0.00
KM0+100.0	20.00	0.780	2.610	1.830	16.18	0.00	0.00	320.75	0.00	0.00
KM0+120.0	20.00	0.790	2.612	1.822	16.08	0.00	0.00	322.50	0.00	0.00
KM0+140.0	20.00	0.770	2.614	1.844	16.35	0.00	0.00	324.25	0.00	0.00
KM0+150.0	10.00	0.760	2.615	1.855	16.49	0.00	0.00	164.19	0.00	0.00
KM0+160.0	10.00	0.750	2.616	1.866	16.63	0.00	0.00	165.56	0.00	0.00
KM0+180.0	20.00	0.650	2.618	1.968	17.90	0.00	0.00	345.25	0.00	0.00
KM0+200.0	20.00	1.040	2.621	1.581	13.06	0.00	0.00	309.63	0.00	0.00
KM0+220.0	20.00	0.720	2.623	1.903	17.09	0.00	0.00	301.50	0.00	0.00
KM0+240.0	20.00	0.660	2.625	1.965	17.86	0.00	0.00	349.50	0.00	0.00
KM0+260.0	20.00	0.690	2.627	1.937	17.51	0.00	0.00	353.75	0.00	0.00
KM0+280.0	20.00	0.860	2.629	1.769	15.41	0.00	0.00	329.25	0.00	0.00
KM0+300.0	20.00	1.290	2.631	1.341	10.06	0.00	0.00	254.75	0.00	0.00
KM0+310.0	10.00	1.010	2.632	1.622	13.58	0.00	0.00	118.19	0.00	0.00
KM0+320.0	10.00	0.730	2.633	1.903	17.09	0.00	0.00	153.31	0.00	0.00
KM0+340.0	20.00	0.860	2.635	1.775	15.49	0.00	0.00	325.75	0.00	0.00
KM0+360.0	20.00	0.840	2.637	1.797	15.76	0.00	0.00	312.50	0.00	0.00
KM0+380.0	20.00	0.820	2.639	1.819	16.04	0.00	0.00	318.00	0.00	0.00
KM0+390.0	10.00	0.800	2.640	1.840	16.30	0.00	0.00	161.69	0.00	0.00
KM0+400.0	10.00	0.820	2.711	1.891	16.94	0.00	0.00	166.19	0.00	0.00
KM0+410.0	10.00	0.820	2.819	1.999	18.29	0.00	0.00	176.13	0.00	0.00
KM0+420.0	10.00	0.820	2.853	2.033	19.21	0.00	0.00	187.48	0.00	0.00
KM0+440.0	20.00	0.830	2.996	2.166	22.87	0.00	0.00	420.73	0.00	0.00
KM0+445.8	5.83	0.820	3.037	2.217	24.27	0.00	0.00	137.39	0.00	0.00
TOTAL								7252	0	0

QUANTITY OF FINAL SETTLEMENT, SURCHARGE AND REMOVING SURCHARGE
PACKAGE 1 - VINH LONG SIDE
INTERCHANGE 2 - OVERROAD

Chainage	Distance (m)	Ground level	Design level	Embankment height (m)	Area of settlement (m²)	Area of surcharge (m²)	Area of removing surcharge (m²)	Quantity of settlement (m³)	Quantity of surcharge (m³)	Quantity of removing surcharge (m³)
KM0+000.0		1.480	2.600	1.120	9.88	0.00	0.00			
KM0+020.0	20.00	1.440	2.675	1.235	11.69	0.00	0.00	215.74	0.00	0.00
KM0+040.0	20.00	1.460	2.750	1.290	12.55	0.00	0.00	242.43	0.00	0.00
KM0+060.0	20.00	1.420	2.825	1.405	14.36	0.00	0.00	269.12	0.00	0.00
KM0+080.0	20.00	1.410	2.900	1.490	15.69	0.00	0.00	300.52	0.00	0.00
KM0+100.0	20.00	1.450	3.022	1.572	16.98	0.00	0.00	326.73	0.00	0.00
KM0+120.0	20.00	1.490	3.471	1.981	23.40	0.00	0.00	403.82	0.00	0.00
KM0+140.0	20.00	1.570	4.297	2.727	46.16	0.00	0.00	695.66	0.00	0.00
KM0+160.0	20.00	1.600	5.431	3.831	82.52	22.10	13.33	1286.86	221.00	133.30
KM0+180.0	20.00	1.580	6.473	4.893	89.81	31.65	14.85	1723.29	537.50	281.80
KM0+200.0	20.00	1.600	7.354	5.754	103.20	40.20	13.42	1930.02	718.50	282.67
KM0+220.0	20.00	1.460	8.074	6.614	121.74	40.20	11.73	2249.40	804.00	251.50
KM0+233.7	13.65	1.450	8.634	7.184	134.40	40.20	10.58	1748.18	548.73	152.27
FLYOVER BRIDGE										
KM0+366.4		1.550	8.634	7.084	132.39	40.20	10.81			
KM0+380.0	13.65	1.550	8.074	6.524	119.66	40.20	11.90	1720.21	548.73	155.00
KM0+400.0	20.00	1.520	7.354	5.834	104.60	40.20	13.25	2242.52	804.00	251.53
KM0+420.0	20.00	1.530	6.473	4.943	89.90	31.65	14.92	1944.92	718.50	281.69
KM0+440.0	20.00	1.560	5.431	3.871	83.87	22.10	13.39	1737.63	537.50	283.14
KM0+460.0	20.00	1.470	4.297	2.827	49.25	0.00	0.00	1331.20	221.00	133.94
KM0+480.0	20.00	1.410	3.471	2.061	25.58	0.00	0.00	748.39	0.00	0.00
KM0+500.0	20.00	1.540	3.022	1.482	15.57	0.00	0.00	411.52	0.00	0.00
KM0+520.0	20.00	1.490	2.900	1.410	14.44	0.00	0.00	300.04	0.00	0.00
KM0+540.0	20.00	1.470	2.825	1.355	13.57	0.00	0.00	280.11	0.00	0.00
KM0+560.0	20.00	1.410	2.750	1.340	13.34	0.00	0.00	269.12	0.00	0.00
KM0+580.0	20.00	1.510	2.675	1.165	10.59	0.00	0.00	239.29	0.00	0.00
KM0+600.0	20.00	1.530	2.600	1.070	9.10	0.00	0.00	196.90	0.00	0.00
TOTAL								22814	5659	2207

QUANTITY OF INSTRUMENTATION
PACKAGE 1 - VINH LONG SIDE

No.	CHAINAGE	Day/section	SSP (each)	SSP (day)	AS (each)	AS (day)	DSP (each)	DSP (day)	INC (each)	INC (day)	EP (each)	EP (day)	OW (each)	OW (day)
	I/ MAIN WAY													
	1/ BEGINNING POINT - LARGE TRA VA													
1	KM -0+51.8	232	3	696	8	1856								
2	KM 0+060	180	1	180	8	1440		-	-	-	-	-	-	-
3	KM 0+183.7	232	3	696	8	1856		-	-	-	-	-	-	-
4	KM 0+240	180	1	180	-	-		-	-	-	-	-	-	-
5	KM 0+300	180	3	540	8	1440		-	-	-	-	-	1	232
6	KM 0+369.373	232	3	696	8	1856		-	-	-	-	-	-	-
7	KM 0+420	180	1	180	-	-		-	-	-	-	-	-	-
8	KM 0+480	180	1	180	-	-		-	-	-	-	-	-	-
9	KM 0+552.2	232	3	696	8	1856	-	-	-	-	-	-	1	232
	SUB-TOTAL		19	4044	48	10304								
	2/ LARGE TRA VA - SMALL TRA VA													
10	KM 0+869.10	232	3	696	8	1856	1	232	2	464	2	464	-	-
11	KM 0+940	180	1	180	-	-		-	-	-	-	-	-	-
12	KM 1+000	180	3	540	8	1440		-	-	-	-	-	-	-
13	KM 1+063.2	232	3	696	8	1856		-	-	-	-	-	-	-
14	KM 1+120	180	1	180	-	-		-	-	-	-	-	-	-
15	KM 1+180	180	3	540	8	1440		-	-	-	-	-	-	-
16	KM1+240	180	1	180	-	-								
17	KM1+300	232	3	696	8	1856								
18	KM1+360	180	1	180										

No.	CHAINAGE	Day/section	SSP (each)	SSP (day)	AS (each)	AS (day)	DSP (each)	DSP (day)	INC (each)	INC (day)	EP (each)	EP (day)	OW (each)	OW (day)
19	KM1+420	180	3	540	8	1440								-
20	KM1+480	180	1	180	-	-								-
21	KM1+560	232	3	696	8	1856								-
22	KM1+600	180	1	180	-	-								-
23	KM1+660	180	3	540	8	1440								-
24	KM1+720	180	1	180	-	-								-
25	KM1+780	180	3	540	8	1440								-
26	KM1+866.25	232	3	696	8	1856							1	232
	SUB-TOTAL		37	7440	80	16480	1	232	2	464	2	464	1	232
	3/ SMALL TRA VA - TRA ON													
27	KM1+953.75	232	3	696	8	1856	1	232	2	464	2	464		-
28	KM2+020	180	1	180	-	-								-
29	KM2+080	180	3	540	-	-								-
30	KM2+150	232	3	696	8	1856								-
31	KM2+200	180	1	180										-
32	KM2+260	180	3	540										-
33	KM2+320	180	1	180										-
34	KM2+380	180	3	540										-
35	KM2+440	180	1	180										-
36	KM2+500	180	3	540										-
37	KM2+560	180	1	180										-
38	KM2+620	232	3	696	8	1856								-
39	KM2+780	180	1	180										-
40	KM2+835	232	3	696	8	1856								-
41	KM2+900	180	1	180										-
42	KM2+960	180	3	540										-

No.	CHAINAGE	Day/section	SSP (each)	SSP (day)	AS (each)	AS (day)	DSP (each)	DSP (day)	INC (each)	INC (day)	EP (each)	EP (day)	OW (each)	OW (day)
43	KM3+020	180	1	180	-	-	-	-	-	-	-	-	-	-
44	KM3+080	180	3	540	-	-	-	-	-	-	-	-	-	-
45	KM3+140	180	1	180	-	-	-	-	-	-	-	-	-	-
46	KM3+170	232	3	696	8	1856	-	-	-	-	-	-	-	-
47	KM3+260	180	1	180	-	-	-	-	-	-	-	-	-	-
48	KM3+320	180	3	540	-	-	-	-	-	-	-	-	-	-
49	KM3+380	180	1	180	-	-	-	-	-	-	-	-	-	-
50	KM3+440	180	3	540	8	1440	-	-	-	-	-	-	-	180
51	KM3+500	180	1	180	-	-	-	-	-	-	-	-	-	-
52	KM3+587.85	232	3	696	8	1856	1	232	2	464	2	464	1	-
	SUB-TOTAL		54	10656	56	12576	2	464	4	928	4	928	1	180
	4/ TRA ON - MAIN BRIDGE (CAN THO)													
53	KM3+848.15	232	3	696	8	1856	-	-	-	-	-	-	-	-
54	KM3+920	180	1	180	-	-	-	-	-	-	-	-	-	-
55	KM3+960	180	3	540	-	-	-	-	-	-	-	-	-	-
56	KM4+020	180	1	180	-	-	-	-	-	-	-	-	-	-
57	KM4+080	180	3	540	8	1856	-	-	-	-	-	-	-	-
58	KM4+125	232	3	696	-	-	-	-	-	-	-	-	-	-
59	KM4+200	180	3	540	-	-	-	-	-	-	-	-	-	-
60	KM4+260	180	1	180	8	1856	-	-	-	-	-	-	-	-
61	KM4+320	232	3	696	-	-	-	-	-	-	-	-	-	-
62	KM4+380	180	5	900	-	-	-	-	-	-	-	-	-	-
63	KM4+440	180	4	720	8	1440	-	-	-	-	-	-	-	-
64	KM4+500	180	6	1080	-	-	-	-	-	-	-	-	-	-
65	KM4+560	180	4	720	8	1856	-	-	-	-	-	-	-	-
66	KM4+640	232	3	696	-	-	-	-	-	-	-	-	-	-

No.	CHAINAGE	Day/section	SSP (each)	SSP (day)	AS (each)	AS (day)	DSP (each)	DSP (day)	INC (each)	INC (day)	EP (each)	EP (day)	OW (each)	OW (day)
67	KM4+680	180	1	180	-	-	-	-	-	-	-	-	1	180
68	KM4+740	180	3	540	8	1440	-	-	-	-	-	-	-	-
69	KM4+800	180	1	180	-	-	-	-	-	-	-	-	-	-
70	KM4+860	180	3	540	-	-	-	-	-	-	-	-	-	-
71	KM4+910	232	3	696	8	1856	1	232	2	464	2	464	-	-
	SUB-TOTAL		54	10500	56	12160	1	232	2	464	2	464	1	180
	II/ INTERCHANGE 2-OVERROAD													
72	KM0+040	180	1	180	-	-	-	-	-	-	-	-	-	-
73	KM0+100	180	3	540	-	-	-	-	-	-	-	-	-	-
74	KM0+160	180	1	180	8	1440	-	-	-	-	-	-	-	-
75	KM0+220	232	3	696	8	1856	1	232	2	464	2	464	1	232
76	KM0+380	232	3	696	8	1856	-	-	-	-	-	-	-	-
77	KM0+440	180	1	180	8	1440	-	-	-	-	-	-	-	-
78	KM0+500	180	1	180	-	-	-	-	-	-	-	-	-	-
79	KM0+560	180	3	540	-	-	-	-	-	-	-	-	-	-
	SUB-TOTAL		16	3192	32	6592	1	232	2	464	2	464	1	232
	TOTAL		180	35832	272	58112	5	1160	10	2320	10	2320	5	1056

NOTES :

- SSP : SURFACE SETTLEMENT PLATE
- AS   : ALIGNMENT STAKES
- DSP : DEEP SETTLEMENT PLATE
- INC : INCLINOMETER
- EP   : ELECTRICAL PIEZOMETER
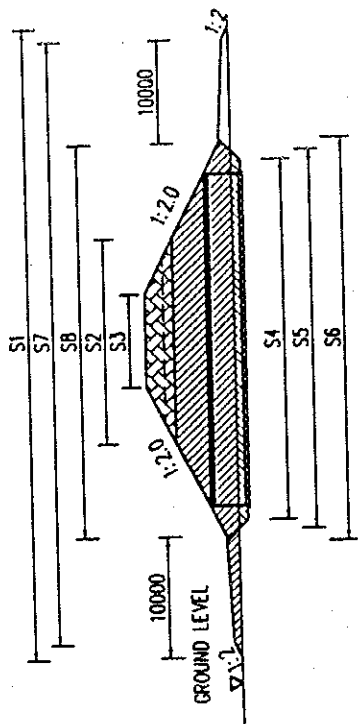
PVD QUANTITY OF PACKAGE 1 - VINH LONG SIDE

No	CHAINAGE	PVD LENGTH (m)	LEFT COUNTERWEIGHT BERM				EMBANKMENT				RIGHT COUNTERWEIGHT BERM				SUB-TOTAL LENGTH (m)
			SPACING (m)	AREA (m2)	UNIT (each)	TOTAL LENGTH (m)	SPACING (m)	AREA (m2)	UNIT (each)	TOTAL LENGTH (m)	SPACING (m)	AREA (m2)	UNIT (each)	TOTAL LENGTH (m)	
	I.MAIN WAY														
	1/ BEGINNING POINT-LARGE TRA VA														
1	Km0+120 - Km0+360	29	-	-	-	-	1.00	8594.35	9924	287793.12	-	-	-	-	287793.12
2	Km0+360-Km0+480	29	-	-	-	-	1.00	6284.11	7256	210431.69	-	-	-	-	210431.69
3	Km0+480-Km0+540	29	1.50	412.31	212	6136.33	1.00	3087.31	3565	103382.64	1.50	677.73	348	10086.52	119605.49
4	Km0+540-Km0+552	29	1.50	70.24	36	1045.37	1.00	970.59	1121	32501.48	1.50	57.15	29	850.55	34397.40
	SUB TOTAL														652228
	2/ LARGE TRA VA-SMALL TRA VA														
5	Km0+869-Km0+880	29	1.50	145.09	74	2158.45	1.00	561.44	648	18800.56	1.50	144.16	74	2145.51	23104.52
6	Km0+880-Km0+980	29	1.50	1268.11	651	18873.04	1.00	5007.13	5782	167670.34	1.50	1216.09	624	18098.83	20464220
7	Km0+980-Km1+10,4	29	1.50	181.62	93	2703.02	1.00	1407.72	1625	47139.36	1.50	164.12	84	2442.57	52284.94
8	Km1+10,4-Km1+40	29	-	-	-	-	1.00	1284.01	1483	42996.76	-	-	-	-	42996.76
9	Km1+40-Km1+80	29	-	-	-	-	1.00	1739.28	2008	58242.08	-	-	-	-	58242.08
10	Km1+80-Km1+180	29	-	-	-	-	1.00	3886.51	4488	130144.90	-	-	-	-	130144.90
11	Km1+480-Km1+740	29	-	-	-	-	1.00	9427.38	10886	315688.22	-	-	-	-	315688.22
12	Km1+740-Km1+784,5	29	-	-	-	-	1.00	1679.66	1940	56245.62	-	-	-	-	56245.62
13	Km1+784,5-Km1+800	29	1.50	30.78	16	458.09	1.00	605.34	699	20270.61	1.50	20.91	11	311.20	21039.90
14	Km1+800-Km1+866,2	29	1.50	599.48	308	8921.95	1.00	2848.85	3290	95397.49	1.50	589.06	302	8766.87	113086.30
	SUB TOTAL														1017475
	3/ SMALL TRA VA-TRA ON														
15	Km1+953,75-Km2+200	29	1.50	421.96	217	6279.95	1.00	2011.76	2323	67366.43	1.50	441.42	227	6569.57	80215.95
16	Km2+000-Km2+040	29	1.50	175.80	90	2616.40	1.00	1587.13	1833	53147.14	1.50	194.20	100	2890.24	58553.77

| No	CHAINAGE	PVD LENGTH (m)	LEFT COUNTERWEIGHT BERM				EMBANKMENT				RIGHT COUNTERWEIGHT BERM				SUB-TOTAL LENGTH (m)
			SPACING (m)	AREA (m2)	UNIT (each)	TOTAL LENGTH (m)	SPACING (m)	AREA (m2)	UNIT (each)	TOTAL LENGTH (m)	SPACING (m)	AREA (m2)	UNIT (each)	TOTAL LENGTH (m)	
17	Km2+40-Km2+100	29	-	-	-	-	1.00	2122.59	2451	7077.72	-	-	-	-	7077.72
18	Km2+480-Km2+520	29	-	-	-	-	1.00	1448.84	1673	4816.31	-	-	-	-	4816.31
19	Km2+520-Km2+620	29	-	-	-	-	1.00	4034.30	4658	135093.84	-	-	-	-	135093.84
20	Km2+780-Km2+900	29	-	-	-	-	1.00	5415.88	6254	181357.87	-	-	-	-	181357.87
21	Km3+480-Km3+520	38	1.50	169.68	87	3309.03	1.00	1768.29	2042	77590.13	1.50	125.14	64	2440.43	83339.59
22	Km3+520-Km3+587,8	38	1.50	649.46	333	12665.52	1.00	3005.16	3470	131862.28	1.50	649.46	333	12665.52	157193.31
	SUB TOTAL														815448
	4/ TRA ON - MAIN BRIDGE (CAN THO)														
23	Km3+848,15-Km3+900	38	1.50	616.78	317	12028.20	1.00	2970.19	3430	130327.84	1.50	605.12	311	11800.81	154156.86
24	Km9+300-Km3+943,55	38	1.50	200.19	103	3904.03	1.00	1748.66	2019	76728.79	1.50	262.86	135	5126.19	85759.01
25	Km3+943,550-Km3+960	38	-	-	-	-	1.00	526.79	608	23114.82	-	-	-	-	23114.82
26	Km4+200-Km4+320	38	-	-	-	-	1.00	4998.10	5771	219309.73	-	-	-	-	219309.73
27	Km4+320-Km4+620	38	-	-	-	-	1.00	32115.26	37084	1409173.30	-	-	-	-	1409173.30
28	Km4+620-Km4+668,996	38	1.50	188.10	97	3668.25	1.00	2035.87	2351	89331.17	1.50	129.49	66	2525.26	95524.68
29	Km4+668,996-Km4+860	38	1.50	2250.78	1155	43893.83	1.00	8500.42	9815	372986.70	1.50	2054.86	1055	40073.08	456953.61
30	Km4+860-Km4+910	38	1.50	527.33	271	10283.78	1.00	2457.04	2837	107811.53	1.50	504.37	259	9836.03	12793134
	SUB TOTAL														2577923
	II/ INTERCHANGE 2 - OVERROAD														
31	Km0+140-Km0+200	29.00	1.50	814.09	418	12115.94	1.00	1869.04	2158	62587.26	1.50	814.09	418	12215.94	86819.15
32	Km0+200-Km0+233,2	29.00	1.50	167.87	86	2498.38	1.00	518.38	599	17358.64	1.50	167.87	86	2498.38	22355.39
33	Km0+366,55-Km0+400	29.00	1.50	408.05	209	6072.93	1.00	1332.51	1539	44620.85	1.50	408.65	210	6081.86	56775.64
34	Km0+400-Km0+460	29.00	1.50	510.93	262	7604.07	1.00	1892.68	2185	63378.88	1.50	516.66	265	7689.35	78672.30
	SUB TOTAL														244622
	TOTAL														5301697

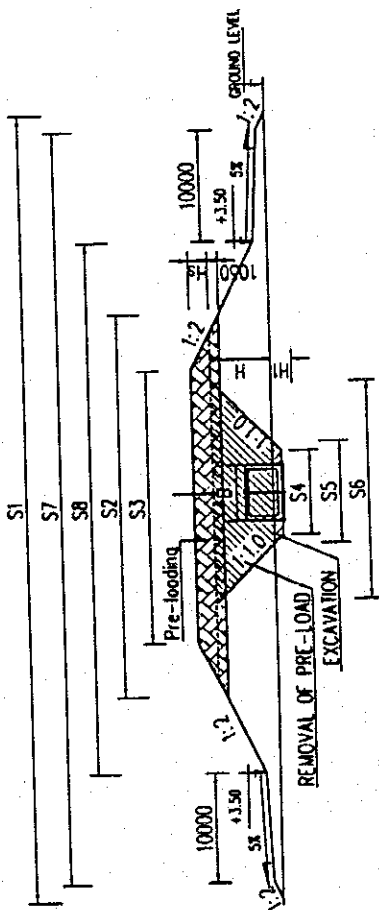3 - 4 - 2

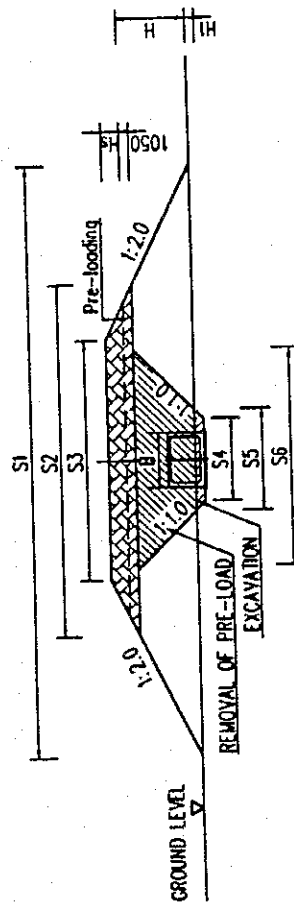# CROSS SECTION A-A
NOT TO SCALE

CROSS SECTION
NOT TO SCALE
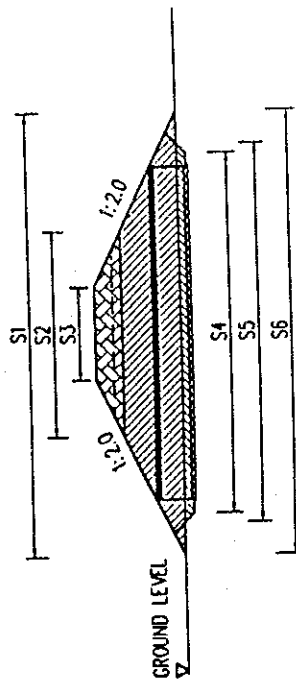
LONGITUDINAL SECTION B-B
NOT TO SCALE

LONGITUDINAL SECTION
NOT TO SCALE

CROSS SECTION A-A
NOT TO SCALE

LONGITUDINAL SECTION B-B
NOT TO SCALE

S1
S7
S8
S2
S3
S4
S5
S6

12000
+3.50
5%
1:2

Pre-loading
REMOVAL OF PRE-LOAD
EXCAVATION
GROUND LEVEL
1:2
10000
H
1H

1 - 2 - 40
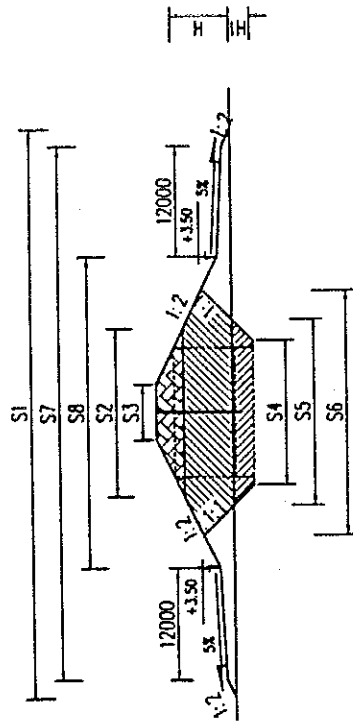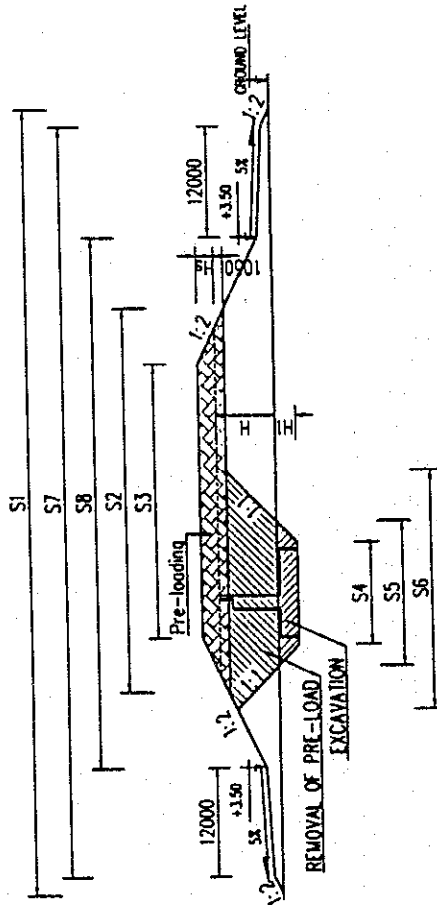
No.	ITEMS	B (m)	LENG	V2(m³)	V3(m³)	V4(m³)	V5(m³)	V6(m³)	REMARKS
1	Large Trava Bridge "A1"	7.5	:	26449.8	2309.4	4890.4	4187.8	612.5	
2	Large Trava Bridge "A2"	7.5	:	27039.8	2309.4	4890.4	4114.6	440.0	
3	Small Trava Bridge "A1"	7.5	:	18429.3	2309.4	3903.3	3364.6	812.2	
4	Small Trava Bridge "A2"	7.5	:	18588.3	2309.4	3903.3	3358.0	728.2	
5	Interchange 2 Flyover Bridge "A1"	7.5	:	23881.2	2309.4	3194.5	2522.2	443.2	
6	Interchange 2 Flyover Bridge "A2"	7.5	:	23774.3	2309.4	3118.9	2474.9	471.7	
7	Tra On Bridge "A1"	7.5	:	25746.5	2309.4	4890.4	3866.7	9.4	
8	Tra On Bridge "A2"	7.5	:	25407.9	2309.4	4890.4	4139.8	496.7	
9	Can Tho Bridge "A1"	7.0	:	27374.3	2275.8	4757.9	4077.1	810.3	
	TOTAL		;	216691	20751	38440	32106	4824	

$0m+0.70m = 36.70m$

NOTES:

- SCP D700mm - SMALL TRA VA-ABUTMENT "A1" $6m+0.70m = 15.26m$

$0 \times 1.039 = 1.247 m2/Nos.$

- SCP D700mm - SMALL TRA VA-ABUTMENT "A2" $0 \times 15.26 / 1.247 = 449 Nos.$

$0m/Nos.$

- So : Average area of settlement (m^2)

- v1: Quantity of embankment including sand blan $\times 17.00 = 7633m$

- v2: Quantity of final settlement (m^3)

- V1: Quantity of sand blanket (m^3)

- V2: Quantity of sand fill (m^3)

- V3: Quantity of Pre-loading (m^3)

- V4: Quantity of removing Pre-loading (m^3)

- V5: Quantity of back fill (m^3)

- V6: Quantity of mud excation (m^3)
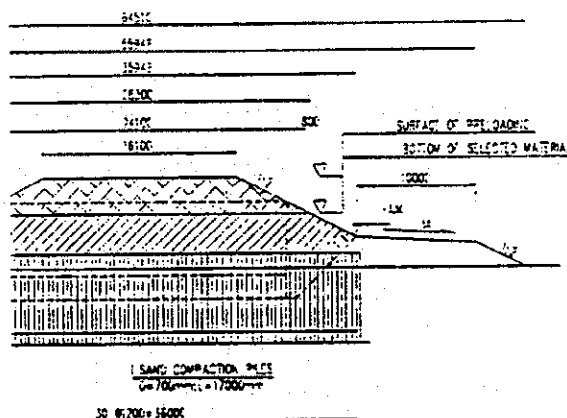
No.	CHAINAGE	TYPE	W1xH1(m)	V2(m³)	V3(m³)	V4(m³)	V5(m³)	V6(m³)	RMARKS
	Main Way								
1	Km0+51.8	SINGLE PIPE	D1.5m	1782.8	1295.4	862.2	746.0	134.0	
2	Km0+183.7	SINGLE BOX	3.0x3.2	3174.5	1725.4	1450.6	818.7	226.5	
3	Km0+369.5	SINGLE BOX	3.0x3.2	3744.7	1725.4	1956.1	1205.0	269.2	
4	Km1+63.2	SINGLE BOX	5.0x4.5	11956.8	2195.1	2423.7	1584.3	199.1	
5	Km1+300	DOUBLE BOX	2.5x1.5	640.1	771.8	423.3	76.7	165.6	
6	Km1+560	SINGLE BOX	3.0x3.5	3744.7	1725.4	1004.5	587.4	128.1	
7	Km2+150	DOUBLE BOX	2.5x2.0	1324.0	1499.5	590.1	164.7	165.6	
8	Km2+620	SINGLE BOX	5.0x3.8	4618.6	1849.2	1516.5	741.1	212.6	
9	Km2+835	DOUBLE BOX	2.5x2.0	3078.3	1855.1	1466.3	846.9	241.2	
10	Km3+170	DOUBLE BOX	2.5x1.5	765.3	771.8	471.5	118.6	168.7	
11	Km4+125	DOUBLE BOX	2.5x1.5	1362.9	1499.5	647.9	274.1	178.6	
12	Km4+318	DOUBLE BOX	5.0x4.5	4644.4	2167.3	2501.3	313.8	421.0	
13	Km4+640	SINGLE BOX	6.5x4.5	12755.8	2302.7	3734.8	2247.9	345.9	
	Inter. 2								
14	Ramp"A"	SINGLE BOX	2.5x1.5						
	Km0+300			665.8	849.7	105.8	36.8	44.3	
15	Ramp"B"	SINGLE BOX	2.5x1.5						
	Km0+220			665.8	849.7	105.8	36.8	44.3	
16	Ramp"C"	SINGLE BOX	2.5x1.5						
	Km0+240			665.8	849.7	105.8	36.8	44.3	
17	Ramp"D"	SINGLE BOX	2.5x1.5						
	Km0+300			665.8	849.7	105.8	36.8	44.3	
				56256	24782	19472	9872	3033	

NOTES:

- v1: Quantity of embank
- v2: Quantity of final se
- V1: Quantity of sand b
- V2: Quantity of sand fil
- V3: Quantity of Pre-loa
- V4: Quantity of removi
- V5: Quantity of back fil
- V6: Quantity of mud e

QUANTITY OF RELOCATION CANAL (EXVACATION)

No	CHAINAGE		LENGTH	WIDTH	EXISTING LEVEL	BOTTOM ELEVATION	QUANTITY
	FROM	TO	(m)	(m)	(m)	(m)	(m^3)
1	-0+098	0+355	476	10	0.6	-1.06	6590
2	1+392	1+560	217	6	0.7	-0.06	864
3	1+954	2+026	75	5	1	0.00	300
4	2+515	2+545	30	4	0.8	0.00	77
5	2+695	2+888	196	3.5	0.7	0.14	323
6	4+320		106	9	0.83	-1.06	1424
7	4+970	5+075	100	10	0.7	-0.30	900
8	5+035	5+120	115	10	0.9	-0.20	1126
TOTAL							11604

1.3. Pavement

QUANTITY OF PAVEMENT (Throughway+interchange+service area)

QUANTITY OF PAVEMENT

ITEM	ASC (m2)	TACK COAT (m2)	ABC (m2)	PRIME COAT (m2)	FA-BASE (m3)	CA-SUBBASE (m3)	AC-levelling (m3)	FA-levelling (m3)
THROUGHWAY	106,755	106,993	107,467	108,416	32,709	34,482	31	291
INTERCHANGE	35,129	35,319	35,141	35,519	9,852	10,286	125	78
SERVICE AREA	9,291	9,291	9,352	9,352	2,815	2,897		
TOTAL	151,175	151,602	151,960	153,287	45,376	47,665	156	369

TOTAL 152,116

TOTAL 45,745
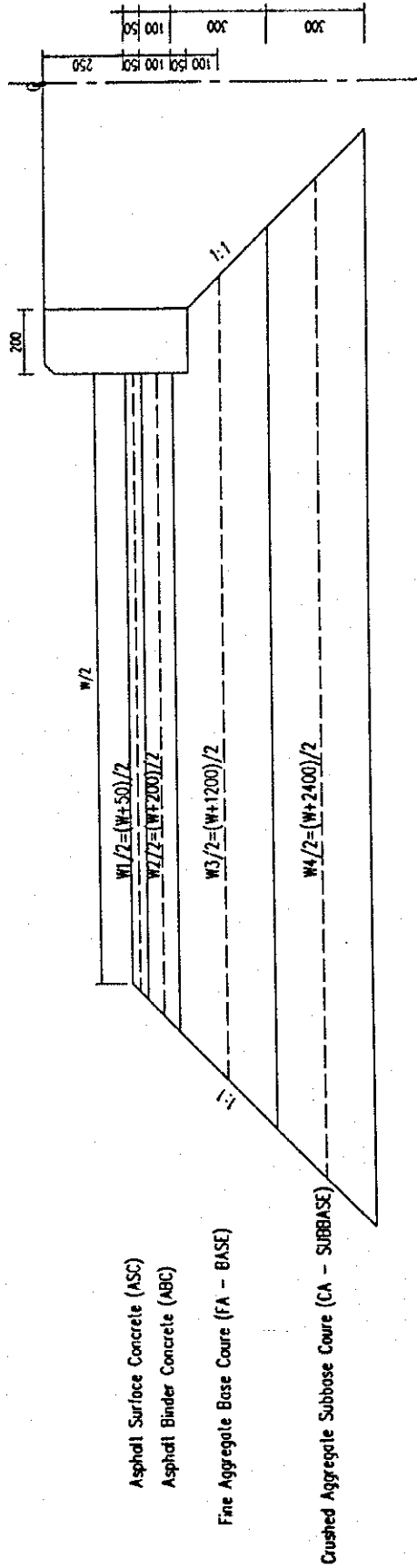
Note :

ASC   : asphalt surface concrete

ABC   : asphalt binder concrete

FA-base   : fine aggregate base coure

CA-subbase : crushed aggregate subbase coure

AC-leveling : asphalt concrete - levelling

FA-leveling : fine aggregate - levelling

PAVEMENT

W/2

W1/2=(W+50)/2
W2/2=(W+200)/2
W3/2=(W+1200)/2
W4/2=(W+2400)/2

1:1

200

Asphalt Surface Concrete (ASC)
Asphalt Binder Concrete (ABC)

Fine Aggregate Base Course (FA – BASE)

Crushed Aggregate Subbase Course (CA – SUBBASE)

NOTE

ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE INDICATED

1 - 3 - 2

QUANTITY OF PAVEMENT (throughway)

SECTION No.	BRIDGE NAME	CHAINAGE	SECTION LENGTH (m)		QUANTITY OF PAVEMENT							
			BRIDGE	PAVEMENT	ASC (m2)	TACK COAT (m2)	ABC (m2)	PRIME COAT (m2)	FA-BASE (m3)	CA-SUBBASE (m3)	AC-levelling (m3)	FA-levelling (m3)
1	BP	0 + -500.00		1,052	22903	22956	23061	23272	6344	6,723	31	291
		0 + 552.20										
	LARGE TRA VA	0 + 869.10	316.9									
2		1 + 866.25		997	21489	21538	21638	21838	6773	7,150		
	SMALL TRA VA	1 + 953.75	87.5									
3		3 + 587.80		1,634	38105	38187	38350	38677	11967	12,584		
	TRA ON	3 + 848.10	260.3									
4		4 + 910.00		1,062	24258	24311	24417	24630	7625	8,026		
	MAIN BRIDGE		-									
	TOTAL		664.7	4,745.3	106,755	106,993	107,467	108,416	32,709	34,482	31	291

Note :

ASC : asphalt surface concrete

ABC : asphalt binder concrete

FA-base : fine aggregate base coure

CA-subbase : crushed aggregate subbase coure

AC-leveling : asphalt concrete - levelling

FA-leveling : fine aggregate - levelling

QUANTITY OF PAVEMENT
BP - LARGE TRA VA (KM0-500 - KM0+552.20)

No	CHAINAGE	DISTANCE (M)	WIDTH OF PAVEMENT (M)	AREA(M2)		QUANTITY (M3)		LEVELLING	
				ASC	ABC	FA- BASE	CA-SUBBASE	AC (M2)	FA (M3)
1	Km0 -500		11.00						
2	Km0 -460	40.000	13.90	500.00	506.00			15.4	
3	Km0 -420	40.000	16.72	614.40	620.40	44.00	44.00	15.4	56
4	Km0 -380	40.000	19.50	726.40	732.40	106.00	106.00		145.6
5	Km0 -340	40.000	20.00	792.00	798.00	189.24	208.20		89.6
6	Km0 -300	40.000	20.00	802.00	808.00	192.24	211.20		
7	Km0 -260	40.000	20.00	802.00	808.00	192.24	211.20		
8	Km0 -220	40.000	20.00	802.00	808.00	192.24	211.20		
9	Km0 -180	40.000	20.56	813.20	819.20	195.60	214.56		
10	Km0 -140	40.000	22.60	865.20	871.20	211.20	230.16		
11	Km0 -100	40.000	30.64	1066.80	1072.80	271.68	290.64		
12	Km0 -60	40.000	29.11	1197.00	1203.00	372.20	387.30		
13	Km0 -40	20.000	29.11	583.20	586.20	181.51	189.06		
14	Km0 +0	40.000	21.50	1014.20	1020.20	317.36	332.46		
15	Km0 +40	40.000	21.50	862.00	868.00	271.70	286.80		
16	Km0 +80	40.000	21.50	862.00	868.00	271.70	286.80		
17	Km0 +120	40.000	21.50	862.00	868.00	271.70	286.80		
18	Km0 +160	40.000	21.50	862.00	868.00	271.70	286.80		
19	Km0 +200	40.000	21.50	862.00	868.00	271.70	286.80		
20	Km0 +240	40.000	21.84	868.80	874.80	273.74	288.84		
21	Km0 +280	40.000	23.10	900.80	906.80	283.34	298.44		
22	Km0 +320	40.000	23.10	926.00	932.00	290.90	306.00		
23	Km0 +360	40.000	23.10	926.00	932.00	290.90	306.00		
24	Km0 +400	40.000	23.10	926.00	932.00	290.90	306.00		
25	Km0 +440	40.000	23.10	926.00	932.00	290.90	306.00		
26	Km0 +480	40.000	23.10	926.00	932.00	290.90	306.00		
27	Km0 +520	40.000	22.38	911.60	917.60	286.58	301.68		
28	Km0 +540	20.000	21.50	439.80	442.80	138.49	146.04		
29	Km0 +552.2	12.250	21.50	263.99	265.83	83.21	87.83		
	TOTAL			22,903	23,061	6,344	6,723	31	291

NOTE :

ASC = (W+0.05)*D

ABC = (W+0.2)*D

FA-BASE = [(W+1.2)*0.3-(0.15+0.2)*0.05*2/2]*D

CA-SUBBASE = (W+2.4)*0.3*D

QUANTITY OF PAVEMENT

LARGE TRA VA - SMALL TRA VA (KM0+869.10 - KM1+866.25)

No	CHAINAGE	DISTANCE (M)	WIDTH OF PAVEMENT (M)	AREA(M2)		QUANTITY (M3)	
				ASC	ABC	FA- BASE	CA-SUBBASE
1	Km0 +869.10		21.50				
2	Km0 +880	10.90	21.50	234.90	236.53	74.04	78.15
3	Km0 +900	20.00	21.50	431.00	434.00	135.85	143.40
4	Km0 +920	20.00	21.50	431.00	434.00	135.85	143.40
5	Km0 +940	20.00	21.50	431.00	434.00	135.85	143.40
6	Km0 +960	20.00	21.50	431.00	434.00	135.85	143.40
7	Km0 +980	20.00	21.50	431.00	434.00	135.85	143.40
8	Km1 +000	20.00	21.50	431.00	434.00	135.85	143.40
9	Km1 +20	20.00	21.50	431.00	434.00	135.85	143.40
10	Km1 +60	40.00	21.50	862.00	868.00	271.70	286.80
11	Km1 +80	20.00	21.50	431.00	434.00	135.85	143.40
12	Km1 +120	40.00	21.50	862.00	868.00	271.70	286.80
13	Km1 +160	40.00	21.50	862.00	868.00	271.70	286.80
14	Km1 +220	60.00	21.50	1 293.00	1 302.00	407.55	430.20
15	Km1 +260	40.00	21.50	862.00	868.00	271.70	286.80
16	Km1 +300	40.00	21.50	862.00	868.00	271.70	286.80
17	Km1 +340	40.00	21.50	862.00	868.00	271.70	286.80
18	Km1 +380	40.00	21.50	862.00	868.00	271.70	286.80
19	Km1 +420	40.00	21.50	862.00	868.00	271.70	286.80
20	Km1 +460	40.00	21.50	862.00	868.00	271.70	286.80
21	Km1 +500	40.00	21.50	862.00	868.00	271.70	286.80
22	Km1 +540	40.00	21.50	862.00	868.00	271.70	286.80
23	Km1 +580	40.00	21.50	862.00	868.00	271.70	286.80
24	Km1 +620	40.00	21.50	862.00	868.00	271.70	286.80
25	Km1 +660	40.00	21.50	862.00	868.00	271.70	286.80
26	Km1 +700	40.00	21.50	862.00	868.00	271.70	286.80
27	Km1 +740	40.00	21.50	862.00	868.00	271.70	286.80
28	Km1 +780	40.00	21.50	862.00	868.00	271.70	286.80
29	Km1 +820	40.00	21.50	862.00	868.00	271.70	286.80
30	Km1 +840	20.00	21.50	431.00	434.00	135.85	143.40
31	Km1 +860	20.00	21.50	431.00	434.00	135.85	143.40
32	Km1 +866.25	6.25	21.50	134.69	135.63	42.45	44.81
	TOTAL			21 488.58	21 638.16	6 773.14	7 149.57

NOTE :

ASC = (W+0.05)*

ABC = (W+0.2)*D

FA-BASE = [(W+1.2)*0.3-(0.15+0.2)*0.05*2/2]*D

CA-SUBBASE = (W+2.4)*0.3*D

QUANTITY OF PAVEMENT

SMALL TRA VA - TRA ON (KM1+953.75 - KM3+587.80)

No	CHAINAGE	DISTANCE (M)	WIDTH OF PAVEMENT (M)	AREA(M2)		QUANTITY (M3)	
				ASC	ABC	FA- BASE	CA-SUBBASE
1	Km1 +953.75		21.50				
2	Km1 +960	6.250	21.50	134.69	135.63	42.45	44.81
3	Km1 +980	20.000	21.50	431.00	434.00	135.85	143.40
5	Km2 +00	20.000	21.50	431.00	434.00	135.85	143.40
6	Km2 +40	40.000	21.50	862.00	868.00	271.70	286.80
7	Km2 +80	40.000	21.50	862.00	868.00	271.70	286.80
8	Km2 +120	40.000	21.50	862.00	868.00	271.70	286.80
9	Km2 +160	40.000	21.50	862.00	868.00	271.70	286.80
10	Km2 +200	40.000	21.50	862.00	868.00	271.70	286.80
11	Km2 +240	40.000	21.50	862.00	868.00	271.70	286.80
12	Km2 +280	40.000	21.50	862.00	868.00	271.70	286.80
13	Km2 +320	40.000	21.50	862.00	868.00	271.70	286.80
14	Km2 +360	40.000	21.50	862.00	868.00	271.70	286.80
15	Km2 +400	40.000	21.50	862.00	868.00	271.70	286.80
16	Km2 +460	60.000	21.50	1293.00	1302.00	407.55	430.20
17	Km2 +500	40.000	21.50	862.00	868.00	271.70	286.80
18	Km2 +540	40.000	21.50	862.00	868.00	271.70	286.80
19	Km2 +580	40.000	21.50	862.00	868.00	271.70	286.80
20	Km2 +620	40.000	21.50	862.00	868.00	271.70	286.80
21	Km2 +660	40.000	21.50	862.00	868.00	271.70	286.80
22	Km2 +700	40.000	21.50	862.00	868.00	271.70	286.80
23	Km2 +740	40.000	21.50	862.00	868.00	271.70	286.80
24	Km2 +780	40.000	26.47	961.40	967.40	301.52	316.62
25	Km2 +820	40.000	29.50	1121.40	1127.40	349.52	364.62
26	Km2 +860	40.000	31.00	1212.00	1218.00	376.70	391.80
27	Km2 +900	40.000	28.20	1186.00	1192.00	368.90	384.00
28	Km2 +940	40.000	21.50	996.00	1002.00	311.90	327.00
29	Km2 +980	40.000	21.50	862.00	868.00	271.70	286.80
31	Km3 +00	20.000	21.50	431.00	434.00	135.85	143.40
32	Km3 +20	20.000	21.50	431.00	434.00	135.85	143.40
33	Km3 +60	40.000	21.50	862.00	868.00	271.70	286.80
34	Km3 +100	40.000	21.50	862.00	868.00	271.70	286.80
35	Km3 +140	40.000	21.50	862.00	868.00	271.70	286.80
36	Km3 +180	40.000	21.50	862.00	868.00	271.70	286.80
37	Km3 +220	40.000	21.50	862.00	868.00	271.70	286.80
38	Km3 +260	40.000	21.50	862.00	868.00	271.70	286.80
39	Km3 +300	40.000	21.50	862.00	868.00	271.70	286.80
40	Km3 +320	20.000	41.80	634.00	637.00	196.75	204.30

QUANTITY OF PAVEMENT

SMALL TRA VA - TRA ON (KM1+953.75 - KM3+587.80)

No	CHAINAGE	DISTANCE (M)	WIDTH OF PAVEMENT (M)	AREA(M2)		QUANTITY (M3)	
				ASC	ABC	FA- BASE	CA-SUBBASE
41	Km3 +360	40.000	35.14	1540.80	1546.80	475.34	490.44
42	Km3 +400	40.000	28.50	1274.80	1280.80	395.54	410.64
43	Km3 +440	40.000	25.25	1077.00	1083.00	336.20	351.30
44	Km3 +480	40.000	25.00	1007.00	1013.00	315.20	330.30
45	Km3 +520	40.000	21.50	932.00	938.00	292.70	307.80
46	Km3 +540	20.000	21.50	431.00	434.00	135.85	143.40
47	Km3 +560	20.000	21.50	431.00	434.00	135.85	143.40
48	Km3 +587.8	27.800	21.50	599.09	603.26	188.83	199.33
TOTAL				38105.18	38350.29	11966.70	12583.56

NOTE :

ASC = (W+0.05)*D

ABC = (W+0.2)*D

FA-BASE = [(W+1.2)*0.3-(0.15+0.2)*0.05*2/2]*D

CA-SUBBASE = (W+2.4)*0.3*D

QUANTITY OF PAVEMENT

TRA ON - MAIN BRIDGE (KM3+848.10 - KM4+910.00)

No	CHAINAGE	DISTANCE (M)	WIDTH OF PAVEMENT (M)	AREA(M2)		QUANTITY (M3)	
				ASC	ABC	FA- BASE	CA-SUBBASE
1	Km3 +848.10		21.50				
2	Km3 +860	11.90	21.50	256.45	258.23	80.83	85.32
3	Km3 +880	20.00	21.50	431.00	434.00	135.85	143.40
4	Km3 +900	20.00	21.50	431.00	434.00	135.85	143.40
5	Km3 +960	60.00	21.50	1 293.00	1 302.00	407.55	430.20
6	Km3 +980	20.00	21.50	431.00	434.00	135.85	143.40
7	Km4 +020	40.00	21.50	862.00	868.00	271.70	286.80
8	Km4 +060	40.00	21.50	862.00	868.00	271.70	286.80
9	Km4 +100	40.00	21.50	862.00	868.00	271.70	286.80
10	Km4 +140	40.00	21.50	862.00	868.00	271.70	286.80
11	Km4 +160	20.00	21.50	431.00	434.00	135.85	143.40
12	Km4 +200	40.00	22.15	875.00	881.00	275.60	290.70
13	Km4 +240	40.00	24.72	939.40	945.40	294.92	310.02
14	Km4 +300	60.00	29.18	1 620.00	1 629.00	505.65	528.30
15	Km4 +340	40.00	21.50	1 015.60	1 021.60	317.78	332.88
16	Km4 +360	20.00	21.50	431.00	434.00	135.85	143.40
17	Km4 +400	40.00	21.50	862.00	868.00	271.70	286.80
18	Km4 +440	40.00	21.50	862.00	868.00	271.70	286.80
19	Km4 +480	40.00	21.50	862.00	868.00	271.70	286.80
20	Km4 +520	40.00	21.50	862.00	868.00	271.70	286.80
21	Km4 +560	40.00	21.50	862.00	868.00	271.70	286.80
22	Km4 +600	40.00	21.50	862.00	868.00	271.70	286.80
23	Km4 +640	40.00	28.53	1 002.60	1 008.60	313.88	328.98
24	Km4 +680	40.00	25.37	1 080.00	1 086.00	337.10	352.20
25	Km4 +720	40.00	24.75	1 004.40	1 010.40	314.42	329.52
26	Km4 +760	40.00	24.75	992.00	998.00	310.70	325.80
27	Km4 +800	40.00	23.93	975.60	981.60	305.78	320.88
28	Km4 +840	40.00	21.75	915.60	921.60	287.78	302.88
29	Km4 +880	40.00	21.50	867.00	873.00	273.20	288.30
30	Km4 +900	20.00	21.50	431.00	434.00	135.85	143.40
31	Km4 +910	10.00	21.50	215.50	217.00	67.93	71.70
SUM	TOTAL			24 258.15	24 417.43	7 625.22	8 026.08

NOTE :

ASC = (W+0.05)*D

ABC = (W+0.2)*D

FA-BASE = [(W+1.2)*0.3-(0.15+0.2)*0.05*2/2]*D

CA-SUBBASE = (W+2.4)*0.3*D

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PAVEMENT

W1=W+0.05
W2=W+0.20
W3=W+0.60
W4=W+1.20

1:1

1:1

5
10
30
30

Asphalt Surface Concrete (ASC)
Asphalt Binder Concrete (ABC)

Fine Aggregate Base Coure (FA – BASE)

Crushed Aggregate Subbase Coure (CA – SUBBASE)

NOTE

ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE INDICATED

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Quantity of Pavement (Ramp) IC1 - IC2 - P1

QUANTITY OF PAVEMENT

SECTION No.	RAMP NAME	CHAINAGE	SECTION LENGTH (m)		ASC (m2)	TACK COAT (m2)	ABC (m2)	PRIME COAT (m2)	FA-BASE (m3)	CA-BASE (m3)	LEVELING	
			BRIDGE	PAVEMENT							AC	FA
IC - 1	"A" RAMP	0 + 233.34 / 1 + 125.47		892.13	5,570.03	5,759.21	5,682.03	6,060.38	1,794.21	1,928.61	0.00	0.00
	"B" RAMP	0 + 81.37 / 0 + 750.40		669.03	9,082.81	9,082.81	8,701.02	8,701.02	1,605.75	1,567.19	124.94	78.18
	"A" RAMP	0 + 0.00 / 0 + 461.14		461.14	2,989.90	2,989.90	3,053.07	3,053.07	966.46	1,042.26	0.00	0.00
IC - 2	"B" RAMP	0 + 63.89 / 0 + 428.42		364.52	4,798.66	4,798.66	4,849.08	4,849.08	1,495.06	1,555.56	0.00	0.00
	"C" RAMP	0 + 75.41 / 0 + 426.34		350.93	2,465.87	2,465.87	2,514.56	2,514.56	793.32	851.74	0.00	0.00
	"D" RAMP	0 + 0.00 / 0 + 445.83		445.83	5,167.86	5,167.86	5,228.73	5,228.73	1,617.32	1,690.37	0.00	0.00
	NH No.54	0 + 0.00 / 0 + 600.00	132.70	600.00	5,054.27	5,054.27	5,112.36	5,112.36	1,580.18	1,649.90	0.00	0.00
TOTAL			132.70	3,783.58	35,129.40	35,318.57	35,140.85	35,519.21	9,852.30	10,285.63	124.94	78.18

INTERCHANGE 1 - " A " RAMP
QUANTITY OF PAVEMENT

No	Chainage	Distance (D) (m)	Width of pavement surface (W) (m)	Quantity			
				ASC (m²)	ABC (m²)	FA-BASE (m³)	CA-SUBBASE (m³)
1	Km0+ 233.336		6.00				
2	Km0+ 267.440	34.10	6.00	206.33	211.44	67.53	73.66
3	Km0+ 304.171	36.73	6.00	222.22	227.73	72.73	79.34
4	Km0+ 342.740	38.57	6.00	233.34	239.13	76.37	83.31
5	Km0+ 380.000	37.26	6.00	225.42	231.01	73.77	80.48
6	Km0+ 418.000	38.00	6.00	229.90	235.60	75.24	82.08
7	Km0+ 458.270	40.27	6.00	243.63	249.67	79.73	86.98
8	Km0+ 498.000	39.73	6.00	240.37	246.33	78.67	85.82
9	Km0+ 498.000	40.21	6.00	243.27	249.30	79.62	86.85
10	Km0+ 538.210	51.53	6.00	311.76	319.49	102.03	111.31
11	Km0+ 589.741	54.46	6.00	329.50	337.66	107.83	117.64
12	Km0+ 644.203	43.72	10.50	362.90	369.46	116.08	123.95
13	Km0+ 687.926	52.07	10.50	549.38	557.19	173.41	182.78
14	Km0+ 740.000	49.79	10.50	525.28	532.75	165.80	174.76
15	Km0+ 789.790	53.21	10.50	561.37	569.35	177.19	186.77
16	Km0+ 843.000	17.00	10.50	179.35	181.90	56.61	59.67
17	Km0+ 860.000	20.00	10.50	211.00	214.00	66.60	70.20
18	Km0+ 880.000	40.00	6.00	332.00	338.00	106.20	113.40
19	Km0+ 920.000	40.00	6.00	242.00	248.00	79.20	86.40
20	Km0+ 960.000	20.00	6.00	121.00	124.00	39.60	43.20
TOTAL	Km0+ 980.000			5570.03	5682.03	1794.21	1928.61

NOTE:

ASC = (W + 0.05) * D
ABC = (W + 0.20) * D
FA-BASE = (W + 0.60) * 0.30 * D
CA-SUBBASE = (W + 1.2) * 0.30 *D

INTERCHANGE 1 - " B " RAMP
QUANTITY OF PAVEMENT

No	Chainage	Distance (D) (m)	Width of pavement surface (W) (m)	Area ASC (m²)	Area ABC (m²)	Area FA-BASE (m²)	Area CA-SUBBASE (m²)	Area Leveling AC (m²)	Area Leveling CRUSHE (m²)	Qty ASC (m³)	Qty ABC (m³)	Qty FA-BASE (m³)	Qty CA-SUBBASE (m³)	Qty Leveling AC (m³)	Qty Leveling FA (m³)
1	Km0+ 81.373		6.00	0.30	0.62	1.98	2.15			231.76	239.49	76.48	83.05	0.00	0.00
2	Km0+ 120.000	38.627	6.00	0.30	0.62	1.98	2.15			240.00	248.00	79.20	86.00	0.00	0.00
3	Km0+ 160.000	40.000	6.00	0.30	0.62	1.98	2.15								
4	Sub-Intersection	77.820	8.00						3.61	1329.93	1329.93	399.02	399.15		
5	Km0+ 240.000	40.000	9.50	0.53	1.07	0.54	0.63		2.09	424.00	428.00	21.60	25.20	0.00	27.08
6	Km0+ 280.000	40.000	9.50	0.53	1.07	0.54	0.63			424.00	624.00	21.60	25.20	8.00	9.93
7	Km0+ 320.000	40.000	9.50	0.53	2.05	0.54	0.63	0.40		424.00	624.00	21.60	25.20	10.60	0.00
8	Km0+ 360.000	40.000	9.50	0.53	1.07	0.54	0.63	0.13		424.00	376.00	21.60	25.20	5.40	0.00
9	Km0+ 400.000	40.000	9.50	0.53	0.81	0.54	0.63	0.14		424.00	286.00	21.60	25.20	5.60	0.00
10	Km0+ 440.000	40.000	9.50	0.53	0.62	0.54	0.63	0.14		424.00	290.00	21.60	25.20	5.80	0.00
11	Km0+ 480.000	40.000	9.50	0.53	0.83	0.54	0.63	0.15		424.00	380.00	21.60	25.20	15.80	0.00
12	Km0+ 520.000	40.000	9.50	0.53	1.07	0.54	0.63	0.64		424.00	428.00	17.60	25.20	12.80	0.00
13	Km0+ 560.000	40.000	9.50	0.53	1.07	0.54	0.63		1.52	424.00	428.00	17.60	25.20	0.00	7.22
14	Km0+ 600.000	40.000	9.50	0.53	1.07	0.54	0.63		0.89	424.00	428.00	21.60	25.20	8.40	11.45
15	Km0- 640.000	40.000	50.58	2.53	4.47	14.49	13.55	0.42		1224.00	1108.00	300.60	283.60	28.20	22.51
16	Km0+ 680.000	40.000	14.58	0.73	0.78	4.16	2.63	0.99		1304.00	1050.00	373.00	323.60	21.60	0.00
17	Km0+ 720.000	40.000	12.83	0.64	1.40	2.14	2.23	0.09		548.00	436.00	126.00	97.20	2.74	0.00
18	Km0+ 750.400	30.400	12.00	0.64	1.40	2.14	2.23	0.09		389.12	425.60	65.06	67.79		0.00
TOTAL										9082.81	8701.02	1605.75	1567.19	124.94	78.18

INTERCHANGE 2 - "A" RAMP
QUANTITY OF PAVEMENT

No	Chainage	Distance (D) (m)	Width of pavement surface (W) (m)	Quantity			
				ASC (m²)	ABC (m²)	FA-BASE (m³)	CA-SUBBASE (m³)
2	Km0+ 40.000		12.60				
3	Km0+ 80.000	40.000	11.94	492.80	498.80	154.44	161.64
4	Km0+ 120.000	40.000	6.69	374.60	380.60	118.98	126.18
5	Km0+ 160.000	40.000	6.00	255.80	261.80	83.34	90.54
6	Km0+ 200.000	40.000	6.00	242.00	248.00	79.20	86.40
7	Km0+ 240.000	40.000	6.00	242.00	248.00	79.20	86.40
8	Km0+ 280.000	40.000	6.00	242.00	248.00	79.20	86.40
9	Km0+ 320.000	40.000	6.00	242.00	248.00	79.20	86.40
10	Km0+ 360.000	40.000	6.80	258.00	264.00	84.00	91.20
11	Km0+ 400.000	40.000	6.32	264.40	270.40	85.92	93.12
12	Km0+ 440.000	40.000	6.00	248.40	254.40	81.12	88.32
13	Km0+ 461.141	21.141	6.00	127.90	131.07	41.86	45.66
TOTAL				2989.90	3053.07	966.46	1042.26

NOTE:

ASC = (W + 0.05) * D

ABC = (W + 0.20) * D

FA-BASE = (W + 0.60) * 0.30 * D

CA-SUBBASE = (W + 1.2) * 0.30 *D

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INTERCHANGE 2 - "B" RAMP
QUANTITY OF PAVEMENT

No	Chainage	Distance (D) (m)	Width of pavement surface (W) (m)	Quantity			
				ASC (m²)	ABC (m²)	FA-BASE (m³)	CA-SUBBASE (m³)
1	Km0+ 63.894		6.00				
2	Km0+ 80.000	16.106	6.41	100.74	103.16	32.88	35.78
3	Km0+ 120.000	40.000	6.80	266.20	272.20	86.46	93.66
4	Km0+ 160.000	40.000	6.64	270.80	276.80	87.84	95.04
5	Km0+ 200.000	40.000	6.00	254.80	260.80	83.04	90.24
6	Km0+ 240.000	40.000	6.00	242.00	248.00	79.20	86.40
7	Km0+ 280.000	40.000	6.07	243.40	249.40	79.62	86.82
8	Km0+ 320.000	40.000	8.02	283.80	289.80	91.74	98.94
9	Km0+ 360.000	40.000	10.73	377.00	383.00	119.70	126.90
10	Km0+ 400.000	40.000	12.00	456.60	462.60	143.58	150.78
11	Intersection			2303.32	2303.32	691.00	691.00
TOTAL				4798.66	4849.08	1495.06	1555.56

NOTE:

ASC = (W + 0.05) * D

ABC = (W + 0.20) * D

FA-BASE = (W + 0.60) * 0.30 * D

CA-SUBBASE = (W + 1.2) * 0.30 *D

INTERCHANGE 2 - "C" RAMP
QUANTITY OF PAVEMENT

No	Chainage	Distance (D) (m)	Width of pavement surface (W) (m)	Quantity			
				ASC (m^2)	ABC (m^2)	FA-BASE (m^3)	CA-SUBBASE (m^3)
1	Km0+ 75.410		6.00				
2	Km0+ 80.000	4.590	6.13	28.07	28.76	9.18	10.00
3	Km0+ 120.000	40.000	6.80	260.60	266.60	84.78	91.98
4	Km0+ 160.000	40.000	6.80	274.00	280.00	88.80	96.00
5	Km0+ 200.000	40.000	6.40	266.00	272.00	86.40	93.60
6	Km0+ 240.000	40.000	6.00	250.00	256.00	81.60	88.80
7	Km0+ 280.000	40.000	6.17	245.40	251.40	80.22	87.42
8	Km0+ 320.000	40.000	8.23	290.00	296.00	93.60	100.80
9	Km0+ 360.000	40.000	11.08	388.20	394.20	123.06	130.26
10	Km0+ 400.000	40.000	12.00	463.60	469.60	145.68	152.88
TOTAL				2465.87	2514.56	793.32	851.74

NOTE:

ASC = (W + 0.05) * D

ABC = (W + 0.20) * D

FA-BASE = (W + 0.60) * 0.30 * D

CA-SUBBASE = (W + 1.2) * 0.30 *D

INTERCHANGE 2 - "D" RAMP
QUANTITY OF PAVEMENT

No	Chainage	Distance (D) (m)	Width of pavement surface (W) (m)	Quantity			
				ASC (m²)	ABC (m²)	FA-BASE (m³)	CA-SUBBASE (m³)
1	Km0+ 40.000		12.40				
2	Km0+ 80.000	40.000	11.42	478.40	484.40	150.12	157.32
3	Km0+ 120.000	40.000	6.69	364.20	370.20	115.86	123.06
4	Km0+ 160.000	40.000	6.00	255.80	261.80	83.34	90.54
5	Km0+ 200.000	40.000	6.00	242.00	248.00	79.20	86.40
6	Km0+ 240.000	40.000	6.00	242.00	248.00	79.20	86.40
7	Km0+ 280.000	40.000	6.00	242.00	248.00	79.20	86.40
8	Km0+ 320.000	40.000	6.18	245.60	251.60	80.28	87.48
9	Km0+ 360.000	40.000	6.80	261.60	267.60	85.08	92.28
10	Km0+ 400.000	40.000	6.40	266.00	272.00	86.40	93.60
11	Km0+ 445.830	45.830	6.00	286.44	293.31	93.49	101.74
12	Intersection			2283.82	2283.82	685.15	685.15
	TOTAL			5167.86	5228.73	1617.32	1690.37

NOTE:
  ASC = (W + 0.05) * D
  ABC = (W + 0.20) * D
  FA-BASE = (W + 0.60) * 0.30 * D
  CA-SUBBASE = (W + 1.2) * 0.30 * D

INTERCHANGE 2 - NATIONAL HIGHWAY No54
QUANTITY OF PAVEMENT

No	Chainage	Distance (D) (m)	Width of pavement surface (W) (m)	Quantity			
				ASC (m²)	ABC (m²)	FA-BASE (m³)	CA-SUBBASE (m³)
1	Km0+ 40.000		13.00				
2	Km0+ 80.000	40.000	13.00	522.00	528.00	163.20	170.40
3	Km0+ 120.000	40.000	13.00	522.00	528.00	163.20	170.40
4	Km0+ 160.000	40.000	13.00	522.00	528.00	163.20	170.40
5	Km0+ 200.000	40.000	13.00	522.00	528.00	163.20	170.40
6	Km0+ 233.650	33.650	13.00	439.13	444.18	137.29	143.35
	Fly-Over Bridge	132.700					
7	Km0+ 366.350		13.00				
8	Km0+ 400.000	33.650	13.00	439.13	444.18	137.29	143.35
9	Km0+ 440.000	40.000	13.00	522.00	528.00	163.20	170.40
10	Km0+ 480.000	40.000	13.00	522.00	528.00	163.20	170.40
11	Km0+ 520.000	40.000	13.00	522.00	528.00	163.20	170.40
12	Km0+ 560.000	40.000	13.00	522.00	528.00	163.20	170.40
TOTAL				5054.27	5112.36	1580.18	1649.90

NOTE:

ASC = (W + 0.05) * D

ABC = (W + 0.20) * D

FA-BASE = (W + 0.60) * 0.30 * D

CA-SUBBASE = (W + 1.2) * 0.30 * D

Quantity of Pavement (Service Area)

ITEM	QUANTITY OF PAVEMENT					
	ASC (m2)	TACK COAT (m2)	ABC (m2)	PRIME COAT (m2)	FA-BASE (m3)	CA-SUBBASE (m3)
VINH LONG SERVICE AREA	9 291	9 291	9 352	9 352	2 815	2 897

QUANTITY OF SERVICE ROAD

No	CHAINAGE		LOCATION	LENGTH (m)	WIDTH (m)	GROUND ELEVATION (m)	DESIGN ELEVATION (m)		QUANTITY (m³)	
	FROM	TO					FROM	TO	GRAVEL	SANDFILL
1	0+377.00	0+668.00	LEFT+RIGHT	430.00	2.50 / 3.00	1.00	1.74	1.74	161.3	1190.1
2	0+849.00	0+981.79	LEFT+RIGHT	330.00	2.50 / 3.00	0.43	1.74	1.74	123.8	1863.2
3	0+981.79	1+040.00	LEFT+RIGHT	125.00	2.50 / 3.00	0.52	1.74	5.65	46.9	2450.7
4	1+040.00	1+129.00	LEFT	88.00	2.50 / 3.00	0.58	1.74	1.74	33.0	424.7
5	1+1750	1+818.27	LEFT+RIGHT	139.00	2.50 / 3.00	0.82	1.74	3.95	52.1	1414.4
6	1+818.27	1+887.00	LEFT+RIGHT	191.00	2.50 / 3.00	0.76	1.74	1.74	71.6	745.0
7	1+936.00	2+001.67	LEFT+RIGHT	187.00	2.50 / 3.00	0.93	4.98	1.74	70.1	2467.4
8	2+001.67	2+065.00	LEFT+RIGHT	136.00	2.50 / 3.00	0.87	1.74	3.72	51.0	1229.4
9	3+472.00	3+516.90	LEFT+RIGHT	82.00	2.50 / 3.00	0.93	1.74	4.47	30.8	923.0
10	3+516.90	3+678.00	LEFT+RIGHT	338.00	2.50 / 3.00	0.87	1.74	1.74	126.8	1138.0
11	3+761.00	3+902.00	LEFT+RIGHT	285.00	2.50 / 3.00	1.22	1.74	1.74	106.9	521.7
12	3+902.00	3+958.00	LEFT+RIGHT	120.00	2.50 / 3.00	1.22	1.74	4.25	45.0	1017.1
TOTAL				2451.00					919.1	15384.6