



REPUBLIC OF KENYA

A ROAD NETWORK DEVELOPMENT MASTER PLAN STUDY

FINAL REPORT

**VOLUME II ANNEX II:
TECHNICAL ASSESSMENT OF THE EXISTING ROAD NETWORK**


MAY 1995

**JAPAN INTERNATIONAL
COOPERATION AGENCY**

**MINISTRY OF PUBLIC
WORKS AND HOUSING**

**PACIFIC CONSULTANTS INTERNATIONAL (PCI)
CONSTRUCTION PROJECT CONSULTANTS (CPC)**

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The following foreign exchange rate is applied in the study:
US\$1.00=60.15Ksh (as of November 1994)

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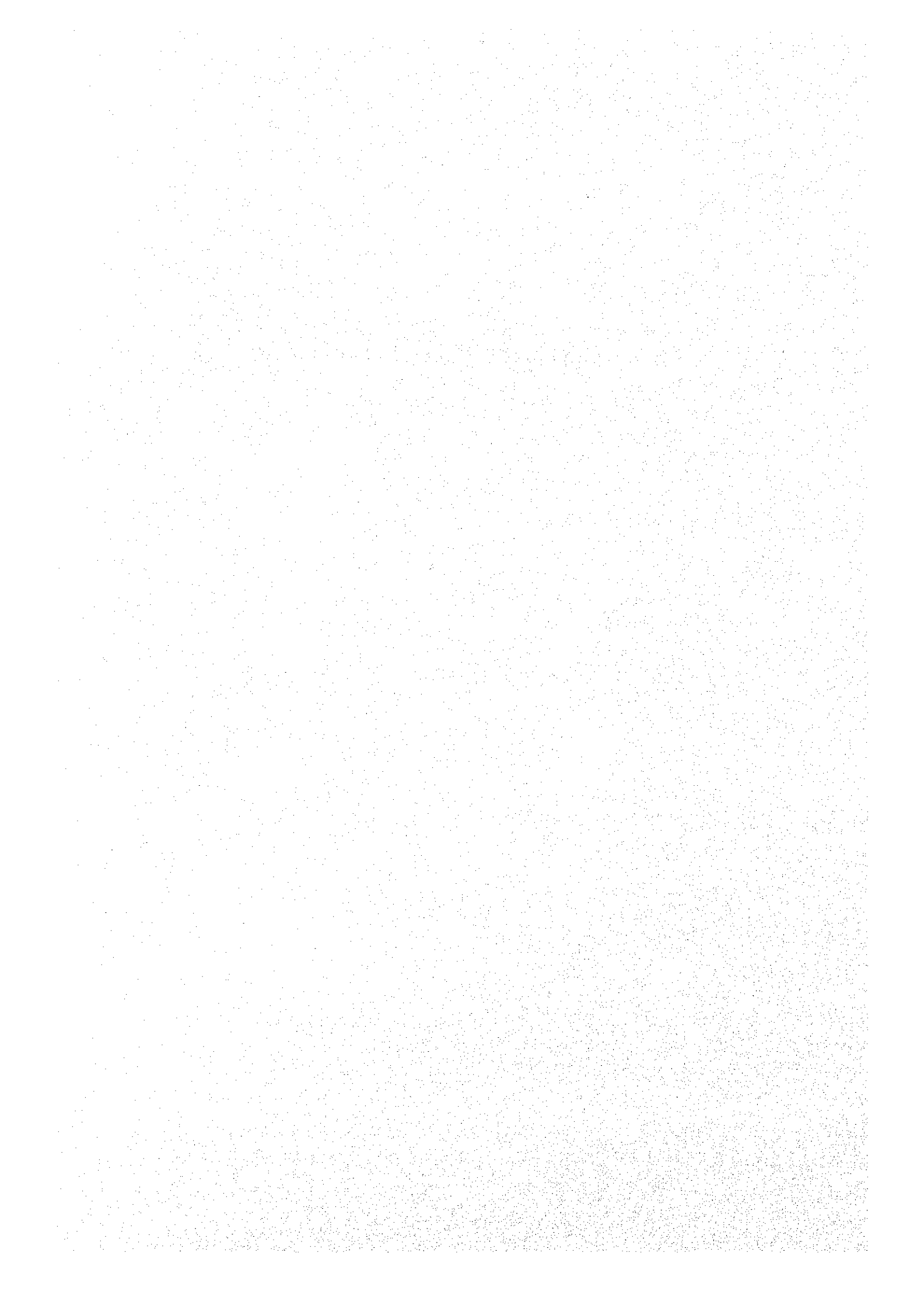
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I. EXISTING ROAD CONDITIONS



DESCRIPTION

The major outputs from the road inventory survey as explained in Chapter 4.2 of Volume I are tabulated:

- 1) Road Class
- 2) Existing Surface: Paved, Gravel, Earth
- 3) MOPWH Road Code, Section Number
- 4) Road Link Length
- 5) Rise + Fall
- 6) Carriageway Width (C/W-Width)
- 7) Shoulder Width (S-Width)
- 8) Number of Traffic Lanes
- 9) Surfacing Type:
 - Surface Dressing ----- 1
 - Premixed Asphalt Concrete ----- 2
- 10) Thickness of New Surface Layer
- 11) Thickness of Old Surface Layer
- 12) Base Course Type
 - Granular Base ----- 1
 - Cement Stabilized ----- 2
 - Bitumen Stabilized ----- 3
- 13) Base Course Thickness
- 14) Subgrade CBR
- 15) Surface Roughness

EXISTING ROAD CONDITION (MARCH 1994)

CLASS A PAVED

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry Rise+Fall m/km	C/W Width m	S-Width m	Lanes	Surface Type			Base/Subgrade			Surface Roughness	
									Type	N/L mm	O/L mm	Type	B/L mm	CBR %	IRI	
P 12	850	A	1	80	381	7	6	0.5	2	1	20	1	130	7	NA	9
P 10	760	A	1	62	5.8	22	6	1	2	1	25	1	400			5
P 7	940	A	1	41	20	29	5.9	1.2	2	2	50	2	130			8
P 3	610	A	1	20	31	37	6.2	1.5	2	1	20	2	150			6
P 8	910	A	1	50	30.3	20	5.8	1	2	1	25	1	130			NA
P 4	620	A	1	31	62.5	12	6.2	1.5	2	1	20	1	150			9
P 9	760	A	1	61	56	10	5.9	1	2	1	25	1	400			4
P 5	620	A	1	32	5.6	20	6.5	1.5	2	2	50	1	300			5
P 6	930	A	1	40	61.4	23	5.8	1	2	1	25	1	260			NA
P 1	660	A	1	11	69	26	6.5	2	2	2	50	3	125			NA
P 11	860	A	1	70	102.3	29	6	0.5	2	1	20	1	130	10	NA	6
P 2	640	A	1	12	42	25	6.2	1.5	2	1	20	2	130	8	NA	4
P 23	460	A	2	60	73	25	6.4	2.1	2	1	20	2	200			12
P 14	110	A	2	2	20	20	6.5	1.8	2	2		1	200			NA
P 21	250	A	2	40	74.2	17	6.7	1.5	2	1	30	1	300	5	NA	8
P 25	450	A	2	90	9.5	38	5	1	2	1	20	2	130	18	NA	4
P 22	730	A	2	50	3.8	19	6.8	5	2	1	20	2	130			4
P 13	110	A	2	1	15.4	21	6.8	2.2	2	2	50	2	200			6
P 15	210	A	2	11	28.1	18	6.6	1.9	2	2	50	2	200			

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Geometry		Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI					
				Length km	Rise+Fall m/km		Type	N/L mm	O/L mm	Type		B/L mm	CBR %			
P	20	220	A	2	30	37.7	8	7.1	1.8	2	1	35	20	2	150	6
P	19	230	A	2	20	39.5	25	6.8	2.7	2	2	35	20	1	130	7
P	18	210	A	2	14	5	16	7	1	2	2	2	50	2	200	5
P	24	420	A	2	70	9	2	5.9	1.4	2	1	1	20	2	130	8
P	16	210	A	2	12	28.1	18	6.7	1.9	2	2	2	50	2	200	6
P	17	210	A	2	13	5	16	7	1.03	2	2	2	50	2	200	6
P	32	360	A	3	40	25.5	4	6.8	1.3	2	1	1	25	1	250	NA
P	29	440	A	3	22	12	6	6.8	1.2	2	1	20	20	2	150	9
P	31	430	A	3	32	41.9	15	6.8	1.3	2	1	1	25	1	250	NA
P	33	510	A	3	50	3 NA	3	6.5	1.5	2	1	20	25	2	150	NA
P	26	210	A	3	11	13.1	3	6.8	1.3	2	1	20	25	1	150	NA
P	27	210	A	3	12	23.7	6	6.8	1.3	2	1	20	25	1	150	NA
P	30	430	A	3	31	10.8	7	6.8	1.3	2	1	20	20	2	150	6
P	28	440	A	3	21	33.1	5	6.8	1.3	2	1	20	20	2	150	NA
P	36	340	A	14	22	8.4	7	7.7	2.1	2	2	50	20	2	450	4
P	34	320	A	14	10	97.5	7	6.9	1.1	2	2	20	70	2	300	5
P	35	340	A	14	21	7.7	5	8.7	1.4	2	2	35	20	2	300	NA
P	37	350	A	23	1	25.2	22	6.6	1.3	2	1	30	20	2	150	8
P	47	770	A	104	51	116.3	21	6.8	1.9	2	2	2	50	3	150	10
P	42	210	A	104	31	50.8	89	7.7	1.5	2	2	2	140	3	150	4
P	39	440	A	104	10	15.3	10	7.2	1.9	2	2	70	100	1	200	4
P	49	930	A	104	61	34.1	30	7	1.4	2	2	100	25	2	220	2
P	38	710	A	104	1	131.5	6	6.4	1.2	2	1	20	20	1	170	13

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry			Surface Type		Base/Subgrade		Surface Roughness IRI			
					Rise+Fall m/km	C/W Width m	S-Width m	Lanes	Type	N/L mm	O/L mm		Type	B/L mm	CBR %
P	44	740	A	104	41	156.1	27	7.5	1.4	2	2	50	3	150	10
P	50	910	A	104	71	51.8	18	7	2	2	2	50	3	150	11
P	45	740	A	104	42	16.9	6	7.2	2.6	2	2	50	3	150	4
P	46	740	A	104	43	2.7	7	7.2	2.7	2	2	50	3	150	5
P	41	110	A	104	22	25.1	3	7.7	1.5	2	2	80	1	130	3
P	51	920	A	104	81	15.1	18	7	2	2	2	50	3	150	19
P	43	240	A	104	32	4.3	13	9.2	1.4	2	2	50	3	150	3
P	48	770	A	104	52	7.1	8	6.8	2.3	2	2	50	3	150	10
P	40	110	A	104	21	30	9	8.7	1.7	2	2	80	1	130	3
P	58	470	A	109	52	220.4	13	6.5	1.2	2	1	25	2	125	12
P	53	340	A	109	12	6.2	10	8	1.4	2	2	50	1	400	3
P	52	340	A	109	11	17.8	9	7.1	1.5	2	2	50	1	300	3
P	56	350	A	109	41	105	6	6.2	1.6	2	2	23	2	125	13
P	54	310	A	109	21	48.1	12	7.1	1.4	2	1	25	1	150	3
P	57	440	A	109	51	47.5	15	7.3	2	2	2	50	3	125	2
P	55	320	A	109	31	54.2	11	6.8	1.5	2	1	25	1	150	8

CLASS A UNPAVED

PAVED

GRAVEL No. MOPW Road Code

EARTH

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry		Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI
					Rise+Fall m/km	C/W Width m		S-Width m	Type N/L mm	O/L mm	Type B/L mm	
G	3	840	A	2	80	92	20	5	1	2	2	NA
G	4	450	A	2	90	370	16	5	1	2	2	NA
G	2	420	A	2	70	36	2	5	1	2	2	NA
G	5	350	A	23	1	88.8	14	5	1	2	2	NA
E	1	850	A	1	80	30	10	5	0	2	2	NA
E	4	510	A	3	50	201	NA	5	0	2	2	NA
E	3	360	A	3	40	89	NA	5	0	2	2	NA
E	2	430	A	3	32	116.9	18	5	0	2	2	NA

EXISTING ROAD CONDITION (MARCH 1994)

CLASS B PAVED

GRAVEL No. EARTH	MOPW Road Code RANK NO.	SEC.	Length km	Geometry Rise+Fall/C/W m/km	Widtht m	S-Width m	Lane	Surface Type		O/L mm	Base/Subgrade		Surface Rough. IRI			
								Type	N/L mm		Type	B/L mm		CBR %		
P	63	940	B	1	31	12.5	22	5.8	2.3	2	2	35	20	2	130	4
P	59	120	B	1	10	90.4	25	6.3	1.2	2	1	1	20	3	175	8
P	64	630	B	1	41	49.5	13	5.8	1.1	2	1	1	25	1	130	8
P	60	620	B	1	21	22.1	9	6	1.5	2	1	1	20	3	150	8
P	61	620	B	1	22	6.9	14	7.2	2.2	2	1	1	20	3	150	6
P	66	740	B	1	61	2.9	30	7	1.1	2	1	1	20	3	175	8
P	62	620	B	1	23	26.2	20	6	2.7	2	2	2	20	2	130	5
P	65	920	B	1	51	27	15	6.4	1.5	2	1	1	25	1	130	7
P	68	930	B	2	21	12	20	6	1	2	1	1	25	1	400	9
P	69	760	B	2	31	18.6	13	6	1	2	1	1	25	2	150	8
P	67	770	B	2	11	35.2	18	6	1.2	2	1	1	25	2	130	9
P	70	210	B	3	10	20	18	6.7	2.5	2	2	3	100	3	150	3
P	74	610	B	3	50	30.2	26	5.8	1.2	2	2	3	20	1	170	5
P	75	650	B	3	60	18	29	5.8	1	2	2	3	20	1	130	5
P	72	750	B	3	30	59.3	12	5.4	2	2	1	1	25	2	250	9
P	73	720	B	3	40	62	23	6.5	1.2	2	1	1	25	1	300	3
P	71	740	B	3	20	29.4	11	6	1.9	2	1	1	25	1	300	6
P	76	740	B	4	10	24	13	6.4	2.2	2	2	3	20	1	130	4
P	77	810	B	4	20	88.4	11	6.5	1.8	2	1	1	20	1	250	6
P	79	730	B	5	20	24.6	27	6.2	2.7	2	1	1	20	1	230	6

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length	Geometry		S-Width	Lane	Surface Type		Base/Subgrade		Surface Rough. IRI			
					Rise+Fall	C/W			N/L	O/L	Type	B/L		CBR %		
EARTH				km	m/km	m	m		mm	mm	mm	mm				
P	78	250	B	5	10	64.3	28	6	2.3	2	1	25	20	1	230	8
P	80	730	B	5	22	13.7	21	6.5	1.7	2	2		30	1	250	4
P	82	740	B	5	40	49.4	36	6.7	1.9	2	2		30	1	250	4
P	83	740	B	5	42	1.9	27	6.3	2.4	2	2	35	25	1	130	3
P	81	240	B	5	30	27.8	22	6.1	2.1	2	2		30	1	250	4
P	85	410	B	6	20	35.6	26	7	1.5	2	2	25	35	1	130	5
P	86	460	B	6	31	88.9	51	7.3	1.5	2	1	25	50	1	130	4
P	84	220	B	6	10	42.1	12	6	1.9	2	2	25	35	1	130	7
P	88	430	B	7	20	6.5	13	7.1	1.7	2	1		25	1	130	10
P	87	470	B	7	10	3	12	6.5	1.2	2	1		20	2	130	NA
P	90	410	B	7	40	45.5	17	6.6	1.1	2	1		25	1	250	13
P	89	440	B	7	30	35.5	22	6.5	1.2	2	1		25	1	275	8
P	92	340	B	8	12	2.6	11	7.8	2	2	2	35	25	1	200	3
P	93	310	B	8	20	103.5	4	6.2	1.5	2	1		25	2	130	11
P	91	340	B	8	11	15	5	7.9	1.6	2	2	35	25	1	200	10
P	94	360	B	8	30	24.5	3	5	1	2	1		25	1	275	11
P	95	520	B	9	51	136.4	3	5	1	1	3		15	1	230	NA
P	96	110	B	10	1	4.3	2	7.1	1.6	2	2	50	100	1	200	3
P	97	110	B	10	2	4	2	7	2.5	2	2	50	100	1	200	3

CLASS B UNPAVED

PAVED GRAVEL No. EARTH	MOPW Road Code RANK NO.	SEC.	Length km	Geometry Rise+Fall/C/W	Width m	S-Width m	Lane	Surface Type		Base/Subgrade		Surface Rough. IRI
								Type mm	N/L mm	Type	B/L mm	
G	6	750	B	3	30	41	13	5	1	2		NA
G	8	860	B	4	41	43.8	16	5	1	2		NA
G	7	810	B	4	20	118	17	4	1	1		NA
G	9	470	B	7	10	24.8	12	5	1	2		NA
G	10	310	B	8	20	52.1	9	5	1	2		NA
G	11	360	B	8	30	43.4	2	5	1	2		NA
G	15	520	B	9	51	122.4	3	5	1			NA
G	12	420	B	9	21	118	5	5	1			NA
G	13	510	B	9	31	37.1	2	5	1			NA
G	14	550	B	9	41	220	6	5	1			NA
G	14	550	B	9	41	220	6	5	1			NA
E	5	820	B	4	30	18.3	28	5	1	2		NA
E	6	430	B	7	20	157.2	13	5	0	2		NA
E	7	360	B	8	30	198.7	2	5	1	2		NA
E	8	460	B	9	11	66	8	5	1	2		NA
E	11	530	B	9	41	46	6	5	1	2		NA
E	12	520	B	9	51	14	3	5	1	2		NA
E	10	510	B	9	31	15	2	5	1	2		NA
E	9	420	B	9	21	9	5	5	1	2		NA

EXISTING ROAD CONDITION (MARCH 1994)

CLASS C PAVED

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry		Lanes	Surface Type		O/L mm	Base/Subgrade		Surface Roughness IRI
					Rise+Fall m/km	C/W m		S-Wid. m	Type		N/L mm	Type	
P 98	750	C 12	1	34	15	5	1	2	2	25	2	150	NA
P 99	610	C 17	10	42	35	6.2	2	2	1	25	2	150	NA
P 100	750	C 17	20	11.1	26	6	1	2	1	25	2	125	NA
P 101	620	C 19	10	25.3	6	6.3	1.1	2	1	25	1	150	6
P 102	640	C 19	20	20.6	8	6	1.1	2	1	25	1	150	6
P 103	640	C 20	20	19.6	20	6.5	1	2	2	20	2	305	6
P 104	660	C 20	30	16.5	23	6.5	1	2	1	20	2	305	6
P 105	720	C 21	20	16.5	26	7.2	1.2	2	2	50	1	150	8
P 106	720	C 23	1	45.3	23	6.2	1.8	2	2	50	1	150	2
P 107	720	C 24	1	42.3	24	6.7	1.3	2	1	25	1	125	2
P 108	720	C 25	1	10	20	5.4	1	2	1	25	1	225	8
P 109	520	C 27	10	29.5	23	5.9	1	2	1	20	2	130	6
P 110	530	C 27	20	53	35	6.2	2	2	1	20	2	130	NA
P 112	940	C 29	30	3.5	18	6	2.2	2	1	25	1	100	8
P 111	630	C 29	10	36	25	5.8	1.5	2	1	25	2	130	8
P 114	910	C 33	20	18	17	5.9	1	2	1	25	2	130	5
P 113	930	C 33	10	16.2	17	5.9	1	2	1	25	1	150	6
P 115	620	C 34	10	52.2	7	6.2	1	2	2	25	2	150	15
P 116	720	C 34	20	8.2	26	6.5	1	2	2	25	1	130	12

GRAVEL No.	MOPW Road Code	RANK	NO.	SEC.	Length	km	Geometry		S-Wid.	Lanes	Surface Type		O/L	Base/Subgrade		Surface Roughness
							Rise+Fall	m/km			Type	N/L		Type	B/L	
EARTH							C/W	m	m		Type	mm	mm	mm	%	IRI
P	117	720	C	35	10	1.6	5	6.8	2.5	2	1	25	2	150	16	
P	118	820	C	35	20	19	5	6.5	0	2	2	25	1	130	8	
P	119	830	C	36	11	30.9	22	6	1	2	1	20	1	150	10	
P	120	770	C	36	21	22.5	22	6.2	1.2	2	1	20	1	150	10	
P	121	620	C	37	10	19.8	12	6.3	1.4	2	1	25	1	150	10	
P	122	236	C	37	20	39.9	27	6.2	2	2	1	25	2	150	9	
P	123	940	C	38	1	16.6	30	5.7	1.5	2	1	20	2	130	6	
P	126	830	C	39	20	50.2	22	5.6	1.2	2	1	25	1	130	11	
P	125	770	C	39	12	18.8	15	5.6	1	2	1	25	1	150	7	
P	128	630	C	39	40	4.4	27	5.1		2	2	35	2	125	7	
P	127	940	C	39	30	29.1	16	5.5	1.3	2	1	25	1	130	7	
P	124	770	C	39	11	2.2	15	7.1	1.1	2	1	25	1	150	7	
P	129	930	C	40	1	31	14	6.4	1	2	1	30	1	300	4	
P	130	910	C	42	1	8.3	25	5		1	1	20	1	130	NA	
P	132	760	C	45	2	18.7	6	5.6	1	2	1	25	1	130	13	
P	131	760	C	45	1	2.5	8	5.6	1	2	1	25	1	130	10	
P	133	850	C	47	1	18.2	NA	6	0	0	1	25	1	300	NA	
P	136	820	C	51	20	50.4	28	6.5	1	2	1	25	1	150	5	
P	134	770	C	51	11	3.1	23	5.5	1.8	2	1	25	1	150	9	
P	138	730	C	51	40	39.6	24	5		1	1	25	1	150	NA	
P	135	770	C	51	12	24	5	5.8	1.2	2	1	25	1	150	12	
P	137	810	C	51	30	66	59	6.7	1.6	2	1	25	1	150	5	
P	139	820	C	53	20	16.5	4	6	1.1	2	1	20	1	275	5	
P	141	770	C	54	12	32	18	6	1	2	2	25	1	130	6	

PAVED GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry		Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI				
					Rise+Fall m/km	C/W m		S-Wid. m	Type	N/L mm	O/L mm		Type	B/L mm	CBR %	
P	140	770	C	54	11	0.8	18	6.3	1	2	2	25	50	1	130	6
P	142	820	C	54	20	8.6	18	6	1	2	2	2	50	1	125	6
P	144	810	C	55	20	59.7	17	6.6	1.7	2	2	20	25	1	130	5
P	143	740	C	55	10	10.2	0	6.2	2	2	2	20	25	1	130	8
P	145	820	C	55	30	11.5	1	6.5	1.6	2	2	20	20	1	125	4
P	146	740	C	56	1	57.4	26	6.3	2.4	2	2	20	25	1	150	10
P	147	750	C	57	11	2	22	6.2	2.5	2	2	2	25	1	150	3
P	148	740	C	57	20	38.8	22	6.1	1.9	2	1	2	25	1	150	8
P	149	110	C	58	10	13	11	6.5	1.4	2	2	35	50	1	200	4
P	150	710	C	58	20	97.6	26	5.3	1.3	2	2	2	25	1	150	7
P	151	110	C	59	1	14.6	10	8	2.4	2	2	80	40	1	300	3
P	152	110	C	60	10	13.5	14	5.8	3.4	2	2	60	20	1	175	5
P	153	710	C	60	20	4.9	26	7.1	2.4	2	2	60	20	1	175	5
P	154	110	C	61	1	13.5	21	8	2.4	2	2	35	50	1	200	4
P	155	110	C	62	10	11.5	21	6.8	3	2	2	35	75	1	130	3
P	156	110	C	62	20	21.5	30	6.8	2.1	2	2	35	75	1	130	6
P	158	210	C	63	20	51.4	31	6.1	1.7	2	1	35	20	1	130	7
P	157	110	C	63	10	15.5	13	5.8	1.2	2	2	35	25	1	200	3
P	159	110	C	64	10	5.5	23	5.6	2.6	2	2	35	20	1	125	3
P	160	210	C	64	20	39.8	30	5.5	1.7	2	1	20	20	1	125	11
P	161	210	C	65	1	45.5	21	5.9	1.8	2	1	20	25	1	150	16
P	162	210	C	66	10	65	16	5.8	1.7	2	1	20	25	1	250	8
P	163	240	C	66	20	4.5	10	5.4	2.3	2	1	20	25	1	250	6
P	164	230	C	67	10	31.1	16	5	2	2	1	25	25	1	225	12

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry Rise+Fall m/km	C/W S-Wid. m	Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI	
								Type	N/L mm	Type	B/L mm		CBR %
P 166	740	C 67	30	6.9	38	6	1.8	2	1	25	1	100	8
P 165	240	C 67	20	5.1	11	5			1	25	1	225	NA
P 167	240	C 68	1	18.1	13	6.5	1.7	2	1	25	2	125	7
P 168	740	C 69	10	17.6	31	5.3	1.7	2	1	20	2	150	8
P 169	240	C 69	20	2	20	5.5	2.2	2	1	25	2	150	16
P 171	250	C 70	20	23	42	6.1	1.2	2	1	20	1	150	5
P 170	230	C 70	10	33	18	6.2	1.8	2	2	25	1	150	10
P 172	230	C 71	1	29	26	6.3	1.7	2	2	35	2	150	9
P 173	230	C 72	1	25.1	24	5.6	1.4	2	2	25	1	225	10
P 175	230	C 73	20	12.1	28	5.8	1	2	1	25	2	110	8
P 174	220	C 73	10	22.8	16	6.1	1.3	2	1	25	2	150	5
P 177	220	C 74	20	24	28	6.1	1.5	2	1	20	1	150	4
P 176	250	C 74	10	4	NA	6.1	1	2	1	20	2	130	6
P 178	250	C 75	1	9.2	19	6.1	1.8	2	1	25	2	150	8
P 179	730	C 76	10	3	11	5.7	1.3	2	1	20	2	125	10
P 180	740	C 77	10	18.1	22	6	2.2	2	2	20	1	130	8
P 181	240	C 77	20	52	14	6	2.2	2	1	25	1	130	12
P 182	730	C 77	30	39.7	7	6.1	1.7	2	1	20	1	130	8
P 184	240	C 83	20	9	41	5			1	25	2	125	NA
P 183	740	C 83	10	2	67	5			1	25	2	125	NA
P 185	620	C 84	1	1.5	NA	5			1	25	1	200	NA
P 186	620	C 85	1	3	NA	7.6	2.5	2	2	35	1	150	3
P 187	620	C 86	1	11.4	33	6.2	1	2	1	25	1	150	6
P 188	620	C 87	1	1	19	5.7	1	2	1	25	1	150	8

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry		Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI			
					Rise+Fall m/km	C/W m		S-Wid. m	Type	N/L mm	O/L mm		Type	B/L mm	CBR %
P 189	740	C 88	1	39.9	14	6.3	2.1	2	1		75	1	200		13
P 190	110	C 89	1	4.5	3	7	1.9	2	2	25	40	1	200		4
P 191	460	C 91	1	50.7	15	8.1	1.4	2	1	20	20	1	150		6
P 193	430	C 97	20	25.5	7	7	1.1	2	1		20	1	130		4
P 192	440	C 97	10	85.5	15	6.3	1.2	2	1		20	1	130		11
P 194	110	C 98	10	25	7	7	1.5	2	2	25	25	1	130		11
P 195	440	C 98	20	36.6	6	5.8	1.7	2	1		25	1	225		8
P 196	440	C 99	1	29.8	47	5.8	1.6	2	1		20	1	200		10
P 197	710	C 102	1	12	13	5		2	1		25	2	130	NA	3
P 198	310	C 103	30	7	1.7	5	0.5	2	1		25	2	125		
P 199	350	C 104	1	15.5	38	6.1	1	2	1		25	2	150	NA	
P 200	350	C 105	1	6.5	18	6.5	1.3	2	1		25	2	250		4
P 201	320	C 106	1	18	20	6	1.1	2	1		25	2	275		6
P 202	340	C 109	1	0.7	0	7.6	1.4	2	1		25	2	130		4
P 203	340	C 110	1	4.9	1	7.6	1.7	2	2		50	1	200		4
P 204	310	C 111	1	21.2	22	6.5	1.2	2	1	25	20	1	200		8
P 205	360	C 112	10	29	0	5	NA	2	1		25	2	125	NA	
P 207	340	C 114	2	6.5	2	8.2	1.5	2	2	100	50	1	200		3
P 206	340	C 114	1	6.7	20	8.1	1.7	2	2	100	50	1	200		3
P 208	110	C 294	2	1.2	10	6.7	1.5	2	1		20	1	175		4
P 209	110	C 396	1	1.3	11	5.7	1.3	2	2		20	1	175		11

CLASS C UNPAVED

GRAVEL No.	MOPW Road Code	RANK	NO.	SEC.	Length km	Geometry		S-Wid. m	Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI
						Rise+Fall m/km	C/W m			Type	N/L mm	Type	B/L mm	
G	16	750	C	11	1	74.1	16	5	1	2				NA
G	17	750	C	12	1	65.5	15	5	1	2				NA
G	19	660	C	13	20	72.1	13	4	0	1				NA
G	18	750	C	13	10	86	17	5	1	2				NA
G	21	720	C	14	20	57.8	16	5	1	2				NA
G	20	750	C	14	10	14	18	5	1	2				NA
G	22	720	C	15	1	28.8	26	5	1	2				NA
G	23	610	C	16	1	28.8	27	5	1	2				NA
G	24	640	C	18	1	81.7	19	5	0	2				NA
G	25	640	C	19	20	70	8	5	1	2				NA
G	26	610	C	20	10	14.2	58	5	0	2				
G	27	650	C	21	10	50.2	28	5	1	2				NA
G	28	650	C	22	1	38.5	30	5	1	2				NA
G	29	720	C	25	1	26	20	5	0	2				NA
G	30	640	C	26	1	21	16	5	0	2				NA
G	31	630	C	28	1	84	15	5	1	2				NA
G	32	630	C	29	10	25	12	5	1	2				NA
G	35	930	C	30	30	8	11	5	0					NA
G	33	630	C	30	10	1.5	16	5	1	2				NA
G	34	920	C	30	20	27.1	14	4	0	1				NA
G	36	920	C	31	10	31.6	11	4	0	1				NA

PAVED GRAVEL No.	MOPW Road Code	RANK	NO.	SEC.	Length km	Geometry Rise+Fall m/km	C/W	S-Wid. m	Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI
										Type	N/L mm	Type	B/L mm	
G	37	920	C	32	11	13.6	9	5	0	2				NA
G	38	920	C	32	12	12.6	41	5	0	2				NA
G	40	910	C	32	22	5	0	5	1	2				NA
G	39	910	C	32	21	15.9	12	4	1	1				NA
G	42	940	C	33	11	3	54	4	0	1				NA
G	43	910	C	33	20	23	17	5	0	2				NA
G	41	930	C	33	10	16	17	4	0	1				NA
G	44	720	C	35	10	49.4	5	5	1	2				NA
G	45	620	C	35	20	5	5	5	1	2				NA
G	47	770	C	37	30	10.5	22	5	1	2				NA
G	46	830	C	37	20	52	27	5	1	2				NA
G	48	940	C	39	30	19.1	16	5		2				NA
G	49	930	C	41	10	27.9	24	5		2				NA
G	50	910	C	41	20	15.9	24	5		2				NA
G	51	910	C	42	1	44.4	25	4	1	1				NA
G	52	920	C	43	1	19	10	6	1	2				NA
G	53	910	C	44	20	17.3	13	5	0.5	2				NA
G	54	760	C	44	30	28.5	30	5		2				NA
G	55	760	C	45	2	27.3	6	4		1				NA
G	56	760	C	48	12	44.7	24	5		2				NA
G	57	770	C	48	31	18.9	23	5	2	2				NA
G	58	770	C	50	1	51.7	9	5	1	2				NA
G	60	820	C	53	20	56.9	4	5		2				NA
G	59	770	C	53	10	11	40	5	1	2				NA

PAVED GRAVEL No.	MOPW Road Code	RANK	NO.	SEC.	Length km	Geometry Rise+Fall m/km	C/W m	S-Wid. m	Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI
										Type	N/L mm	Type	B/L mm	
G	61	820	C	54	20	24.7	18	5	0.5	2				NA
G	62	750	C	57	11	62	22	5	1	2				NA
G	63	210	C	63	20	2.2	19	5	1	2				NA
G	64	210	C	64	20	13.2	30	5	1	2				NA
G	67	740	C	67	30	11	38	5	1	2				NA
G	65	230	C	67	10	15.4	16	5	1	2				NA
G	66	240	C	67	20	24.9	11	5	1	2				NA
G	68	240	C	69	20	80	20	5	1	2				NA
G	69	230	C	70	10	23	44	5	1	2				NA
G	70	730	C	76	10	76	11	5	0.5	2				NA
G	71	240	C	76	20	12	5	5	1	2				NA
G	72	730	C	77	30	73.3	7	5	1	2				NA
G	73	840	C	77	40	119	22	5	1	2				NA
G	74	840	C	78	1	92.7	15	5	0.5	2				NA
G	75	840	C	79	1	44	16	5	0.5	2				NA
G	76	240	C	83	20	21.7	41	5	0.5	2				NA
G	77	620	C	85	1	2.9	16	5	1	2				NA
G	78	630	C	90	10	24.8	20	5	1	2				NA
G	79	920	C	90	20	3	8	5	1	2				NA
G	80	410	C	92	10	41	29	5	1	2				NA
G	81	460	C	92	20	68	24	5	1	2				NA
G	82	430	C	93	10	58	21	5	1	2				NA
G	83	410	C	93	20	4	27	5	1	2				NA
G	84	430	C	94	1	42.7	13	5	1	2				NA

GRAVEL No.	MOPW Road Code	RANK	NO.	SEC.	Length	Geometry		S-Wid.	Lanes	Surface Type		Base/Subgrade		Surface Roughness
						km	m/km			C/W	Rise+Fall	O/L	Type	
EARTH						m	m	m		mm	mm	mm	%	IRI
G	85	430	C	96	1	45	6	6	1	2				NA
G	86	440	C	98	20	20	6	5	1	2				NA
G	87	440	C	99	1	20.5	47	5	1	2				NA
G	88	470	C	99	2	109	NA	5	1	2				NA
G	89	440	C	100	1	32.2	6	5	1	2				NA
G	91	470	C	101	2	42	6	5	1	2				NA
G	90	440	C	101	1	10	14	5	1	2				NA
G	92	710	C	102	1	113.4	13	5	1	2				NA
G	95	310	C	103	30	109.1	2	5	1	2				NA
G	93	710	C	103	10	168	25	5	1	2				NA
G	94	350	C	103	20	150	16	5	0.5					NA
G	96	350	C	104	1	0.6	18	5	1	2				NA
G	97	320	C	106	1	4	20	5	0.5					NA
G	99	320	C	107	20	27	16	5	1	2				NA
G	98	310	C	107	10	25	23	5	1	2				NA
G	100	320	C	108	1	50	5	5	1	2				NA
G	101	340	C	109	1	3.8	0	5	1	2				NA
G	102	810	C	113	10	30	9	5	0.7	2				NA
G	103	110	C	294	2	1.5	10	5	1	2				NA
E	13	750	C	13	10	29	17	5	1	2				NA
E	14	750	C	14	10	14.7	18	5	0	2				NA
E	15	750	C	17	20	31.1	26	5	0	2				NA
E	16	920	C	29	20	12	2	5	0	2				NA

GRAVEL No.	MOPW Road Code	RANK NO.	SEC.	Length km	Geometry		Lanes	Surface Type		Base/Subgrade		Surface Roughness IRI
					Rise+Fall m/km	C/W m		S-Wid. m	Type	N/L mm	O/L mm	
E 17	920	C	30	20	36	14	5	0	2			NA
E 18	930	C	31	20	16	11	5	0	2			NA
E 19	930	C	33	10	14.5	17	5		2			NA
E 20	910	C	41	20	5	24	5		2			NA
E 21	920	C	43	1	10.5	10	5	1	2			NA
E 22	930	C	44	10	19.3	17	5	1	2			NA
E 23	850	C	46	10	115	NA	5	1	2			NA
E 24	860	C	46	20	45	7	5	0	2			NA
E 25	850	C	47	1	148.8	NA	5	1	2			NA
E 28	820	C	48	20	21	64	5	1	2			NA
E 26	760	C	48	11	0.5	31	5	0	2			NA
E 27	760	C	48	12	16	24	5	1	2			NA
E 30	730	C	51	40	15.5	11	5	1	2			NA
E 29	810	C	51	30	39	3	5	1	2			NA
E 31	820	C	52	1	85.7	21	5	1	2			NA
E 32	240	C	69	20	20	20	5	1	2			NA
E 34	450	C	77	50	209.8	6	5	0	2			NA
E 33	840	C	77	40	50.7	22	5	0	2			NA
E 35	450	C	80	10	64	NA	5	0	2			NA
E 36	530	C	80	20	194	NA	5	0	2			NA
E 37	510	C	81	1	157.5	1	5	1	2			NA
E 38	450	C	82	0	218.3	NA	5		2			NA
E 40	410	C	93	20	8.3	29	5	1	2			NA
E 39	430	C	93	10	39.3	21	5	1	2			NA

GRAVEL No.	MOPW Road Code	RANK	NO.	SEC.	Length	Geometry		S-Wid.	Lanes	Surface Type		Base/Subgrade		Surface Roughness
						Riser+Fall	m/km			C/W	m	Type	N/L	
E 41	320	C	106	1	90.7	20	5	1	1	2				NA
E 43	320	C	107	20	15	16	5	1	1	2				NA
E 42	310	C	107	10	24	23	5	1	1	2				NA
E 44	330	C	112	20	93.4	1	5	1	1	2				NA
E 45	850	C	113	20	134	16	5	1	1	2				NA
E 46	310	C	115	1	39.2	17	5	1	1	2				NA
E 48	530	C	116	20	154	NA	5	1	1	2				NA
E 47	510	C	116	10	19	NA	5	1	1	2				NA
E 49	110	C	304	1	1.5	3	5	NA	NA	2				NA

II. ENGINEERING ASSESSMENT ON GEOMETRY

DESCRIPTION

1. Engineering assessment on geometry is based on:
 - (1) existing geometric conditions of every road link out of the road inventory survey,
 - (2) existing traffic out of the Traffic Survey as explained in Chapter 4.2 of Volume I,
 - (3) future traffic out of the Traffic Demand Forecast as explained in Chapter 5 of Volume I,
 - (4) geometric improvement criteria as explained below.

2. Geometric Improvement Criteria

Each cross section type to be adopted for several traffic volume (ADT) is derived from Road Design Manual, Part I : Geometric Design of Rural Road of MOPWH as shown in Fig. A.2-1~3 and Table A.2-1 below.

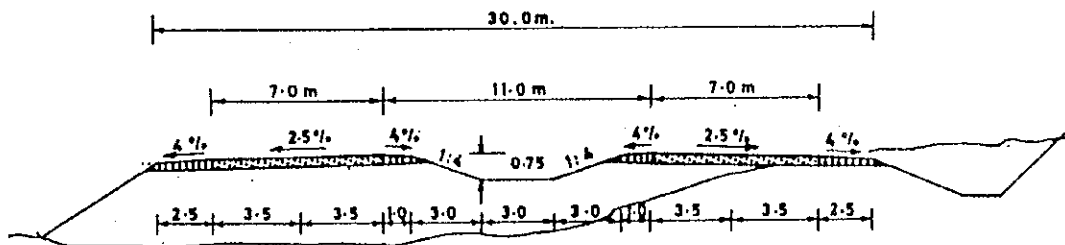


Figure A.2-1 Cross Section Type I-Dual Carriage Way

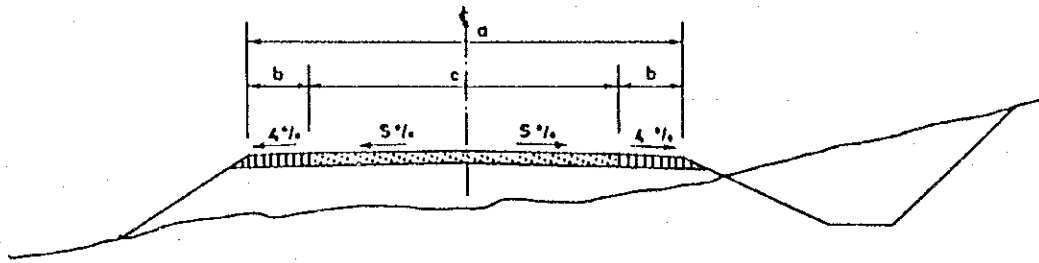


Figure A.2-2 Cross Section Type II-VIII-Single Carriage Way

Table A.2-1 Cross Section Type

Cross-Section			Dimensions in Meters			Traffic Volume
Type	Lanes	Surfacing	a	b	c	PCU/day
I	4	bitumen	30.00	2.50/1.50	14.00	8000 (SUP. HWY) 15000 (Others)
II	2	bitumen	10.00	1.50	7.00	2000 ≤ T (SUP. HWY)
III	2	bitumen	8.50	1.00	6.50	2000 ≤ T (Others)
IV	2	bitumen	7.00	0.50	6.00	500 ≤ T ≤ 2000
VII	2	gravel	8.00	-	-	100 ≤ T ≤ 500
VIII	1	earth/gravel	6.00	-	-	T < 150

SOURCE: JICA Study Team.

The improvement diagram is shown below.

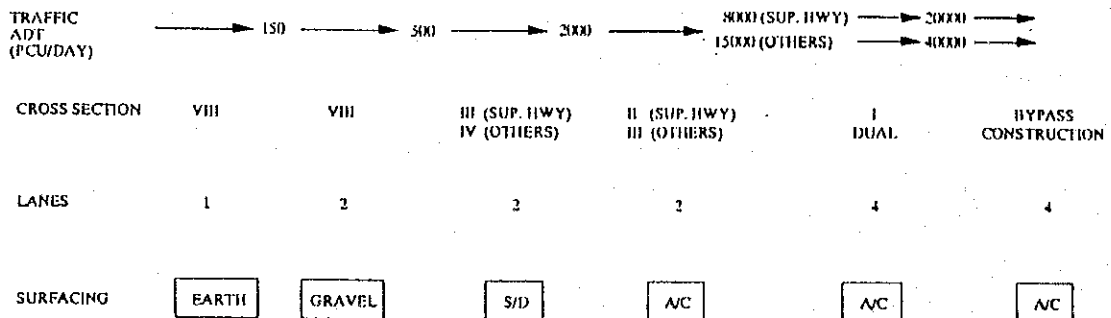


Figure A.2-3 Geometric Improvement Diagram

3. Abbreviation

- 1) C/W : carriageway width
- 2) S/W : shoulder width
- 3) OK : satisfactory to cross section to be adopted
- 4) Year : the year when the traffic reaches to the range of cross sectional improvement
- 5) Type : type of improvement on geometry
- 6) Upg. SHW : upgrading to Super Highway
- 7) Minor : geometric improvement to be implemented in the following rehabilitation or reconstruction chance.

ENGINEERING ASSESSMENT ON GEOMETRY

(1) CLASS A, PAVED ROADS

No.	S.L. GRAVEL MOPW Road Code	District RANK NO.	SEC.	Existing Geometry			Lanes (Nos)	ADT 1994 (FCU)	ADT 2013 (FCU)	Growth Ratio (%/Year)	Cross Section to be Adopted			C/W (m)	S/W (m)	Year	Improvement Type	Remarks
				Length km	C/W (m)	Width (m)					Type	C/W (m)	Status					
1	P	660	A	1	11	52.0	6.5	2.0	2	1,734	2,612	2.18%	III	6.5	OK	1.0	OK	
2	P	660	A	1	11	4.0	6.5	2.0	2	1,732	2,609	2.18%	III	6.5	OK	1.0	OK	
3	P	610	A	1	20	16.5	6.2	1.5	2	1,732	2,609	2.18%	III	6.5	OK	1.0	OK	
4	P	660	A	1	11	2.0	6.5	2.0	2	1,732	2,609	2.18%	III	6.5	OK	1.0	OK	
5	P	660	A	1	11	11.0	6.5	2.0	2	1,732	2,609	2.18%	III	6.5	OK	1.0	OK	
6	P	610	A	1	20	14.5	6.2	1.5	2	1,732	2,609	2.18%	III	6.5	OK	1.0	OK	
7	P	640	A	1	12	4.8	6.2	1.5	2	1,732	2,609	2.18%	III	6.5	OK	1.0	OK	
8	P	640	A	1	12	32.5	6.2	1.5	2	903	2,322	5.10%	III	6.5	OK	1.0	OK	
9	P	640	A	1	12	4.8	6.2	1.5	2	974	3,676	7.24%	III	6.5	OK	1.0	OK	
10	P	620	A	1	31	20.0	6.2	1.5	2	935	3,520	7.23%	III	6.5	NO	1.0	OK	Upg. SHW
11	P	620	A	1	31	20.0	6.2	1.5	2	4,636	9,834	4.04%	I	14.0	NO	2.5	NO	S.H.W.
12	P	620	A	1	31	17.5	6.2	1.5	2	1,548	4,546	5.83%	II	7.0	NO	1.5	NO	S.H.W.
13	P	620	A	1	31	5.0	14.0	2.5	4	4,497	12,540	5.55%	I	14.0	OK	2.5	OK	S.H.W.
14	P	620	A	1	32	5.6	6.5	1.5	2	4,569	9,441	3.89%	II	7.0	OK	1.5	OK	
15	P	930	A	1	40	2.0	5.8	1.0	2	565	1,716	6.02%	IV	6.0	OK	0.5	OK	Minor
16	P	940	A	1	41	6.0	5.9	1.2	2	3,849	10,155	5.24%	II	7.0	NO	1.5	NO	1995 Minor
17	P	930	A	1	40	15.0	5.8	1.0	2	3,849	10,155	5.24%	II	7.0	NO	1.5	NO	1995 Minor
18	P	930	A	1	40	44.4	5.8	1.0	2	562	1,708	6.02%	IV	6.0	OK	0.5	OK	
19	P	940	A	1	41	7.0	5.9	1.2	2	2,386	8,712	7.05%	II	7.0	NO	1.5	NO	2002 Minor
20	P	940	A	1	41	7.0	5.9	1.2	2	3,562	10,584	5.90%	II	7.0	NO	1.5	NO	1996 Minor
21	P	910	A	1	50	10.0	5.8	1.0	2	414	1,334	6.35%	IV	6.0	OK	0.5	OK	
22	P	910	A	1	50	20.3	5.8	1.0	2	414	1,334	6.35%	IV	6.0	OK	0.5	OK	
23	P	760	A	1	61	25.0	5.9	1.0	2	414	1,461	6.86%	IV	6.0	OK	0.5	OK	
24	P	760	A	1	61	30.8	5.9	1.0	2	670	1,266	3.41%	IV	6.0	OK	0.5	OK	
25	P	860	A	1	70	14.8	6.0	0.5	2	670	1,266	3.41%	IV	6.0	OK	0.5	OK	
26	P	760	A	1	61	6.0	6.0	1.0	2	414	1,461	6.86%	IV	6.0	OK	0.5	OK	
27	P	860	A	1	70	41.5	6.0	0.5	2	598	391	-1.37%	VII	8.0	NO	0.5	NO	2083 Minor
28	P	860	A	1	70	46.0	6.0	0.5	2	312	825	5.25%	IV	6.0	OK	0.5	OK	
29	P	850	A	1	80	80.0	6.0	0.5	2	312	825	5.25%	IV	6.0	OK	0.5	OK	
30	P	850	A	1	80	88.0	6.0	0.5	2	557	823	2.08%	IV	6.0	OK	0.5	OK	
31	P	850	A	1	80	66.5	6.0	0.5	2	71	194	5.43%	VII	8.0	NO	0.5	NO	2008 Minor
32	P	850	A	1	80	146.0	6.0	0.5	2	71	194	5.43%	VII	8.0	NO	0.5	NO	2008 Minor
33	P	110	A	2	1	7.7	14.0	2.5	4	12,435	33,132	5.29%	I	14.0	OK	2.5	OK	
34	P	210	A	2	11	9.1	14.0	2.5	4	12,435	33,132	5.29%	I	14.0	OK	2.5	OK	
35	P	110	A	2	1	7.7	14.0	2.5	4	12,232	35,790	5.81%	I	14.0	OK	2.5	OK	

No.	S.L. GRAVEL EARTH DISTRICT	MOPW ROAD CODE RANK NO.	NO.	SEC.	Existing Geometry		Lanes	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Cross Section Improvement		Remarks				
					Length C/W km	Width S-Width (m)					Type	C/W Status (m)	C/W (m)	S/W (m)		Year	Type		
36		P	30	2	11	1.0	14.0	2.5	4	8,766	35,971	7.71%	I	14.0	OK	2.5	OK		
37		P	31	2	11	18.0	14.0	2.5	4	15,458	41,519	5.34%	I	14.0	OK	2.5	OK		
38		P	32	2	14	10.0	14.0	2.5	4	8,766	35,694	7.67%	I	14.0	OK	2.5	OK		
39		P	33	2	20	13.5	7.1	1.8	2	7,548	19,042	4.99%	I	14.0	NO	2.5	NO	1996	
40		P	34	2	30	10.0	7.1	1.8	2	1,596	7,795	8.71%	I	14.0	NO	2.5	NO	2013	
41		P	34	2	20	26.0	7.1	1.8	2	1,596	7,795	8.71%	I	14.0	NO	2.5	NO	2013	
42		P	35	2	30	10.0	7.1	1.8	2	914	5,957	10.37%	II	7.0	OK	1.5	OK		
43		P	36	2	30	17.7	7.1	1.8	2	751	1,666	4.28%	IV	6.0	OK	0.5	OK		
44		P	37	2	40	48.6	6.7	1.5	2	837	2,837	6.64%	III	6.5	OK	1.0	OK		
45		P	37	2	50	3.8	7.0	5.0	2	837	2,837	6.64%	III	6.5	OK	1.0	OK		
46		P	38	2	40	12.6	6.7	1.5	2	826	523	-0.94%	IV	6.0	OK	0.5	OK		
47		P	39	2	40	13.0	6.7	1.5	2	837	2,045	4.81%	III	6.5	OK	1.0	OK		
48		P	40	2	60	48.0	6.4	2.1	2	1,652	5,491	6.53%	II	7.0	OK	1.5	OK		
49		P	41	2	60	25.0	6.4	2.1	2	487	1,792	7.10%	IV	6.0	OK	0.5	OK		
50		P	42	2	70	9.0	5.9	1.4	2	142	428	5.98%	VII	8.0	OK		OK		
51		P	44	2	90	9.0	5.0	1.0	2	14	39	5.54%	VIII	6.0	OK		OK		
52		P	46	3	11	13.1	6.8	1.3	2	1,632	2,919	3.11%	III	6.5	OK	1.0	OK		
53		P	46	3	12	23.7	6.8	1.3	2	1,632	2,919	3.11%	III	6.5	OK	1.0	OK		
54		P	46	3	21	13.1	6.8	1.3	2	1,632	2,919	3.11%	III	6.5	OK	1.0	OK		
55		P	47	3	21	20.0	6.8	1.3	2	1,584	3,152	3.69%	III	6.5	OK	1.0	OK		
56		P	47	3	22	6.0	6.8	1.2	2	1,584	3,152	3.69%	III	6.5	OK	1.0	OK		
57		P	48	3	22	6.0	6.8	1.2	2	1,571	813	-3.41%	IV	6.0	OK	0.5	OK		
58		P	48	3	31	10.8	6.8	1.3	2	1,571	813	-3.41%	IV	6.0	OK	0.5	OK		
59		P	48	3	32	27.9	6.8	1.3	2	1,571	813	-3.41%	IV	6.0	OK	0.5	OK		
60		P	49	3	40	100.0	6.8	1.3	2	1,28	812	10.21%	IV	6.0	OK	0.5	OK		
61		P	50	3	32	14.0	6.8	1.3	2	1,556	805	-3.41%	IV	6.0	OK	0.5	OK		
62		P	51	3	40	14.5	6.8	1.3	2	1,15	675	9.76%	IV	6.0	OK	0.5	OK		
63		P	54	3	50	3.0	6.5	1.5	2	100	290	5.76%	VII	8.0	OK		OK		
64		P	55	14	10	18.0	6.9	1.1	2	291	246	-0.88%	VII	8.0	OK		OK		
65		P	56	14	10	8.5	6.9	1.1	2	3,835	8,491	4.27%	II	7.0	NO	1.5	NO	1995	Minor
66		P	56	14	21	7.7	8.7	1.4	2	3,885	8,491	4.27%	II	7.0	NO	1.5	NO	1995	Minor
67		P	57	14	10	30.0	6.9	1.1	2	292	730	4.94%	IV	6.0	OK	0.5	OK		
68		P	58	14	10	8.0	6.9	1.1	2	293	730	4.92%	IV	6.0	OK	0.5	OK		
69		P	59	14	10	14.0	6.9	1.1	2	3,784	8,378	4.27%	II	7.0	NO	1.5	NO	1995	Minor
70		P	60	14	10	19.0	6.9	1.1	2	3,791	8,394	4.27%	II	7.0	NO	1.5	NO	1995	Minor
71		P	61	23	1	25.2	6.6	1.3	2	150	420	5.57%	VII	8.0	OK		OK		
72		P	62	104	1	131.5	6.4	1.2	2	415	1,642	7.51%	IV	6.0	OK	0.5	OK		
73		P	63	104	10	15.0	14	2.5	4	11,678	22,124	3.42%	I	14.0	OK	2.5	OK		Upg. SHW S.H.W.
74		P	64	104	21	22.5	14.0	2.5	4	10,279	18,858	3.25%	I	14.0	OK	2.5	OK		Upg. SHW S.H.W.
75		P	65	110	21	7.5	14.0	2.5	4	10,279	18,858	3.25%	I	14.0	OK	2.5	OK		Upg. SHW S.H.W.

No.	S. L. No.	PAVED GRAVEL EARTH	District	MOPW RANK	Road Code	SEC.	Existing Geometry		Lanes (Nos)	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Cross Section Improvement		Remarks										
							Length km	C/W Width (m)					Type	C/W (m)	S/W (m)	Year		Type									
76	65	P	210	A	104	31	4.8	7.7	1.5	2	10,279	18,858	3.25%	I	14.0	NO	2.5	NO	6.3	1.0	1995	Dualize	S.H.W.				
77	66	P	110	A	104	22	17.0	14.0	2.5	4	10,991	21,422	3.57%	I	14.0	OK	2.5	OK	---	---	---	---	---	Uppg. SHW	S.H.W.		
78	67	P	110	A	104	22	8.1	14.0	2.5	4	11,524	21,280	3.28%	I	14.0	OK	2.5	OK	---	---	---	---	---	---	---	Uppg. SHW	S.H.W.
79	68	P	210	A	104	31	10.0	7.7	1.5	2	10,403	19,172	3.27%	I	14.0	NO	2.5	NO	6.3	1.0	1995	Dualize	S.H.W.				
80	69	P	210	A	104	31	14.0	7.7	1.5	2	5,695	9,613	2.82%	I	14.0	NO	2.5	NO	6.3	1.0	2006	Dualize	S.H.W.				
81	70	P	210	A	104	31	22.0	7.7	1.5	2	5,736	10,913	3.44%	I	14.0	NO	2.5	NO	6.3	1.0	2004	Dualize	S.H.W.				
82	71	P	240	A	104	32	4.3	9.2	1.4	2	6,786	8,500	1.19%	I	14.0	NO	2.5	NO	4.8	1.1	2008	Dualize	S.H.W.				
83	71	P	740	A	104	41	26.0	7.5	1.4	2	6,786	8,500	1.19%	I	14.0	NO	2.5	NO	6.5	1.1	2008	Dualize	S.H.W.				
84	72	P	740	A	104	41	32.0	7.5	1.4	2	5,384	11,473	4.06%	I	14.0	NO	2.5	NO	6.5	1.1	2004	Dualize	S.H.W.				
85	73	P	740	A	104	41	5.0	7.5	1.4	2	6,173	14,491	4.59%	I	14.0	NO	2.5	NO	6.5	1.1	2000	Dualize	S.H.W.				
86	74	P	740	A	104	41	45.3	7.5	1.4	2	9,628	18,377	3.46%	I	14.0	NO	2.5	NO	6.5	1.1	1995	Dualize	S.H.W.				
87	74	P	740	A	104	42	7.4	7.2	2.6	2	9,628	18,377	3.46%	I	14.0	NO	2.5	OK	6.8	---	1989	Dualize	S.H.W.				
88	75	P	740	A	104	41	13.5	7.5	1.4	2	3,882	6,321	2.60%	II	7.0	OK	1.5	NO	---	---	1995	Uppg. SHW	S.H.W.				
89	76	P	740	A	104	41	27.5	7.5	1.4	2	6,150	13,431	4.20%	I	14.0	NO	2.5	NO	6.5	1.1	2000	Dualize	S.H.W.				
90	77	P	740	A	104	41	7.0	7.5	1.4	2	5,383	11,650	4.15%	I	14.0	NO	2.5	NO	6.5	1.1	2004	Dualize	S.H.W.				
91	78	P	740	A	104	43	5.2	7.2	2.7	2	9,884	23,184	4.59%	I	14.0	NO	2.5	OK	6.8	---	1989	Dualize	S.H.W.				
92	79	P	770	A	104	51	43.0	6.8	1.9	2	3,275	6,550	3.72%	II	7.0	NO	1.5	OK	0.2	---	1999	Uppg. SHW	S.H.W.				
93	80	P	770	A	104	51	24.4	6.8	1.9	2	3,940	5,800	2.06%	II	7.0	NO	1.5	OK	0.2	---	1995	Uppg. SHW	S.H.W.				
94	80	P	770	A	104	52	7.1	6.8	2.3	2	1,659	4,047	4.81%	II	7.0	NO	1.5	OK	0.2	---	2013	Uppg. SHW	S.H.W.				
95	81	P	770	A	104	51	16.0	6.8	1.9	2	3,024	3,450	0.70%	III	6.5	OK	1.0	OK	---	---	2013	Uppg. SHW	S.H.W.				
96	82	P	770	A	104	51	16.8	6.8	1.9	2	1,659	4,047	4.81%	II	7.0	NO	1.5	OK	0.2	---	2013	Uppg. SHW	S.H.W.				
97	83	P	770	A	104	51	37.6	6.8	1.9	2	3,648	6,209	2.84%	II	7.0	NO	1.5	OK	0.2	---	1997	Uppg. SHW	S.H.W.				
98	84	P	930	A	104	61	34.1	7.0	1.4	2	1,644	4,340	5.24%	II	7.0	OK	1.5	NO	---	---	2011	Uppg. SHW	S.H.W.				
99	85	P	910	A	104	71	30.0	7.0	2.0	2	744	1,276	2.88%	III	6.5	OK	1.0	OK	---	---	2013	Uppg. SHW	S.H.W.				
100	86	P	910	A	104	71	20.8	7.0	2.0	2	855	1,714	3.73%	III	6.5	OK	1.0	OK	---	---	2013	Uppg. SHW	S.H.W.				
101	87	P	910	A	104	71	1.0	7.0	2.0	2	2,109	6,056	5.71%	II	7.0	OK	1.5	OK	---	---	2013	Uppg. SHW	S.H.W.				
102	88	P	920	A	104	81	14.1	7.0	2.0	2	847	1,697	3.73%	III	6.5	OK	1.0	OK	---	---	2013	Uppg. SHW	S.H.W.				
103	89	P	340	A	109	11	6.2	14.0	2.5	4	3,821	8,808	4.49%	I	14.0	OK	2.5	OK	---	---	2013	Uppg. SHW	S.H.W.				
104	89	P	340	A	109	11	17.8	7.1	1.4	2	3,821	8,808	4.49%	I	14.0	NO	2.5	NO	6.9	1.1	2011	Dualize	S.H.W.				
105	90	P	310	A	109	21	23.1	7.1	1.4	2	3,919	7,445	3.44%	II	7.0	OK	1.5	NO	---	---	1995	Uppg. SHW	S.H.W.				
106	90	P	320	A	109	31	54.2	6.8	1.5	2	3,919	7,445	3.44%	II	7.0	NO	1.5	OK	0.2	---	1995	Uppg. SHW	S.H.W.				
107	90	P	350	A	109	41	49.0	6.2	1.6	2	3,919	7,445	3.44%	II	7.0	NO	1.5	OK	0.8	---	1995	Uppg. SHW	S.H.W.				
108	91	P	310	A	109	21	25.0	7.1	1.4	2	3,837	7,433	3.54%	II	7.0	OK	1.5	NO	---	---	1995	Uppg. SHW	S.H.W.				
108	92	P	350	A	109	41	36.0	6.2	1.6	2	3,425	6,036	3.03%	II	7.0	NO	1.5	OK	0.8	---	1999	Uppg. SHW	S.H.W.				
109	93	P	350	A	109	41	14.0	6.2	1.6	2	3,638	6,307	2.94%	II	7.0	NO	1.5	OK	0.8	---	1997	Uppg. SHW	S.H.W.				
110	94	P	350	A	109	41	6.0	6.2	1.6	2	2,915	4,167	1.90%	II	7.0	NO	1.5	OK	0.8	---	2011	Uppg. SHW	S.H.W.				
111	95	P	440	A	109	51	21.5	7.3	2.0	2	4,139	6,265	2.21%	II	7.0	OK	1.5	OK	---	---	2013	Uppg. SHW	S.H.W.				
113	95	P	470	A	109	52	64.4	6.5	1.2	2	4,139	6,265	2.21%	II	7.0	NO	1.5	NO	0.5	0.3	1992	Uppg. SHW	S.H.W.				
112	96	P	440	A	109	51	26.0	7.3	2.0	2	11,066	20,116	3.20%	I	14.0	NO	2.5	NO	6.7	0.5	1984	Dualize	S.H.W.				
114	97	P	470	A	109	52	88.0	6.5	1.2	2	3,617	6,305	2.97%	II	7.0	NO	1.5	NO	0.5	0.3	1997	Uppg. SHW	S.H.W.				
115	98	P	470	A	109	52	68.0	6.5	1.2	2	4,151	6,416	2.32%	II	7.0	NO	1.5	NO	0.5	0.3	1992	Uppg. SHW	S.H.W.				

CLASS A , GRAVEL ROADS

No.	S.L. No.	GRAVEL MOPW District Rank	MOPW Road Code	No.	SEC.	Existing Geometry		Lanes (Nos)	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Cross Section Improvement		Remarks				
						Length (km)	C/W Width (m)					C/W Status (m)	S/W Status (m)	C/W Status (m)	S/W Status (m)		Year	Type		
1	42	G	420	A	2	70	36.0	5.0	1.0	2	142	428	5.98%	VII	8.0	NO	--	OK	1995	Minor
2	42	G	420	A	2	80	18.0	5.0	1.0	2	142	428	5.98%	VII	8.0	NO	--	OK	1995	Minor
3	43	G	420	A	2	80	74.0	5.0	1.0	2	142	429	5.99%	VII	8.0	NO	--	OK	1995	Minor
4	43	G	450	A	2	90	124.5	5.0	1.0	2	142	429	5.99%	VII	8.0	NO	--	OK	1995	Minor
5	45	G	450	A	2	90	246.0	5.0	1.0	2	14	39	5.54%	VIII	6.0	OK	--	OK	--	--
6	61	G	350	A	23	1	88.8	5.0	1.0	2	150	420	5.57%	VII	8.0	NO	--	OK	1995	Minor

CLASS A , EARTH ROADS

No.	S.L. No.	GRAVEL MOPW District Rank	MOPW Road Code	No.	SEC.	Existing Geometry		Lanes (Nos)	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Cross Section Improvement		Remarks				
						Length (km)	C/W Width (m)					C/W Status (m)	S/W Status (m)	C/W Status (m)	S/W Status (m)		Year	Type		
1	27	E	850	A	1	80	30.0	5.0	0.0	2	71	194	5.43%	VII	8.0	NO	--	OK	2008	Minor
2	49	E	430	A	3	32	116.9	5.0	0.0	2	128	812	10.21%	IV	6.0	NO	0.5	NO	2008	Minor
3	52	E	360	A	3	50	96.0	5.0	0.0	2	100	290	5.76%	VII	8.0	NO	--	OK	2001	Minor
4	53	E	360	A	3	50	100.0	5.0	0.0	2	100	290	5.76%	VII	8.0	NO	--	OK	2001	Minor
5	54	E	360	A	3	50	5.0	5.0	0.0	2	100	290	5.76%	VII	8.0	NO	--	OK	2001	Minor

(2) CLASS B , PAVED ROADS

No.	S.L. No.	PAVED ROAD CODE	DISTRICT	RANK	NO.	SEC.	Existing Geometry			Lanes (Nos)	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted			Cross Section Improvement			Remarks			
							Length (m)	C/W (m)	S-Width (m)					Type	C/W (m)	S/W (m)	Status	Type	C/W (m)		S/W (m)	Status	Year
1	1	P	120	B	1	10	45.0	6.3	1.2	2	5,570	9,916	3.08%	I	14.0	NO	2.5	NO	2006	Dualize	S.H.W		
2	2	P	120	B	1	10	12.5	6.3	1.2	2	3,223	2,908	-0.54%	III	6.5	NO	1.0	OK	1995	Minor	Upg. SHW		
3	3	P	120	B	1	10	7.0	6.3	1.2	2	5,695	16,151	5.64%	I	14.0	NO	2.5	NO	2000	Dualize	S.H.W		
4	4	P	120	B	1	10	19.0	6.3	1.2	2	3,204	2,893	-0.54%	III	6.5	NO	1.0	OK	1995	Minor	Upg. SHW		
5	5	P	120	B	1	10	6.9	6.3	1.2	2	3,107	2,373	-1.41%	III	6.5	NO	1.0	OK	1995	Minor	Upg. SHW		
6	6	P	620	B	1	21	16.6	6.0	1.5	2	3,406	5,658	2.71%	II	7.0	NO	1.5	OK	2000	Minor	Upg. SHW		
7	7	P	620	B	1	21	5.5	6.0	1.5	2	3,396	5,483	2.55%	II	7.0	NO	1.5	OK	2000	Minor	Upg. SHW		
8	8	P	620	B	1	22	6.9	7.2	2.2	2	708	3,361	8.54%	III	6.5	OK	1.0	OK	---	---	---	---	---
9	9	P	620	B	1	23	13.1	6.0	2.7	2	708	3,361	8.54%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
10	10	P	620	B	1	23	4.3	6.0	2.7	2	683	1,521	4.30%	III	6.5	NO	1.0	OK	2036	Minor	Upg. SHW		
11	11	P	620	B	1	23	8.8	6.0	2.7	2	2,857	5,491	3.50%	II	7.0	NO	1.5	OK	2004	Minor	Upg. SHW		
12	12	P	940	B	1	31	3.0	5.8	2.3	2	3,984	7,193	3.16%	II	7.0	NO	1.5	OK	1995	Minor	Upg. SHW		
13	13	P	940	B	1	31	6.5	5.8	2.3	2	998	3,601	6.99%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
14	14	P	630	B	1	41	29.0	5.8	1.1	2	1,142	3,645	6.30%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
15	15	P	630	B	1	41	3.0	5.8	2.3	2	1,142	3,645	6.30%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
16	16	P	630	B	1	41	4.0	5.8	1.1	2	1,155	3,651	6.24%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
17	17	P	630	B	1	41	2.0	5.8	1.1	2	1,149	3,631	6.24%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
18	18	P	630	B	1	41	14.5	5.8	1.1	2	1,149	3,631	6.24%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
19	19	P	920	B	1	51	2.0	6.4	1.5	2	1,149	3,631	6.24%	III	6.5	NO	1.0	OK	2015	Minor	Upg. SHW		
20	20	P	920	B	1	51	20.0	6.4	1.5	2	1,164	3,683	6.25%	III	6.5	NO	1.0	OK	2014	Minor	Upg. SHW		
21	21	P	920	B	1	51	5.0	6.4	1.5	2	1,270	4,173	6.46%	II	7.0	NO	1.5	OK	2012	Minor	Upg. SHW		
22	22	P	740	B	1	61	2.9	7.0	1.1	2	5,397	12,695	4.56%	I	14.0	NO	2.5	NO	2003	Dualize	S.H.W		
23	23	P	770	B	2	11	35.2	6.0	1.2	2	2,309	6,400	5.51%	II	7.0	NO	1.5	NO	2004	Minor	---		
24	24	P	930	B	2	21	12.0	6.0	1.0	2	2,309	6,400	5.51%	II	7.0	NO	1.5	NO	2004	Minor	---		
25	25	P	760	B	2	31	18.6	6.0	1.0	2	2,339	7,383	6.24%	II	7.0	NO	1.5	NO	2003	Minor	---		
26	26	P	210	B	3	10	20.0	6.7	2.5	2	5,839	16,215	5.52%	I	14.0	OK	---	OK	---	---	---	---	---
27	27	P	740	B	3	20	29.4	6.0	1.9	2	1,986	7,428	7.19%	II	7.0	NO	1.5	OK	2004	Minor	---		
28	28	P	750	B	3	30	48.2	5.4	2.0	2	1,986	7,428	7.19%	II	7.0	NO	1.5	OK	2004	Minor	---		
29	29	P	750	B	3	30	16.0	5.4	2.0	2	1,176	4,762	7.64%	II	7.0	NO	1.5	OK	2011	Minor	---		
30	30	P	750	B	3	30	23.4	5.4	2.0	2	1,176	4,762	7.64%	II	7.0	NO	1.5	OK	2011	Minor	---		
31	31	P	750	B	3	30	42.5	5.4	2.0	2	1,223	5,431	8.16%	II	7.0	NO	1.5	OK	2009	Minor	---		
32	32	P	750	B	3	30	15.5	5.4	2.0	2	1,218	5,409	8.16%	II	7.0	NO	1.5	OK	2009	Minor	---		
33	33	P	720	B	3	40	35.0	6.5	1.2	2	1,158	3,628	6.19%	III	6.5	OK	1.0	OK	---	---	---	---	---
34	34	P	720	B	3	40	16.0	6.5	1.2	2	1,158	3,628	6.19%	III	6.5	OK	1.0	OK	---	---	---	---	---
35	35	P	720	B	3	40	5.0	6.5	1.2	2	2,132	3,600	2.80%	III	6.5	OK	1.0	OK	---	---	---	---	---
36	36	P	720	B	3	40	6.0	6.5	1.2	2	1,182	4,786	7.64%	II	7.0	NO	1.5	NO	2011	Minor	---		
37	37	P	610	B	3	50	30.2	5.8	1.2	2	2,113	2,493	0.87%	III	6.5	NO	1.0	OK	1995	Minor	---		
38	38	P	650	B	3	60	18.0	5.8	1.0	2	2,094	2,471	0.88%	III	6.5	NO	1.0	OK	1995	Minor	---		

No.	S.L. No.	PAVED GRAVEL MOPW Road Code	District RANK NO.	SEC.	Existing Geometry		Lanes (Nos)	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Type	Section to be Adopted		C/W (m)	S/W (m)	Year	Improvement Type	Remarks	
					Length km	C/W Width (m)						C/W Status	S/W Status						
39	31	P	740	B	4	10	6.0	6.4	2.2	2	66	624	12.55%	IV	6.0	OK	0.5	OK	
40	31	P	810	B	4	20	88.4	6.5	1.8	2	66	624	12.55%	IV	6.0	OK	0.5	OK	
41	32	P	740	B	4	10	18.0	6.4	2.2	2	443	4,469	12.94%	II	7.0	OK	1.5	OK	
42	37	P	240	B	5	30	15.0	6.1	2.1	2	1,120	4,444	7.52%	II	7.0	OK	1.5	OK	
43	37	P	250	B	5	10	52.0	6.0	2.3	2	1,120	4,444	7.52%	II	7.0	OK	1.5	OK	
44	37	P	730	B	5	20	24.6	6.2	2.7	2	1,120	4,444	7.52%	II	7.0	OK	1.5	OK	
45	38	P	250	B	5	10	12.3	6.0	2.3	2	214	1,513	10.84%	IV	6.0	OK	0.5	OK	
46	39	P	730	B	5	22	13.7	6.5	1.7	2	630	2,490	7.50%	III	6.5	OK	1.0	OK	
47	39	P	740	B	5	40	51.3	6.7	1.9	2	630	2,490	7.50%	III	6.5	OK	1.0	OK	
48	40	P	240	B	5	30	15.3	6.1	2.1	2	1,497	5,623	7.21%	II	7.0	OK	1.5	OK	
49	41	P	220	B	6	10	12.0	6.0	1.9	2	1,320	4,644	6.84%	II	7.0	NO	1.5	OK	2011
50	42	P	220	B	6	10	30.1	6.0	1.9	2	686	1,866	5.41%	IV	6.0	OK	0.5	OK	
51	43	P	410	B	6	20	20.6	7.0	1.5	2	262	4,030	15.47%	II	7.0	OK	1.5	OK	
52	44	P	410	B	6	20	15.0	7.0	1.5	2	390	4,065	13.13%	II	7.0	OK	1.5	OK	
53	44	P	460	B	6	31	8.3	7.3	1.5	2	390	4,065	13.13%	II	7.0	OK	1.5	OK	
54	45	P	460	B	6	31	55.6	7.3	1.5	2	357	3,494	12.76%	III	6.5	OK	1.0	OK	
55	46	P	470	B	6	31	25.0	7.3	1.5	2	706	4,027	9.60%	II	7.0	OK	1.5	OK	
56	47	P	430	B	7	10	3.0	6.5	1.2	2	152	695	8.33%	IV	6.0	OK	0.5	OK	
57	48	P	430	B	7	20	3.0	7.1	1.7	2	428	3,862	12.27%	III	6.5	OK	1.0	OK	
58	50	P	430	B	7	20	6.5	7.1	1.7	2	50	2,584	23.08%	III	6.5	OK	1.0	OK	
59	51	P	440	B	7	30	35.5	6.5	1.2	2	127	1,253	12.80%	IV	6.0	OK	0.5	OK	
60	51	P	410	B	7	40	45.5	6.6	1.1	2	127	1,253	12.80%	IV	6.0	OK	0.5	OK	
61	52	P	310	B	8	8	30.0	6.2	1.5	2	7,599	12,705	2.74%	I	14.0	NO	2.5	NO	1995
62	52	P	340	B	8	11	15.0	7.9	1.6	2	7,599	12,705	2.74%	II	7.0	OK	1.5	OK	
63	53	P	310	B	8	20	57.5	6.2	1.5	2	7,648	14,068	3.26%	II	7.0	NO	1.5	OK	1995
64	54	P	310	B	8	20	16.0	6.2	1.5	2	7,675	14,117	3.26%	II	7.0	NO	1.5	OK	1995
65	56	P	360	B	8	30	24.5	5.0	1.0	2	51	208	7.68%	VII	8.0	NO	---	OK	2009
66	62	P	110	B	10	1	8.3	14.0	2.5	4	500	1,800	6.97%	IV	6.0	OK	0.5	OK	

CLASS B , GRAVEL ROADS

No.	S.L. GRAVEL MOPW Road Code	EARTH District RANK NO.	SEC.	Length km	Existing Goemetry		Lanes (Nos)	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Cross Section Improvement		Remarks			
					C/W (m)	Width S-Width (m)					C/W (m)	S/W (m)	C/W (m)	S/W (m)				
1	22	G	30	10.3	5.0	1.0	2	1,986	7,428	7.19%	7.0	NO	1.5	OK	2.0	---	Minor	
2	33	G	4	60.6	4.0	1.0	1	48	430	12.23%	4.0	OK	0.5	OK	---	---	---	
3	34	G	4	57.4	4.0	1.0	1	33	432	14.50%	4.0	OK	0.5	OK	---	---	---	
4	35	G	4	41	5.0	1.0	2	48	431	12.25%	4.0	OK	0.5	OK	---	---	---	
5	36	G	4	32.8	5.0	1.0	2	48	434	12.29%	4.0	OK	0.5	OK	---	---	---	
6	47	G	7	24.8	5.0	1.0	2	152	695	8.33%	IV	6.0	NO	0.5	OK	1.0	---	Minor
7	55	G	8	52.1	5.0	1.0	2	190	1,245	10.40%	IV	6.0	NO	0.5	OK	1.0	---	Minor
8	56	G	8	43.4	5.0	1.0	2	51	208	7.68%	VI	4.0	OK	0.5	OK	---	---	---
9	58	G	9	118.0	5.0	1.0	2	20	98	8.72%	VIII	6.0	NO	---	OK	1.0	---	Minor
10	59	G	9	37.1	5.0	1.0	2	20	98	8.72%	VIII	6.0	NO	---	OK	1.0	---	Minor
11	59	G	9	49.0	5.0	1.0	2	20	98	8.72%	VIII	6.0	NO	---	OK	1.0	---	Minor
12	60	G	9	217.0	5.0	1.0	14	14	60	7.96%	VIII	6.0	NO	---	OK	1.0	---	Minor
13	60	G	9	272.8	5.0	1.0	14	14	60	7.96%	VIII	6.0	NO	---	OK	1.0	---	Minor
14	61	G	9	69.0	5.0	1.0	20	20	98	8.72%	VIII	6.0	NO	---	OK	1.0	---	Minor

CLASS B , EARTH ROADS

No.	S.L. GRAVEL MOPW Road Code	EARTH District RANK NO.	SEC.	Length km	Existing Goemetry		Lanes (Nos)	ADT 1994 (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Cross Section Improvement		Remarks			
					C/W (m)	Width S-Width (m)					C/W (m)	S/W (m)	C/W (m)	S/W (m)				
1	34	E	4	6.3	5.0	1.0	2	33	432	14.50%	VI	4.0	OK	0.5	OK	---	---	---
2	35	E	4	12.0	5.0	1.0	2	48	431	12.25%	VI	4.0	OK	0.5	OK	---	---	---
3	47	E	7	114.8	5.0	0.0	2	152	695	8.33%	IV	6.0	NO	0.5	OK	1.0	---	Minor
4	49	E	7	13.4	5.0	0.0	2	50	2,581	23.07%	III	6.5	NO	1.0	OK	1.5	---	Minor
5	50	E	7	26.0	5.0	0.0	2	50	2,584	23.08%	III	6.5	NO	1.0	OK	1.5	---	Minor
6	55	E	8	47.9	5.0	1.0	2	190	1,245	10.40%	IV	6.0	NO	0.5	OK	1.0	---	Minor
7	56	E	8	30	5.0	1.0	2	51	208	7.68%	VI	4.0	OK	0.5	OK	---	---	---
8	57	E	8	92.8	5.0	1.0	2	118	791	10.53%	IV	6.0	NO	0.5	OK	1.0	---	Minor
9	58	E	9	66.0	5.0	1.0	2	20	98	8.72%	VIII	6.0	NO	---	OK	1.0	---	Minor
10	59	E	9	9.0	5.0	1.0	2	20	98	8.72%	VIII	6.0	NO	---	OK	1.0	---	Minor
11	59	E	9	15.0	5.0	1.0	2	20	98	8.72%	VIII	6.0	NO	---	OK	1.0	---	Minor

(3) CLASS C , PAVED ROADS (GROUPE-I)

No.	GRAVEL S.L. EARTH No.	MOPW Road Code	District RANK No.	SEC.	Existing Geometry			Lanes (Nos)	ADT 1994ADT 2013 (PCU)	Growth Ratio (%/Year) Class	Cross Section to be Adopted			Cross Section Improvement			Remarks			
					Length (km)	C/W (m)	WidS-Width (m)				C/W (m)	Type	Status	S/W (m)	Year	Type				
1	P	7	610	C	17	10	24.0	6.2	2.0	2	70	270	7.36%	VII	8.0	OK	--	--	--	--
2	P	8	610	C	17	10	18.0	6.2	2.0	2	70	270	7.36%	VII	8.0	OK	--	--	--	--
3	P	9	750	C	17	20	11.1	6.0	1.0	2	70	270	7.36%	VII	8.0	OK	--	--	--	--
4	P	12	620	C	19	10	25.3	6.3	1.1	2	620	1,031	2.71%	IV	6.0	OK	0.5	--	--	--
5	P	12	640	C	19	20	20.6	6.0	1.1	2	620	1,031	2.71%	IV	6.0	OK	0.5	--	--	--
6	P	15	640	C	20	20	19.6	6.5	1.0	2	1,200	3,200	5.30%	III	6.5	OK	1.0	--	--	--
7	P	15	660	C	20	30	16.5	6.5	1.0	2	1,200	3,200	5.30%	III	6.5	OK	1.0	--	--	--
8	P	17	720	C	21	20	4.0	7.2	1.2	2	36	3,985	28.11%	III	6.5	OK	1.0	--	--	--
9	P	20	720	C	23	1	15.3	6.2	1.8	2	1,031	313	-6.08%	VII	8.0	OK	--	--	--	--
10	P	21	720	C	23	1	12.5	6.2	1.8	2	1,041	1,467	1.82%	IV	6.0	OK	0.5	--	--	--
11	P	22	720	C	23	1	17.5	6.2	1.8	2	1,069	4,802	8.23%	II	7.0	NO	1.5	2011	Minor	--
12	P	23	720	C	24	1	42.3	6.7	1.3	2	24	1,153	22.60%	IV	6.0	OK	0.5	--	--	--
13	P	24	720	C	25	1	10.0	5.4	1.0	2	37	90	4.79%	VIII	6.0	OK	--	--	--	--
14	P	26	520	C	27	10	29.5	5.9	1.0	2	540	1,803	6.55%	IV	6.0	OK	0.5	--	--	--
15	P	26	530	C	27	20	6.0	6.2	2.0	2	540	1,803	6.55%	IV	6.0	OK	0.5	--	--	--
16	P	30	630	C	29	10	36.0	5.8	1.5	2	1,527	1,395	-0.47%	IV	6.0	OK	0.5	--	--	--
17	P	30	940	C	29	30	3.5	6.0	2.2	2	1,527	1,395	-0.47%	IV	6.0	OK	0.5	--	--	Minor
18	P	38	630	C	39	40	4.4	5.1		2	15	60	7.57%	VIII	6.0	NO	--	--	--	--
19	P	38	930	C	33	10	16.2	5.9	1.0	2	15	60	7.57%	VIII	6.0	OK	--	--	--	--
20	P	38	930	C	33	10	19.2	5.9	1.0	2	15	60	7.57%	VIII	6.0	OK	--	--	--	--
21	P	40	930	C	40	1	31.0	6.4	1.0	2	9	32	6.90%	VIII	6.0	OK	--	--	--	--
22	P	41	910	C	33	20	1.0	5.9	1.0	2	6	20	6.54%	VIII	6.0	OK	--	--	--	--
23	P	42	940	C	33	20	17.0	5.9	1.0	2	6	20	6.54%	VIII	6.0	OK	--	--	--	--
24	P	44	620	C	34	10	41.7	6.2	1.0	2	10	3,659	36.43%	III	6.5	NO	1.0	2011	Minor	--
25	P	45	620	C	34	10	10.5	6.2	1.0	2	13	3,857	34.93%	III	6.5	NO	1.0	2011	Minor	--
26	P	46	720	C	34	20	8.2	6.5	1.0	2	23	471	17.22%	VII	8.0	OK	--	--	--	--
27	P	46	620	C	34	10	10.5	6.2	1.0	2	23	471	17.22%	VII	8.0	OK	--	--	--	--
28	P	47	820	C	35	20	10.0	6.5	1.0	2	208	6,459	19.82%	II	7.0	NO	1.5	2010	Minor	--
29	P	47	720	C	35	10	1.6	6.5	1.0	2	208	6,459	19.82%	II	7.0	NO	1.5	2010	Minor	--
30	P	48	820	C	35	20	9.0	6.5	0.0	2	196	3066	15.57%	III	6.5	OK	1.0	2010	Minor	--
31	P	49	770	C	36	21	22.5	6.2	1.2	2	632	2,766	8.08%	III	6.5	OK	1.0	2009	Minor	--
32	P	49	830	C	36	11	30.9	6.0	1.0	2	632	2,766	8.08%	III	6.5	NO	1.0	--	--	--
33	P	50	236	C	37	10	39.9	6.3	1.4	2	33	417	14.28%	VII	8.0	OK	--	--	--	--

No.	PAVED GRAVEL S.L. EARTH No.	MOPW Road Code	District RANK NO.	SEC.	Existing Geometry			ADT 1994ADT	2013	Growth Ratio (%/Year)	Cross Section to be Adopted			Status	Cross Section Improvement		Remarks		
					Length (km)	C/W (m)	Width (m)				Lanes (Nos)	(PCU)	(PCU)		(PCU)	C/W (m)		S/W (m)	Year
34	P	50	620	C	37	10	9.9	6.3	1.4	2	33	417	14.28%	VII	8.0	OK	--	--	--
35	P	51	620	C	37	10	9.9	6.3	1.4	2	10	173	16.19%	VII	8.0	OK	--	--	--
36	P	53	940	C	38	1	16.6	5.7	1.5	2	1,193	1,899	2.48%	IV	6.0	OK	0.5	--	--
37	P	54	770	C	39	11	2.2	7.1	1.1	2	150	1,048	10.77%	IV	6.0	OK	0.5	--	--
38	P	54	770	C	39	12	18.6	5.6	1.0	2	150	1,048	10.77%	IV	6.0	OK	0.5	--	--
39	P	54	830	C	39	20	27.6	5.6	1.2	2	150	1,048	10.77%	IV	6.0	OK	0.5	--	--
40	P	55	830	C	39	20	22.6	5.6	1.2	2	652	1,532	4.60%	IV	6.0	OK	0.5	--	--
41	P	55	940	C	39	30	14.1	5.5	1.3	2	652	1,532	4.60%	IV	6.0	OK	0.5	--	--
42	P	55	940	C	39	30	15.0	5.5	1.3	2	652	1,532	4.60%	IV	6.0	OK	0.5	--	--
43	P	58	910	C	42	1	8.3	5.0	1.0	2	6	20	6.54%	VIII	6.0	NO	1.0	--	Minor
44	P	61	760	C	45	2	18.7	5.6	1.0	2	65	180	5.51%	VIII	6.0	OK	--	--	--
45	P	61	760	C	45	1	2.5	5.6	1.0	2	65	180	5.51%	VIII	6.0	OK	--	--	--
46	P	67	770	C	51	12	9.0	5.8	1.2	2	72	1,149	15.70%	IV	6.0	OK	0.5	--	--
47	P	67	770	C	51	20	11.0	6.5	1.0	2	72	1,149	15.70%	IV	6.0	OK	0.5	--	--
48	P	68	770	C	51	12	18.1	5.8	1.2	2	60	6,035	27.47%	III	6.5	NO	1.0	2008	Minor
49	P	69	820	C	51	20	10.0	6.5	1.0	2	37	1,090	19.49%	IV	6.0	OK	0.5	--	--
50	P	69	820	C	51	20	19.5	6.5	1.0	2	37	1,090	19.49%	IV	6.0	OK	0.5	--	--
51	P	70	810	C	51	30	66.0	6.7	1.6	2	37	1,098	19.53%	IV	6.0	OK	0.5	--	--
52	P	70	820	C	51	20	23.5	6.5	1.0	2	37	1,098	19.53%	IV	6.0	OK	0.5	--	--
53	P	71	730	C	51	40	49.6	5.0	1.1	2	19	906	22.56%	IV	6.0	NO	0.5	2010	Minor
54	P	74	820	C	53	20	16.5	6.0	1.0	2	160	2,950	16.58%	III	6.5	NO	1.0	2010	Minor
55	P	76	770	C	54	12	32.8	6.0	2.0	2	160	2,950	16.58%	III	6.5	NO	1.0	2010	Minor
56	P	77	740	C	55	10	10.2	6.2	1.7	2	379	3,864	13.00%	III	6.5	OK	1.0	--	--
57	P	77	810	C	55	20	29.9	6.6	1.7	2	379	3,869	13.01%	III	6.5	OK	1.0	--	--
58	P	78	810	C	55	20	29.8	6.6	1.7	2	252	3,121	14.16%	III	6.5	OK	1.0	--	--
59	P	78	820	C	55	30	11.5	6.5	1.6	2	252	3,121	14.16%	III	6.5	OK	1.0	--	--
60	P	79	740	C	56	1	12.9	6.3	2.4	2	85	4,320	22.97%	III	6.5	OK	1.0	--	--
61	P	80	740	C	56	1	44.5	6.3	2.4	2	4	4,199	44.21%	III	6.5	OK	1.0	--	--
62	P	81	740	C	57	20	38.8	6.1	1.9	2	90	311	6.74%	VIII	6.0	OK	--	--	--
63	P	81	750	C	57	11	2.0	6.2	2.5	2	90	311	6.74%	VIII	6.0	OK	--	--	--
64	P	82	110	C	58	10	7.0	6.5	1.4	2	1,001	2,154	4.12%	III	6.5	OK	1.0	--	--
65	P	83	110	C	58	10	6.0	6.5	1.4	2	40	110	5.47%	VIII	6.0	OK	--	--	--
66	P	83	710	C	58	20	97.6	5.3	1.3	2	40	110	5.47%	VIII	6.0	OK	--	--	--
67	P	84	110	C	59	1	10.0	8.0	2.4	2	533	411	-1.36%	VIII	6.0	OK	--	--	--
68	P	85	110	C	59	1	2.3	8.0	2.4	2	120	320	5.30%	VIII	6.0	OK	--	--	--
69	P	86	110	C	59	1	2.3	8.0	2.4	2	783	3,134	7.57%	III	6.5	OK	1.0	--	--

No.	PAVED EARTH	S.L. No.	MOPW District	Road RANK	Code NO.	SEC.	Existing Geometry		Lanes (Nos)	ADT 1994ADT (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Cross Section Improvement		Remarks						
							Length (km)	C/W (m)					Type	Status	C/W (m)	S/W (m)		Year	Type				
70	P	87	110	C	60	10	8.0	5.8	3.4	2	675	1,458	4.14%	IV	6.0	OK	0.5	OK	--	--	--	--	
71	P	88	110	C	60	10	5.5	5.8	3.4	2	1,798	3,995	4.29%	III	6.5	OK	1.0	OK	--	--	--	--	--
72	P	88	710	C	60	20	4.9	7.1	2.4	2	1,798	3,995	4.29%	III	6.5	OK	1.0	OK	--	--	--	--	--
73	P	89	110	C	61	1	7.0	8.0	2.4	2	1,600	3,500	4.21%	III	6.5	OK	1.0	OK	--	--	--	--	--
74	P	90	110	C	61	1	6.5	8.0	2.4	2	665	1,436	4.13%	IV	6.0	OK	0.5	OK	--	--	--	--	--
75	P	91	110	C	62	20	7.0	6.8	2.1	2	1,110	6,338	9.60%	III	6.5	OK	1.0	OK	--	--	--	--	--
76	P	91	110	C	62	10	26.0	6.8	3.0	2	1,110	6,338	9.60%	III	6.5	OK	1.0	OK	--	--	--	--	--
77	P	92	110	C	62	20	14.5	6.8	2.1	2	1,172	6,688	9.60%	III	6.5	OK	1.0	OK	--	--	--	--	--
78	P	93	110	C	63	10	7.7	5.8	1.2	2	125	354	5.63%	VIII	6.0	OK	--	OK	--	--	--	--	--
79	P	93	210	C	63	20	2.6	6.1	1.7	2	125	354	5.63%	VIII	6.0	OK	--	OK	--	--	--	--	--
80	P	94	210	C	63	10	7.8	5.8	1.2	2	1,043	2,243	4.11%	III	6.5	NO	1.0	OK	0.7	2010	Minor	--	--
81	P	95	210	C	63	20	16.0	6.1	1.7	2	3,258	9,020	5.51%	III	6.5	OK	1.0	OK	--	--	--	--	--
79	P	96	210	C	63	20	18.0	6.1	1.7	2	50	193	7.37%	VIII	6.0	OK	--	OK	--	--	--	--	--
80	P	97	210	C	63	20	17.0	6.1	1.7	2	15	36	4.72%	VIII	6.0	OK	--	OK	--	--	--	--	--
81	P	98	110	C	64	10	5.5	5.6	2.6	2	4,869	14,319	5.84%	III	6.5	OK	1.0	OK	--	--	--	--	--
82	P	99	210	C	64	20	6.2	5.5	1.7	2	4,869	14,319	5.84%	III	6.5	OK	1.0	OK	--	--	--	--	--
83	P	99	210	C	64	20	18.1	5.5	1.7	2	1,588	4,086	5.10%	III	6.5	OK	1.0	OK	--	--	--	--	--

CLASS C , PAVED ROADS (GROUPE-II)

No.	PAVED GRAVEL S.L. EARTH No.	MOPW Road Code	District RANK NO.	SEC.	Existing Geometry		Lanes (Nos)	ADT 1994ADT 2013 (PCU)	Growth Ratio (%/Year)	Cross Section to be Adopted		Status	Cross Section Improvement		Remarks							
					Length (km)	C/W WidS-Width (m)				C/W (m)	S/W (m)		C/W (m)	S/W (m)		Year	Type					
1	P	1	210	C	64	20	15.5	5.5	1.7	2	1,568	5,214	6.53%	III	6.5	OK	1.0	OK	--	--	--	--
2	P	2	210	C	65	1	32.5	5.9	1.8	2	38	1,264	20.26%	IV	6.0	OK	0.5	OK	--	--	--	--
3	P	3	210	C	65	1	13.0	5.9	1.8	2	5	4	-1.17%	VIII	6.0	OK	--	OK	--	--	--	--
4	P	4	210	C	66	10	51.0	5.8	1.7	2	1,009	2,226	4.25%	III	6.5	OK	1.0	OK	--	--	--	--
5	P	4	240	C	66	20	4.5	5.4	2.3	2	1,009	2,226	4.25%	III	6.5	OK	1.0	OK	--	--	--	--
6	P	5	210	C	66	10	14.0	5.8	1.7	2	2,565	6,233	4.78%	III	6.5	OK	1.0	OK	--	--	--	--
7	P	6	230	C	67	10	31.1	6.0	2.0	2	100	424	7.90%	VIII	6.0	OK	--	OK	--	--	--	--
8	P	7	240	C	67	20	5.1	6.0	2.0	2	1,300	4,995	7.34%	III	6.5	OK	1.0	OK	--	--	--	--
9	P	8	740	C	67	30	6.9	6.0	1.8	2	1,300	4,995	7.34%	III	6.5	OK	1.0	OK	--	--	--	--
10	P	9	240	C	68	1	18.1	6.5	1.7	2	1,300	4,995	7.34%	III	6.5	OK	1.0	OK	--	--	--	--
11	P	10	740	C	69	10	17.6	5.3	1.7	2	157	520	6.51%	IV	6.0	OK	0.5	OK	--	--	--	--
12	P	11	240	C	69	20	2.0	5.5	2.2	2	20	59	5.86%	VIII	6.0	OK	--	OK	--	--	--	--
13	P	14	230	C	70	10	33.0	6.2	1.8	2	1,214	7,202	9.82%	III	6.5	OK	1.0	OK	--	--	--	--
14	P	14	250	C	70	20	23.0	6.1	1.2	2	1,214	7,202	9.82%	III	6.5	OK	1.0	OK	--	--	--	--
15	P	15	230	C	71	1	29.0	6.3	1.7	2	5,927	11,186	3.40%	III	6.5	OK	1.0	OK	--	--	1991	Minor
16	P	16	230	C	72	1	25.1	5.6	1.4	2	2,400	9,424	7.46%	III	6.5	NO	1.0	OK	0.9	--	--	--
17	P	17	220	C	73	10	4.0	6.1	1.3	2	634	2,778	8.09%	III	6.5	OK	1.0	OK	--	--	--	--
18	P	18	220	C	73	10	18.8	6.1	1.3	2	1,239	6,342	8.97%	III	6.5	OK	1.0	OK	--	--	--	--
19	P	19	230	C	73	20	12.1	5.8	1.0	2	1,068	5,756	9.27%	III	6.5	NO	1.0	OK	0.7	--	2001	Minor
20	P	20	250	C	74	20	14.5	6.1	1.5	2	96	1,404	15.17%	IV	6.0	OK	0.5	OK	--	--	--	--
21	P	20	220	C	74	10	4.0	6.1	1.0	2	96	1,404	15.17%	IV	6.0	OK	0.5	OK	--	--	--	--
22	P	21	220	C	74	20	9.5	6.1	1.5	2	847	5,591	10.44%	III	6.5	OK	1.0	OK	--	--	--	--
23	P	22	250	C	75	1	9.2	6.1	1.8	2	213	2,354	13.48%	III	6.5	OK	1.0	OK	--	--	--	--
24	P	23	730	C	76	10	3.0	5.7	1.3	2	356	1,099	6.11%	IV	6.0	OK	0.5	OK	--	--	--	--
25	P	24	240	C	77	20	14.8	6.0	2.2	2	761	1,946	5.07%	IV	6.0	OK	0.5	OK	--	--	--	--
26	P	24	740	C	77	10	18.1	6.0	2.2	2	761	1,946	5.07%	IV	6.0	OK	0.5	OK	--	--	--	--
27	P	25	240	C	77	20	25.5	6.1	1.7	2	1,003	3,299	6.47%	III	6.5	OK	1.0	OK	--	--	--	--
28	P	26	240	C	77	20	11.7	6.1	1.7	2	1,016	3,341	6.47%	III	6.5	OK	1.0	OK	--	--	--	--
29	P	27	730	C	77	30	9.7	6.1	1.7	2	233	1,690	10.99%	IV	6.0	OK	0.5	OK	--	--	--	--
30	P	28	730	C	77	30	30.0	6.1	1.7	2	209	748	6.94%	IV	6.0	OK	0.5	OK	--	--	--	--
31	P	34	240	C	83	20	9.0	5.5	1.5	2	15	40	5.30%	VIII	6.0	OK	--	OK	--	--	--	--
32	P	34	740	C	83	10	2.0	5.5	1.5	2	15	40	5.30%	VIII	6.0	OK	--	OK	--	--	--	--
33	P	35	620	C	86	1	11.4	6.2	1.0	2	2,040	3,638	3.09%	III	6.5	NO	1.0	OK	0.3	--	1995	Minor

No.	GRAVEL S.L.	MOPW Road Code	District RANK NO.	SEC.	Existing Geometry			ADT 1994	ADT 2013	Growth Ratio (%/Year)	Cross Section to be Adopted			Status	Cross Section Improvement			Remarks		
					Length (km)	C/W (m)	Width (m)				Lanes (Nos)	(PCU)	(PCU)		Ratio	Type	C/W (m)		S/W (m)	Year
34	P	36	740	C	88	1	39.9	6.3	2.1	2	3,994	8,932	4.33%	III	6.5	OK	1.0	OK		
35	P	37	110	C	89	1	2.0	7.0	1.9	2	533	956	3.12%	IV	6.0	OK	0.5	OK		
36	P	38	110	C	89	1	2.5	7.0	1.9	2	190	553	5.78%	IV	6.0	OK	0.5	OK		
37	P	44	440	C	97	10	15.3	6.3	1.2	2	7,343	14,479	3.64%	III	6.5	OK	1.0	OK		
38	P	45	440	C	97	10	9.8	6.3	1.2	2	370	1,348	7.04%	IV	6.0	OK	0.5	OK		
39	P	46	430	C	97	20	25.5	7.0	1.1	2	379	1,267	6.56%	IV	6.0	OK	0.5	OK		
40	P	47	440	C	97	10	32.5	6.3	1.2	2	199	475	4.69%	VIII	6.0	OK	--	OK		
41	P	48	110	C	98	10	25.0	7.0	1.5	2	319	3,000	12.52%	III	6.5	OK	1.0	OK		
42	P	49	440	C	98	20	36.6	5.8	1.7	2	318	1,551	8.70%	IV	6.0	OK	0.5	OK		
43	P	50	440	C	99	1	20.3	5.8	1.6	2	540	1,448	5.33%	IV	6.0	OK	0.5	OK		
44	P	51	440	C	99	1	9.5	5.8	1.6	2	10	20	3.72%	VIII	6.0	OK	--	OK		
45	P	56	710	C	102	1	12.0	5.5	0.5	2	10	20	3.72%	VIII	6.0	OK	--	OK		
46	P	61	310	C	103	30	7.0	5.5	0.5	2	229	1,466	10.26%	IV	6.0	NO	0.5	OK	2002	Minor
47	P	62	350	C	105	1	4.0	6.5	1.3	2	998	3,266	6.44%	III	6.5	OK	1.0	OK		
48	P	63	350	C	105	1	2.5	6.5	1.3	2	520	1,886	7.02%	IV	6.0	OK	0.5	OK		
49	P	64	320	C	106	1	18.0	6.0	1.1	2	200	550	5.47%	IV	6.0	OK	0.5	OK		
50	P	71	310	C	111	1	21.2	6.5	1.2	2	45	1,419	19.92%	IV	6.0	OK	0.5	OK		
51	P	72	360	C	112	10	29.0	6.0	0.0	2	112	623	9.45%	IV	6.0	OK	0.5	NO	2011	Minor
52	P	74	310	C	115	1	39.2	6.0	0.0	2	25	70	5.57%	VIII	6.0	OK	--	OK		
53	P	75	510	C	116	10	19.0	6.0	0.0	2	12	35	5.80%	VIII	6.0	OK	--	OK		
54	P	75	510	C	116	10	154.0	6.0	0.0	2	12	35	5.80%	VIII	6.0	OK	--	OK		

CLASS C, GRAVEL ROADS (GROUPE-I)

No.	PAVED EARTH No.	S.L. District	MOPW Road Rank	Code NO.	SEC.	Length km	Existing Geometry		Lanes (Nos)	ADT 1994	ADT 2013	Ratio (%/Year)	Growth		Cross Section to be Adopted		C/W (m)	S/W (m)	Year	Improvement Type	Remarks
							C/W (m)	WidS-Width (m)					(PCU)	(PCU)	Type Class	Status					
1	G	1	750	C	13	10	21.0	5.0	1.0	2	44	659	15.31%	IV	6.0	OK	0.5	OK			
2	G	1	750	C	13	10	44.0	5.0	1.0	2	44	659	15.31%	IV	6.0	OK	0.5	OK			
3	G	2	750	C	13	20	24.1	5.0	1.0	1	44	658	15.30%	IV	6.0	OK	0.5	OK			
4	G	2	750	C	13	10	21.0	5.0	1.0	2	44	658	15.30%	IV	6.0	OK	0.5	OK			
5	G	3	750	C	14	20	14.0	5.0	1.0	2	50	150	5.95%	VIII	6.0	OK					
6	G	4	750	C	14	10	57.8	5.0	1.0	2	50	150	5.95%	VIII	6.0	OK					
7	G	5	720	C	15	1	28.8	5.0	1.0	2	70	220	6.21%	VIII	6.0	OK					
8	G	6	610	C	16	1	28.8	5.0	1.0	2	50	191	7.31%	VIII	6.0	OK					
9	G	11	640	C	18	1	29.7	5.0	0.0	2	140	400	5.68%	VIII	6.0	NO				Minor	
10	G	13	640	C	19	20	27.5	5.0	1.0	2	1,209	3,249	5.34%	III	6.5	NO	1.0	OK	2004		
11	G	14	610	C	20	10	14.2	5.0	0.0	2	1,200	3,200	5.30%	III	6.5	NO	1.0	NO	2004		
12	G	16	650	C	21	10	46.2	5.0	1.0	2	42	3,569	26.34%	III	6.5	NO	1.0	OK	2011		
13	G	17	650	C	21	10	16.5	5.0	1.0	2	36	3,985	28.11%	III	6.5	NO	1.0	OK	2010		
14	G	18	650	C	22	1	22.5	5.0	1.0	2	26	1,115	21.87%	IV	6.0	OK	0.5	OK			
15	G	19	650	C	22	1	16.0	5.0	1.0	2	66	1,936	19.46%	IV	6.0	OK	0.5	OK			
16	G	24	720	C	25	1	26.0	5.0	1.0	2	37	90	4.79%	VIII	6.0	OK					
17	G	25	640	C	26	1	21.0	5.0	0.0	2	589	2,212	7.21%	III	6.5	NO	1.0	NO	2012		
18	G	27	630	C	28	1	15.0	5.0	1.0	2	40	100	4.94%	VIII	6.0	OK					
19	G	28	630	C	28	1	20.0	5.0	1.0	2	650	1,803	5.52%	IV	6.0	OK	0.5	OK			
20	G	29	630	C	29	10	25.0	5.0	1.0	2	130	330	5.03%	VIII	6.0	OK					
21	G	32	920	C	30	20	27.1	4.0	0.0	1	9	32	6.90%	VIII	6.0	NO				Minor	
22	G	32	930	C	30	30	8.0	5.0	0.0	1	9	32	6.90%	VIII	6.0	NO				Minor	
23	G	33	920	C	31	10	31.6	4.0	0.0	1	10	35	6.82%	VIII	6.0	NO				Minor	
24	G	36	920	C	42	1	25.5	4.0	1.0	1	15	40	5.30%	VIII	6.0	OK					
25	G	36	920	C	32	12	7.0	5.0	0.0	1	15	40	5.30%	VIII	6.0	NO					
26	G	37	910	C	33	20	20.0	5.0	0.0	1	15	60	7.57%	VIII	6.0	NO				Minor	
27	G	38	930	C	33	10	16.0	4.0	0.0	1	15	60	7.57%	VIII	6.0	NO				Minor	
28	G	38	940	C	33	11	3.0	4.0	0.0	1	15	60	7.57%	VIII	6.0	NO				Minor	
29	G	43	930	C	33	20	10.0	5.0	0.0	2	5	12	4.72%	VIII	6.0	NO				Minor	
30	G	47	720	C	35	10	5.0	5.0	1.0	2	208	6,459	19.82%	III	6.5	NO	1.0	OK	2007		
31	G	47	720	C	35	10	49.4	5.0	1.0	2	208	6,459	19.82%	III	6.5	NO	1.0	OK	2007		
32	G	50	770	C	37	30	10.5	5.0	1.0	2	33	417	14.28%	VIII	6.0	OK					
33	G	52	830	C	37	20	52.0	5.0	1.0	2	5	470	27.01%	VIII	6.0	OK					

No.	PAVED GRAVEL EARTH	S. L. District	MOPW Road Code RANK NO.	NO. SEC.	Existing Geometry		Length (km)	Lanes (Nos)	ADT 1994	ADT 1994	Growth		Cross Section to be Adopted		Cross Section Improvement		Remarks	
					C/W (m)	Width (m)					(FCU)	(FCU)	Ratio (%/Year)	Type	C/W (m)	S/W (m)		Year
34	G	56	940	C	39	30	19.1	2	140	370	5.25%	VIII	6.0	NO	---	1.0	---	Minor
35	G	57	910	C	41	20	15.9	2	50	140	5.57%	VIII	6.0	NO	---	1.0	---	Minor
36	G	57	910	C	41	10	27.9	2	50	140	5.57%	VIII	6.0	NO	---	1.0	---	Minor
37	G	58	910	C	42	1	18.9	1	6	20	6.54%	VIII	6.0	OK	---	---	---	---
38	G	59	920	C	43	1	19.0	2	105	499	8.55%	VIII	6.0	OK	---	---	---	---
39	G	60	910	C	44	20	17.3	2	50	127	5.03%	VIII	6.0	OK	---	---	---	---
40	G	60	760	C	44	30	28.5	2	65	180	5.51%	VIII	6.0	NO	---	1.0	---	Minor
41	G	64	760	C	48	12	44.7	1	30	80	5.30%	VIII	6.0	NO	---	2.0	---	Minor
42	G	64	820	C	48	20	21.0	2	30	80	5.30%	VIII	6.0	NO	---	1.0	---	Minor
43	G	65	770	C	50	1	20.0	2	12	5,524	38.09%	III	6.5	NO	1.0	1.5	2010	Minor
44	G	66	770	C	50	1	31.7	2	12	5,559	38.14%	III	6.5	NO	1.0	1.5	2010	Minor
45	G	73	770	C	53	20	11.0	2	160	2,950	16.58%	III	6.5	NO	1.0	1.5	2010	Minor
46	G	74	820	C	53	20	19.0	2	160	2,950	16.58%	III	6.5	NO	1.0	1.5	2010	Minor
47	G	75	820	C	53	20	18.5	2	160	2,950	16.58%	III	6.5	NO	1.0	1.5	2010	Minor
48	G	76	820	C	54	20	24.7	2	160	2,950	16.58%	III	6.5	NO	1.0	1.5	2010	Minor
49	G	81	750	C	57	11	62.0	2	91	311	6.68%	VIII	6.0	OK	---	---	---	---
50	G	99	210	C	64	20	13.2	2	1,588	4,086	5.10%	III	6.5	NO	1.0	1.5	1999	Minor

CLASS C , GRAVEL ROADS (GROUPE-II)

No.	PAVED GRAVEL S.L. EARTH No.	MOPW Road Code	District	RANK NO.	SEC.	Length (km)	Existing Geometry		Lanes (Nos)	ADT 1994ADP (PCU)	ADT 2013 (PCU)	Growth Ratio (%/Year)	Class	Section to be Adopted		Status	C/W (m)	S/W (m)	Year	Improvement Type	Remarks
							Length C/W (m)	Width (m)						C/W (m)	S/W (m)						
1	G	230	C	67	10	15.4	5.0	1.0	2	100	424	7.90%	VIII	6.0	OK	6.0	---	---	---	---	
2	G	240	C	67	20	24.9	5.0	1.0	2	100	424	7.90%	VIII	6.0	OK	6.0	---	---	---	---	
3	G	740	C	67	30	11.0	5.0	1.0	2	1,300	4,995	7.34%	III	6.5	NO	1.5	---	2000	Minor	---	
4	G	240	C	69	20	17.0	5.0	1.0	2	20	59	5.86%	VIII	6.0	OK	---	---	---	---	---	
5	G	240	C	69	20	21.0	5.0	1.0	2	20	59	5.86%	VIII	6.0	OK	---	---	---	---	---	
6	G	240	C	69	20	42.0	5.0	1.0	2	156	518	6.52%	IV	6.0	OK	0.5	---	2012	Minor	---	
7	G	230	C	70	10	23.0	5.0	1.0	2	1,218	16,652	14.76%	I	14.0	NO	9.0	1.5	2012	Dualize	---	
8	G	240	C	76	20	12.0	5.0	1.0	2	356	1,099	6.11%	IV	6.0	OK	0.5	---	---	---	---	
9	G	730	C	76	10	55.0	5.0	---	2	356	1,099	6.11%	IV	6.0	NO	0.5	---	2000	Minor	---	
10	G	730	C	77	30	15.6	5.0	1.0	2	209	748	6.94%	IV	6.0	OK	0.5	---	---	---	---	
11	G	730	C	77	30	57.7	5.0	1.0	2	209	748	6.94%	IV	6.0	OK	0.5	---	---	---	---	
12	G	840	C	77	40	19.0	5.0	1.0	2	209	748	6.94%	IV	6.0	OK	0.5	---	---	---	---	
13	G	840	C	77	40	55.0	5.0	1.0	2	180	650	6.99%	IV	6.0	OK	0.5	---	---	---	---	
14	G	840	C	77	40	27.5	5.0	1.0	2	180	650	6.99%	IV	6.0	OK	0.5	---	---	---	---	
15	G	840	C	77	40	17.5	5.0	1.0	2	209	748	6.94%	IV	6.0	OK	0.5	---	---	---	---	
16	G	240	C	83	20	21.7	5.0	1.0	2	15	40	5.30%	VIII	6.0	OK	---	---	---	---	---	
17	G	630	C	90	10	24.8	5.0	1.0	2	25	70	5.57%	VIII	6.0	OK	---	---	---	---	---	
18	G	920	C	90	20	4.5	5.0	1.0	2	25	70	5.57%	VIII	6.0	OK	---	---	---	---	---	
19	G	410	C	92	10	41.1	5.0	1.0	2	70	920	14.52%	IV	6.0	OK	0.5	---	---	---	---	
20	G	460	C	92	20	68.0	5.0	1.0	2	70	920	14.52%	IV	6.0	OK	0.5	---	---	---	---	
21	G	410	C	93	20	4.0	5.0	1.0	2	25	70	5.57%	VIII	6.0	OK	---	---	---	---	---	
22	G	430	C	93	10	58.0	5.0	1.0	2	25	70	5.57%	VIII	6.0	OK	---	---	---	---	---	
23	G	430	C	94	1	42.7	5.0	1.0	2	25	70	5.57%	VIII	6.0	OK	---	---	---	---	---	
24	G	440	C	98	20	20.0	5.0	1.0	2	319	3,000	12.52%	III	6.5	NO	1.0	---	2010	Minor	---	
25	G	470	C	99	2	30.0	5.0	1.0	2	540	1,448	5.33%	IV	6.0	OK	0.5	---	---	---	---	
26	G	440	C	99	2	30.0	5.0	1.0	2	10	20	3.72%	VIII	6.0	OK	---	---	---	---	---	
27	G	470	C	99	2	25.0	5.0	1.0	2	10	20	3.72%	VIII	6.0	OK	---	---	---	---	---	
28	G	470	C	99	2	54.0	5.0	1.0	2	50	133	5.28%	VIII	6.0	OK	---	---	---	---	---	
29	G	440	C	100	1	27.2	5.0	1.0	2	140	383	10.18%	IV	6.0	OK	0.5	---	---	---	---	
30	G	440	C	100	1	5.0	5.0	1.0	2	457	1,684	7.11%	IV	6.0	OK	0.5	---	---	---	---	
31	G	440	C	101	1	10.0	5.0	1.0	2	40	113	5.62%	VIII	6.0	OK	---	---	---	---	---	
32	G	470	C	101	2	42.0	5.0	1.0	2	40	113	5.62%	VIII	6.0	OK	---	---	---	---	---	
33	G	710	C	102	1	86.0	5.0	1.0	2	10	20	3.72%	VIII	6.0	OK	---	---	---	---	---	
34	G	710	C	102	1	9.0	5.0	1.0	2	48	49	0.11%	VIII	6.0	OK	---	---	---	---	---	

No.	GRAVEL S.L.	MOPW Road Code	EARTH No.	District	RANK NO.	SEC.	Existing Geometry		Lanes (Nos)	ADT 1994	ADT 2013	Growth		Cross Section to be Adopted		Cross Section Improvement		Remarks	
							Length (km)	C/W (m)				WidS-Width (m)	(PCU)	Ratio (%/Year)	Type	C/W (m)	Status		S/W (m)
35	G	58	710	C	102	1	5.0	5.0	1.0	2	10	20	3.72%	VIII	6.0	OK	--	--	--
36	G	60	350	C	103	20	20.0	5.0	--		10	20	3.72%	VIII	6.0	NO	1.0	--	Minor
37	G	60	310	C	103	30	116.0	5.0	1.0	2	10	20	3.72%	VIII	6.0	OK	--	--	--
38	G	61	310	C	103	10	77.1	5.0	1.0	2	229	1,466	10.26%	IV	6.0	OK	0.5	--	--
39	G	61	310	C	103	10	32.0	5.0	1.0	2	229	1,466	10.26%	IV	6.0	OK	0.5	--	--
40	G	61	310	C	103	10	80.0	5.0	1.0	2	229	1,466	10.26%	IV	6.0	OK	0.5	--	--
41	G	69	320	C	107	20	27.0	5.0	1.0	2	25	70	5.57%	VIII	6.0	OK	--	--	--
42	G	70	320	C	108	1	50.0	5.0	1.0	2	25	70	5.57%	VIII	6.0	OK	--	--	--
43	G	73	810	C	113	10	30.0	5.0	1.0	2	10	35	6.82%	VIII	6.0	NO	1.0	--	Minor
44	G	76	920	C	32	11	13.6	5.0	1.0	2	10	35	6.82%	VIII	6.0	NO	1.0	--	Minor
45	G	76	920	C	32	11	5.6	5.0	1.0	2	10	35	6.82%	VIII	6.0	NO	1.0	--	Minor

CLASS C, EARTH ROADS (GROUPE-I)

No.	EARTH	S.L.	MOPW	Road	Code	District	RANK	NO.	SEC.	Length	Existing Geometry		Lanes	ADT	1994	ADT	2013	Growth	Cross Section to be Adopted		Cross Section Improvement		Remarks
											C/W	WidS-Width							Type	C/W	S/W	Year	
										km	(m)	(m)	(Nos)	(PCU)	(PCU)	(PCU)	(%/Year)	Ratio	Type	C/W	S/W	Year	Type
1	E	1	750	C	13	10	29.0	5.0	1.0	2	44	659	15.31%	IV	6.0	NO	0.5	OK	1.0	---	2011	Minor	
2	E	3	750	C	14	10	14.7	5.0	0.0	2	50	150	5.95%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
3	E	10	750	C	17	20	31.1	5.0	0.0	2	70	270	7.36%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
4	E	31	920	C	30	20	36.0	5.0	0.0	2	10	35	6.82%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
5	E	34	930	C	31	20	9.0	5.0	0.0	2	10	35	6.82%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
6	E	35	930	C	31	20	7.0	5.0	0.0	2	9	32	6.90%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
7	E	37	930	C	33	10	4.5	5.0	0.0	2	15	60	7.57%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
8	E	39	910	C	33	10	4.5	5.0	0.0	2	9	43	8.58%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
9	E	57	910	C	41	20	5.0	5.0	0.0	2	50	140	5.57%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
10	E	59	920	C	43	1	10.5	5.0	1.0	2	105	499	8.55%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
11	E	60	930	C	44	10	19.3	5.0	1.0	2	50	127	5.03%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
12	E	62	850	C	46	10	51.0	5.0	1.0	2	25	60	4.72%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
13	E	62	860	C	46	20	45.0	5.0	0.0	2	25	60	4.72%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
14	E	63	850	C	46	10	64.0	5.0	1.0	2	25	60	4.72%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
15	E	64	760	C	48	12	16.5	5.0	1.0	2	30	80	5.30%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor
16	E	64	770	C	48	31	18.9	5.0	1.0	2	30	80	5.30%	VIII	6.0	NO	---	OK	6.0	---	---	---	Dualize
17	E	71	810	C	51	40	15.5	5.0	1.0	2	19	906	22.56%	IV	6.0	NO	0.5	OK	1.0	---	2010	Minor	
18	E	71	810	C	51	30	39.0	5.0	1.0	2	19	906	22.56%	IV	6.0	NO	0.5	OK	1.0	---	2010	Minor	
19	E	72	810	C	52	1	85.7	5.0	1.0	2	20	50	4.94%	VIII	6.0	NO	---	OK	1.0	---	---	---	Minor

CLASS C, EARTH ROADS (GROUPE-II)

GRAVEL S.L. EARTH No.	MOPW Road Code	District RANK NO.	SEC.	Length (km)	Existing Geometry		Lanes (Nos)	ADT 1994	ADT 2013	Growth Ratio (%/Year)	Cross Section Type	C/W (m)	Status	Cross Section to be Adopted			Cross Section Improvement			Remarks		
					C/W (m)	Width (m)								(PCU)	(PCU)	(%/Year)	C/W (m)	Type	S/W (m)		Status	S/W (m)
1	E	11	240	C	69	20	20.0	5.0	1.0	2	20	59	5.86%	VIII	6.0	NO	--	OK	1.0	--	Minor	
2	E	29	730	C	77	50	127.0	5.0	0.0	2	180	650	6.99%	IV	6.0	NO	0.5	NO	1.0	0.5	2009	Minor
3	E	29	450	C	82	0	218.3	5.0		2	180	650	6.99%	IV	6.0	NO	0.5	NO	1.0	0.5	2009	Minor
4	E	29	730	C	77	0	50.7	5.0		2	180	650	6.99%	IV	6.0	NO	0.5	NO	1.0	0.5	2009	Minor
5	E	31	840	C	79	1	44.0	5.0		2	25	65	5.16%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
6	E	31	840	C	78	1	88.0	5.0		2	25	65	5.16%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
7	E	32	450	C	80	10	64.0	5.0	0.0	2	12	35	5.80%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
8	E	32	530	C	80	20	194.0	5.0	0.0	2	12	35	5.80%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
9	E	33	510	C	81	1	157.5	5.0	1.0	2	25	70	5.57%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
10	E	42	410	C	93	20	8.3	5.0	1.0	2	25	70	5.57%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
11	E	42	430	C	93	10	39.3	5.0	1.0	2	25	70	5.57%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
12	E	64	320	C	106	1	38.0	5.0	1.0	2	200	550	5.47%	IV	6.0	NO	0.5	OK	1.0	--	2011	Minor
13	E	64	320	C	106	1	18.0	5.0	1.0	2	200	550	5.47%	IV	6.0	NO	0.5	OK	1.0	--	2011	Minor
14	E	65	320	C	106	1	37.7	5.0	1.0	2	200	550	5.47%	IV	6.0	NO	0.5	OK	1.0	--	2011	Minor
15	E	66	310	C	107	10	19.0	5.0	1.0	2	76	140	3.27%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
16	E	67	310	C	107	10	19.0	5.0	1.0	2	76	1,405	16.59%	IV	6.0	NO	0.5	OK	1.0	--	2006	Minor
17	E	68	310	C	107	10	11.0	5.0	1.0	2	76	1,412	16.62%	IV	6.0	NO	0.5	OK	1.0	--	2006	Minor
18	E	69	320	C	107	20	15.0	5.0	1.0	2	25	70	5.57%	VIII	6.0	NO	--	OK	1.0	--	--	Minor
19	E	72	330	C	112	20	93.4	5.0	1.0	2	112	623	9.45%	IV	6.0	NO	0.5	OK	1.0	--	2011	Minor
20	E	73	850	C	113	20	134.0	5.0	1.0	2	10	35	6.82%	VIII	6.0	NO	--	OK	1.0	--	--	Minor

III. ENGINEERING ASSESSMENT ON PAVING CONDITIONS

2. Assessment criteria

(1) Upgrading of Paving Structure

As described in Chapter 6.4 of Volume I, the diagram of surface type upgrading is as shown below.

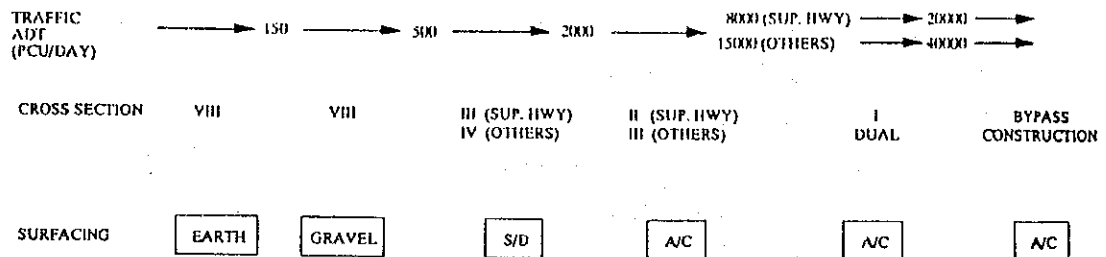


Fig. A.2-4 Surface Type Diagram

(2) Period Maintenance Requirement

Periodic maintenance criteria is shown on the table below.

Table A.2-2 Maintenance Options

Surface	Grading	Regraveling	Resealing	Overlay	Rehabilitation	Reconstruction
A/C Paved Road				IRI 6	IRI 8	IRI 10
SD Paved Roads			IRI 6		IRI 8	IRI 10
Gravel Roads	Twice a Year	5 Years Interva				
Earth Roads	Twice a Year					

IRI: International Roughness Index

3. Abbreviation

- 1) AC Recon : reconstruction of premixed asphalt concrete surface type paving
- 2) Upg. AC : upgrading to premixed asphalt concrete surface type paving
- 3) AC Rehab : rehabilitation of paving structure with premixed asphalt concrete surface
- 4) Overlay : resurfacing with premixed asphalt concrete, 50 mm thick
- 5) SD Recon : reconstruction of double surface dressing type paving
- 6) Upg. SD : upgrading to double surface dressing type paving
- 7) SD Rehab : rehabilitation of paving structure with double surface dressing
- 8) Reseal : resurfacing with double surface dressing, 20~25 mm
- 9) Upg. G : upgrading to gravel surfacing
- 10) OK : no works required except routine maintenance ($2 \leq \text{IRI} < 6$)
- 11) Mnt.G, Mnt.E : routine maintenance for gravel surfaced road and earth road respectively

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS A)

NO.	PAVED GRAVE EARTH NO.	S.L. MOPW ROAD CODE	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	2013 HEAVY (VEH)	GROWTH PCU (YR)	RATIO HEAVY (YR)	AADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS				15Yrs CUMUL. Traffic E.S.A. Class (Mill.)			
										SURFACE Type	O/L (mm)	BASE Type	SUBGRADE Soil Type				
1	AC	1 660 A	11	1,734	268	330	2.18%	1.10%	2105	2	50	2	125	S2	6	1.9	T4
2	AC	2 660 A	11	1,732	268	330	2.18%	1.10%	2103	2	50	2	125	S2	6	1.9	T4
3	SD	2 610 A	20	1,732	268	330	2.18%	1.10%	2103	1	20	2	150	S2	6	1.9	T4
4	AC	3 660 A	11	1,732	268	330	2.18%	1.10%	2103	2	50	2	125	S2	6	1.9	T4
5	AC	4 660 A	11	1,732	268	330	2.18%	1.10%	2103	2	50	2	125	S2	6	1.9	T4
6	SD	5 610 A	20	1,732	268	330	2.18%	1.10%	2103	1	20	2	150	S2	6	1.9	T4
7	AC	5 640 A	12	1,732	268	330	2.18%	1.10%	2103	2	50	3	175	S2	6	1.9	T4
8	AC	6 640 A	12	903	123	355	5.10%	5.74%	1412	2	50	3	175	S2	6	1.2	T4
9	AC	7 640 A	12	974	135	366	7.24%	8.27%	1827	2	50	3	175	S2	6	1.6	T4
10	SD	8 620 A	31	935	129	585	7.23%	8.28%	1752	1	20	1	150	S1	3	1.6	T4
11	SD	9 620 A	31	4,636	892	1,954	4.04%	4.21%	6620	1	20	1	150	S1	3	7.9	T3
12	SD	10 620 A	31	1,548	262	763	5.83%	6.00%	2579	1	20	1	150	S1	3	2.6	T4
13	SD	11 620 A	31	4,497	665	2,065	5.55%	6.15%	7310	1	20	1	150	S1	3	6.9	T3
14	AC	12 620 A	32	4,569	675	1,348	3.89%	3.71%	6444	2	50	1	300	S5	20	5.8	T3
15	SD	13 930 A	40	565	123	366	6.02%	5.91%	956	1	25	1	260	S2	6	1.2	T4
16	AC	14 940 A	41	3,849	524	1,612	5.24%	6.09%	6094	2	50	2	130	S2	6	5.4	T3
17	SD	14 930 A	40	3,849	524	1,612	5.24%	6.09%	6094	1	25	1	260	S2	6	5.4	T3
18	SD	15 930 A	40	562	123	365	6.02%	5.89%	951	1	25	1	260	S2	6	1.2	T4
19	AC	16 940 A	41	2,386	375	1,433	7.05%	7.31%	4406	2	50	2	130	S2	6	4.2	T3
20	AC	17 940 A	41	3,562	442	1,576	5.90%	6.92%	5967	2	50	2	130	S2	6	4.8	T3
21	SD	18 910 A	50	414	77	1,334	6.35%	5.68%	721	1	25	1	130	S2	6	0.8	T5
22	SD	19 910 A	50	412	77	1,327	6.35%	5.68%	717	1	25	1	130	S2	6	0.8	T5
23	SD	20 760 A	61	414	77	1,461	6.86%	6.19%	752	1	25	1	400	S2	6	0.8	T5
24	SD	21 760 A	61	670	177	1,266	3.41%	0.83%	906	1	25	1	400	S2	6	1.2	T4
25	SD	21 860 A	70	670	177	1,266	3.41%	0.83%	906	1	25	1	130	S2	6	1.2	T4
26	SD	22 760 A	61	414	77	1,461	6.86%	6.19%	752	1	25	1	400	S3	8	0.8	T5
27	SD	23 860 A	70	508	143	391	-1.37%	-1.81%	449	1	20	1	130	S2	6	0.8	T5
28	SD	24 860 A	70	312	88	825	5.25%	4.79%	495	1	20	1	130	S2	6	0.8	T5
29	SD	24 850 A	80	312	88	825	5.25%	4.79%	495	1	20	1	130	S3	8	0.8	T5
30	SD	25 850 A	80	557	158	823	2.08%	1.61%	670	1	20	1	130	S3	8	1.2	T4
31	SD	26 850 A	80	71	19	194	5.43%	5.65%	114	1	20	1	130	S3	8	0.2	T5
32	SD	27 850 A	80	71	19	194	5.43%	5.65%	114	1	20	1	130	S3	8	0.2	T5
33	E	27 850 A	80	71	19	194	5.43%	5.65%	114	1	NA	NA	NA	NA	NA	NA	T5
34	AC	28 110 A	1	12,435	1,179	3,457	5.29%	5.83%	19781	2	50	2	200	S2	6	5.9	T3

(continued from previous sheet)

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS A)

NO.	PAVED	EARTH No.	S. L. MOPW ROAD CODE	Dist RANK NO.	NO. SEC.	Length Design Modif. km	S	N	Pave IRI 1994 (m/km)	PSI 1994 (m/yr)	Rough IRI 1995 (m/yr)	Status 1995	IRI 2000	Status 2000	IRI Status 2005	IRI Status 2010	IRI Status 2015	Status 2015	
																			IRI
1	AC	1	660	A	1	11	52.0	2.00	2.8	2.8	0.09	12	AC Recon	2	OK	3	OK	3	OK
2	AC	2	660	A	1	11	4.0	2.00	2.8	2.8	0.09	12	AC Recon	2	OK	3	OK	3	OK
3	SD	2	610	A	1	20	16.5	1.70	2.5	2.5	0.09	8	Upg.AC	2	OK	3	OK	3	OK
4	AC	3	660	A	1	11	2.0	2.00	2.8	2.8	0.09	12	AC Recon	2	OK	3	OK	3	OK
5	AC	4	660	A	1	11	11.0	2.00	2.8	2.8	0.09	12	AC Recon	2	OK	3	OK	3	OK
6	SD	5	610	A	1	20	14.5	1.70	2.5	2.5	0.09	8	Upg.AC	2	OK	3	OK	3	OK
7	AC	5	640	A	1	12	4.8	3.04	3.8	3.8	0.03	8	AC Rehab	2	OK	2	OK	2	OK
8	AC	6	640	A	1	12	32.4	3.04	3.8	3.8	0.02	8	AC Rehab	2	OK	2	OK	2	OK
9	AC	7	640	A	1	12	4.8	3.04	3.8	3.8	0.02	8	AC Rehab	2	OK	2	OK	2	OK
10	SD	8	620	A	1	31	20.0	2.25	3.0	3.0	0.06	8	Upg.AC	2	OK	3	OK	3	OK
11	SD	9	620	A	1	31	20.0	2.25	3.0	3.0	0.29	8	Upg.AC	3	OK	5	OK	6	Ovrlay
12	SD	10	620	A	1	31	17.5	2.25	3.0	3.0	0.09	8	SD Rehab	2	OK	3	OK	3	OK
13	SD	11	620	A	1	31	5.0	2.25	3.0	3.0	0.25	8	Upg.AC	3	OK	4	OK	4	OK
14	AC	12	620	A	1	32	5.6	2.44	3.3	3.4	0.15	4	OK	5	OK	6	Reseal	4	OK
15	SD	13	930	A	1	40	2.0	1.55	2.3	2.6	0.11	5	OK	6	OK	4	OK	5	Ovrlay
16	AC	14	940	A	1	41	6.0	2.25	3.1	2.8	0.17	5	OK	6	OK	4	OK	5	OK
17	SD	14	930	A	1	40	15.0	1.55	2.3	2.6	0.17	5	OK	6	Reseal	3	OK	4	OK
18	SD	15	930	A	1	40	44.4	1.55	2.3	2.6	0.11	5	OK	6	Reseal	6	Reseal	4	OK
19	AC	16	940	A	1	41	7.0	2.25	3.0	2.8	0.15	5	OK	6	OK	7	Upg.AC	3	OK
20	AC	17	940	A	1	41	7.0	2.25	3.0	2.8	0.17	5	OK	6	OK	4	OK	5	OK
21	SD	18	910	A	1	50	10.0	0.92	1.7	2.3	0.19	6	Reseal	4	OK	5	OK	7	Reseal
22	SD	19	910	A	1	50	20.3	0.92	1.7	2.3	0.19	6	Reseal	4	OK	5	OK	7	Reseal
23	SD	20	760	A	1	61	25.0	2.22	3.0	2.3	0.03	9	SD Rehab	2	OK	2	OK	3	OK
24	SD	21	760	A	1	61	30.8	2.22	3.0	2.3	0.04	9	SD Rehab	2	OK	2	OK	3	OK
25	SD	21	860	A	1	70	14.8	0.70	1.5	1.0	0.48	8	SD Rehab	4	OK	5	OK	7	Reseal
26	SD	22	760	A	1	61	6.0	2.22	3.3	1.5	0.02	9	SD Rehab	2	OK	2	OK	2	OK
27	SD	23	860	A	1	70	41.5	0.70	1.5	1.0	0.32	8	SD Rehab	4	OK	5	OK	7	Reseal
28	SD	24	860	A	1	70	46.0	0.70	1.5	1.0	0.32	8	SD Rehab	4	OK	5	OK	7	Reseal
29	SD	24	850	A	1	80	80.0	0.70	1.8	1.7	0.19	7	Reseal	4	OK	5	OK	7	Reseal
30	SD	25	850	A	1	80	88.0	0.70	1.8	1.7	0.27	7	Reseal	4	OK	6	OK	7	Reseal
31	SD	26	850	A	1	80	66.5	0.70	1.8	1.7	0.04	7	Reseal	3	OK	3	OK	4	OK
32	SD	27	850	A	1	80	146.0	0.70	1.8	1.7	0.04	7	Reseal	3	OK	3	OK	4	OK
33	E	27	850	A	1	80	30.0	NA	NA	NA	NA	NA	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E
34	AC	28	110	A	2	1	7.7	2.32	3.1	8	0.19	4	OK	5	OK	4	OK	5	OK

NO.	PAVED GRAVE EARTH No.	S.L. No.	MOPW Distr. Rank	ROAD CODE No.	SEC.	Length km	ADT		TOTAL (PCU)	1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH PCU (YR)	RATIO HEAVY (YR)	AADT IN YEAR 10(PCU)	EXISTING PAVING CONDITIONS			15YRS				
							ADT TOTAL (PCU)	HEAVY (VEH)								SURFACE N/L (mm)	O/L (mm)	BASE Type (mm)	SUBGRADE Soil Type	CUMUL. E.S.A. Class (Mill.)	Traffic Class		
35	AC	28	210	A	2	11	9.1	12,435	1,179	33,132	3,457	5.29%	5.83%	19781	2	50	2	200	S2	6	5.9	T3	
36	AC	29	110	A	2	1	7.7	12,232	1,118	35,790	3,805	5.81%	6.66%	20340	2	50	2	200	S2	6	6.0	T3	
37	AC	30	230	A	2	11	1.0	8,766	1,054	35,971	4,320	7.71%	7.71%	17110	2	35	1	130	S3	8	6.1	T3	
38	AC	31	210	A	2	11	18.0	15,458	1,438	41,519	4,297	5.34%	5.93%	24684	2	50	2	200	S2	6	7.3	T3	
39	AC	32	210	A	2	14	10.0	8,766	1,054	35,694	4,255	7.67%	7.62%	17047	2	50	2	200	S2	6	6.1	T3	
40	AC	33	230	A	2	20	13.5	7,548	936	19,042	2,321	4.99%	4.90%	11700	2	35	20	1	130	S3	8	4.4	T3
41	AC	34	230	A	2	30	10.0	1,596	275	7,795	1,760	8.71%	10.26%	3383	2	35	20	1	130	S3	8	2.0	T4
42	SD	34	220	A	2	20	26.0	1,596	275	7,795	1,760	8.71%	10.26%	3383	1	25	20	2	150	S2	6	2.0	T4
43	SD	35	220	A	2	30	10.0	914	173	5,957	1,100	10.37%	10.23%	2221	1	25	20	2	150	S2	6	1.2	T4
44	SD	36	220	A	2	30	17.7	751	144	1,666	223	4.28%	2.33%	1095	1	25	20	2	150	S2	6	1.1	T4
45	SD	37	250	A	2	40	48.6	837	195	2,837	594	6.64%	6.04%	1492	1	30	1	300	S3	8	2.0	T4	
46	SD	37	730	A	2	50	3.8	837	195	2,837	594	6.64%	6.04%	1492	1	20	20	2	130	S3	8	2.0	T4
47	SD	38	250	A	2	40	12.6	626	138	523	120	-0.94%	-0.73%	575	1	30	1	300	S3	8	0.9	T5	
48	SD	39	250	A	2	40	13.0	837	169	2,045	375	4.81%	4.28%	1278	1	30	1	300	S3	8	1.5	T4	
49	SD	40	460	A	2	60	48.0	1,652	279	5,491	882	6.53%	6.25%	2918	1	20	20	2	130	S3	8	2.9	T4
50	SD	41	460	A	2	60	25.0	487	113	1,792	320	7.10%	5.63%	903	1	20	20	2	130	S3	8	1.1	T4
51	SD	42	420	A	2	70	9.0	142	43	428	89	5.98%	3.90%	239	1	20	2	130	S2	6	0.4	T5	
52	G	42	420	A	2	70	36.0	142	43	428	89	5.98%	3.90%	239	NA	NA	NA	NA	NA	NA	0.4	T5	
53	G	42	420	A	2	80	18.0	142	43	428	89	5.98%	3.90%	239	NA	NA	NA	NA	NA	NA	0.4	T5	
54	G	43	420	A	2	80	74.0	142	43	429	90	5.99%	3.96%	240	NA	NA	NA	NA	NA	NA	0.4	T5	
55	G	43	450	A	2	90	124.5	142	43	429	90	5.99%	3.96%	240	NA	NA	NA	NA	NA	NA	0.4	T5	
56	SD	44	450	A	2	90	9.0	14	4	39	11	5.54%	5.47%	23	NA	NA	NA	NA	NA	NA	0.0	T5	
57	G	45	450	A	2	90	246.0	14	4	39	11	5.54%	5.47%	23	NA	NA	NA	NA	NA	NA	0.0	T5	
58	SD	46	210	A	3	11	13.1	1,632	310	2,919	564	3.11%	3.20%	2149	1	20	25	1	150	S2	6	2.6	T4
59	SD	46	210	A	3	12	23.7	1,632	310	2,919	564	3.11%	3.20%	2149	1	20	25	1	150	S2	6	2.6	T4
60	SD	46	440	A	3	21	13.1	1,632	310	2,919	564	3.11%	3.20%	2149	1	20	20	2	150	S2	6	2.6	T4
61	SD	47	440	A	3	21	20.0	1,584	305	3,152	577	3.69%	3.41%	2194	1	20	20	2	150	S2	6	2.6	T4
62	SD	47	440	A	3	22	6.0	1,584	305	3,152	577	3.69%	3.41%	2194	1	20	20	2	150	S3	8	2.6	T4
63	SD	48	440	A	3	22	6.0	1,571	156	813	300	-3.41%	3.50%	1150	1	20	20	2	150	S3	8	1.3	T4
64	SD	48	430	A	3	31	10.8	1,571	156	813	300	-3.41%	3.50%	1150	1	20	20	2	150	S3	8	1.3	T4
65	SD	48	430	A	3	32	27.9	1,571	156	813	300	-3.41%	3.50%	1150	1	20	20	2	150	S3	8	1.3	T4
66	SD	49	360	A	3	40	100.0	128	81	812	156	10.21%	3.51%	307	1	25	1	250	S3	8	0.7	T5	
67	E	49	430	A	3	32	116.9	128	81	812	156	10.21%	3.51%	307	NA	NA	NA	NA	NA	NA	0.7	T5	
68	SD	50	430	A	3	32	14.0	1,556	155	805	297	-3.41%	3.48%	1139	1	25	1	250	S3	8	1.3	T4	
69	SD	51	360	A	3	40	14.5	115	36	675	111	9.76%	6.11%	266	1	25	1	250	S3	8	0.4	T5	
70	E	52	360	A	3	50	96.0	100	30	290	80	5.76%	-	166	NA	NA	NA	NA	NA	NA	ERR	ERR	ERR

(continued from previous sheet)

NO.	PAVED GRAVE EARTH	S.L.	MOPW ROAD CODE	Distr	RANK	NO.	SEC.	Length	S	N	Pave Age	IRI 1994	PSI 1994	Rough Progr	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI Status 2005	IRI Status 2010	IRI Status 2015	Status 2015		
																							(m/km)	(m/yr)
35	AC	28	210	A	2	11	9.1	2.32	3.1	8	6	1.5	0.19	6	Ovrly	4	OK	5	OK	6	OK	7	Ovrly	
36	AC	29	110	A	2	1	7.7	2.32	3.1	8	4	2.4	0.19	4	OK	5	OK	6	Ovrly	4	OK	5	OK	
37	AC	30	230	A	2	11	1.0	1.34	2.4	28	7	1.0	0.51	8	Ovrly	6	OK	8	AC Rehab	5	OK	7	Ovrly	
38	AC	31	210	A	2	11	18.0	2.32	3.1	8	6	1.5	0.23	6	Ovrly	4	OK	5	OK	6	Ovrly	4	OK	
39	AC	32	210	A	2	14	10.0	2.32	3.1	8	6	1.5	0.19	6	Ovrly	4	OK	5	OK	6	OK	7	Ovrly	
40	AC	33	230	A	2	20	13.5	1.34	2.4	28	7	1.0	0.36	7	Ovrly	5	OK	7	Ovrly	5	OK	7	Ovrly	
41	AC	34	230	A	2	30	10.0	1.34	2.4	28	7	1.0	0.16	7	Ovrly	4	OK	5	OK	5	OK	6	OK	
42	SD	34	220	A	2	20	26.0	1.72	2.5	5/16	6	1.5	0.14	6	Reseal	4	OK	4	OK	5	OK	6	OK	
43	SD	35	220	A	2	30	10.0	1.72	2.5	5/16	6	1.5	0.09	6	Reseal	3	OK	4	OK	4	OK	5	OK	
44	SD	36	220	A	2	30	17.7	1.72	2.5	5/16	6	1.5	0.08	6	Reseal	3	OK	4	OK	4	OK	5	OK	
45	SD	37	250	A	2	40	48.6	1.56	2.6	4/20	12	-1.3	0.12	12	SD Recon	3	OK	3	OK	4	OK	4	OK	
46	SD	37	730	A	2	50	3.8	1.49	2.5	5/20	8	0.5	0.13	8	SD Recon	3	OK	3	OK	4	OK	5	OK	
47	SD	38	250	A	2	40	12.6	1.56	2.6	4/20	12	-1.3	0.05	12	SD Recon	2	OK	3	OK	3	OK	3	OK	
48	SD	39	250	A	2	40	13.0	1.56	2.6	4/20	12	-1.3	0.09	12	SD Recon	2	OK	3	OK	3	OK	4	OK	
49	SD	40	460	A	2	60	48.0	1.49	2.5	5/20	6	1.5	0.20	6	Reseal	4	OK	5	OK	6	OK	7	Reseal	
50	SD	41	460	A	2	60	25.0	1.49	2.5	5/20	6	1.5	0.08	6	Reseal	3	OK	4	OK	4	OK	5	OK	
51	SD	42	420	A	2	70	9.0	1.33	2.1	20	8	0.5	0.05	8	SD Rehab	2	OK	2	OK	3	OK	3	OK	
52	G	42	420	A	2	70	36.0	NA	NA	NA	NA	NA	NA	NA	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
53	G	42	420	A	2	80	18.0	NA	NA	NA	NA	NA	NA	NA	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
54	G	43	420	A	2	80	74.0	NA	NA	NA	NA	NA	NA	NA	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
55	G	43	450	A	2	90	124.5	NA	NA	NA	NA	NA	NA	NA	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
56	G	44	450	A	2	90	9.0	NA	NA	NA	NA	NA	NA	NA	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
57	G	45	450	A	2	90	246.0	NA	NA	NA	NA	NA	NA	NA	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
58	SD	46	210	A	3	11	13.1	0.98	1.8	31	8	0.5	0.40	8	SD Rehab	4	OK	6	OK	8	Reseal	5	OK	
59	SD	46	210	A	3	12	23.7	0.98	1.8	31	8	0.5	0.40	8	SD Rehab	4	OK	5	OK	8	Reseal	5	OK	
60	SD	46	440	A	3	21	13.1	1.68	2.4	12	6	1.5	0.21	6	Reseal	4	OK	5	OK	6	OK	7	Upg.AC	
61	SD	47	440	A	3	21	20.0	1.68	2.4	12	6	1.5	0.21	6	Reseal	4	OK	5	OK	6	OK	7	Upg.AC	
62	SD	47	440	A	3	22	6.0	1.68	2.7	20	9	0.1	0.13	9	SD Rehab	3	OK	3	OK	4	OK	5	OK	
63	SD	48	440	A	3	22	6.0	1.68	2.7	20	9	0.1	0.07	9	SD Rehab	2	OK	3	OK	3	OK	3	OK	
64	SD	48	430	A	3	31	10.8	1.68	2.7	8	6	1.5	0.07	6	Reseal	3	OK	4	OK	4	OK	4	OK	
65	SD	48	430	A	3	32	27.9	1.30	2.3	14	8	0.5	0.12	8	SD Rehab	3	OK	3	OK	4	OK	4	OK	
66	SD	49	360	A	3	40	100.0	1.30	2.3	2	4	2.4	0.06	4	OK	4	OK	5	OK	5	OK	5	OK	
67	E	49	430	A	3	32	116.9	NA	NA	NA	NA	NA	NA	NA	Mnt.E	Mnt.E	Mnt.E	Upg.SD	2	OK	2	OK	2	OK
68	SD	50	430	A	3	32	14.0	1.30	2.3	2	8	0.5	0.12	8	SD Rehab	3	OK	3	OK	4	OK	4	OK	
69	SD	51	360	A	3	40	14.5	1.30	2.3	2	4	2.4	0.03	4	OK	4	OK	4	OK	5	OK	5	OK	
70	E	52	360	A	3	50	96.0	NA	NA	NA	NA	NA	NA	NA	Mnt.E	Mnt.E	Mnt.E	Upg.G	2	OK	2	OK	2	OK

15Yrs

EXISTING PAVING CONDITIONS

TRAFFIC

BASE

SUBGRADE

CUMUL. Traffic

E. S. A. Class

(Mill.)

PAVED	NO.	GRAVE S.L. EARTH No.	MOPW No.	ROAD NO.	CODE	SEC.	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	2013 HEAVY (VEH)	GROWTH PCU (YR)	RATIO HEAVY (YR)	AADT IN YEAR 10 (PCU)	SURFACE		BASE		SUBGRADE		CUMUL. Traffic E. S. A. Class (Mill.)	
														Type	N/L (mm)	Type	O/L (mm)	Type	B/L (mm)		Type
E	71	53	360	A	3	50	100.0	100	30	80	5.76%	-	166	NA	NA	NA	NA	NA	NA	ERR	ERR
E	72	54	510	A	3	50	5.0	100	30	80	5.76%	-	166	NA	NA	NA	NA	NA	NA	ERR	ERR
SD	73	54	510	A	3	50	3.0	100	30	80	5.76%	-	166	NA	NA	NA	NA	NA	NA	ERR	ERR
AC	74	55	320	A	14	10	18.0	291	89	81	-0.88%	-0.49%	269	2	20	2	300	S3	8	0.6	T5
AC	75	56	320	A	14	10	8.5	3,835	509	8,491	4.27%	4.11%	5588	2	20	2	300	S3	8	4.5	T3
AC	76	56	340	A	14	21	7.7	3,835	509	8,491	4.27%	4.11%	5588	2	35	2	300	S3	8	4.5	T3
AC	77	57	320	A	14	10	30.0	292	89	246	-0.90%	-0.49%	269	2	20	2	300	S3	8	0.6	T5
AC	78	58	320	A	14	10	8.0	293	90	247	-0.89%	-0.55%	270	2	20	2	300	S3	8	0.6	T5
AC	79	59	320	A	14	10	14.0	3,784	503	8,378	4.27%	4.11%	5514	2	20	2	300	S3	8	4.4	T3
AC	80	60	320	A	14	10	19.0	3,791	503	8,394	4.27%	4.12%	5524	2	20	2	300	S3	8	4.5	T3
AC	81	61	350	A	23	1	25.2	150	40	420	5.57%	3.72%	244	1	30	2	150	S3	8	0.3	T5
G	82	61	350	A	23	1	88.8	150	40	420	5.57%	3.72%	244	NA	NA	NA	NA	NA	NA	0.3	T5
SD	83	62	710	A	104	1	131.5	415	74	1,642	7.51%	8.41%	796	1	20	1	170	S3	8	0.9	T5
AC	84	63	440	A	104	10	15.0	11,678	2,099	22,124	3.42%	3.10%	15806	2	70	1	200	S1	3	17.2	T2
AC	85	64	110	A	104	21	22.5	10,279	2,085	18,858	3.25%	2.44%	13702	2	80	1	130	S3	8	16.3	T2
AC	86	65	110	A	104	21	7.5	10,279	2,085	18,858	3.25%	2.44%	13702	2	80	1	130	S3	8	16.3	T2
AC	87	65	210	A	104	31	4.8	10,279	2,085	18,858	3.25%	2.44%	13702	2	140	3	150	S5	20	16.3	T2
AC	88	66	110	A	104	22	17.0	10,991	1,957	21,422	3.57%	3.29%	15077	2	80	1	130	S3	8	16.3	T2
AC	89	67	110	A	104	22	8.1	11,524	2,072	21,280	3.28%	2.91%	15409	2	80	1	130	S3	8	16.8	T2
AC	90	68	210	A	104	31	10.0	10,403	2,104	19,172	3.27%	2.48%	13897	2	140	3	150	S5	20	16.5	T2
AC	91	69	210	A	104	31	14.0	5,695	1,150	9,652	2.82%	1.93%	7312	2	140	3	150	S5	20	8.7	T3
AC	92	70	210	A	104	31	22.0	5,736	1,158	10,913	3.44%	2.53%	7779	2	140	3	150	S5	20	9.1	T3
AC	93	71	240	A	104	32	4.3	6,786	1,375	8,500	1.19%	0.57%	7550	2	50	3	150	S5	20	9.4	T3
AC	94	71	740	A	104	41	26.0	6,786	1,375	8,500	1.19%	0.57%	7550	2	50	3	150	S5	20	9.4	T3
AC	95	72	740	A	104	41	32.0	5,384	1,310	11,473	4.06%	2.95%	7704	2	50	3	150	S5	20	10.6	T2
AC	96	73	740	A	104	41	5.0	6,173	1,478	14,491	4.59%	3.54%	9248	2	50	3	150	S5	20	12.5	T2
SD	97	74	740	A	104	41	45.3	9,628	1,956	18,377	3.46%	2.12%	13077	2	50	3	150	S5	20	14.9	T2
SD	98	74	740	A	104	42	7.4	9,628	1,956	18,377	3.46%	2.12%	13077	2	50	3	150	S5	20	14.9	T2
SD	99	75	740	A	104	41	13.5	3,882	900	6,321	2.60%	0.06%	4890	2	50	3	150	S5	20	5.9	T3
AC	100	76	740	A	104	41	27.5	6,150	1,424	13,431	4.20%	3.10%	8904	2	50	3	150	S5	20	11.7	T2
AC	101	77	740	A	104	41	7.0	5,383	1,292	11,650	4.15%	3.03%	7760	2	50	3	150	S5	20	10.5	T2
AC	102	78	740	A	104	43	5.2	9,884	1,997	23,184	4.59%	3.05%	14802	2	50	3	150	S5	20	16.3	T2
SD	103	79	770	A	104	51	43.0	3,275	772	6,550	3.72%	2.52%	4548	2	50	3	150	S2	6	6.1	T3
AC	104	80	770	A	104	51	24.4	3,940	836	5,800	1.04%	1.16%	4732	2	50	3	150	S2	6	6.0	T3
AC	105	80	770	A	104	52	7.1	1,659	394	4,047	4.81%	4.02%	2531	2	50	3	150	S5	20	3.5	T3
AC	106	81	770	A	104	51	16.0	3,024	715	3,450	0.70%	-0.65%	3219	2	50	3	150	S2	6	4.5	T3

(continued from previous sheet)

NO.	PAVED GRAVE S.L. EARTH No.	MOPW ROAD CODE	Distr RANK	NO.	SEC.	Length km	S	N	Pave Age (yrs)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
71	E	53	360	A	3	50	100.0	NA	NA	NA	NA	NA	5	Mnt. E	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
72	E	54	510	A	3	50	5.0	NA	NA	NA	NA	NA	5	Mnt. E	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
73	SD	54	510	A	3	50	3.0	NA	NA	NA	NA	NA	5	Mnt. E	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
74	AC	55	320	A	14	10	18.0	3.76	4.8	23	5	1.9	0.00	OK	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
75	AC	56	320	A	14	10	8.5	3.76	4.8	23	5	1.9	0.03	OK	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
76	AC	56	340	A	14	21	7.7	3.60	4.6	20	5	1.9	0.03	OK	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
77	AC	57	320	A	14	10	30.0	3.76	4.8	23	5	1.9	0.00	OK	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
78	AC	58	320	A	14	10	8.0	3.76	4.8	23	5	1.9	0.00	OK	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
79	AC	59	320	A	14	10	14.0	3.76	4.8	23	5	1.9	0.03	OK	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
80	AC	60	320	A	14	10	19.0	3.76	4.8	23	5	1.9	0.03	OK	5	Mnt. E	5	Upg. G	5	Mnt. G	5	Mnt. G
81	AC	61	350	A	23	1	25.2	1.76	2.8	23	8	0.5	0.02	AC Rehab	2	Mnt. G	2	Mnt. G	2	Mnt. G	2	Mnt. G
82	G	61	350	A	23	1	88.8	NA	NA	NA	NA	NA	NA	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G
83	SD	62	710	A	104	1	131.5	1.06	2.1	23	4	2.4	0.12	OK	5	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G
84	AC	63	440	A	104	10	15.0	2.88	2.9	19	2	3.3	0.46	OK	5	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G
85	AC	64	110	A	104	21	22.5	2.70	3.8	19	3	2.8	0.17	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
86	AC	65	110	A	104	21	7.5	2.70	3.8	19	3	2.8	0.17	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
87	AC	65	210	A	104	31	4.8	4.16	5.9	12	4	2.4	0.03	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
88	AC	66	110	A	104	22	17.0	2.70	3.8	19	3	2.8	0.17	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
89	AC	67	110	A	104	22	8.1	2.70	3.8	19	3	2.8	0.17	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
90	AC	68	210	A	104	31	10.0	4.16	5.9	12	4	2.4	0.03	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
91	AC	69	210	A	104	31	14.0	4.16	5.9	12	4	2.4	0.02	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
92	AC	70	210	A	104	31	22.0	4.16	5.9	12	4	2.4	0.02	OK	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G
93	AC	71	240	A	104	32	4.3	2.72	4.4	10	3	2.8	0.08	OK	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G
94	AC	71	740	A	104	41	26.0	2.72	4.4	12	10	-0.4	0.08	AC Recon	2	Mnt. G	2	Mnt. G	2	Mnt. G	2	Mnt. G
95	AC	72	740	A	104	41	32.0	2.72	4.4	12	10	-0.4	0.09	AC Recon	2	Mnt. G	2	Mnt. G	2	Mnt. G	2	Mnt. G
96	AC	73	740	A	104	41	5.0	2.72	4.4	12	10	-0.4	0.10	AC Recon	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G
97	SD	74	740	A	104	41	45.3	2.72	4.4	12	10	-0.4	0.12	AC Recon	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G
98	SD	74	740	A	104	42	7.4	2.72	4.4	9	4	2.4	0.12	OK	5	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G
99	SD	75	740	A	104	41	13.5	2.72	4.4	12	10	-0.4	0.05	SD Recon	2	Mnt. G	2	Mnt. G	2	Mnt. G	2	Mnt. G
100	AC	76	740	A	104	41	27.5	2.72	4.4	12	10	-0.4	0.09	AC Recon	2	Mnt. G	2	Mnt. G	2	Mnt. G	2	Mnt. G
101	AC	77	740	A	104	41	7.0	2.72	4.4	12	10	-0.4	0.08	AC Recon	2	Mnt. G	2	Mnt. G	2	Mnt. G	2	Mnt. G
102	AC	78	740	A	104	43	5.2	2.72	4.4	9	5	1.9	0.13	OK	6	Mnt. G	6	Mnt. G	6	Mnt. G	6	Mnt. G
103	SD	79	770	A	104	51	43.0	2.72	3.5	5	4	2.4	0.12	OK	5	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G
104	AC	80	770	A	104	51	24.4	2.72	3.5	5	4	2.4	0.12	OK	5	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G
105	AC	80	770	A	104	52	7.1	2.72	4.4	4	3	2.8	0.03	OK	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G
106	AC	81	770	A	104	51	16.0	2.72	3.5	5	4	2.4	0.09	OK	5	Mnt. G	5	Mnt. G	5	Mnt. G	5	Mnt. G

NO.	PAVED EARTH No.	S.L. MOPW No.	DISTR. RANK	ROAD NO.	SEC.	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH PCU (YR)	RATIO HEAVY (YR)	AADT IN YEAR 10(PCU)	EXISTING PAVING CONDITIONS			15Yrs CUMUL. Traffic E. S. A. Class (Mill.)					
														SURFACE Type	O/L (mm)	BASE Type		SUBGRADE Soil Type	CBR %			
107	AC	82	770	A	104	51	1,659	394	4,047	833	4.81%	4.02%	2531	2	50	3	150	S2	6	3.5	T3	
108	AC	83	770	A	104	51	3,648	859	6,209	924	2.84%	0.38%	4693	2	50	3	150	S2	6	5.8	T3	
109	AC	84	930	A	104	61	1,644	390	4,340	862	5.24%	4.26%	2604	2	100	2	220	S5	20	3.5	T3	
110	AC	85	910	A	104	71	744	197	1,276	305	2.88%	2.33%	961	2	50	3	150	S2	6	1.5	T4	
111	AC	86	910	A	104	71	855	223	1,714	402	3.73%	3.15%	1189	2	50	3	150	S2	6	1.8	T4	
112	AC	87	910	A	104	71	2,109	499	6,056	1,229	5.71%	4.86%	3476	2	50	3	150	S2	6	4.7	T3	
113	AC	88	920	A	104	81	847	220	1,697	399	3.73%	3.15%	1177	2	50	3	150	S2	6	1.8	T4	
114	AC	89	340	A	109	11	3,821	987	8,808	1,671	4.49%	2.81%	5675	2	50	20	1	400	S3	8	7.9	T3
115	AC	89	340	A	109	12	3,821	987	8,808	1,671	4.49%	2.81%	5675	2	50	20	1	300	S3	8	7.9	T3
116	SD	90	310	A	109	21	3,919	997	7,445	1,546	3.44%	2.34%	5311	1	25	25	1	160	S3	8	7.7	T3
117	SD	90	320	A	109	31	3,919	997	7,445	1,546	3.44%	2.34%	5311	1	25	25	1	160	S3	8	7.7	T3
118	AC	90	350	A	109	41	3,919	997	7,445	1,546	3.44%	2.34%	5311	2	25	25	2	125	S3	8	7.7	T3
119	SD	91	310	A	109	21	3,837	991	7,433	1,544	3.54%	2.36%	5248	1	25	25	1	150	S3	8	7.7	T3
120	AC	92	350	A	109	41	3,425	975	6,036	1,515	3.03%	2.35%	4479	2	25	25	2	125	S3	8	7.6	T3
121	AC	93	350	A	109	41	3,638	1,038	6,307	1,721	2.94%	2.70%	4721	2	25	25	2	125	S3	8	8.3	T3
122	AC	94	350	A	109	41	2,915	832	4,167	1,196	1.90%	1.93%	3453	2	25	25	2	125	S3	8	6.3	T3
123	AC	95	440	A	109	51	4,139	1,069	6,265	1,601	2.21%	2.15%	5037	2	50	3	125	S1	3	8.2	T3	
124	SD	95	470	A	109	52	4,139	1,069	6,265	1,601	2.21%	2.15%	5037	1	25	25	2	125	S3	8	8.2	T3
125	AC	96	440	A	109	51	11,066	1,990	20,116	3,348	3.20%	2.79%	14687	2	50	3	125	S1	3	15.9	T2	
126	SD	97	470	A	109	52	3,617	1,036	6,305	1,725	2.97%	2.72%	4706	1	25	25	2	125	S1	3	8.3	T3
127	SD	98	470	A	109	52	4,151	1,071	6,416	1,642	2.32%	2.27%	5102	1	25	25	2	125	S1	3	8.3	T3

(continued from previous sheet)

NO.	PAVED EARTH No.	GRAVE S.L. Distr	MOPW ROAD CODE RANK NO.	NO.	SEC.	Length km	Design Modif.	S	N	Pave Age	IRI (m/km)	PSI 1994	Rough Progr	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
106	AC	82	770	A	104	51	16.8	NA	ERR	5	4	2.4	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR	ERR
107	AC	83	770	A	104	51	37.6	2.72	3.5	5	4	2.4	0.07	4	OK	4	OK	5	OK	5	OK	5	OK
108	AC	84	930	A	104	61	34.1	NA	0.8	23	3	2.8	11.79	15	Recon	OK	OK	59	Recon	OK	OK	59	Recon
109	AC	85	910	A	104	71	30.0	2.51	4.2	12	8	0.5	0.03	8	AC Rehab	2	OK	2	OK	3	OK	3	OK
110	AC	86	910	A	104	71	20.8	2.72	3.5	12	8	0.5	0.03	8	AC Rehab	2	OK	2	OK	2	OK	3	OK
111	AC	87	910	A	104	71	1.0	2.72	3.5	12	8	0.5	0.04	8	AC Rehab	2	OK	2	OK	3	OK	3	OK
112	AC	88	920	A	104	81	14.1	2.72	3.5	2	4	2.4	0.09	4	OK	5	OK	5	OK	6	OK	6	OK
113	AC	89	340	A	109	11	6.2	NA	0.8	41	3	2.8	3.69	7	Resurf	18	Recon	18	Recon	OK	OK	18	Recon
114	AC	89	340	A	109	12	17.8	2.88	3.9	41	3	2.8	0.10	3	OK	4	OK	4	OK	5	OK	5	OK
115	SD	90	310	A	109	21	23.1	NA	2.4	32	3	2.8	0.65	4	OK	7	Upg.AC	5	OK	9	AC Rehab	5	OK
116	SD	90	320	A	109	31	54.2	1.02	2.4	25	8	0.5	0.63	9	Upg.AC	5	OK	8	AC Rehab	5	OK	8	AC Rehab
117	AC	90	350	A	109	41	49.0	NA	1.0	30	5	1.9	7.99	13	Recon	7	Upg.AC	40	Upg.AC	42	Recon	5	OK
118	SD	91	310	A	109	21	25.0	NA	1.0	32	3	2.8	0.63	4	OK	7	Upg.AC	5	OK	8	AC Rehab	5	OK
119	AC	92	350	A	109	41	36.0	NA	1.0	30	5	1.9	7.96	13	Recon	7	Upg.AC	40	Upg.AC	42	Recon	5	OK
120	AC	93	350	A	109	41	14.0	1.80	2.8	30	5	1.9	0.34	5	OK	7	OK	9	Upg.AC	4	OK	5	OK
121	AC	94	350	A	109	41	6.0	1.80	2.8	30	5	1.9	0.37	5	OK	7	OK	9	Upg.AC	4	OK	6	OK
122	AC	95	440	A	109	51	21.5	1.60	2.6	16	3	2.8	0.36	5	OK	7	Upg.AC	4	OK	6	Ovrlay	6	OK
123	SD	95	470	A	109	52	64.4	NA	0.1	30	5	1.9	*****	240	Recon	33	Upg.AC	1176	OK	2350	Ovrlay	1177	Recon
124	AC	96	440	A	109	51	26.0	NA	1.0	16	3	2.8	5.63	5	OK	6	AC Recon	5	OK	7	Ovrlay	6	OK
125	SD	97	470	A	109	52	88.0	NA	1.9	1/43	3	2.8	0.54	4	OK	6	Upg.AC	5	OK	7	Ovrlay	6	OK
126	SD	98	470	A	109	52	68.0	1.50	1.9	1/43	3	2.8	0.54	4	OK	6	Upg.AC	5	OK	7	Ovrlay	6	OK
127	SD	98	470	A	109	52	68.0	1.50	1.9	1/43	3	2.8	0.54	4	OK	6	Upg.AC	5	OK	7	Ovrlay	6	OK

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS B)

NO.	PAVED GRAVE EARTH	S.L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	ADT 1994		ADT 2013		GROWTH RATIO		AADT IN YEAR 10 (PCU)	SURFACE		BASE Type	B/L (mm)	SUBGRADE Soil Type	SUBGRADE CBR %	15Yrs CUMUL. E.S.A. (Mill)	Traffic Class
								TOTAL (PCU)	HEAVY (VEH)	TOTAL (PCU)	HEAVY (VEH)	PCU (YR)	HEAVY (YR)		Type	N/L (mm)						
1	SD	1	120	B	1	10	45.0	5,570	1,015	9,916	1,133	3.08%	0.58%	7320	1	20	3	175	S2	6	6.9	T3
2	SD	2	120	B	1	10	12.5	3,223	683	2,908	438	-0.54%	-2.31%	3070	1	20	3	175	S2	6	3.8	T3
3	SD	3	120	B	1	10	7.0	5,695	1,045	16,151	2,519	5.64%	4.74%	9331	1	20	3	175	S2	6	9.7	T3
4	SD	4	120	B	1	10	19.0	3,204	679	2,893	436	-0.54%	-2.30%	3053	1	20	3	175	S2	6	3.8	T3
5	SD	5	120	B	1	10	6.9	3,107	658	2,373	346	-1.41%	-3.33%	2735	1	20	3	175	S2	6	3.4	T3
6	SD	6	620	B	1	21	16.6	3,406	720	5,658	1,001	2.71%	1.75%	4332	1	20	3	150	S2	6	5.4	T3
7	SD	7	620	B	1	22	5.5	3,396	720	5,483	1,001	2.55%	1.75%	4261	1	20	3	150	S2	6	5.4	T3
8	SD	8	620	B	1	22	6.9	708	77	3,361	447	8.54%	9.70%	1481	1	20	3	150	S2	6	1.0	T4
9	AC	8	620	B	1	23	13.1	708	77	3,361	447	8.54%	9.70%	1481	2	35	2	130	S3	8	1.0	T4
10	AC	9	620	B	1	23	4.3	683	74	1,521	238	4.30%	6.34%	998	2	35	2	130	S3	8	0.8	T5
11	AC	10	620	B	1	23	8.8	2,857	371	5,419	881	3.43%	4.66%	3869	2	35	2	130	S3	8	3.4	T3
12	AC	11	940	B	1	31	3.0	3,984	430	7,193	1,008	3.16%	4.59%	5271	2	35	2	130	S3	8	3.9	T3
13	AC	12	940	B	1	31	6.5	998	181	3,601	640	6.99%	6.87%	1833	2	35	2	130	S3	8	2.0	T4
14	SD	13	630	B	1	41	29.0	1,142	217	3,645	647	6.30%	5.92%	1979	1	25	1	130	S3	8	2.2	T4
15	AC	13	940	B	1	31	3.0	1,142	217	3,645	647	6.30%	5.92%	1979	2	35	2	130	S3	8	2.2	T4
16	SD	14	630	B	1	41	4.0	1,155	220	3,651	648	6.24%	5.85%	1992	1	25	1	130	S3	8	2.2	T4
17	SD	15	630	B	1	41	2.0	1,149	219	3,631	645	6.24%	5.85%	1982	1	25	1	130	S3	8	2.2	T4
18	SD	15	630	B	1	41	14.5	1,149	219	3,631	654	6.24%	5.93%	1982	1	25	1	130	S3	8	2.2	T4
19	SD	15	920	B	1	51	2.0	1,149	219	3,631	654	6.24%	5.93%	1982	1	25	1	130	S3	8	2.2	T4
20	SD	16	920	B	1	51	20.0	1,164	222	3,683	654	6.25%	5.85%	2009	1	25	1	130	S3	8	2.4	T4
21	SD	17	920	B	1	51	5.0	1,270	238	4,173	721	6.46%	6.01%	2231	1	25	1	130	S3	8	2.4	T4
22	SD	18	740	B	1	61	2.9	5,397	989	12,954	2,055	4.72%	3.92%	8171	1	20	3	175	S2	6	8.6	T3
23	SD	19	770	B	2	11	35.2	2,309	448	6,400	1,240	5.51%	5.50%	3742	1	25	2	130	S3	8	4.4	T3
24	SD	19	930	B	2	21	12.0	2,309	448	6,400	1,240	5.51%	5.50%	3742	1	25	1	400	S3	8	4.4	T3
25	SD	20	760	B	2	31	18.6	2,339	455	7,383	1,019	6.24%	4.33%	4032	1	25	2	150	S3	8	4.1	T3
26	AC	21	210	B	3	10	20.0	5,839	1,177	16,215	2,849	5.52%	4.76%	9472	2	100	3	150	S3	8	10.9	T2
27	SD	22	740	B	3	20	29.4	1,986	381	7,428	1,302	7.19%	6.68%	3710	1	20	1	300	S3	8	4.1	T3
28	G	22	750	B	3	30	10.3	1,986	381	7,428	1,302	7.19%	6.68%	3710	NA	NA	NA	NA	NA	NA	4.1	T3
29	SD	22	750	B	3	30	48.2	1,986	381	7,428	1,302	7.19%	6.68%	3710	1	25	2	250	S3	8	4.1	T3
30	SD	23	720	B	3	30	16.0	1,176	306	4,762	965	7.64%	6.23%	2281	1	25	2	250	S3	8	3.2	T3
31	SD	23	750	B	3	30	23.4	1,176	306	4,762	965	7.64%	6.23%	2281	1	25	2	250	S3	8	3.2	T3
32	SD	24	750	B	3	30	42.5	1,223	319	5,431	1,113	8.16%	6.80%	2478	1	25	2	250	S3	8	3.5	T3

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS B)

(continued from previous sheet)

NO.	PAVED EARTH	S.L. No.	MOPW Dist.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old (years)	IRI (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
1	SD	1	120	B	1	10	45.0	2.32	3.1	11	8	0.5	0.22	8	Upg. AC	3	OK	4	OK	5	OK	6	Ovrly
2	SD	2	120	B	1	10	12.5	2.32	3.1	11	8	0.5	0.12	8	Upg. AC	3	OK	3	OK	4	OK	4	OK
3	SD	3	120	B	1	10	7.0	2.32	3.1	11	8	0.5	0.31	8	Upg. AC	4	OK	5	OK	7	Ovrly	5	OK
4	SD	4	120	B	1	10	19.0	2.32	3.1	11	8	0.5	0.12	8	Upg. AC	3	OK	3	OK	4	OK	4	OK
5	SD	5	120	B	1	10	6.9	2.32	3.1	11	8	0.5	0.11	8	Upg. AC	3	OK	3	OK	4	OK	4	OK
6	SD	6	620	B	1	21	16.6	2.00	2.8	11	8	0.5	0.26	8	Upg. AC	3	OK	5	OK	6	OK	7	Ovrly
7	SD	7	620	B	1	22	5.5	2.00	2.8	11	8	0.5	0.26	8	Upg. AC	3	OK	5	OK	6	OK	7	Ovrly
8	SD	8	620	B	1	22	6.9	2.00	2.8	11	6	1.5	0.05	6	Reseal	3	OK	4	OK	4	OK	4	OK
9	AC	8	620	B	1	23	13.1	1.97	3.0	2 / 27	5	1.9	0.04	5	OK	5	OK	5	OK	6	OK	6	OK
10	AC	9	620	B	1	23	4.3	1.97	3.0	2 / 27	5	1.9	0.03	5	OK	5	OK	5	OK	5	OK	6	OK
11	AC	10	620	B	1	23	8.8	1.97	3.0	2 / 27	5	1.9	0.12	5	OK	6	OK	6	Ovrly	6	Ovrly	4	OK
12	AC	11	940	B	1	31	3.0	1.97	3.0	2 / 27	4	2.4	0.14	4	OK	4	OK	5	OK	5	OK	5	OK
13	AC	12	940	B	1	31	6.5	1.97	3.0	2 / 27	4	2.4	0.07	4	OK	4	OK	5	OK	5	OK	5	OK
14	SD	13	630	B	1	41	29.0	0.72	2.8	2 / 27	8	0.5	0.10	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
15	AC	13	940	B	1	41	3.0	1.97	3.0	2 / 27	4	2.4	0.08	4	OK	4	OK	5	OK	5	OK	6	OK
16	SD	14	630	B	1	41	4.0	0.72	2.8	2 / 27	8	0.5	0.10	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
17	SD	15	630	B	1	41	2.0	0.72	2.8	2 / 27	8	0.5	0.10	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
18	SD	15	630	B	1	41	14.5	0.72	2.8	2 / 27	8	0.5	0.10	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
19	SD	15	920	B	1	51	2.0	0.72	2.8	22	8	0.5	0.10	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
20	SD	16	920	B	1	51	20.0	0.72	2.8	22	8	0.5	0.11	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
21	SD	17	920	B	1	51	5.0	0.72	2.8	22	8	0.5	0.11	8	Upg. AC	3	OK	3	OK	4	OK	4	OK
22	SD	18	740	B	1	61	2.9	2.32	3.1	NA	8	0.5	0.28	8	Upg. AC	3	OK	5	OK	6	Ovrly	4	OK
23	SD	19	770	B	2	11	35.2	1.55	2.6	31	9	0.1	0.27	9	Upg. AC	3	OK	5	OK	6	Ovrly	4	OK
24	SD	19	930	B	2	21	12.0	2.22	3.3	31	9	0.1	0.12	9	Upg. AC	3	OK	3	OK	4	OK	4	OK
25	SD	20	760	B	2	31	18.6	1.74	2.8	31	8	0.5	0.20	8	Upg. AC	3	OK	4	OK	5	OK	6	OK
26	AC	21	210	B	3	10	20.0	2.72	3.8	21	3	2.8	0.17	3	OK	4	OK	5	OK	6	OK	6	Ovrly
27	SD	22	740	B	3	20	29.4	1.70	2.7	21	6	1.5	0.21	6	Upg. AC	3	OK	4	OK	5	OK	6	Ovrly
28	G	22	750	B	3	30	10.3	NA	NA	NA	NA	NA	NA	9	Upg. AC	2	OK	2	OK	3	OK	4	OK
29	SD	22	750	B	3	30	48.2	2.50	3.5	21	9	0.1	0.08	9	Upg. AC	2	OK	3	OK	3	OK	3	OK
30	SD	23	720	B	3	30	16.0	2.50	3.5	21	9	0.1	0.06	9	SD Rehab	2	OK	3	OK	3	OK	3	OK
31	SD	23	750	B	3	30	23.4	2.50	3.5	21	9	0.1	0.06	9	SD Rehab	2	OK	3	OK	3	OK	3	OK
32	SD	24	750	B	3	30	42.5	2.50	3.5	21	9	0.1	0.07	9	SD Rehab	2	OK	3	OK	3	OK	3	OK

NO.	PAVED GRAVE S.L. EARTH No.	MOPW Dist. No.	ROAD RANK	CODE NO.	Length km	ADT 1994		ADT 2013		GROWTH RATIO		AADT IN YEAR 10(PCU)	SURFACE		BASE Type	B/L (mm)	SUBGRADE Soil Type	SUBGRADE CBR %	15YrS CUMUL. E.S.A. (Mill)	Traffic Class		
						TOTAL (PCU)	HEAVY (VEH)	TOTAL (PCU)	HEAVY (VEH)	PCU (YR)	HEAVY (YR)		Type	N/L (mm)							O/L (mm)	
33	SD	25	750	B	3	30	15.5	1,218	318	5,409	1,108	8.16%	6.79%	2468	1	25	2	250	S3	8	3.4	T3
34	SD	26	720	B	3	40	35.0	1,158	301	3,628	763	6.19%	5.02%	1989	1	25	1	300	S3	8	2.8	T4
35	SD	26	720	B	3	40	16.0	1,158	301	3,628	763	6.19%	5.02%	1989	1	25	1	300	S3	8	2.8	T4
36	SD	27	720	B	3	40	5.0	2,132	450	3,600	777	2.80%	2.92%	2732	1	25	1	300	S3	8	3.6	T3
37	SD	28	720	B	3	40	6.0	1,182	308	4,786	970	7.64%	6.22%	2293	1	25	1	300	S3	8	3.2	T3
38	AC	29	610	B	3	50	30.2	2,113	443	2,493	541	0.87%	1.06%	2285	1	25	1	130	S2	6	3.1	T3
39	AC	30	650	B	3	60	18.0	2,094	439	2,471	536	0.88%	1.06%	2265	1	25	1	170	S2	6	3.1	T3
40	SD	31	740	B	4	10	6.0	66	16	624	93	12.55%	9.71%	191	1	25	1	130	S3	8	0.2	T5
41	SD	31	810	B	4	10	88.4	66	16	624	93	12.55%	9.71%	191	1	25	1	250	S3	8	0.2	T5
42	AC	32	740	B	4	10	18.0	443	93	4,469	786	12.94%	11.89%	1324	1	25	1	130	S3	8	1.5	T4
43	G	33	810	B	4	20	60.6	48	14	430	113	12.23%	11.62%	136	NA	NA	NA	NA	NA	NA	0.2	T5
44	G	34	810	B	4	20	57.4	33	10	432	114	14.50%	13.66%	112	NA	NA	NA	NA	NA	NA	0.2	T5
45	E	34	820	B	4	30	6.3	33	10	432	114	14.50%	13.66%	112	NA	NA	NA	NA	NA	NA	0.2	T5
46	E	35	820	B	4	30	12.0	48	14	431	113	12.25%	11.62%	136	NA	NA	NA	NA	NA	NA	0.2	T5
47	G	35	860	B	4	41	11.0	48	14	431	113	12.25%	11.62%	136	NA	NA	NA	NA	NA	NA	0.2	T5
48	G	36	860	B	4	41	32.8	48	14	434	114	12.29%	11.67%	136	NA	NA	NA	NA	NA	NA	0.2	T5
49	SD	37	240	B	5	30	12.5	1,120	128	4,444	632	7.52%	8.77%	2152	2	30	1	250	S2	6	1.6	T4
50	SD	37	250	B	5	10	52.0	1,120	128	4,444	632	7.52%	8.77%	2152	1	25	1	230	S2	6	1.6	T4
51	SD	37	730	B	5	20	24.6	1,120	128	4,444	632	7.52%	8.77%	2152	1	25	1	230	S2	6	1.6	T4
52	SD	38	250	B	5	10	12.3	214	32	1,513	250	10.84%	11.43%	540	1	25	1	230	S2	6	0.5	T5
53	AC	39	730	B	5	22	13.7	630	147	2,490	515	7.50%	6.82%	1208	2	30	1	250	S2	6	1.6	T4
54	AC	39	740	B	5	40	51.3	630	147	2,490	515	7.50%	6.82%	1208	2	30	1	250	S3	8	1.6	T4
55	AC	40	240	B	5	30	15.3	1,497	223	5,623	924	7.21%	7.77%	2802	2	30	1	250	S2	6	2.6	T4
56	AC	41	220	B	6	10	12.0	1,320	220	4,644	730	6.84%	6.52%	2395	2	25	1	130	S2	6	2.3	T4
57	AC	42	220	B	6	10	30.1	686	107	1,866	270	5.41%	4.99%	1102	2	25	1	130	S2	6	1.0	T4
58	AC	43	410	B	6	20	20.6	262	42	4,030	452	15.47%	13.32%	956	2	25	1	130	S2	6	0.8	T5
59	AC	44	410	B	6	20	15.0	390	60	4,065	456	13.13%	11.27%	1184	2	25	1	130	S2	6	0.9	T5
60	AC	44	460	B	6	31	8.3	390	60	4,065	456	13.13%	11.27%	1184	2	25	1	130	S2	6	0.9	T5
61	SD	45	460	B	6	31	55.6	357	58	3,494	393	12.76%	10.59%	1052	2	25	1	130	S2	6	0.8	T5
62	SD	46	460	B	6	31	25.0	706	105	4,027	617	9.60%	9.77%	1611	2	25	1	130	S2	6	1.4	T4
63	E	47	430	B	7	20	115	152	59	695	196	8.33%	6.52%	312							0.6	T5
64	G	47	470	B	7	10	24.8	152	59	695	196	8.33%	6.52%	312							0.6	T5
65	SD	47	470	B	7	10	3.0	152	59	695	196	8.33%	6.52%	312	1	20	2	130	S3	8	0.6	T5

(continued from previous sheet)

PAVED NO. GRAVE EARTH	S.L. No.	MOPW Dist.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
33	SD	25	750	B	3	30	2.50	3.5	21	9	0.1	0.07	9	SD Rehab	2	OK	3	OK	3	OK	3	OK
34	SD	26	720	B	3	40	1.54	2.6	3	3	2.8	0.18	3	OK	4	OK	5	OK	6	OK	7	Reseal
35	SD	26	720	B	3	40	1.54	2.6	3	3	2.8	0.18	3	OK	4	OK	5	OK	6	OK	7	Reseal
36	SD	27	720	B	3	40	1.54	2.6	3	3	2.8	0.23	3	OK	4	OK	6	OK	7	Reseal	4	OK
37	SD	28	720	B	3	40	1.54	2.6	3	3	2.8	0.20	3	OK	4	OK	5	OK	6	Reseal	4	OK
38	AC	29	610	B	3	50	0.90	2.5	6 / 19	5	1.9	0.22	5	OK	6	OK	7	Ovrly	4	OK	5	OK
39	AC	30	650	B	3	60	1.10	2.5	6 / 19	5	1.9	0.22	5	OK	6	OK	7	Ovrly	4	OK	5	OK
40	SD	31	740	B	4	10	0.90	2.0	NA	4	2.4	0.04	4	OK	4	OK	4	OK	5	OK	5	OK
41	SD	31	810	B	4	20	1.28	2.3	12	6	1.5	0.02	6	Reseal	3	OK	3	OK	3	OK	3	OK
42	AC	32	740	B	4	10	0.90	2.0	NA	4	2.4	0.25	4	OK	6	OK	7	Reseal	4	OK	6	OK
43	G	33	810	B	4	20	NA	NA	NA	NA	NA	NA	4	Mnt. E	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
44	G	34	810	B	4	20	NA	NA	NA	NA	NA	NA	4	Mnt. E	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
45	E	34	820	B	4	30	NA	NA	NA	NA	NA	NA	4	Mnt. E	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
46	E	35	820	B	4	30	NA	NA	NA	NA	NA	NA	4	Mnt. E	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
47	G	35	860	B	4	41	NA	NA	NA	NA	NA	NA	4	Mnt. E	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
48	G	36	860	B	4	41	NA	NA	NA	NA	NA	NA	4	Mnt. E	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
49	SD	37	240	B	5	30	1.44	2.2	16	4	2.4	0.17	4	OK	5	OK	6	Reseal	7	Reseal	4	OK
50	SD	37	250	B	5	10	1.38	2.2	16	8	0.5	0.19	8	SD Rehab	3	OK	4	OK	5	OK	6	OK
51	SD	37	730	B	5	20	1.38	2.2	16	6	1.5	0.19	6	Reseal	4	OK	5	OK	6	OK	7	Reseal
52	SD	38	250	B	5	10	1.38	2.2	16	8	0.5	0.06	8	SD Rehab	2	OK	3	OK	3	OK	3	OK
53	AC	39	730	B	5	22	1.44	2.2	5	4	2.4	0.17	4	OK	5	OK	6	OK	7	Ovrly	4	OK
54	AC	39	740	B	5	40	1.44	2.5	28	4	2.4	0.12	4	OK	5	OK	5	OK	6	OK	6	Ovrly
55	AC	40	240	B	5	30	1.44	2.2	16	4	2.4	0.28	4	OK	6	OK	7	Ovrly	4	OK	6	OK
56	AC	41	220	B	6	10	1.30	2.1	23	7	1.0	0.31	7	Ovrly	5	OK	6	OK	6	OK	6	Ovrly
57	AC	42	220	B	6	10	1.30	2.1	23	7	1.0	0.13	7	Ovrly	4	OK	4	OK	5	OK	6	OK
58	AC	43	410	B	6	20	1.30	2.1	23	5	1.9	0.10	5	OK	6	OK	6	OK	4	OK	4	OK
59	AC	44	410	B	6	20	1.30	2.1	23	5	1.9	0.12	5	OK	6	OK	6	OK	4	OK	4	OK
60	AC	44	460	B	6	31	1.42	2.2	24	4	2.4	0.10	4	OK	5	OK	5	OK	6	OK	6	Ovrly
61	SD	45	460	B	6	31	1.42	2.2	24	4	2.4	0.09	4	OK	5	OK	5	OK	6	OK	6	OK
62	SD	46	460	B	6	31	1.42	2.2	24	4	2.4	0.16	4	OK	5	ERR	ERR	ERR	Reseal	Reseal	4	ERR
63	E	47	430	B	7	20	NA	NA	NA	NA	NA	NA	4	Upg. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
64	G	47	470	B	7	10	NA	NA	NA	NA	NA	NA	4	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G
65	SD	47	470	B	7	10	1.33	2.4	NA	13	-1.7	0.05	4	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G

NO.	PAVED GRAVE EARTH	S.L. No.	MOPW Dist.	ROAD RANK	CODE NO.	Length km	ADT 1994		ADT 2013		GROWTH RATIO		AADT IN YEAR 10(PCU)	SURFACE		BASE Type	SUBGRADE		15YrS CUMUL. Traffic E.S.A. Class (Mill)		
							TOTAL (PCU)	HEAVY (VEH)	TOTAL (PCU)	HEAVY (VEH)	PCU (YR)	HEAVY (YR)		N/L Type	O/L Type		B/L Type	Soil Type		CBR %	
66	SD	48	430	B	7	20	428	77	3,862	724	12.27%	12.52%	1213	1	25	1	130	S3	8	1.3	
67	E	49	430	B	7	20	50	14	2,581	528	23.07%	21.05%	324							0.5	
68	E	50	430	B	7	20	50	14	2,584	529	23.08%	21.06%	324							0.5	
69	SD	50	430	B	7	20	50	14	2,584	529	23.08%	21.06%	324	1	25	1	275	S3	8	0.5	
69	SD	51	440	B	7	30	127	33	1,253	235	12.80%	10.88%	376	1	25	1	275	S3	8	0.5	
70	SD	51	410	B	7	40	127	33	1,253	235	12.80%	10.88%	376	1	25	1	250	S3	8	0.5	
71	SD	52	310	B	8	20	7,599	612	12,705	1,201	2.74%	3.61%	9694	1	25	2	130	S5	20	5.2	
72	SD	52	340	B	8	11	7,599	612	12,705	1,201	2.74%	3.61%	9694	2	35	1	200	S5	20	5.2	
73	SD	53	310	B	8	20	7,648	613	14,068	1,330	3.26%	4.16%	10208	1	25	2	130	S5	20	5.4	
74	SD	54	310	B	8	20	7,675	616	14,117	1,335	3.26%	4.15%	10243	1	25	2	130	S5	20	5.5	
75	G	55	310	B	8	20	190	67	1,245	305	10.40%	8.32%	463							0.8	
76	E	55	360	B	8	30	190	67	1,245	306	10.40%	8.32%	463							0.8	
77	E	56	360	B	8	30	51	18	208	71	7.68%	7.49%	99							0.2	
78	G	56	360	B	8	30	51	18	208	71	7.68%	7.49%	99							0.2	
79	G	56	360	B	8	30	51	18	208	71	7.68%	7.49%	99							0.2	
80	E	57	360	B	8	30	118	41	791	191	10.53%	8.44%	291							0.5	
81	G	58	420	B	9	21	20	8	98	39	8.72%	8.69%	42							0.1	
82	E	58	460	B	9	11	20	8	98	39	8.72%	8.69%	42							0.1	
83	E	59	420	B	9	21	20	8	98	39	8.72%	8.69%	42							0.1	
84	E	59	510	B	9	31	20	8	98	39	8.72%	8.69%	42							0.1	
85	G	59	510	B	9	31	20	8	98	39	8.72%	8.69%	42							0.1	
86	G	59	550	B	9	41	20	8	98	39	8.72%	8.69%	42							0.1	
87	G	60	520	B	9	41	14	6	60	24	7.96%	7.57%	28							0.0	
88	G	60	520	B	9	51	14	6	60	7	7.96%	0.62%	28							0.0	
89	G	61	530	B	9	41	20	8	98	39	8.72%	8.69%	42							0.1	
90	AC	62	110	B	10	1	500	50	1,800	150	6.97%	5.95%	917	2	50	100	1	200	S2	6	0.5

(continued from previous sheet)

NO.	PAVED EARTH	S.L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	IRI 2000	IRI 2005	IRI 2005	IRI 2010	IRI 2010	IRI 2013	IRI 2013	Status 2013
66	SD	48	430	B	7	20	3.0	0.72	1.8	NA	10	-0.4	0.30	10	SD Recon	3	OK	5	OK	6	Reseal	4	OK	
67	E	49	430	B	7	20	13.4	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Upg. SD	2	2	OK	2	OK	
68	E	50	430	B	7	20	26.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Upg. SD	2	2	OK	2	OK	
69	SD	50	430	B	7	20	6.5	1.42	2.5	NA	4	2.4	0.04	4	OK	4	OK	4	OK	5	OK	5	OK	
70	SD	51	440	B	7	30	35.5	1.42	2.5	NA	4	2.4	0.04	4	OK	4	OK	4	OK	5	OK	5	OK	
71	SD	51	410	B	7	40	45.5	1.30	2.3	NA	7	1.0	0.04	7	Reseal	3	OK	3	OK	4	OK	4	OK	
72	SD	52	310	B	8	20	30.0	1.35	3.0	1 / 25	6	1.5	0.18	6	Upg. AC	3	OK	4	OK	5	OK	6	Upg. AC	
73	SD	52	340	B	8	11	15.0	1.72	3.4	25	4	2.4	0.12	4	OK	5	OK	5	OK	6	OK	6	OK	
74	SD	53	310	B	8	20	57.5	1.35	3.0	1 / 25	6	1.5	0.19	6	Upg. AC	3	OK	4	OK	5	OK	6	OK	
75	G	54	310	B	8	20	16.0	1.35	3.0	1 / 25	6	1.5	0.19	6	Upg. AC	3	OK	4	OK	5	OK	6	OK	
76	E	55	310	B	8	20	52.1	NA	NA	NA	NA	NA	NA		Mnt. G	Mnt. G	Mnt. G	Upg. SD	2	2	OK	2	OK	
77	E	55	360	B	8	30	47.9	NA	NA	NA	NA	NA	NA		Mnt. G	Mnt. G	Mnt. G	Upg. SD	2	2	OK	2	OK	
78	E	56	360	B	8	30	58.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Upg. G	
79	G	56	360	B	8	30	43.4	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Upg. G	
80	E	57	360	B	8	30	24.5	NA	NA	NA	NA	NA	NA		Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	OK	
81	G	57	360	B	8	30	92.8	NA	NA	NA	NA	NA	NA		Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	OK	
82	E	58	420	B	9	21	118.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
83	E	58	460	B	9	11	66.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
84	E	59	420	B	9	21	9.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
85	E	59	510	B	9	31	15.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
86	G	59	510	B	9	31	37.1	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
87	G	59	550	B	9	41	49.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
88	G	60	520	B	9	41	217.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
89	G	60	520	B	9	51	272.8	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
90	AC	61	530	B	9	41	69.0	NA	NA	NA	NA	NA	NA		Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
		62	110	B	10	1	8.3	2.56	3.3	18	3	2.8	0.01	3	OK	3	OK	3	OK	3	OK	3	OK	

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS C, GROUPE-I)

NO.	PAVED GRAVE EARTH No.	S.L. MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	ADT 1994		ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH PCU (YR)	GROWTH RATIO HEAVY (YR)	AADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS			SUBGRADE Soil Type	CUMUL. E.S.A. (Mill)	Traffic Class				
							TOTAL (VEH)	HEAVY (VEH)						SURFACE Type	N/L (mm)	O/L Type (mm)				BASE B/L (mm)	CBR %		
1	G	1	750	C	13	10	21.0	44	12	659	145	15.31%	14.01%	159				0.2	T5				
2	E	1	750	C	13	10	29.0	44	12	659	145	15.31%	14.01%	159				0.2	T5				
3	G	1	750	C	13	10	44.0	44	12	659	145	15.31%	14.01%	159				0.2	T5				
4	G	2	750	C	13	20	24.1	44	12	658	145	15.30%	14.01%	158				0.2	T5				
5	G	2	750	C	13	10	21.0	44	12	658	145	15.30%	14.01%	158				0.2	T5				
6	G	3	750	C	14	20	14.0	50	4	150	20	5.95%	8.84%	84				0.1	T5				
7	E	3	750	C	14	10	14.7	50	4	150	20	5.95%	8.84%	84				0.1	T5				
8	G	4	750	C	14	20	57.8	50	4	150	20	5.95%	8.84%	84				0.1	T5				
9	G	5	720	C	15	1	28.8	50	5	220	30	8.11%	9.89%	101				0.1	T5				
10	G	6	610	C	16	1	28.8	50	5	191	30	7.31%	9.89%	94				0.1	T5				
11	SD	7	610	C	17	10	24.0	70	7	270	40	7.36%	9.61%	133	1	25	2	150	S3	8	0.1	T5	
12	SD	8	610	C	17	10	18.0	70	7	270	40	7.36%	9.61%	133	1	25	2	150	S3	8	0.1	T5	
13	SD	9	750	C	17	20	11.1	70	7	270	40	7.36%	9.61%	133	1	25	2	125	S3	8	0.1	T5	
14	E	10	750	C	17	20	31.1	70	7	270	40	7.36%	9.61%	133								0.1	T5
15	G	11	640	C	18	1	29.7	140	20	400	70	5.68%	6.82%	230								0.2	T5
16	SD	12	620	C	19	10	25.3	620	124	1,031	179	2.71%	1.95%	789	1	25	1	150	S2	6	0.9	T5	
17	SD	12	640	C	19	20	20.6	620	124	1,031	179	2.71%	1.95%	789	1	25	1	150	S2	6	0.9	T5	
18	G	13	640	C	19	20	27.5	1,209	216	3,249	579	5.34%	5.33%	1931								2.1	T4
19	G	14	610	C	20	10	14.2	1,200	250	3,200	650	5.30%	5.16%	1910								2.4	T4
20	AC	15	640	C	20	20	19.6	1,200	250	3,200	650	5.30%	5.16%	1910	2	35	20	2	305	S2	6	2.4	T4
21	AC	15	660	C	20	30	16.5	1,200	250	3,200	650	5.30%	5.16%	1910	1	25	20	2	305	S2	6	2.4	T4
22	G	16	650	C	21	10	46.2	42	4	3,569	415	26.34%	27.67%	344								0.2	T5
23	AC	17	720	C	21	20	4.0	36	5	3,985	528	28.11%	27.79%	335	2	50	1	150	S2	6	0.3	T5	
24	G	17	650	C	21	10	16.5	36	5	3,985	528	28.11%	27.79%	335								0.3	T5
25	G	18	650	C	22	1	22.5	26	8	1,115	237	21.87%	19.52%	154								0.2	T5
26	G	19	650	C	22	1	16.0	66	34	1,936	392	19.46%	13.73%	327								0.6	T5
27	SD	20	720	C	23	1	15.3	1,031	159	313	30	-6.08%	-8.40%	586	2	100	50	1	150	S2	6	0.6	T5
28	SD	21	720	C	23	1	12.5	1,041	164	1,467	237	1.82%	1.96%	1225								1.2	T4
29	SD	22	720	C	23	1	17.5	1,069	166	4,802	637	8.23%	7.33%	2178								1.9	T4
30	SD	23	720	C	24	1	42.3	24	7	1,153	206	22.60%	19.48%	150	1	25	1	125	S2	6	0.2	T5	
31	G	24	720	C	25	1	26.0	37	11	90	31	4.79%	5.60%	56								0.1	T5
32	SD	24	720	C	25	1	10.0	37	11	90	31	4.79%	5.60%	56	1	25	1	225	S2	6	0.1	T5	

(continued from previous sheet)

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS C, GROUPE-I)

NO.	PAVED EARTH No.	S.L. MOPW Distr. Rank	ROAD CODE	NO.	SEC.	Length km	S N Design Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994 Progr	Rough (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015	
																						IRI
1	G	1	750	C	13	10	21.0					Upg. SD	3	OK	Mnt. E	5	OK	6	Reseal	4	OK	Upg. SD
2	E	1	750	C	13	10	29.0					Mnt. E	3	Mnt. E	5	Upg. G	6	Reseal	4	OK	4	OK
3	G	1	750	C	13	10	44.0					Upg. SD	3	OK	5	OK	6	Reseal	4	OK	4	OK
4	G	2	750	C	13	20	24.1					Upg. SD	3	OK	5	OK	6	Reseal	4	OK	4	OK
5	G	2	750	C	13	10	21.0					Upg. SD	3	OK	5	OK	6	Reseal	4	OK	4	OK
6	G	3	750	C	14	20	14.0					Mnt. G	3	Mnt. G	5	Mnt. G	6	Reseal	4	OK	4	OK
7	E	3	750	C	14	10	14.7					Mnt. E	3	Mnt. E	5	Mnt. E	6	Reseal	4	OK	4	OK
8	G	4	750	C	14	20	57.8					Mnt. G	3	Mnt. G	5	Mnt. G	6	Reseal	4	OK	4	OK
9	G	5	720	C	15	1	28.8					Mnt. G	3	Mnt. G	5	Mnt. G	6	Reseal	4	OK	4	OK
10	G	6	610	C	16	1	28.8					Mnt. G	3	Mnt. G	5	Mnt. G	6	Reseal	4	OK	4	OK
11	SD	7	610	C	17	10	24.0	1.54	2.6	0.29	0.29	8	SD Rehab	3	OK	5	OK	6	Reseal	4	OK	
12	SD	8	610	C	17	10	18.0	1.54	2.6	0.29	0.29	8	SD Rehab	3	OK	5	OK	6	Reseal	4	OK	
13	SD	9	750	C	17	20	11.1	1.30	2.3	0.29	0.29	8	SD Rehab	3	OK	5	OK	6	Reseal	4	OK	
14	E	10	750	C	17	20	31.1					Mnt. E	3	Mnt. E	5	Mnt. E	6	Reseal	4	OK	4	OK
15	G	11	640	C	18	1	29.7					Mnt. G	4	Mnt. G	6	Mnt. G	7	Reseal	4	OK	4	OK
16	SD	12	620	C	19	10	25.3	0.82	1.6	1.5	0.29	6	Reseal	4	OK	6	OK	7	Reseal	4	OK	
17	SD	12	640	C	19	20	20.6	0.82	1.6	1.5	0.29	6	Reseal	4	OK	6	OK	7	Reseal	4	OK	
18	G	13	640	C	19	20	27.5					Upg. SD	2	OK	3	Upg. AC	2	OK	3	OK	3	OK
19	G	14	610	C	20	10	14.2					Upg. SD	2	OK	3	Upg. AC	2	OK	3	OK	3	OK
20	AC	15	640	C	20	20	19.5	3.29	4.1	1.5	0.09	6	Ovr. lay	3	OK	4	OK	4	OK	5	OK	
21	AC	15	660	C	20	30	16.5	3.21	4.0	1.5	0.09	6	Reseal	3	OK	4	OK	4	OK	5	OK	
22	G	16	650	C	21	10	46.2					Upg. AC	3	OK	4	OK	5	OK	6	Reseal	4	OK
23	AC	17	720	C	21	20	4.0	1.64	2.4	0.29	0.29	8	AC Rehab	3	OK	5	OK	6	Ovr. lay	4	OK	
24	G	17	650	C	21	10	16.5					Upg. SD	3	OK	5	OK	6	Reseal	4	OK	4	OK
25	G	18	650	C	22	1	22.5					Upg. SD	3	OK	5	OK	6	Reseal	4	OK	4	OK
26	G	19	650	C	22	1	16.0					Upg. SD	3	OK	5	OK	6	Reseal	4	OK	4	OK
27	SD	20	720	C	23	1	15.3	2.44	3.2	3.3	0.29	2	OK	4	OK	5	OK	7	Reseal	4	OK	
28	SD	21	720	C	23	1	12.5					Upg. SD	2	OK	3	OK	3	OK	3	OK	4	OK
29	SD	22	720	C	23	1	17.5					Upg. SD	2	OK	3	OK	3	OK	3	OK	4	OK
30	SD	23	720	C	24	1	42.3	0.70	1.5	3.3	0.08	2	OK	2	Mnt. E	3	OK	3	OK	4	OK	
31	G	24	720	C	25	1	26.0					Mnt. E	2	Mnt. E	3	Mnt. E	3	OK	3	OK	4	OK
32	SD	24	720	C	25	1	10.0	1.18	2.0	0.5	0.02	8	Mnt. G	2	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. E	

NO.	PAVED GRAVE S.L. EARTH No.	MOPW Distr. No.	ROAD RANK	CODE NO.	SEC.	Length km	ADT		1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH PCU (YR)	RATIO HEAVY (YR)	AADT IN YEAR 10(PCU)	EXISTING PAVING CONDITIONS			SUBGRADE Soil Type	CBR %	E.S.A. (Mill)	15Yrs CUMUL. E.S.A. (Mill)	Traffic Class
							ADT TOTAL (PCU)	ADT HEAVY (VEH)							Surface Type	N/L (mm)	O/L (mm)					
33	G	25	640	C	26	1	589	92	2,212	398	7.21%	8.01%	1102	1						1.1	T4	
34	SD	26	520	C	27	10	540	70	1,803	202	6.55%	5.74%	956	1	20	2	130	S2	6	0.7	T5	
35	SD	26	530	C	27	20	540	70	1,803	202	6.55%	5.74%	956	1	20	2	130	S2	6	0.7	T5	
36	G	27	630	C	28	1	40	3	100	8	4.94%	5.30%	62							0.0	T5	
37	G	28	630	C	28	1	650	80	1,803	202	5.52%	5.00%	1054							0.8	T5	
38	G	29	630	C	29	10	130	10	330	30	5.03%	5.95%	202							0.1	T5	
39	SD	30	630	C	29	10	1,527	142	1,395	162	-0.47%	0.70%	1463	1	25	2	130	S2	6	1.0	T5	
40	SD	30	940	C	29	30	1,527	142	1,395	162	-0.47%	0.70%	1463	1	25	1	100	S2	6	1.0	T5	
41	E	31	920	C	30	20	10	2	35	6	6.82%	5.95%	18							0.0	T5	
42	G	32	920	C	30	20	27.1	9	2	32	6	6.90%	5.95%	16						0.0	T5	
43	G	32	930	C	30	30	8.0	9	2	32	6	6.90%	5.95%	16						0.0	T5	
44	G	33	920	C	31	10	31.6	10	2	35	6	6.82%	5.95%	18						0.0	T5	
45	E	34	930	C	31	20	9.0	10	2	35	6	6.82%	5.95%	18						0.0	T5	
46	E	35	930	C	31	20	7.0	9	2	32	6	6.90%	5.95%	16						0.0	T5	
47	G	36	920	C	42	1	25.5	15	2	40	6	5.30%	5.95%	24						0.0	T5	
48	G	36	920	C	32	12	7.0	15	2	40	6	5.30%	5.95%	24						0.0	T5	
49	G	37	910	C	33	20	20.0	15	2	60	9	7.57%	8.24%	29						0.0	T5	
50	E	37	930	C	33	10	4.5	15	2	60	9	7.57%	8.24%	29						0.0	T5	
51	SD	38	630	C	39	40	4.4	15	2	60	9	7.57%	8.24%	29	1	25	1	150	S3	8	0.0	T5
52	G	38	930	C	33	10	16.0	15	2	60	9	7.57%	8.24%	29						0.0	T5	
53	SD	38	930	C	33	10	16.2	15	2	60	9	7.57%	8.24%	29	1	25	1	150	S3	8	0.0	T5
54	G	38	940	C	33	11	3.0	15	2	60	9	7.57%	8.24%	29						0.0	T5	
55	E	39	910	C	33	10	4.5	9	2	43	9	8.58%	8.24%	19						0.0	T5	
56	SD	40	930	C	40	1	31.0	9	2	32	6	6.90%	5.95%	16	1	30	1	300	S3	8	0.0	T5
57	SD	41	910	C	33	20	1.0	6	1	20	2	6.54%	3.72%	11	1	25	2	130	S2	6	0.0	T5
58	SD	42	940	C	33	20	17.0	97	23	401	91	7.76%	7.51%	190	1	25	2	130	S2	6	0.3	T5
59	G	43	930	C	33	20	10.0	5	1	12	3	4.72%	5.95%	8						0.0	T5	
60	SD	44	620	C	34	10	41.7	10	3	3,659	827	36.43%	34.41%	164	1	25	2	150	S3	8	0.3	T5
61	SD	45	620	C	34	10	10.5	13	7	3,857	862	34.93%	28.75%	193	1	25	2	150	S3	8	0.5	T5
62	SD	46	720	C	34	20	8.2	23	5	471	83	17.22%	15.94%	96	1	25	2	130	S2	6	0.1	T5
63	SD	46	620	C	34	10	10.5	23	5	471	83	17.22%	15.94%	96	1	25	2	150	S3	8	0.1	T5
64	G	47	720	C	35	10	5.0	208	45	6,459	1,420	19.82%	19.92%	1059						1.4	T4	
65	G	47	720	C	35	10	49.4	208	45	6,459	1,420	19.82%	19.92%	1059	2	25	1	130	S3	8	1.4	T4
66	SD	47	820	C	35	20	10.0	208	45	6,459	1,420	19.82%	19.92%	1059	1	25	2	150	S3	8	1.4	T4
67	SD	47	720	C	35	10	1.6	208	45	6,459	1,420	19.82%	19.92%	1059	1	25	2	150	S3	8	1.4	T4

(continued from previous sheet)

NO.	PAVED GRAVE S.L. EARTH No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015	
																							IRI
33	G	25	640	C	26	1	21.0						Upg. SD	2	OK	2	OK	2	OK	2	OK	2	OK
34	SD	26	520	C	27	10	29.5	1.33	2.1	12	6	1.5	0.09	6	Re seal	3	OK	4	OK	4	OK	5	OK
35	SD	26	530	C	27	20	6.0	1.33	2.1	12	8	0.5	0.09	8	SD Rehab	2	OK	3	OK	3	OK	4	OK
36	G	27	630	C	28	1	15.0						Mnt. E	2	Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	4	Mnt. E
37	G	28	630	C	28	1	20.0						Upg. SD	2	OK	3	OK	3	OK	3	OK	4	OK
38	G	29	630	C	29	10	25.0						Upg. SD	2	OK	3	OK	3	OK	3	OK	4	OK
39	SD	30	630	C	29	10	36.0	1.35	2.1	18	8	0.5	0.12	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
40	SD	30	940	C	29	30	3.5	0.58	1.4	25	8	0.5	0.12	8	SD Rehab	3	OK	3	OK	4	OK	4	OK
41	E	31	920	C	30	20	36.0						Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	4	Mnt. E
42	G	32	920	C	30	20	27.1						Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. G
43	G	32	930	C	30	30	8.0						Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. G
44	G	33	920	C	31	10	31.6						Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. G
45	E	34	930	C	31	20	9.0						Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	4	Mnt. E
46	E	35	930	C	31	20	7.0						Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	4	Mnt. E
47	G	36	920	C	42	1	25.5						Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. G
48	G	36	920	C	32	12	7.0						Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. G
49	G	37	910	C	33	20	20.0						Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. G
50	E	37	930	C	33	10	4.5						Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	4	Mnt. E
51	SD	38	630	C	39	40	4.4	0.82	1.9	22	6	1.5	0.00	6	Re seal	3	OK	3	OK	3	OK	3	OK
52	G	38	930	C	33	10	16.0						Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	4	Mnt. E
53	SD	38	930	C	33	10	16.2	0.82	1.9	22	6	1.5	0.00	6	Re seal	3	OK	3	OK	3	OK	3	OK
54	G	38	940	C	33	11	3.0						Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	3	Mnt. G	4	Mnt. G
55	E	39	910	C	33	10	4.5						Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	3	Mnt. E	4	Mnt. E
56	SD	40	930	C	40	1	31.0	1.56	2.6	9	4	2.4	0.00	4	OK	4	OK	4	OK	4	OK	5	OK
57	SD	41	910	C	33	20	1.0	1.35	2.1	NA	5	1.9	0.00	5	OK	5	OK	5	OK	5	OK	6	OK
58	SD	42	940	C	33	20	17.0	1.35	2.1	NA	5	1.9	0.03	5	OK	5	OK	5	OK	5	OK	6	OK
59	G	43	930	C	33	20	10.0						Mnt. E	2	Mnt. E	2	Mnt. E	2	Mnt. E	2	Mnt. E	3	Mnt. E
60	SD	44	620	C	34	10	41.7	1.74	2.8	23	15	-2.6	0.02	15	SD Recon	2	OK	2	OK	2	OK	2	OK
61	SD	45	620	C	34	10	10.5	1.74	2.8	23	15	-2.6	0.02	15	SD Recon	2	OK	2	OK	2	OK	2	OK
62	SD	46	720	C	34	20	8.2	0.92	1.7	23	12	-1.3	0.03	12	SD Recon	2	OK	2	OK	2	OK	2	OK
63	SD	46	620	C	34	10	10.5	1.74	2.8	23	15	-2.6	0.01	15	SD Recon	2	OK	2	OK	2	OK	2	OK
64	G	47	720	C	35	10	5.0						Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G	4	Mnt. G	5	Mnt. G
65	G	47	720	C	35	10	49.4	1.35	2.4	23	8	0.5	0.12	8	Re seal	4	OK	4	OK	4	OK	5	OK
66	SD	47	820	C	35	20	10.0	1.35	2.4	23	16	-3.1	0.09	16	SD Recon	2	OK	2	OK	2	OK	3	OK
67	SD	47	720	C	35	10	1.6	1.54	2.6	23	16	-3.1	0.09	16	SD Recon	2	OK	2	OK	2	OK	3	OK

NO.	PAVED GRAVE S.L. EARTH No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH PCU (YR)	RATIO HEAVY (YR)	ADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS				SUBGRADE Soil Type	CUMUL. E.S.A. (Mill)	Traffic Class		
														SURFACE Type	O/L (mm)	BASE Type	15Yrs					
68	SD 48	820	C	35	20	9.0	196	42	3,006	638	15.45%	15.40%	714	2	25	1	130	S3	8	0.9	T5	
69	SD 49	770	C	36	21	22.5	632	145	2,766	293	8.08%	3.77%	1272	1	20	1	150	S1	3	1.3	T4	
70	SD 49	830	C	36	11	30.9	632	145	2,766	293	8.08%	3.77%	1272	1	20	1	150	S1	3	1.3	T4	
71	SD 50	236	C	37	10	39.9	33	5	417	35	14.28%	10.78%	110	1	25	20	1	150	S2	6	0.1	T5
72	SD 50	620	C	37	10	9.9	33	5	417	35	14.28%	10.78%	110	1	25	20	1	150	S2	6	0.1	T5
73	SD 51	620	C	37	10	9.9	10	2	173	34	16.19%	16.08%	39	1	25	20	1	150	S2	6	0.0	T5
74	G 52	770	C	37	30	10.5	5	1	470	61	27.01%	24.16%	43							0.0	T5	
75	G 52	830	C	37	20	52.0	5	1	470	61	27.01%	24.16%	43							0.0	T5	
76	SD 53	940	C	38	1	16.6	1,193	68	1,899	147	2.48%	4.14%	1487	1	20	2	130	S3	8	0.6	T5	
77	SD 54	770	C	39	11	2.2	150	24	1,048	127	10.77%	9.17%	377	1	25	20	1	150	S3	8	0.3	T5
78	SD 54	770	C	39	12	18.6	150	24	1,048	127	10.77%	9.17%	377	1	25	20	1	150	S3	8	0.3	T5
79	SD 54	830	C	39	20	27.6	150	24	1,048	127	10.77%	9.17%	377	1	25	20	1	130	S3	8	0.3	T5
80	SD 55	830	C	39	20	22.6	652	151	1,532	180	4.60%	0.93%	977	1	25	20	1	130	S3	8	1.1	T4
81	SD 55	940	C	39	30	14.1	652	151	1,532	180	4.60%	0.93%	977	1	25	20	1	130	S3	8	1.1	T4
82	SD 55	940	C	39	30	15.0	652	151	1,532	180	4.60%	0.93%	977	1	25	20	1	130	S3	8	1.1	T4
83	G 56	940	C	39	30	19.1	140	37	370	100	5.25%	5.37%	222	1	25	20	1	130	S3	8	1.1	T4
84	G 57	910	C	41	20	15.9	50	6	140	15	5.57%	4.94%	81							0.4	T5	
85	E 57	910	C	41	20	5.0	50	6	140	15	5.57%	4.94%	81							0.1	T5	
86	G 57	930	C	41	10	27.9	50	6	140	15	5.57%	4.94%	81							0.1	T5	
87	SD 58	910	C	42	1	8.3	6	1	20	2	6.54%	3.72%	11	1	20	1	130	S4	12	0.0	T5	
88	G 58	910	C	42	1	18.9	6	1	20	2	6.54%	3.72%	11							0.0	T5	
89	E 59	920	C	43	1	10.5	105	15	499	70	8.55%	8.45%	220							0.2	T5	
90	G 59	920	C	43	1	19.0	105	15	499	70	8.55%	8.45%	220							0.2	T5	
91	G 60	910	C	44	20	17.3	50	8	127	22	5.03%	5.47%	78							0.1	T5	
92	E 60	930	C	44	10	19.3	50	8	127	22	5.03%	5.47%	78							0.1	T5	
93	G 61	760	C	44	30	28.5	65	8	180	20	5.51%	4.94%	105							0.1	T5	
94	SD 61	760	C	45	2	18.7	65	8	180	20	5.51%	4.94%	105	1	20	25	1	130	S2	6	0.1	T5
95	SD 61	760	C	45	1	2.5	65	8	180	20	5.51%	4.94%	105	1	20	25	1	130	S2	6	0.1	T5
96	E 62	850	C	46	10	51.0	25	2	60	5	4.72%	4.94%	38							0.0	T5	
97	E 62	860	C	46	20	45.0	25	2	60	5	4.72%	4.94%	38							0.0	T5	
98	E 63	850	C	46	10	64.0	25	2	60	5	4.72%	4.94%	38							0.0	T5	
99	G 64	760	C	48	12	44.7	30	2	80	5	5.30%	4.94%	48							0.0	T5	
100	E 64	760	C	48	12	16.5	30	2	80	5	5.30%	4.94%	48							0.0	T5	
101	E 64	770	C	48	31	18.9	30	2	80	5	5.30%	4.94%	48							0.0	T5	
102	G 64	820	C	48	20	21.0	30	2	80	5	5.30%	4.94%	48							0.0	T5	

(continued from previous sheet)

NO.	PAVED GRAVE S.L. EARTH No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
68	SD	48	820	C	20	9.0	1.35	2.4	23	8	0.5	0.07	8	Reseal	3	OK	4	OK	4	OK	4	OK
69	SD	49	770	C	21	22.5	0.80	0.9	11	10	-0.4	0.09	10	SD Recon	2	OK	3	OK	3	OK	4	OK
70	SD	49	830	C	36	30.9	0.80	0.9	11	10	-0.4	0.09	10	SD Recon	2	OK	3	OK	3	OK	4	OK
71	SD	50	236	C	37	39.9	1.00	1.8	16	10	-0.4	0.02	10	SD Recon	2	OK	2	OK	2	OK	2	OK
72	SD	50	620	C	37	9.9	1.00	1.8	16	10	-0.4	0.02	10	SD Recon	2	OK	2	OK	2	OK	2	OK
73	SD	51	620	C	37	10	1.00	1.8	16	10	-0.4	0.01	10	SD Recon	2	OK	2	OK	2	OK	2	OK
74	G	52	770	C	37	10.5								Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Upg. G	Upg. G	Mnt. G	
75	G	52	830	C	37	52.0								Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Upg. G	Upg. G	Mnt. G	
76	SD	53	940	C	38	1	1.33	2.4	18	6	1.5	0.05	6	Reseal	3	OK	4	OK	4	OK	4	OK
77	SD	54	770	C	39	11	1.00	2.0	22	7	1.0	0.04	7	Reseal	3	OK	3	OK	4	OK	4	OK
78	SD	54	770	C	39	12	1.00	2.0	NA	7	1.0	0.04	7	Reseal	3	OK	3	OK	4	OK	4	OK
79	SD	54	830	C	39	20	0.90	2.0	NA	11	-0.8	0.05	11	SD Recon	2	OK	3	OK	3	OK	3	OK
80	SD	55	830	C	39	20	0.90	2.0	NA	11	-0.8	0.18	11	SD Recon	2	OK	4	OK	5	OK	6	OK
81	SD	55	940	C	39	30	0.90	2.0	22	7	1.0	0.18	7	Reseal	4	OK	5	OK	6	OK	7	Reseal
82	SD	55	940	C	39	30	0.90	2.0	22	7	1.0	0.18	7	Reseal	4	OK	5	OK	6	OK	7	Reseal
83	G	56	940	C	39	30	19.1							Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	
84	G	57	910	C	41	20	15.9							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
85	E	57	910	C	41	20	5.0							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
86	G	57	930	C	41	10	27.9							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
87	SD	58	910	C	42	1	8.3	2.1	17	8	0.5	0.01	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
88	G	58	910	C	42	1	18.9							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
89	E	59	920	C	43	1	10.5							Upg. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	Mnt. G	
90	G	59	920	C	43	1	19.0							MNT. G	MNT. G	MNT. G	MNT. G	MNT. G	MNT. G	MNT. G	MNT. G	
91	G	60	910	C	44	20	17.3							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
92	E	60	930	C	44	10	19.3							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
93	G	61	760	C	44	30	28.5							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
94	SD	61	760	C	45	2	18.7	1.7	33	13	-1.7	0.02	13	SD Recon	2	OK	2	OK	2	OK	2	OK
95	SD	61	760	C	45	1	2.5	1.7	33	10	-0.4	0.02	10	SD Recon	2	OK	2	OK	2	OK	2	OK
96	E	62	850	C	46	10	51.0							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
97	E	62	860	C	46	20	45.0							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
98	E	63	850	C	46	10	64.0							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
99	G	64	760	C	48	12	44.7							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
100	E	64	760	C	48	12	16.5							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
101	E	64	770	C	48	31	18.9							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	
102	G	64	820	C	48	20	21.0							Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	Mnt. E	

NO.	PAVED GRAVE EARTH	S.L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH PCU (YR)	GROWTH RATIO HEAVY (YR)	AADT IN YEAR 10 (PCU)	SURFACE Type	EXISTING PAVING CONDITIONS			15Yr-S CUMUL. E.S.A. (Mill)	Traffic Class		
																O/L (mm)	BASE Type	B/L (mm)			SUBGRADE Soil Type	
103	G	65	770	C	50	1	20.0	12	4	5,524	792	38.09%	32.09%	219	1	25	1	150	S4	12	0.3	T5
104	G	66	770	C	50	1	31.7	12	4	5,559	797	38.14%	32.14%	220	1	25	1	150	S4	12	0.4	T5
105	SD	67	770	C	51	12	9.0	72	15	1,149	236	15.70%	15.61%	267	1	25	1	150	S4	12	0.3	T5
106	SD	67	770	C	51	20	11.0	72	15	1,149	236	15.70%	15.61%	267	1	25	1	150	S4	12	0.6	T5
107	SD	68	770	C	51	12	18.1	60	12	6,035	880	27.47%	25.36%	533	1	25	1	150	S4	12	0.2	T5
108	SD	69	820	C	51	20	10.0	37	8	1,090	180	19.49%	17.81%	184	1	25	1	150	S4	12	0.2	T5
109	SD	69	820	C	51	30	66.0	37	8	1,098	182	19.53%	17.87%	184	1	25	1	150	S4	12	0.2	T5
110	SD	70	810	C	51	20	23.5	37	8	1,098	182	19.53%	17.87%	184	1	25	1	150	S4	12	0.2	T5
111	SD	70	820	C	51	20	49.6	19	7	906	202	22.56%	19.36%	119	1	25	1	150	S2	6	0.2	T5
112	SD	71	730	C	51	40	15.5	19	7	906	202	22.56%	19.36%	119	1	25	1	150	S2	6	0.2	T5
113	E	71	810	C	51	40	39.0	19	7	906	202	22.56%	19.36%	119	1	25	1	150	S2	6	0.2	T5
114	E	71	810	C	52	1	85.7	20	3	50	7	4.94%	4.56%	31	1	25	1	150	S2	6	0.2	T5
115	E	72	810	C	52	1	11.0	160	60	2,950	600	16.58%	12.88%	636	1	20	1	275	S2	6	1.1	T4
116	G	73	770	C	53	10	38.0	160	60	2,950	600	16.58%	12.88%	636	1	20	1	275	S2	6	1.1	T4
117	G	74	820	C	53	20	16.5	160	60	2,950	600	16.58%	12.88%	636	1	20	1	275	S2	6	1.1	T4
118	SD	74	820	C	53	20	18.9	160	60	2,950	600	16.58%	12.88%	636	1	20	1	275	S2	6	1.1	T4
119	G	75	820	C	53	20	32.8	160	60	2,950	600	16.58%	12.88%	636	1	20	1	275	S2	6	1.1	T4
120	SD	76	770	C	54	12	24.7	160	60	2,950	600	16.58%	12.88%	636	1	20	1	275	S2	6	1.1	T4
121	G	76	820	C	54	20	10.2	379	77	3,869	697	13.01%	12.29%	1139	1	20	1	130	S3	8	1.3	T4
122	SD	77	740	C	55	10	29.9	379	77	3,869	697	13.01%	12.29%	1139	1	20	1	130	S3	8	1.3	T4
123	SD	77	810	C	55	20	29.8	252	57	3,121	612	14.16%	13.31%	830	1	20	1	130	S3	8	1.0	T4
124	SD	78	810	C	55	20	11.5	252	57	3,121	612	14.16%	13.31%	830	1	20	1	125	S3	8	1.0	T4
125	SD	78	820	C	55	30	12.9	85	5	4,320	548	22.97%	28.04%	546	1	20	1	150	S2	6	0.3	T5
126	SD	79	740	C	56	1	44.5	4	1	4,199	536	44.21%	39.20%	108	1	20	1	150	S2	6	0.2	T5
127	SD	80	740	C	56	1	38.8	90	5	311	23	6.74%	8.36%	162	1	25	1	150	S2	6	0.1	T5
128	SD	81	740	C	57	20	2.0	90	5	311	23	6.74%	8.36%	162	1	25	1	150	S3	8	0.1	T5
129	SD	81	750	C	57	11	62.0	90	5	311	23	6.74%	8.36%	162	1	25	1	150	S2	6	0.1	T5
130	G	81	750	C	57	11	7.0	1,001	112	2,154	263	6.74%	8.36%	162	1	25	1	200	S2	6	0.1	T5
131	AC	82	110	C	58	10	6.0	40	6	110	15	4.12%	4.60%	1439	2	35	1	200	S2	6	0.1	T5
132	AC	83	110	C	58	10	97.6	40	6	110	15	4.12%	4.94%	65	2	35	1	200	S2	6	0.1	T5
133	SD	83	710	C	58	20	10.0	533	114	411	86	-1.36%	-1.47%	471	2	80	1	300	S2	6	0.7	T5
134	AC	84	110	C	59	1	2.3	120	10	320	28	5.30%	5.57%	191	2	80	1	300	S2	6	0.1	T5
135	AC	85	110	C	59	1	2.3	783	154	3,134	470	7.57%	6.05%	1510	2	80	1	300	S2	6	0.1	T5
136	AC	86	110	C	59	1	2.3	783	154	3,134	470	7.57%	6.05%	1510	2	80	1	300	S2	6	0.1	T5

(continued from previous sheet)

NO.	PAVED GRAVE EARTH	S.L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
103	G	65	770	C	50	1	20.0								Mnt. E		Mnt. E		Upg. G		Mnt. G		Upg. AC
104	G	66	770	C	50	1	31.7								Mnt. E		Mnt. E		Upg. G		Mnt. G		Upg. AC
105	SD	67	770	C	51	12	9.0	1.02	2.4	33	9	0.1	0.03	9	SD Rehab	2	OK	2	OK	2	OK	3	OK
106	SD	67	770	C	51	20	11.0	1.02	2.4	15	7	1.0	0.03	7	Reseal	3	OK	3	OK	3	OK	4	OK
107	SD	68	770	C	51	12	18.1	1.02	2.4	15	7	1.0	0.05	7	Reseal	3	OK	3	OK	3	OK	4	OK
108	SD	69	820	C	51	20	10.0	0.82	2.2	9	5	1.9	0.02	5	OK	5	OK	5	OK	5	OK	5	OK
109	SD	69	820	C	51	20	19.5	0.82	2.2	9	5	1.9	0.02	5	OK	5	OK	5	OK	5	OK	5	OK
110	SD	70	810	C	51	30	66.0	1.02	1.8	33	9	0.1	0.05	9	SD Rehab	2	OK	2	OK	3	OK	3	OK
111	SD	70	820	C	51	20	23.5	0.82	2.2	9	5	1.9	0.02	5	OK	5	OK	5	OK	5	OK	5	OK
112	SD	71	730	C	51	40	49.6	1.02	1.8	33	12	-1.3	0.04	12	SD Recon	2	OK	2	OK	3	OK	3	OK
113	E	71	810	C	51	40	15.5								Mnt. E		Mnt. E		Upg. G		Mnt. G		Mnt. G
114	E	71	810	C	51	30	39.0								Mnt. E		Mnt. E		Upg. G		Mnt. G		Mnt. G
115	E	72	810	C	52	1	85.7								Mnt. E		Mnt. E		Mnt. E		Mnt. E		Mnt. E
116	G	73	770	C	53	10	11.0								Mnt. G		Mnt. G		Mnt. G		Upg. AC		OK
117	G	74	820	C	53	20	38.0								Mnt. G		Upg. SD		OK	2	OK	2	OK
118	SD	74	820	C	53	20	16.5	1.40	2.2	7	5	1.9	0.12	5	OK	6	OK	6	OK	6	OK	6	OK
119	G	75	820	C	53	20	18.9								Mnt. G		Mnt. G		Mnt. G		Upg. AC		OK
120	SD	76	770	C	54	12	32.8	1.65	2.4	21	6	1.5	0.08	6	Reseal	3	OK	4	OK	4	OK	5	OK
121	G	76	820	C	54	20	24.7								Mnt. G		Mnt. G		Mnt. G		Upg. AC		OK
122	SD	77	740	C	55	10	10.2	0.88	1.9	14	8	0.5	0.22	8	SD Rehab	3	OK	4	OK	5	OK	6	Reseal
123	SD	77	810	C	55	20	29.9	0.88	1.9	14	5	1.9	0.22	5	OK	6	Reseal	4	OK	5	OK	6	Reseal
124	SD	78	810	C	55	20	29.8	0.88	1.9	14	5	1.9	0.18	5	OK	6	Reseal	4	OK	5	OK	6	OK
125	SD	78	820	C	55	30	11.5	0.68	1.7	14	4	2.4	0.26	4	OK	6	OK	7	Reseal	4	OK	6	OK
126	SD	79	740	C	56	1	12.9	0.98	1.8	NA	10	-0.4	0.07	10	SD Recon		OK	0	OK	1	OK	1	OK
127	SD	80	740	C	56	1	44.5	0.98	1.8	NA	10	-0.4	0.04	10	SD Recon		OK	0	OK	0	OK	1	OK
128	SD	81	740	C	57	20	38.8	0.82	1.6	24	8	0.5	0.02	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
129	SD	81	750	C	57	11	2.0	0.82	1.9	NA	3	2.8	0.01	3	OK	3	OK	3	OK	3	OK	3	OK
130	G	81	750	C	57	11	62.0								Mnt. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
131	AC	82	110	C	58	10	7.0	2.40	3.2	NA	4	2.4	0.03	4	OK	4	OK	4	OK	4	OK	5	OK
132	AC	83	110	C	58	10	6.0	2.40	3.2	NA	4	2.4	0.00	4	OK	4	OK	4	OK	4	OK	4	OK
133	SD	83	710	C	58	20	97.6	0.82	2.2	NA	7	1.0	0.01	7	Reseal	3	OK	3	OK	3	OK	3	OK
134	AC	84	110	C	59	1	10.0	3.68	4.5	NA	3	2.8	0.01	3	OK	3	OK	3	OK	3	OK	3	OK
135	AC	85	110	C	59	1	2.3	3.68	4.5	NA	3	2.8	0.00	3	OK	3	OK	3	OK	3	OK	3	OK
136	AC	86	110	C	59	1	2.3	3.68	4.5	NA	3	2.8	0.01	3	OK	3	OK	3	OK	3	OK	3	OK

NO.	PAVED GRAVE EARTH	S. L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH PCU (YR)	HEAVY RATIO (YR)	AADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS				15Yrs CUMUL. E.S.A. (Mill)	Traffic Class			
															SURFACE Type	N/L (mm)	O/L Type (mm)	BASE B/L Type (mm)			SUBGRADE Soil Type	CBR %	
137	AC	87	110	C	60	10	8.0	675	76	1,458	178	4.14%	4.58%	972	2	60	20	1	175	S4	12	0.7	T5
138	AC	88	110	C	60	10	5.5	1,798	206	3,955	501	4.24%	4.79%	2612	2	60	20	1	175	S4	12	1.9	T4
139	AC	88	710	C	60	20	4.9	1,798	206	3,955	501	4.24%	4.79%	2612	2	60	20	1	175	S4	12	1.9	T4
140	AC	89	110	C	61	1	7.0	1,600	220	3,500	520	4.21%	4.63%	2318	2	35	50	1	200	S2	6	2.0	T4
141	AC	90	110	C	61	1	6.5	665	74	1,436	176	4.13%	4.67%	958	2	35	50	1	200	S2	6	0.7	T5
142	AC	91	110	C	62	20	7.0	1,110	226	6,388	1,117	9.65%	8.77%	2543	2	35	75	1	130	S3	8	2.9	T4
143	AC	91	110	C	62	10	26.0	1,110	226	6,388	1,117	9.65%	8.77%	2543	2	35	75	1	130	S3	8	2.9	T4
144	AC	92	110	C	62	20	14.5	1,172	231	6,688	1,153	9.60%	8.83%	2674	2	35	75	1	130	S3	8	2.9	T4
145	SD	93	110	C	63	10	7.7	125	19	354	61	5.63%	6.33%	205	1	20	20	1	130	S3	8	0.2	T5
146	SD	93	210	C	63	20	2.6	125	19	354	61	5.63%	6.33%	205	1	20	20	1	130	S3	8	0.2	T5
147	SD	94	210	C	63	10	7.8	1,043	116	2,243	274	4.11%	4.63%	1499	1	20	20	1	130	S3	8	1.1	T4
148	SD	95	210	C	63	20	16.0	3,258	280	9,020	905	5.51%	6.37%	5278	2	35	25	1	200	S3	8	2.9	T4
149	SD	96	210	C	63	20	18.0	50	2	193	18	7.37%	12.26%	95	1	20	20	1	130	S3	8	0.0	T5
150	SD	97	210	C	63	20	17.0	15	2	36	6	4.72%	5.95%	23	2	35	25	1	200	S3	8	0.0	T5
151	SD	98	210	C	64	10	5.5	4,869	413	14,319	1,491	5.84%	6.99%	8116	1	20	20	1	125	S3	8	4.5	T3
152	SD	98	210	C	64	20	6.2	4,869	413	14,319	1,491	5.84%	6.99%	8116	1	20	20	1	125	S3	8	4.5	T3
153	G	99	210	C	64	20	13.2	1,588	130	4,086	386	5.10%	5.90%	2485	2	35	20	1	125	S3	8	1.3	T4
154	SD	99	110	C	64	20	18.1	1,588	130	4,086	386	5.10%	5.90%	2485	2	35	20	1	125	S3	8	1.3	T4

(continued from previous sheet)

NO.	PAVED EARTH No.	S.L. MOPW Distri. Rank	ROAD Rank	CODE No.	SEC.	Length km	S Design	N Modif.	Pave. Age, old	IRI (m/km)	PSI 1994	Rough Profr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
137	AC	87	110	C	10	8.0	2.24	3.6	NA	5	1.9	0.01	5	OK	5	OK	5	OK	5	OK	5	OK
138	AC	88	110	C	10	5.5	2.24	3.6	NA	5	1.9	0.03	5	OK	5	OK	5	OK	6	OK	6	OK
139	AC	88	710	C	20	4.9	2.24	3.6	23	5	1.9	0.03	5	OK	5	OK	5	OK	6	OK	6	OK
140	AC	89	110	C	1	7.0	2.40	3.2	NA	4	2.4	0.06	4	OK	4	OK	5	OK	5	OK	5	OK
141	AC	90	110	C	1	6.5	2.40	3.2	NA	4	2.4	0.02	4	OK	4	OK	4	OK	4	OK	4	OK
142	AC	91	110	C	20	7.0	1.83	2.9	23	3	2.8	0.12	3	OK	4	OK	4	OK	5	OK	6	OK
143	AC	91	110	C	10	26.0	1.83	2.9	23	3	2.8	0.12	3	OK	4	OK	4	OK	5	OK	6	OK
144	AC	92	110	C	20	14.5	1.83	2.9	23	6	1.5	0.13	6	Ovrly	4	OK	4	OK	5	OK	6	OK
145	SD	93	110	C	10	7.7	0.70	1.8	21	7	1.0	0.05	7	Reseal	3	OK	3	OK	4	OK	4	OK
146	SD	93	210	C	20	2.6	0.70	1.8	21	7	1.0	0.05	7	Reseal	3	OK	3	OK	4	Reseal	4	OK
147	SD	94	210	C	63	7.8	0.70	1.8	21	7	1.0	0.25	7	Reseal	4	OK	6	OK	7	Reseal	4	OK
148	SD	95	210	C	20	16.0	2.30	3.3	NA	3	2.8	0.07	3	OK	3	OK	4	OK	4	OK	4	OK
149	SD	96	210	C	20	18.0	0.70	1.8	21	7	1.0	0.01	7	Reseal	3	OK	3	OK	3	OK	3	OK
150	SD	97	210	C	20	17.0	2.30	3.3	NA	3	2.8	0.00	3	OK	3	OK	3	OK	3	OK	3	OK
151	SD	98	210	C	64	5.5	1.56	2.6	16	11	-0.8	0.28	11	Upg.AC	3	OK	5	OK	6	Ovrly	4	OK
152	SD	98	210	C	64	6.2	1.56	2.6	16	11	-0.8	0.28	11	Upg.AC	3	OK	5	OK	6	Ovrly	4	OK
153	G	99	210	C	20	13.2	1.56	2.6	16	11	-0.8	0.08	11	Upg.SD	2	OK	3	OK	3	OK	4	OK
154	SD	99	110	C	20	18.1	1.56	2.6	16	3	2.8	0.08	3	OK	3	OK	4	OK	4	OK	5	OK

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS C, GROUPE-II)

NO.	PAVED GRAVE EARTH	S. L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	ADT TOTAL (PCU)	ADT HEAVY (VEH)	1994 ADT TOTAL (PCU)	ADT HEAVY (VEH)	2013 GROWTH RATIO			ADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS				15Yrs CUMUL. Traffic E. S. A. Class (Mill)		
												HEAVY (VEH)	PCU (YR)	HEAVY (YR)		SURFACE Type	N/L (mm)	O/L (mm)	BASE Type		B/L (mm)	SUBGRADE Soil Type
1	SD	1	210	C	64	20	15.5	1,568	128	5,214	576	6.53%	8.24%	2770	1	20	1	125	S3	8	1.6	
2	SD	2	210	C	65	1	32.5	38	11	1,264	204	20.26%	16.61%	200	1	25	1	150	S3	8	0.3	
3	SD	3	210	C	65	1	13.0	5	1	4	2	-1.17%	3.72%	4	1	25	1	150	S3	8	0.0	
4	SD	4	210	C	66	10	51.0	1,009	209	2,226	440	4.25%	4.00%	1468	1	20	25	1	250	S3	8	1.8
5	SD	4	240	C	66	20	4.5	1,009	209	2,226	440	4.25%	4.00%	1468	1	20	25	1	250	S3	8	1.8
6	SD	5	210	C	66	10	14.0	2,565	356	6,233	816	4.75%	4.46%	3906	1	20	25	1	250	S3	8	3.2
7	SD	6	230	C	67	10	31.1	100	10	424	80	7.90%	11.57%	198	1	25	1	225	S2	6	0.2	
8	G	6	230	C	67	10	15.4	100	10	424	80	7.90%	11.57%	198	1	25	1	225	S2	6	0.2	
9	G	6	240	C	67	20	24.9	100	10	424	80	7.90%	11.57%	198	1	25	1	225	S2	6	0.2	
10	SD	7	240	C	67	20	5.1	1,300	200	4,995	842	7.34%	7.86%	2460	1	25	1	225	S2	6	2.4	
11	SD	8	740	C	67	30	11.0	1,300	200	4,995	842	7.34%	7.86%	2460	1	25	1	100	S4	12	2.4	
12	SD	8	740	C	67	30	6.9	1,300	200	4,995	842	7.34%	7.86%	2460	1	25	1	100	S4	12	2.4	
13	SD	9	240	C	68	1	18.1	1,300	200	4,687	776	6.98%	7.40%	2387	1	20	25	2	125	S2	6	2.3
14	SD	10	740	C	69	10	17.6	157	21	520	68	6.51%	6.38%	277	1	20	25	2	150	S3	8	0.2
15	G	11	240	C	69	20	42.0	20	3	59	5	5.86%	2.73%	33	1	25	2	150	S1	3	0.0	
16	SD	11	240	C	69	20	2.0	20	3	59	5	5.86%	2.73%	33	1	25	2	150	S1	3	0.0	
17	G	11	240	C	69	20	17.0	20	3	59	5	5.86%	2.73%	33	1	25	2	150	S1	3	0.0	
18	E	11	240	C	69	20	20.0	20	3	59	5	5.86%	2.73%	33	1	25	2	150	S1	3	0.0	
19	G	12	240	C	69	20	21.0	156	21	518	68	6.52%	6.38%	275	1	20	25	2	150	S3	8	0.2
20	G	13	230	C	70	10	23.0	1,218	118	16,652	1,934	14.76%	15.86%	4204	1	25	20	1	150	S3	8	2.6
21	SD	14	230	C	70	10	33.0	1,214	118	7,202	500	9.82%	7.90%	2822	1	25	20	1	150	S3	8	1.4
22	SD	14	250	C	70	20	23.0	1,214	118	7,202	500	9.82%	7.90%	2822	1	25	20	1	150	S3	8	1.4
23	AC	15	230	C	71	1	29.0	5,927	659	11,186	1,323	3.40%	3.74%	8007	2	35	20	2	150	S3	8	5.7
24	SD	16	230	C	72	1	25.1	2,400	270	9,424	1,119	7.46%	7.77%	4588	1	25	1	225	S3	8	3.2	
25	SD	17	220	C	73	10	4.0	634	113	2,778	460	8.09%	7.67%	1277	1	20	1	125	S3	8	2.1	
26	SD	18	220	C	73	10	18.8	1,239	219	6,342	798	8.97%	7.04%	2685	1	25	20	1	150	S3	8	2.4
27	SD	19	230	C	73	20	12.1	1,068	193	5,756	706	9.27%	7.06%	2372	1	25	20	2	110	S3	8	1.3
28	SD	20	220	C	74	20	14.5	96	27	1,404	277	15.17%	13.04%	342	1	20	1	150	S3	8	2.0	
29	SD	20	250	C	74	10	4.0	96	27	1,404	277	15.17%	13.04%	342	1	20	2	130	S3	8	0.5	
30	SD	21	220	C	74	20	9.5	847	165	5,591	762	10.44%	8.39%	2071	1	20	1	150	S3	8	0.5	
31	SD	22	250	C	75	1	9.2	213	58	2,354	478	13.48%	11.74%	665	1	25	20	1	150	S3	8	0.9
32	G	23	240	C	76	20	12.0	356	92	1,099	279	6.11%	6.01%	607	1	25	20	1	150	S3	8	0.9
33	G	23	730	C	76	10	55.0	356	92	1,099	279	6.11%	6.01%	607	1	25	20	1	150	S3	8	0.9

ENGINEERING ASSESSMENT ON PAVING CONDITIONS (CLASS C, GROUPE-II)

(continued from previous sheet)

NO.	PAVED GRAVE S.L. EARTH No.	MOPW ROAD CODE	Distr.	RANK	NO.	SEC.	Length km	S	N	Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015	
																									IRI
1	SD	1	210	C	64	20	15.5	2.00	3.0	16	11	-0.8	0.05	11	Upg.AC	2	OK	3	OK	3	OK	3	OK	3	OK
2	SD	2	210	C	65	1	32.5	0.82	1.9	9	16	-3.1	0.05	16	SD Recon	2	OK	3	OK	3	OK	3	OK	3	OK
3	SD	3	210	C	65	1	13.0	0.82	1.9	9	16	-3.1	0.00	16	SD Recon	2	OK	2	OK	2	OK	2	OK	2	OK
4	SD	4	210	C	66	10	51.0	1.46	2.5	16	8	0.5	0.13	8	AC Rehab	3	OK	3	OK	4	OK	4	OK	5	OK
5	SD	4	240	C	66	20	4.5	1.46	2.5	17	6	1.5	0.13	6	Reseal	4	OK	4	OK	5	OK	5	OK	6	OK
6	SD	5	210	C	66	10	14.0	1.46	2.5	16	8	0.5	0.23	8	Upg.Ac	3	OK	4	OK	5	OK	5	OK	7	Reseal
7	SD	6	230	C	67	10	31.1	1.18	2.0	33	12	-1.3	0.03	12	SD Recon	2	OK	2	OK	2	OK	2	OK	3	OK
8	G	6	230	C	67	10	15.4								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
9	G	6	240	C	67	20	24.9								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
10	SD	7	240	C	67	20	5.1	NA	0.8	22	8	0.5	4.78	13	SD Recon	26	OK	50	OK	74	OK	98	OK		
11	SD	8	740	C	67	30	11.0	0.58	1.9	33	10	-0.4	0.39	10	SD Recon	4	OK	6	OK	8	OK	10	OK		
12	SD	8	740	C	67	30	6.9	0.58	1.9	33	10	-0.4	0.39	10	SD Recon	4	OK	6	OK	8	OK	10	OK		
13	SD	9	240	C	68	1	18.1	1.30	2.1	8	8	0.5	0.30	8	SD Rehab	4	OK	5	OK	7	Reseal	5	OK		
14	SD	10	740	C	69	10	17.6	1.70	2.7	34	8	0.5	0.01	8	SD Rehab	2	OK	2	OK	2	OK	2	OK	2	OK
15	G	11	240	C	69	20	42.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
16	SD	11	240	C	69	20	2.0	1.54	1.6	16	16	-3.1	0.01	16	SD Recon	2	OK	2	OK	2	OK	2	OK	2	OK
17	G	11	240	C	69	20	17.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
18	E	11	240	C	69	20	20.0								Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	
19	G	12	240	C	69	20	21.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
20	G	13	230	C	70	10	23.0						0.20		Upg.SD	3	OK	4	OK	5	OK	6	Upg.AC		
21	SD	14	230	C	70	10	33.0	1.00	2.0	16	10	-0.4	0.20	10	SD Recon	3	OK	4	OK	5	OK	6	Upg.AC		
22	SD	14	250	C	70	20	23.0	1.00	2.0	16	5	1.9	0.20	5	SD Recon	3	OK	4	OK	5	OK	6	Upg.AC		
23	AC	15	230	C	71	1	29.0	2.16	3.2	19	9	0.1	0.16	9	Upg.AC	3	OK	4	OK	4	OK	5	OK		
24	SD	16	230	C	72	1	25.1	1.18	2.2	19	10	-0.4	0.34	10	Upg.AC	4	OK	5	OK	7	Reseal	5	OK		
25	SD	17	220	C	73	10	4.0	0.68	1.7	5	5	1.9	0.53	6	OK	8	SD Rehab	5	OK	7	Reseal	6	OK		
26	SD	18	220	C	73	10	18.8	1.00	2.0	19	8	0.5	0.11	8	SD Rehab	3	OK	3	OK	4	OK	4	OK		
27	SD	19	230	C	73	20	12.1	1.34	2.4	19	4	2.4	0.04	4	Reseal	3	OK	3	OK	4	OK	4	OK		
28	SD	20	220	C	74	20	14.5	0.80	1.8	21	4	2.4	0.04	6	Reseal	3	OK	3	OK	4	OK	4	OK		
29	SD	20	250	C	74	10	4.0	1.33	2.4	21	6	1.5	0.04	4	OK	5	OK	5	OK	6	Reseal	3	OK		
30	SD	21	220	C	74	20	9.5	0.80	1.8	21	4	2.4	0.10	8	SD Rehab	3	OK	3	OK	4	OK	5	OK		
31	SD	22	260	C	75	1	9.2	1.00	2.0	8	8	0.5	0.13	8	SD Rehab	3	OK	3	OK	4	OK	5	OK		
32	G	23	240	C	76	20	12.0						0.06		Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	
33	G	23	730	C	76	10	55.0						0.13		Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	

NO.	PAVED GRAVE EARTH No.	S.L. No.	MOPW Distr. No.	ROAD RANK	CODE NO.	SEC.	Length km	ADT TOTAL (PCU)	ADT HEAVY (VEH)	1994 ADT TOTAL (PCU)	ADT HEAVY (VEH)	2013 HEAVY (VEH)	GROWTH RATIO		AADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS				15Yrs CUMUL. Traffic E. S. A. Class (Mill)			
													PCU (YR)	HEAVY (YR)		SURFACE Type	N/L (mm)	O/L Type	BASE Type		SUBGRADE Soil Type	CBR %	
34	SD	23	730	C	76	10	3.0	356	92	1,099	279	6.11%	6.01%	607	1	20	2	150	S3	8	0.9	T3	
35	SD	24	240	C	77	20	14.8	761	113	1,946	264	5.07%	4.57%	1187	1	20	1	130	S3	8	0.3	T3	
36	AC	24	740	C	77	10	18.1	761	113	1,946	264	5.07%	4.57%	1187	2	35	1	130	S3	8	0.3	T3	
37	SD	25	240	C	77	20	25.5	1,003	92	3,299	374	6.47%	7.66%	1763	1	20	1	130	S3	8	0.0	T5	
38	SD	26	240	C	77	20	11.7	1,016	93	3,341	378	6.47%	7.66%	1786	1	20	1	130	S3	8	0.3	T3	
39	SD	27	730	C	77	30	9.7	233	31	1,690	294	10.99%	12.57%	596	1	20	1	130	S4	12	0.3	T3	
40	G	28	730	C	77	30	15.6	209	26	748	86	6.94%	6.50%	382	1	20	1	130	S4	12	0.3	T3	
41	SD	28	730	C	77	30	30.0	209	26	748	86	6.94%	6.50%	382	1	20	1	130	S4	12	1.1	T2	
42	G	28	730	C	77	30	57.7	209	26	748	86	6.94%	6.50%	382	1	20	1	130	S4	12	0.3	T3	
43	G	28	840	C	77	40	19.0	209	26	748	86	6.94%	6.50%	382	1	20	1	130	S4	12	0.3	T3	
44	E	29	730	C	77	50	127.0	180	30	650	90	6.99%	5.95%	331	1	20	1	130	S4	12	0.3	T3	
45	E	29	450	C	82	0	218.3	180	30	650	90	6.99%	5.95%	331	1	20	1	130	S4	12	0.3	T3	
46	G	29	840	C	77	40	55.0	180	30	650	90	6.99%	5.95%	331	1	20	1	130	S4	12	0.3	T3	
47	E	29	730	C	77	40	50.7	180	30	650	90	6.99%	5.95%	331	1	20	1	130	S4	12	0.3	T3	
48	G	29	840	C	77	40	27.5	180	30	650	90	6.99%	5.95%	331	1	20	1	130	S4	12	0.3	T3	
49	G	30	840	C	77	40	17.5	209	26	748	86	6.94%	6.50%	382	1	20	1	130	S4	12	0.3	T3	
50	E	31	840	C	79	1	44.0	25	2	65	6	5.16%	5.95%	39	1	20	2	125	S3	8	0.0	T5	
51	E	31	840	C	78	1	88.0	25	2	65	6	5.16%	5.95%	39	1	20	2	125	S3	8	0.0	T5	
52	E	32	450	C	80	10	64.0	12	1	35	3	5.80%	5.95%	20	1	25	1	150	S3	8	2.5	T1	
53	E	32	530	C	80	20	194.0	12	1	35	3	5.80%	5.95%	20	1	25	1	200	S3	8	6.8	T1	
54	E	33	510	C	81	1	157.5	25	4	70	10	5.57%	4.94%	41	1	20	2	125	S3	8	0.0	T5	
55	SD	34	240	C	83	20	9.0	15	2	40	6	5.30%	5.95%	24	1	20	2	125	S3	8	0.0	T5	
56	SD	34	740	C	83	10	2.0	15	2	40	6	5.30%	5.95%	24	1	20	2	125	S3	8	0.0	T5	
57	G	34	240	C	83	20	21.7	15	2	40	6	5.30%	5.95%	24	1	20	2	125	S3	8	0.0	T5	
58	SD	35	620	C	86	1	11.4	2,040	280	3,638	601	3.09%	4.10%	2683	1	25	1	150	S3	8	2.5	T1	
59	SD	36	740	C	88	1	39.9	3,994	798	8,932	1,557	4.33%	3.58%	5848	1	25	1	200	S3	8	6.8	T1	
60	AC	37	110	C	89	1	2.0	533	114	956	217	3.12%	3.45%	703	2	25	40	1	200	S1	3	1.0	T3
61	AC	38	110	C	89	1	2.5	190	50	553	131	5.78%	5.20%	315	2	25	40	1	200	S1	3	0.5	T3
62	G	39	630	C	90	10	24.8	25	2	70	10	5.57%	8.84%	41	1	25	1	150	S3	8	0.0	T5	
63	G	39	920	C	90	20	4.5	25	2	70	10	5.57%	8.84%	41	1	25	1	150	S3	8	0.0	T5	
64	G	40	410	C	92	10	41.1	70	10	920	30	14.52%	5.95%	237	1	25	1	200	S3	8	0.1	T4	
65	G	41	460	C	92	20	68.0	70	10	920	30	14.52%	5.95%	237	1	25	1	200	S3	8	0.1	T4	
66	G	42	410	C	93	20	4.0	25	2	70	10	5.57%	8.84%	41	1	25	1	150	S3	8	0.0	T5	
67	E	42	410	C	93	20	8.3	25	2	70	10	5.57%	8.84%	41	1	25	1	150	S3	8	0.0	T5	
68	G	42	430	C	93	10	58.0	25	2	70	10	5.57%	8.84%	41	1	25	1	150	S3	8	0.0	T5	

(continued from previous sheet)

NO.	PAVED GRAVE S.L. EARTH No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	S	N	Modif. Age, old (years)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
34	SD	23	730	C	76	10	3.0	1.52	2.6	10	-0.4	0.06	10	SD Recon	2	OK	3	OK	3	OK	3	OK
35	SD	24	240	C	77	20	14.8	0.86	1.9	8	0.5	0.05	8	SD Rehab	2	OK	3	OK	3	OK	3	OK
36	AC	24	740	C	77	10	18.1	1.34	2.4	8	0.5	0.02	8	AC Rehab	2	OK	2	OK	2	OK	2	OK
37	SD	25	240	C	77	20	25.5	0.86	1.9	8	0.5	0.00	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
38	SD	26	240	C	77	20	11.7	0.86	1.9	8	0.5	0.05	8	SD Rehab	2	OK	3	OK	3	OK	3	OK
39	SD	27	730	C	77	30	9.7	0.70	2.1	8	0.5	0.04	8	SD Rehab	2	OK	2	OK	3	OK	3	OK
40	G	28	730	C	77	30	15.6			8	0.5	0.04	8	Upgr.sd	2	OK	2	OK	2	OK	2	OK
41	SD	28	730	C	77	30	30.0	0.70	2.1	8	0.5	0.04	8	SD Rehab	2	OK	2	OK	3	OK	3	OK
42	G	28	730	C	77	30	57.7			8	0.5	0.04	8	Upgr.sd	2	OK	2	OK	3	OK	3	OK
43	G	28	840	C	77	40	19.0					0.04		Mnt.G	Mnt.G	2	Upgr.SD	2	Upgr.SD	2	OK	
44	E	29	730	C	77	50	127.0							Mnt.G	Mnt.G	2	Upgr.SD	2	Upgr.SD	2	OK	
45	E	29	450	C	82	0	218.3							Mnt.G	Mnt.G	2	Upgr.SD	2	Upgr.SD	2	OK	
46	E	29	840	C	77	40	55.0							Mnt.G	Mnt.G	2	Upgr.SD	2	Upgr.SD	2	OK	
47	E	29	730	C	77	40	50.7							Mnt.G	Mnt.G	2	Upgr.SD	2	Upgr.SD	2	OK	
48	G	29	840	C	77	40	27.5							Mnt.G	Mnt.G	2	Upgr.SD	2	Upgr.SD	2	OK	
49	G	30	840	C	77	40	17.5							Mnt.G	Mnt.G	2	Upgr.SD	2	Upgr.SD	2	OK	
50	E	31	840	C	79	1	44.0							Mnt.E	Mnt.E	2	Mnt.E	2	Mnt.E	2	Mnt.E	
51	E	31	840	C	78	1	88.0							Mnt.E	Mnt.E	2	Mnt.E	2	Mnt.E	2	Mnt.E	
52	E	32	450	C	80	10	64.0							Mnt.E	Mnt.E	2	Mnt.E	2	Mnt.E	2	Mnt.E	
53	E	32	530	C	80	20	194.0							Mnt.E	Mnt.E	2	Mnt.E	2	Mnt.E	2	Mnt.E	
54	E	33	510	C	81	1	157.5							Mnt.E	Mnt.E	2	Mnt.E	2	Mnt.E	2	Mnt.E	
55	SD	34	240	C	83	20	9.0	1.28	2.3	8	0.5	0.00	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
56	SD	34	740	C	83	10	2.0	1.28	2.3	8	0.5	0.00	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
57	G	34	240	C	83	20	21.7							Mnt.E	Mnt.E	5	Mnt.E	5	Mnt.E	5	Mnt.E	
58	SD	35	620	C	86	1	11.4	1.02	2.1	8	0.5	0.34	8	Upgr.AC	4	OK	7	Reseal	7	Reseal	5	OK
59	SD	36	740	C	88	1	39.9	2.40	3.4	13	-1.7	0.15	13	Upgr.AC	3	OK	3	OK	4	OK	5	OK
60	AC	37	110	C	89	1	2.0	1.68	1.7	4	2.4	0.23	4	OK	5	OK	7	Overlay	4	OK	5	OK
61	AC	38	110	C	89	1	2.5	1.68	1.7	4	2.4	0.12	4	OK	5	OK	5	OK	6	OK	6	Overlay
62	G	39	630	C	90	10	24.8							Mnt.G	Mnt.G	2	Mnt.G	2	Mnt.G	2	Mnt.G	
63	G	39	920	C	90	20	4.5							Mnt.E	Mnt.G	2	Mnt.G	2	Mnt.G	2	Mnt.G	
64	G	40	410	C	92	10	41.1							Mnt.G	Mnt.G	2	Mnt.G	2	Mnt.G	2	Mnt.G	
65	G	41	460	C	92	20	68.0							Mnt.G	Mnt.G	2	Mnt.G	2	Mnt.G	2	Mnt.G	
66	G	42	410	C	93	20	4.0							Mnt.G	Mnt.G	2	Mnt.G	2	Mnt.G	2	Mnt.G	
67	E	42	410	C	93	20	8.3							Mnt.E	Mnt.E	2	Mnt.E	2	Mnt.E	2	Mnt.E	
68	G	42	430	C	93	10	58.0							Mnt.G	Mnt.G	2	Mnt.G	2	Mnt.G	2	Mnt.G	

NO.	PAVED GRAVE EARTH	S.L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH RATIO		ADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS			15Yrs				
												PCU (YR)	HEAVY (YR)		SURFACE Type (mm)	BASE O/L Type (mm)	SUBGRADE Soil Type	CER %	CUMUL. E.S.A. (Mill)	Traffic Class		
69	E	42	430	C	93	10	39.3	25	2	70	10	5.57%	8.84%	41					0.0	T5		
70	G	43	430	C	94	1	42.7	25	4	70	10	5.57%	4.94%	41					0.0	T5		
71	SD	44	440	C	97	10	15.3	7,343	1,042	14,479	1,939	3.64%	3.32%	10129	1	20	1	130	S3	8	0.6	T3
72	SD	45	440	C	97	10	9.8	370	61	1,348	216	7.04%	6.88%	683	1	20	1	130	S3	8	8.7	T1
73	SD	46	430	C	97	20	25.5	379	62	1,267	192	6.56%	6.13%	671	1	20	1	130	S3	8	0.3	T3
74	SD	47	440	C	97	10	32.5	199	36	475	62	4.69%	2.90%	300	1	20	1	130	S3	8	0.7	T3
75	G	48	440	C	98	20	20.0	319	53	3,000	426	12.52%	11.59%	922							0.8	T3
76	SD	48	110	C	98	10	25.0	319	53	3,000	426	12.52%	11.59%	922	1	25	1	130	S1	3	0.8	T3
77	SD	49	440	C	98	20	36.6	318	53	1,551	242	8.70%	8.32%	674	1	25	1	225	S2	6	0.6	T3
78	G	50	470	C	99	2	30.0	540	70	1,448	183	5.33%	5.19%	862							0.7	T3
79	SD	50	440	C	99	1	20.3	540	70	1,448	183	5.33%	5.19%	862	1	20	1	200	S2	6	0.7	T3
80	SD	50	440	C	99	1	9.5	540	70	1,448	183	5.33%	5.19%	862	1	20	1	200	S2	6	0.7	T3
81	G	51	440	C	99	2	30.0	10	3	20	9	3.72%	5.95%	14							0.0	T5
82	G	51	470	C	99	2	25.0	10	3	20	9	3.72%	5.95%	14							0.0	T5
83	G	52	470	C	99	2	54.0	50	14	133	38	5.28%	5.40%	79							0.1	T5
84	G	53	440	C	100	1	27.2	140	28	883	142	10.18%	8.92%	335							0.4	T3
85	G	54	440	C	100	1	5.0	457	81	1,548	258	6.98%	6.29%	839							0.8	T3
86	G	55	440	C	101	1	10.0	40	10	113	29	5.62%	5.76%	65							0.1	T5
87	G	55	470	C	101	2	42.0	40	10	113	29	5.62%	5.76%	65							0.1	T5
88	G	56	710	C	102	1	86.0	10	1	20	2	3.72%	3.72%	14							0.0	T5
89	SD	56	710	C	102	1	12.0	10	1	20	2	3.72%	3.72%	14	1	25	2	130	S3	8	0.0	T5
90	G	57	710	C	102	1	9.0	48	9	49	9	0.11%	0.00%	48							0.0	T5
91	G	58	710	C	102	1	5	10	1	20	2	3.72%	3.72%	14							0.0	T5
92	G	59	710	C	103	10	52.0	47	9	47	9	0.00%	0.00%	47							0.1	T5
93	G	59	350	C	103	20	70.0	47	9	50	10	0.33%	0.56%	48							0.0	T5
94	G	60	350	C	103	20	20.0	10	3	20	6	3.72%	3.72%	14							0.0	T5
95	G	60	310	C	103	30	116.0	10	3	20	6	3.72%	3.72%	14							0.0	T5
96	G	61	310	C	103	10	77.1	229	67	1,466	278	10.26%	7.78%	552							0.8	T3
97	SD	61	310	C	103	30	7.0	229	67	1,466	278	10.26%	7.78%	552	1	25	2	125	S3	8	0.8	T3
98	G	61	310	C	103	20	32.0	229	67	1,466	278	10.26%	7.78%	552							0.8	T3
99	G	61	350	C	103	20	80.0	229	67	1,466	278	10.26%	7.78%	552							0.8	T3
100	SD	62	350	C	105	1	4.0	998	162	3,266	348	6.44%	4.11%	1750	1	20	2	250	S2	6	1.4	T2
101	SD	63	350	C	105	1	2.5	520	146	1,886	324	7.02%	4.28%	957	1	20	2	250	S2	6	1.3	T3
102	E	64	320	C	106	1	38.0	200	30	550	80	5.47%	5.30%	323							0.3	T3
103	SD	64	320	C	106	1	18.0	200	30	550	80	5.47%	5.30%	323	1	25	2	275	S2	6	0.3	T3

(continued from previous sheet)

NO.	GRAVE EARTH	S.L. No.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
69	E	42	430	C	92	10	39.3																Mnt.E
70	G	43	430	C	94	1	42.7																Mnt.G
71	SD	44	440	C	97	10	15.3	0.70	1.8	15	11	-0.8	0.15	11	Upg.AC	3	OK	4	OK	4	OK	5	OK
72	SD	45	440	C	97	10	9.8	0.70	1.8	15	11	-0.8	0.16	11	SD Recon	3	OK	4	OK	4	OK	5	OK
73	SD	46	430	C	97	20	25.5	0.70	1.8	12	4	2.4	0.07	4	OK	4	OK	5	OK	5	OK	5	OK
74	SD	47	440	C	97	10	32.5	0.70	1.8	15	11	-0.8	0.16	11	SD Recon	3	OK	4	OK	4	OK	5	OK
75	G	48	440	C	98	20	20.0						0.07		Mnt.G	2	Upg.SD	2	OK	3	OK	3	OK
76	SD	48	110	C	98	10	25.0	0.92	1.0	21	11	-0.8	0.30	11	SD Recon	4	OK	5	OK	7	Reseal	5	OK
77	SD	49	440	C	98	20	36.6	1.18	2.0	21	8	0.5	0.24	8	SD Rehab	3	OK	4	OK	6	OK	6	OK
78	G	50	470	C	99	2	30.0						0.20		Upg.SD	3	OK	4	OK	5	OK	7	Reseal
79	SD	50	440	C	99	1	20.3	1.04	1.8	33	10	-0.4	0.30	10	SD Rehab	4	OK	5	OK	7	Reseal	5	OK
80	SD	50	440	C	99	1	9.5	1.04	1.8	33	10	-0.4	0.30	10	SD Rehab	4	OK	5	OK	7	Reseal	5	OK
81	G	51	440	C	99	2	30.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G
82	G	51	470	C	99	2	25.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G
83	G	52	470	C	99	2	54.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G
84	G	53	440	C	100	1	27.2						0.24		Upg.SD	2	OK	2	OK	2	OK	2	OK
85	G	54	440	C	100	1	5.0								SD Rehab	3	OK	4	OK	6	OK	7	Reseal
86	G	55	440	C	101	1	10.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G
87	G	55	470	C	101	2	42.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G
88	G	56	710	C	102	1	86.0								Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G
89	SD	56	710	C	102	1	12.0	1.35	2.4		8	0.5	0.00	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
90	G	57	710	C	102	1	9.0								Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E
91	G	58	710	C	102	1	5								Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E
92	G	59	710	C	103	10	52.0								Upg.SD	2	OK	2	OK	2	OK	2	OK
93	G	59	350	C	103	20	70.0								Upg.SD	2	OK	2	OK	2	OK	2	OK
94	G	60	350	C	103	20	20.0								Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E
95	G	60	310	C	103	30	116.0								Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E	Mnt.E
96	G	61	310	C	103	10	77.1						0.24		Upg.SD	3	OK	4	OK	6	OK	7	Reseal
97	SD	61	310	C	103	30	7.0	1.30	2.3		3	2.8	0.07	3	OK	3	OK	4	OK	4	OK	4	OK
98	G	61	310	C	103	10	32.0						0.24		Upg.SD	3	OK	4	OK	6	OK	7	Reseal
99	G	61	350	C	103	20	80.0						0.24		Upg.SD	3	OK	4	OK	6	OK	7	Reseal
100	SD	62	350	C	105	1	4.0	2.48	3.3		4	2.4	0.04	4	OK	4	OK	4	OK	5	OK	5	OK
101	SD	63	350	C	105	1	2.5	2.48	3.3		4	2.4	0.03	4	OK	4	OK	4	OK	5	OK	5	OK
102	E	64	320	C	106	1	38.0								Upg.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G	Mnt.G
103	SD	64	320	C	106	1	18.0	2.74	3.5		6	1.5	0.01	6	Reseal	3	OK	3	OK	3	OK	3	OK

NO.	PAVED GRAVE EARTH	S. L. No.	MOPW Dist.	ROAD RANK	CODE NO.	SEC.	Length km	ADT TOTAL (PCU)	1994 HEAVY (VEH)	ADT TOTAL (PCU)	2013 HEAVY (VEH)	GROWTH RATIO		AADT IN YEAR 10 (PCU)	EXISTING PAVING CONDITIONS				15Yrs CUMUL. Traffic E. S. A. Class (Mill)			
												PCU (YR)	HEAVY (YR)		SURFACE Type	N/L (mm)	O/L Type	BASE Type		SUBGRADE B/L Soil (mm)	CBR %	
104	E	64	320	C	106	1	18.0	200	30	550	80	5.47%	5.30%	323						T3	0.3	
105	E	65	320	C	106	1	37.7	200	30	550	80	5.47%	5.30%	323						T3	0.3	
106	E	66	310	C	107	10	19.0	76	4	140	10	3.27%	4.94%	102						T5	0.0	
107	E	67	310	C	107	10	19.0	76	4	1,405	133	16.59%	20.25%	303						T3	0.1	
108	E	68	310	C	107	10	11.0	76	4	1,412	134	16.62%	20.30%	303						T4	0.0	
109	G	69	320	C	107	20	27.0	25	2	70	6	5.57%	5.95%	41						T3	0.1	
110	E	69	320	C	107	20	15.0	25	2	70	6	5.57%	5.95%	41						ERR	ERR	
111	G	70	320	C	108	1	50.0	25	2	70	6									T5	0.0	
112	SD	71	310	C	111	1	21.2	45	4	1,419	135	19.92%	20.35%	231	1	25	20	1	200	S3	8	0.1
113	E	72	330	C	112	20	93.4	112	37	623	159	9.45%	7.98%	252						T4	0.4	
114	SD	72	360	C	112	10	29.0	112	37	623	159	9.45%	7.98%	252	1		25	2	125	S3	8	0.4
115	G	73	810	C	113	10	30.0	10	1	35	3	6.82%	5.95%	18						T4	0.0	
116	E	73	850	C	113	20	134.0	10	1	35	3	6.82%	5.95%	18						T5	0.0	
117	SD	74	310	C	115	1	39.2	25	2	70	6	5.57%	5.95%	41	1		20	1	125	S3	8	0.0
118	SD	75	510	C	116	10	19.0	12	1	35	3	5.80%	5.95%	20	1		20	1	125	S3	8	0.0
119	SD	75	530	C	116	20	154.0	12	1	35	3	5.80%	5.95%	20	1		20	1	125	S3	8	0.0
120	G	76	920	C	32	11	13.6	10	1	35	3	6.82%	5.95%	18						T5	0.0	
121	G	76	920	C	32	11	5.6	10	1	35	3	6.82%	5.95%	18						T5	0.0	

(continued from previous sheet)

NO.	PAVED EARTH No.	S.L.	MOPW Distr.	ROAD RANK	CODE NO.	SEC.	Length km	S Design	N Modif.	Pave. Age, old (years)	IRI 1994 (m/km)	PSI 1994 (m/yr)	Rough Progr (m/yr)	IRI 1995	Status 1995	IRI 2000	Status 2000	IRI 2005	Status 2005	IRI 2010	Status 2010	IRI 2015	Status 2015
104	E	64	320	C	106	I	18.0								Upg. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
105	E	65	320	C	106	I	37.7								Upg. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
106	E	66	310	C	107	10	19.0								Mnt. E		Mnt. E		Mnt. E		Mnt. E		Mnt. E
107	E	67	310	C	107	10	19.0								Upg. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
108	E	68	310	C	107	10	11.0								Mnt. E		Mnt. E		Mnt. E		Mnt. E		Mnt. E
109	G	69	320	C	107	20	27.0								Mnt. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
110	E	69	320	C	107	20	15.0								Mnt. E		Mnt. E		Mnt. E		Mnt. E		Mnt. E
111	G	70	320	C	108	1	50.0								Mnt. E		Mnt. E		Mnt. E		Mnt. E		Mnt. E
112	SD	71	310	C	111	1	21.2	1.24	2.3	19	8	0.5	0.01	8	Reseal	3	OK	3	OK	3	OK	3	OK
113	E	72	330	C	112	20	93.4								Upg. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
114	SD	72	360	C	112	10	29.0	1.30	2.3	19	14	-2.2	0.04	14	SD Recon	2	OK	2	OK	3	OK	3	OK
115	G	73	810	C	113	10	30.0								Upg. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
116	E	73	850	C	113	20	134.0								Mnt. E		Mnt. E		Mnt. E		Mnt. E		Mnt. E
117	SD	74	310	C	115	1	39.2	0.68	1.7	19	8	0.5	0.01	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
118	SD	75	510	C	116	10	19.0	0.68	1.7	19	8	0.5	0.00	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
119	SD	75	530	C	116	20	154.0	0.68	1.7	19	8	0.5	0.00	8	SD Rehab	2	OK	2	OK	2	OK	2	OK
120	G	76	920	C	32	11	13.6								Mnt. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G
121	G	76	920	C	32	11	5.6								Mnt. G		Mnt. G		Mnt. G		Mnt. G		Mnt. G

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