

Table A-1: Saturated Hydraulic Conductivity Results for East Bound Lane Shoulder

Height of Sample (cm)	4.5
Radius of Sample (cm)	5.08
Pi	3.14
Specific Weight of Water (kN/m ²)	9.8
Area of Sample (cm ²)	81.07

Date	Initial Time	Final Time	Change in Time (s)	Inflow Initial Volume (cm ³)	Inflow Final Volume (cm ³)	Inflow Change in Volume (cm ³)	Cumulative Inflow	Outflow Initial Volume (cm ³)	Outflow Final Volume (cm ³)	Outflow Change in Volume (cm ³)	Cumulative Outflow
10-Mar	10:45	11:05	1200	1.40	7.50	6.10	6.10	7.10	1.30	5.80	5.80
	11:05	11:30	1500	0.90	8.01	7.11	13.21	6.67	0.60	6.07	11.87
11-Mar	14:27	14:41	840	3.62	7.23	3.61	16.82	3.70	0.30	3.40	15.27
	14:41	15:05	1440	1.20	7.68	6.48	23.30	8.56	2.27	6.29	21.56
	15:05	15:11	360	0.54	2.22	1.68	24.98	2.27	0.00	2.27	23.83
	15:11	15:27	960	2.22	7.88	5.66	30.64	8.41	3.89	4.52	28.35
12-Mar	9:23	9:35	720	0.59	5.80	5.21	35.85	4.00	0.21	3.79	32.14
	9:35	9:40	300	5.80	7.57	1.77	37.62	8.34	6.12	2.22	34.36
	9:40	9:55	900	0.50	5.77	5.27	42.89	6.12	0.30	5.82	40.18
	9:55	10:00	300	5.77	7.88	2.11	45.00	8.31	6.00	2.31	42.49
	10:00	10:15	900	0.13	6.38	6.25	51.25	6.00	0.24	5.76	48.25
	10:15	10:33	1080	1.67	3.30	1.63	52.88	8.39	0.40	7.99	56.24
	10:33	10:42	540	3.30	7.61	4.31	57.19	8.13	5.28	2.85	59.09
15-Mar	10:03	10:12	540	0.21	2.68	2.47	59.66	5.17	0.65	4.52	63.61
	10:12	10:27	900	2.68	6.80	4.12	63.78	7.49	3.31	4.18	67.79
	10:27	10:37	600	0.74	3.37	2.63	66.41	3.31	0.70	2.61	70.40
	10:37	10:50	780	3.37	6.85	3.48	69.89	7.41	4.22	3.19	73.59
	13:56	14:06	600	0.67	3.71	3.04	72.93	4.22	0.58	3.64	77.23
	14:06	14:14	480	3.71	6.67	2.96	75.89	7.51	4.71	2.80	80.03
	14:14	14:25	660	0.81	4.61	3.80	79.69	4.71	0.43	4.28	84.31
	14:25	14:31	360	4.61	6.96	2.35	82.04	7.46	5.42	2.04	86.35
	14:31	14:44	780	0.39	5.26	4.87	86.91	5.42	0.32	5.10	91.45
	14:44	14:48	240	5.26	6.94	1.68	88.59	7.80	6.13	1.67	93.12
	14:48	15:03	900	0.52	5.98	5.46	94.05	6.13	0.43	5.70	98.82
	15:03	15:06	180	5.98	7.11	1.13	95.18	7.68	6.87	0.81	99.63
	15:06	15:22	960	0.35	6.74	6.39	101.57	6.87	0.46	6.41	106.04
	16-Mar	9:19	9:33	840	0.79	6.58	5.79	107.36	7.31	1.77	5.54
9:33		9:37	240	0.73	1.73	1.00	108.36	1.77	0.54	1.23	112.81
9:37		9:49	720	1.73	6.57	4.84	113.20	7.30	2.63	4.67	117.48
9:49		9:55	360	0.77	2.37	1.60	114.80	2.63	0.19	2.44	119.92
9:55		10:04	540	2.37	6.89	4.52	119.32	7.85	4.15	3.70	123.62
10:04		10:14	600	0.61	3.99	3.38	122.70	4.15	0.57	3.58	127.20
10:14		10:21	420	3.99	6.69	2.70	125.40	7.21	4.78	2.43	129.63
10:21		10:32	660	0.62	4.79	4.17	129.57	4.78	0.28	4.50	134.13
10:32		10:37	300	4.79	6.89	2.10	131.67	7.78	5.98	1.80	135.93
10:37		10:51	840	0.54	3.87	3.33	135.00	5.98	0.38	5.60	141.53
14:35		14:40	300	4.98	6.67	1.69	136.69	6.40	4.61	1.79	143.32
14:40		14:52	720	0.60	4.49	3.89	140.58	4.61	0.48	4.13	147.45
14:52		14:58	360	4.49	6.61	2.12	142.70	7.51	5.51	2.00	149.45
14:58		15:13	900	0.65	5.35	4.70	147.40	5.51	0.49	5.02	154.47
15:13		15:17	240	5.35	6.79	1.44	148.84	7.39	6.11	1.28	155.75
15:17		15:34	1020	0.49	5.89	5.40	154.24	6.11	0.34	5.77	161.52
15:34		15:37	180	5.89	6.86	0.97	155.21	7.55	6.68	0.87	162.39

Table A-1: Saturated Hydraulic Conductivity Results for East Bound Lane Shoulder (con't)

Height of Sample (cm)	4.5
Radius of Sample (cm)	5.08
Pi	3.14
Specific Weight of Water (kN/m ³)	9.8
Area of Sample (cm ²)	81.07

Date	Initial Time	Final Time	Pore Pressure (kPa)	Differential Pressure (kPa)	Pressure Head (m)	Pressure Head (cm)	Hydraulic Gradient	Kin Discharge (cm ³ /s)	Kout Discharge (cm ³ /s)	Kin Hydraulic Conductivity (cm/s)	Kout Hydraulic Conductivity (cm/s)	
10-Mar	10:45	11:05	212	10	1.020	102.041	22.676	5.083E-03	4.833E-03	2.765E-06	2.629E-06	
	11:05	11:30	213	10	1.020	102.041	22.676	4.740E-03	4.047E-03	2.578E-06	2.201E-06	
11-Mar	14:27	14:41	212	8	0.816	81.633	18.141	4.298E-03	4.048E-03	2.922E-06	2.752E-06	
	14:41	15:05	210	8	0.816	81.633	18.141	4.500E-03	4.368E-03	3.060E-06	2.970E-06	
	15:05	15:11	210	8	0.816	81.633	18.141	4.667E-03	6.306E-03	3.173E-06	4.287E-06	
	15:11	15:27	212	7	0.714	71.429	15.873	5.896E-03	4.708E-03	4.582E-06	3.659E-06	
12-Mar	9:23	9:35	208	7	0.714	71.429	15.873	7.236E-03	5.264E-03	5.623E-06	4.090E-06	
	9:35	9:40	207	6	0.612	61.224	13.605	5.900E-03	7.400E-03	5.349E-06	6.709E-06	
	9:40	9:55	205	6	0.612	61.224	13.605	5.856E-03	6.467E-03	5.309E-06	5.863E-06	
	9:55	10:00	207	7	0.714	71.429	15.873	7.033E-03	7.700E-03	5.465E-06	5.983E-06	
	10:00	10:15	206	7	0.714	71.429	15.873	6.944E-03	6.400E-03	5.396E-06	4.973E-06	
	10:15	10:33	205	7	0.714	71.429	15.873	1.509E-03	7.398E-03	1.173E-06	5.749E-06	
	10:33	10:42	206	7	0.714	71.429	15.873	7.981E-03	5.278E-03	6.202E-06	4.101E-06	
15-Mar	10:03	10:12	213	10	1.020	102.041	22.676	4.574E-03	8.370E-03	2.488E-06	4.553E-06	
	10:12	10:27	212	10	1.020	102.041	22.676	4.578E-03	4.644E-03	2.490E-06	2.526E-06	
	10:27	10:37	212	9	0.918	91.837	20.408	4.383E-03	4.350E-03	2.649E-06	2.629E-06	
	10:37	10:50	213	9	0.918	91.837	20.408	4.462E-03	4.090E-03	2.697E-06	2.472E-06	
	13:56	14:06	212	9	0.918	91.837	20.408	5.067E-03	6.067E-03	3.062E-06	3.667E-06	
	14:06	14:14	213	10	1.020	102.041	22.676	6.167E-03	5.833E-03	3.354E-06	3.173E-06	
	14:14	14:25	211	10	1.020	102.041	22.676	5.758E-03	6.485E-03	3.132E-06	3.527E-06	
	14:25	14:31	210	10	1.020	102.041	22.676	6.528E-03	5.667E-03	3.551E-06	3.082E-06	
	14:31	14:44	211	10	1.020	102.041	22.676	6.244E-03	6.538E-03	3.396E-06	3.557E-06	
	14:44	14:48	212	10	1.020	102.041	22.676	7.000E-03	6.958E-03	3.808E-06	3.785E-06	
	14:48	15:03	213	10	1.020	102.041	22.676	6.067E-03	6.333E-03	3.300E-06	3.445E-06	
	15:03	15:06	210	10	1.020	102.041	22.676	6.278E-03	4.500E-03	3.415E-06	2.448E-06	
	15:06	15:22	210	10	1.020	102.041	22.676	6.656E-03	6.677E-03	3.621E-06	3.632E-06	
	16-Mar	9:19	9:33	211	9	0.918	91.837	20.408	6.893E-03	6.595E-03	4.166E-06	3.986E-06
		9:33	9:37	211	9	0.918	91.837	20.408	4.167E-03	5.125E-03	2.518E-06	3.098E-06
9:37		9:49	213	9	0.918	91.837	20.408	6.722E-03	6.486E-03	4.063E-06	3.920E-06	
9:49		9:55	212	9	0.918	91.837	20.408	4.444E-03	6.778E-03	2.686E-06	4.096E-06	
9:55		10:04	208	9	0.918	91.837	20.408	8.370E-03	6.852E-03	5.059E-06	4.141E-06	
10:04		10:14	209	10	1.020	102.041	22.676	5.633E-03	5.967E-03	3.064E-06	3.246E-06	
10:14		10:21	210	10	1.020	102.041	22.676	6.429E-03	5.786E-03	3.497E-06	3.147E-06	
10:21		10:32	208	10	1.020	102.041	22.676	6.318E-03	6.818E-03	3.437E-06	3.709E-06	
10:32		10:37	213	9	0.918	91.837	20.408	7.000E-03	6.000E-03	4.231E-06	3.626E-06	
10:37		10:51	212	8	0.816	81.633	18.141	3.964E-03	6.667E-03	2.695E-06	4.533E-06	
14:35		14:40	213	9	0.918	91.837	20.408	5.633E-03	5.967E-03	3.405E-06	3.606E-06	
14:40		14:52	211	9	0.918	91.837	20.408	5.403E-03	5.736E-03	3.265E-06	3.467E-06	
14:52		14:58	210	9	0.918	91.837	20.408	5.889E-03	5.556E-03	3.559E-06	3.358E-06	
14:58		15:13	212	9	0.918	91.837	20.408	5.222E-03	5.578E-03	3.156E-06	3.371E-06	
15:13		15:17	212	9	0.918	91.837	20.408	6.000E-03	5.333E-03	3.626E-06	3.223E-06	
15:17		15:34	209	9	0.918	91.837	20.408	5.294E-03	5.657E-03	3.200E-06	3.419E-06	
15:34		15:37	209	9	0.918	91.837	20.408	5.389E-03	4.833E-03	3.257E-06	2.921E-06	

Table B-1: Moisture Infiltration Amount for Hot Mix Asphalt for a K_{sa} of 1×10^{-5} cm/s

Day	Precipitation (cm)	cm/s					
		24 hours 86400s	12 hours 43200s	6 hours 21600s	1 hour 3600s	30 min 1800s	15 min 900s
02-Apr	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
3	2.80E-01	3.24E-06	6.48E-06	1.30E-05	7.78E-05	1.56E-04	3.11E-04
4	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
8	1.20E-01	1.39E-06	2.78E-06	5.56E-06	3.33E-05	6.67E-05	1.33E-04
9	2.00E-02	2.31E-07	4.63E-07	9.26E-07	5.56E-06	1.11E-05	2.22E-05
13	8.00E-02	9.26E-07	1.85E-06	3.70E-06	2.22E-05	4.44E-05	8.89E-05
14	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
21	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
22	6.00E-02	6.94E-07	1.39E-06	2.78E-06	1.67E-05	3.33E-05	6.67E-05
23	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
24	2.40E-01	2.78E-06	5.56E-06	1.11E-05	6.67E-05	1.33E-04	2.67E-04
25	3.00E-01	3.47E-06	6.94E-06	1.39E-05	8.33E-05	1.67E-04	3.33E-04
26	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
28	4.20E-01	4.86E-06	9.72E-06	1.94E-05	1.17E-04	2.33E-04	4.67E-04
29	8.00E-01	9.26E-06	1.85E-05	3.70E-05	2.22E-04	4.44E-04	8.89E-04
30	6.00E-02	6.94E-07	1.39E-06	2.78E-06	1.67E-05	3.33E-05	6.67E-05
03-May	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
4	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
7	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
8	6.00E-02	6.94E-07	1.39E-06	2.78E-06	1.67E-05	3.33E-05	6.67E-05
10	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
15	1.40E+00	1.62E-05	3.24E-05	6.48E-05	3.89E-04	7.78E-04	1.56E-03
18	2.40E-01	2.78E-06	5.56E-06	1.11E-05	6.67E-05	1.33E-04	2.67E-04
19	2.00E-01	2.31E-06	4.63E-06	9.26E-06	5.56E-05	1.11E-04	2.22E-04
21	7.00E-01	8.10E-06	1.62E-05	3.24E-05	1.94E-04	3.89E-04	7.78E-04
23	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
24	1.60E-01	1.85E-06	3.70E-06	7.41E-06	4.44E-05	8.89E-05	1.78E-04
30	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
01-Jun	1.60E-01	1.85E-06	3.70E-06	7.41E-06	4.44E-05	8.89E-05	1.78E-04
2	1.34E+00	1.55E-05	3.10E-05	6.20E-05	3.72E-04	7.44E-04	1.49E-03
4	6.40E-01	7.41E-06	1.48E-05	2.96E-05	1.78E-04	3.56E-04	7.11E-04
5	7.00E-01	8.10E-06	1.62E-05	3.24E-05	1.94E-04	3.89E-04	7.78E-04
6	2.00E-01	2.31E-06	4.63E-06	9.26E-06	5.56E-05	1.11E-04	2.22E-04
8	7.00E-01	8.10E-06	1.62E-05	3.24E-05	1.94E-04	3.89E-04	7.78E-04
10	9.40E-01	1.09E-05	2.18E-05	4.35E-05	2.61E-04	5.22E-04	1.04E-03
12	4.00E-02	4.63E-07	9.26E-07	1.85E-06	1.11E-05	2.22E-05	4.44E-05
13	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
16	2.00E-02	2.31E-07	4.63E-07	9.26E-07	5.56E-06	1.11E-05	2.22E-05
17	4.00E-02	4.63E-07	9.26E-07	1.85E-06	1.11E-05	2.22E-05	4.44E-05
18	1.00E-01	1.16E-06	2.31E-06	4.63E-06	2.78E-05	5.56E-05	1.11E-04
19	3.40E-01	3.94E-06	7.87E-06	1.57E-05	9.44E-05	1.89E-04	3.78E-04
20	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
21	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
23	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
25	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
26	2.00E-02	2.31E-07	4.63E-07	9.26E-07	5.56E-06	1.11E-05	2.22E-05
27	1.00E-01	1.16E-06	2.31E-06	4.63E-06	2.78E-05	5.56E-05	1.11E-04
28	6.00E-01	6.94E-06	1.39E-05	2.78E-05	1.67E-04	3.33E-04	6.67E-04
30	4.00E-02	4.63E-07	9.26E-07	1.85E-06	1.11E-05	2.22E-05	4.44E-05
01-Jul	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
2	3.60E-01	4.17E-06	8.33E-06	1.67E-05	1.00E-04	2.00E-04	4.00E-04
3	2.40E+00	2.78E-05	5.56E-05	1.11E-04	6.67E-04	1.33E-03	2.67E-03
4	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
6	4.80E-01	5.56E-06	1.11E-05	2.22E-05	1.33E-04	2.67E-04	5.33E-04
7	3.90E-01	4.51E-06	9.03E-06	1.81E-05	1.08E-04	2.17E-04	4.33E-04
10	3.00E-01	3.47E-06	6.94E-06	1.39E-05	8.33E-05	1.67E-04	3.33E-04
14	8.00E-02	9.26E-07	1.85E-06	3.70E-06	2.22E-05	4.44E-05	8.89E-05
16	6.00E-02	6.94E-07	1.39E-06	2.78E-06	1.67E-05	3.33E-05	6.67E-05
17	5.80E-01	6.71E-06	1.34E-05	2.69E-05	1.61E-04	3.22E-04	6.44E-04
18	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
19	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
20	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
25	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
26	1.60E-01	1.85E-06	3.70E-06	7.41E-06	4.44E-05	8.89E-05	1.78E-04
27	2.78E+00	3.22E-05	6.44E-05	1.29E-04	7.72E-04	1.54E-03	3.09E-03
01-Aug	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
2	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
10	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
11	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
13	2.20E-01	2.55E-06	5.09E-06	1.02E-05	6.11E-05	1.22E-04	2.44E-04
14	3.00E-02	3.47E-07	6.94E-07	1.39E-06	8.33E-06	1.67E-05	3.33E-05
16	2.40E-01	2.78E-06	5.56E-06	1.11E-05	6.67E-05	1.33E-04	2.67E-04
21	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
22	8.00E-02	9.26E-07	1.85E-06	3.70E-06	2.22E-05	4.44E-05	8.89E-05
23	6.00E-02	6.94E-07	1.39E-06	2.78E-06	1.67E-05	3.33E-05	6.67E-05
25	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
26	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
30	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
31	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
03-Sep	2.00E-02	2.31E-07	4.63E-07	9.26E-07	5.56E-06	1.11E-05	2.22E-05
6	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
8	3.60E-01	4.17E-06	8.33E-06	1.67E-05	1.00E-04	2.00E-04	4.00E-04
12	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
13	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
19	1.00E-03	1.16E-08	2.31E-08	4.63E-08	2.78E-07	5.56E-07	1.11E-06
20	1.00E-01	1.16E-06	2.31E-06	4.63E-06	2.78E-05	5.56E-05	1.11E-04
21	1.80E-01	2.08E-06	4.17E-06	8.33E-06	5.00E-05	1.00E-04	2.00E-04

Day	Precipitation (cm)	Acceptance Percentages					
		24 hours	12 hours	6 hours	1 hour	30 min	15 min
02-Apr	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
3	2.80E-01	1.00E+00	1.00E+00	7.71E-01	1.29E-01	6.43E-02	3.21E-02
4	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
8	1.20E-01	1.00E+00	1.00E+00	1.00E+00	3.00E-01	1.50E-01	7.50E-02
9	2.00E-02	1.00E+00	1.00E+00	1.00E+00	1.00E+00	9.00E-01	4.50E-01
13	8.00E-02	1.00E+00	1.00E+00	1.00E+00	4.50E-01	2.25E-01	1.13E-01
14	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
21	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
22	6.00E-02	1.00E+00	1.00E+00	1.00E+00	6.00E-01	3.00E-01	1.50E-01
23	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
24	2.40E-01	1.00E+00	1.00E+00	9.00E-01	1.50E-01	7.50E-02	3.75E-02
25	3.00E-01	1.00E+00	1.00E+00	7.20E-01	1.20E-01	6.00E-02	3.00E-02
26	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
28	4.20E-01	1.00E+00	1.00E+00	5.14E-01	8.57E-02	4.29E-02	2.14E-02
29	8.00E-01	1.00E+00	5.40E-01	2.70E-01	4.50E-02	2.25E-02	1.13E-02
30	6.00E-02	1.00E+00	1.00E+00	1.00E+00	6.00E-01	3.00E-01	1.50E-01
03-May	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
4	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
7	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
8	6.00E-02	1.00E+00	1.00E+00	1.00E+00	6.00E-01	3.00E-01	1.50E-01
10	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
15	1.40E+00	6.17E-01	3.09E-01	1.54E-01	2.57E-02	1.29E-02	6.43E-03
18	2.40E-01	1.00E+00	1.00E+00	9.00E-01	1.50E-01	7.50E-02	3.75E-02
19	2.00E-01	1.00E+00	1.00E+00	1.00E+00	1.80E-01	9.00E-02	4.50E-02
21	7.00E-01	1.00E+00	6.17E-01	3.09E-01	5.14E-02	2.57E-02	1.29E-02
23	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
24	1.60E-01	1.00E+00	1.00E+00	1.00E+00	2.25E-01	1.13E-01	5.63E-02
30	1.00E-03	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
01-Jun	1.60E-01	1.00E+00	1.00E+00	1.00E+00	2.25E-01	1.13E-01	5.63E-02
2	1.34E+00	6					

Table B-1: Moisture Infiltration Amount for Hot Mix Asphalt for a K_{sat} of 1×10^{-5} cm/s

Day	Precipitation (cm)	Acceptance Rates					
		24 hours	12 hours	6 hours	1 hour	30 min	15 min
		cm/s					
02-Apr	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
3	2.80E-01	1.00E-05	1.00E-05	7.71E-06	1.29E-06	6.43E-07	3.21E-07
4	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
8	1.20E-01	1.00E-05	1.00E-05	1.00E-05	3.00E-06	1.50E-06	7.50E-07
9	2.00E-02	1.00E-05	1.00E-05	1.00E-05	1.00E-05	9.00E-06	4.50E-06
13	8.00E-02	1.00E-05	1.00E-05	1.00E-05	4.50E-06	2.25E-06	1.13E-06
14	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
21	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
22	6.00E-02	1.00E-05	1.00E-05	1.00E-05	6.00E-06	3.00E-06	1.50E-06
23	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
24	2.40E-01	1.00E-05	1.00E-05	9.00E-06	1.50E-06	7.50E-07	3.75E-07
25	3.00E-01	1.00E-05	1.00E-05	7.20E-06	1.20E-06	6.00E-07	3.00E-07
26	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
28	4.20E-01	1.00E-05	1.00E-05	5.14E-06	8.57E-07	4.29E-07	2.14E-07
29	8.00E-01	1.00E-05	5.40E-06	2.70E-06	4.50E-07	2.25E-07	1.13E-07
30	6.00E-02	1.00E-05	1.00E-05	1.00E-05	6.00E-06	3.00E-06	1.50E-06
03-May	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
4	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
7	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
8	6.00E-02	1.00E-05	1.00E-05	1.00E-05	6.00E-06	3.00E-06	1.50E-06
10	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
15	1.40E+00	6.17E-06	3.09E-06	1.54E-06	2.57E-07	1.29E-07	6.43E-08
18	2.40E-01	1.00E-05	1.00E-05	9.00E-06	1.50E-06	7.50E-07	3.75E-07
19	2.00E-01	1.00E-05	1.00E-05	1.00E-05	1.80E-06	9.00E-07	4.50E-07
21	7.00E-01	1.00E-05	6.17E-06	3.09E-06	5.14E-07	2.57E-07	1.29E-07
23	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
24	1.60E-01	1.00E-05	1.00E-05	1.00E-05	2.25E-06	1.13E-06	5.63E-07
30	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
01-Jun	1.60E-01	1.00E-05	1.00E-05	1.00E-05	2.25E-06	1.13E-06	5.63E-07
2	1.34E+00	6.45E-06	3.22E-06	1.61E-06	2.69E-07	1.34E-07	6.72E-08
4	6.40E-01	1.00E-05	6.75E-06	3.38E-06	5.63E-07	2.81E-07	1.41E-07
5	7.00E-01	1.00E-05	6.17E-06	3.09E-06	5.14E-07	2.57E-07	1.29E-07
6	2.00E-01	1.00E-05	1.00E-05	1.00E-05	1.80E-06	9.00E-07	4.50E-07
8	7.00E-01	1.00E-05	6.17E-06	3.09E-06	5.14E-07	2.57E-07	1.29E-07
10	9.40E-01	9.19E-06	4.60E-06	2.30E-06	3.83E-07	1.91E-07	9.57E-08
12	4.00E-02	1.00E-05	1.00E-05	1.00E-05	9.00E-06	4.50E-06	2.25E-06
13	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
16	2.00E-02	1.00E-05	1.00E-05	1.00E-05	1.00E-05	9.00E-06	4.50E-06
17	4.00E-02	1.00E-05	1.00E-05	1.00E-05	9.00E-06	4.50E-06	2.25E-06
18	1.00E-01	1.00E-05	1.00E-05	1.00E-05	3.60E-06	1.80E-06	9.00E-07
19	3.40E-01	1.00E-05	1.00E-05	6.35E-06	1.06E-06	5.29E-07	2.65E-07
20	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
21	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
23	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
25	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
26	2.00E-02	1.00E-05	1.00E-05	1.00E-05	1.00E-05	9.00E-06	4.50E-06
27	1.00E-01	1.00E-05	1.00E-05	1.00E-05	3.60E-06	1.80E-06	9.00E-07
28	6.00E-01	1.00E-05	7.20E-06	3.60E-06	6.00E-07	3.00E-07	1.50E-07
30	4.00E-02	1.00E-05	1.00E-05	1.00E-05	9.00E-06	4.50E-06	2.25E-06
01-Jul	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
2	3.60E-01	1.00E-05	1.00E-05	6.00E-06	1.00E-06	5.00E-07	2.50E-07
3	2.40E+00	3.60E-06	1.80E-06	9.00E-07	1.50E-07	7.50E-08	3.75E-08
4	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
6	4.80E-01	1.00E-05	9.00E-06	4.50E-06	7.50E-07	3.75E-07	1.88E-07
7	3.90E-01	1.00E-05	1.00E-05	5.54E-06	9.23E-07	4.62E-07	2.31E-07
10	3.00E-01	1.00E-05	1.00E-05	7.20E-06	1.20E-06	6.00E-07	3.00E-07
14	8.00E-02	1.00E-05	1.00E-05	1.00E-05	4.50E-06	2.25E-06	1.13E-06
16	6.00E-02	1.00E-05	1.00E-05	1.00E-05	6.00E-06	3.00E-06	1.50E-06
17	5.80E-01	1.00E-05	7.45E-06	3.72E-06	6.21E-07	3.10E-07	1.55E-07
18	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
19	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
20	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
25	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
26	1.60E-01	1.00E-05	1.00E-05	1.00E-05	2.25E-06	1.13E-06	5.63E-07
27	2.78E+00	3.11E-06	1.55E-06	7.77E-07	1.29E-07	6.47E-08	3.24E-08
01-Aug	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
2	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
10	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
11	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
13	2.20E-01	1.00E-05	1.00E-05	9.82E-06	1.64E-06	8.18E-07	4.09E-07
14	3.00E-02	1.00E-05	1.00E-05	1.00E-05	1.00E-05	6.00E-06	3.00E-06
16	2.40E-01	1.00E-05	1.00E-05	9.00E-06	1.50E-06	7.50E-07	3.75E-07
21	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
22	8.00E-02	1.00E-05	1.00E-05	1.00E-05	4.50E-06	2.25E-06	1.13E-06
23	6.00E-02	1.00E-05	1.00E-05	1.00E-05	6.00E-06	3.00E-06	1.50E-06
25	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
26	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
30	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
31	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
03-Sep	2.00E-02	1.00E-05	1.00E-05	1.00E-05	1.00E-05	9.00E-06	4.50E-06
6	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
8	3.60E-01	1.00E-05	1.00E-05	6.00E-06	1.00E-06	5.00E-07	2.50E-07
12	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
13	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
19	1.00E-03	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05	1.00E-05
20	1.00E-01	1.00E-05	1.00E-05	1.00E-05	3.60E-06	1.80E-06	9.00E-07
21	1.80E-01	1.00E-05	1.00E-05	1.00E-05	2.00E-06	1.00E-06	5.00E-07

Day	Precipitation (cm)	Acceptance Amounts				
		24 hours	12 hours	6 hours	1 hour	30 min
		mm				
02-Apr	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
3	2.80E-01	8.64E+00	4.32E+00	1.67E+00	4.63E-02	1.16E-02
4	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
8	1.20E-01	8.64E+00	4.32E+00	2.16E+00	1.08E-01	2.70E-02
9	2.00E-02	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.62E-01
13	8.00E-02	8.64E+00	4.32E+00	2.16E+00	1.62E-01	4.05E-02
14	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
21	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
22	6.00E-02	8.64E+00	4.32E+00	2.16E+00	2.16E-01	5.40E-02
23	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
24	2.40E-01	8.64E+00	4.32E+00	1.94E+00	5.40E-02	1.35E-02
25	3.00E-01	8.64E+00	4.32E+00	1.56E+00	4.32E-02	1.08E-02
26	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
28	4.20E-01	8.64E+00	4.32E+00	1.11E+00	3.09E-02	7.71E-03
29	8.00E-01	8.64E+00	2.33E+00	5.83E-01	1.62E-02	4.05E-03
30	6.00E-02	8.64E+00	4.32E+00	2.16E+00	2.16E-01	5.40E-02
03-May	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
4	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
7	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
8	6.00E-02	8.64E+00	4.32E+00	2.16E+00	2.16E-01	5.40E-02
10	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
15	1.40E+00	5.33E+00	1.33E+00	3.33E-01	9.26E-03	2.31E-03
18	2.40E-01	8.64E+00	4.32E+00	1.94E+00	5.40E-02	1.35E-02
19	2.00E-01	8.64E+00	4.32E+00	2.16E+00	6.48E-02	1.62E-02
21	7.00E-01	8.64E+00	2.67E+00	6.67E-01	1.85E-02	4.63E-03
23	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
24	1.60E-01	8.64E+00	4.32E+00	2.16E+00	8.10E-02	2.03E-02
30	1.00E-03	8.64E+00	4.32E+00	2.16E+00	3.60E-01	1.80E-01
01-Jun	1.60E-01	8.64E+00	4.32E+00	2.16E+00	8.10E-02	2.03E-02
2	1.34E+00	5.57E+00	1.39E+00	3.48E-01	9.67E-03	2.42E-03
4	6.40E-01	8.64E+00	2.92E+00	7.29E-01	2.03E-02	5.06E-03
5	7.00E-01	8.64E+00	2.67E+00	6.67E-01	1.85E-02	4.63E-03
6	2.00E-01	8.64E+00	4.32E+00	2.16E+00	6.48E-02	1.62E-02
8	7.00E-01	8.64E+00	2.67E+00	6.67E-01	1.	

15 min

9.00E-02
2.89E-03
9.00E-02
6.75E-03
4.05E-02
1.01E-02
9.00E-02
9.00E-02
1.35E-02
9.00E-02
3.38E-03
2.70E-03
9.00E-02
1.93E-03
1.01E-03
1.35E-02
9.00E-02
9.00E-02
9.00E-02
1.35E-02
9.00E-02
5.79E-04
3.38E-03
4.05E-03
1.16E-03
9.00E-02
5.06E-03
9.00E-02
5.06E-03
6.04E-04
1.27E-03
1.16E-03
4.05E-03
1.16E-03
8.62E-04
2.03E-02
9.00E-02
4.05E-02
2.03E-02
8.10E-03
2.38E-03
9.00E-02
9.00E-02
9.00E-02
9.00E-02
4.05E-02
8.10E-03
1.35E-03
2.03E-02
9.00E-02
2.25E-03
3.38E-04
9.00E-02
1.69E-03
2.08E-03
2.70E-03
1.01E-02
1.35E-02
1.40E-03
9.00E-02
9.00E-02
9.00E-02
9.00E-02
5.06E-03
2.91E-04
9.00E-02
9.00E-02
9.00E-02
3.68E-03
2.70E-02
3.38E-03
9.00E-02
1.01E-02
1.35E-02
9.00E-02
9.00E-02
9.00E-02
9.00E-02
4.05E-02
9.00E-02
2.25E-03
9.00E-02
9.00E-02
9.00E-02
8.10E-03
4.50E-03

3.69E+00

Table C-1: Pressure Plate Extractor Data for East Bound Shoulder

Height of Sample (cm)	4.5
Dry Weight of Sample (g)	877.96
Saturated Mass (g)	888.43

Date	Cummulative Time (hrs)	Height of Sample above Table (cm)	Elevation of Water Column Below Bottom of Sample (cm)	Height of Water Column Above Table (cm)	Applied Air Pressure (kPa)	Mass of Sample (g)
18-May	0	3.1	0.5	2.6	0	887.72
19	22.25	3.1	0.5	2.6	0	887.69
20	47.5	3.1	0.5	2.6	0	887.46
21	71	3.1	1	2.1	0	887.3
25	168.5	3.1	1	2.1	0	887.23
26	190.75	3.1	2.5	0.6	0	886.43
27	215	3.1	2.5	0.6	0	885.91
28	240	3.1	2.5	0.6	0	886.01
29	267.5	3.1	5	-1.9	0	885.89
30	291.5	3.1	5	-1.9	0	885.89
31	311.5	3.1	5	-1.9	0	885.85
01-Jun	335.5	3.1	10	-6.9	0	885.68
2	359.5	3.1	10	-6.9	0	885.53
3	383.5	3.1	10	-6.9	0	885.37
4	407.5	3.1	25	-21.9	0	885.31
5	430	3.1	25	-21.9	0	885.33
7	479.5	3.1	50	-46.9	0	885.25
8	503.25	3.1	50	-46.9	0	885.29
9	526.5	3.1	50	-46.9	0	885.18
10	551.5	3.1	0	3.1	10	885.22
11	578.5	3.1	0	3.1	10	885.17
12	601	3.1	0	3.1	25	885.1
13	623.5	3.1	0	3.1	25	885.27
14	647.5	3.1	0	3.1	50	885.08
15	671.5	3.1	0	3.1	50	885.16
16	695.5	3.1	0	3.1	100	884.93
17	719.5	3.1	0	3.1	100	884.87
18	743.5	3.1	0	3.1	150	884.77
19	767.5	3.1	0	3.1	150	884.74

Table D-1: Measured Vapour Diffusion Data for Older Outer Wheel Path

Date	Time	Weight of Sample (g)	Cummulative Time (min)	Change in Weight (g)	Cummulative Change in weight (g)
08-Sep	10:09	1766.5	0	0	0
9	8:49	1766.4	1360	0.1	0.1
10	9:57	1766.3	2868	0.1	0.2
11	16:40	1766	4711	0.3	0.5
13	13:08	1765.85	7379	0.15	0.65
14	13:11	1765.8	8822	0.05	0.7
15	13:17	1765.6	10268	0.2	0.9
17	11:58	1765.6	13069	0	0.9
20	13:12	1765	17463	0.6	1.5
21	14:22	1764.9	18973	0.1	1.6
22	13:15	1764.7	20346	0.2	1.8
24	13:14	1764.4	23225	0.3	2.1
27	13:00	1764.2	27531	0.2	2.3
29	13:27	1763.9	30438	0.3	2.6
01-Oct	13:35	1763.7	33326	0.2	2.8
4	13:19	1763.3	37630	0.4	3.2
6	12:57	1763.2	40488	0.1	3.3
8	13:14	1762.9	43385	0.3	3.6
12	13:23	1762.6	49154	0.3	3.9
14	13:03	1762.2	52014	0.4	4.3
18	13:30	1761.7	57801	0.5	4.8
19	13:06	1761.7	59217	0	4.8
21	14:07	1761.3	62158	0.4	5.2
25	14:55	1760.9	67966	0.4	5.6
27	13:20	1760.8	70751	0.1	5.7
29	13:10	1760.5	73621	0.3	6
01-Nov	12:55	1760.1	77926	0.4	6.4
3	13:32	1759.9	80843	0.2	6.6
5	12:58	1759.5	83689	0.4	7
8	12:41	1759.2	87992	0.3	7.3
10	12:42	1759	90872	0.2	7.5
12	13:16	1758.6	93787	0.4	7.9
15	12:53	1758.3	98084	0.3	8.2
16	12:42	1758.3	99513	0	8.2
17	12:53	1758.1	100964	0.2	8.4

Table E-1: Air Permeability Data for Hot Mix Asphalt Samples

Sample Number	h _{sample} (cm)	A (cm ²)	P _{cell} (kPa)	Trial Number	Intake Pressure (kPa)	Flow Rate (cc/min)	Flow Rate (m ³ /s)	Manometer Reading 1 (m)	Manometer Reading 2 (m)	Head (m)
East Bound Inner Wheel Path	5.1	81.073	100	1	5	40	6.67E-07			0.06
				2	7.5	70	1.17E-06	5.898	6.17	0.272
				3	10	100	1.67E-06			0.276
				4	12.5	130	2.17E-06	5.78	6.358	0.578
				5	15	160	2.67E-06	5.54	6.52	0.98
East Bound Between Wheel Path	5	81.073	100	1	5	65	1.08E-06	5.91	6.162	0.252
				2	7.5	85	1.42E-06	5.922	6.15	0.228
				3	10	100	1.67E-06	5.786	6.283	0.497
				4	12.5	140	2.33E-06	5.68	6.523	0.843
				5	15	200	3.33E-06	5.548	6.394	0.846
West Bound Shoulder	4.9	81.073	100	1	5	90	1.50E-06	6	6.101	0.101
				2	7.5	100	1.67E-06	5.943	6.158	0.215
				3	10	170	2.83E-06	5.827	6.272	0.445
				4	12.5	210	3.50E-06	5.708	6.392	0.684
				5	15	220	3.67E-06	5.637	6.465	0.828
Older Outer Wheel Path	4.5	81.073	100	1	5	15	2.50E-07	5.989	6.112	0.123
				2	7.5	22	3.67E-07	5.904	6.198	0.294
				3	10	25	4.17E-07	5.792	6.307	0.515
				4	12.5	28	4.67E-07	5.654	6.452	0.798
				5	15	33	5.50E-07	5.493	6.618	1.125
East Bound Shoulder	4.5	81.073	100	1	5	15	2.50E-07	6.018	6.082	0.064
				2	7.5	22	3.67E-07	5.895	6.204	0.309
				3	10	28	4.67E-07	5.766	6.338	0.572
				4	12.5	50	8.33E-07	5.638	6.47	0.832
				5	15	60	1.00E-06	5.498	6.624	1.126
West Bound Outer Wheel Path	5	81.073	100	1	5	65	1.08E-06	6.06	6.084	0.024
				2	7.5	70	1.17E-06	5.941	6.159	0.218
				3	10	90	1.50E-06	5.849	6.25	0.401
				4	12.5	120	2.00E-06	5.689	6.406	0.717
				5	15	150	2.50E-06	5.568	6.527	0.959
Older Inner Wheel Path A	4.8	81.073	100	1	5	17	2.83E-07	5.885	5.922	0.037
				2	7.5	26	4.33E-07	5.795	6.013	0.218
				3	10	30	5.00E-07	5.716	6.092	0.376
				4	12.5	42	7.00E-07	5.54	6.266	0.726
				5	15	60	1.00E-06	5.372	6.435	1.063
Older Inner Wheel Path B	5.7	81.073	100	1	5	21	3.50E-07	5.875	5.958	0.083
				2	7.5	27	4.50E-07	5.783	6.049	0.266
				3	10	31	5.17E-07	5.685	6.143	0.458
				4	12.5	41	6.83E-07	5.558	6.274	0.716
				5	15	62	1.03E-06	5.404	6.428	1.024
West Bound Inner Wheel Path	5.9	81.073	100	1	5	16	2.67E-07	5.877	5.953	0.076
				2	7.5	25	4.17E-07	5.739	6.091	0.352
				3	10	30	5.00E-07	5.658	6.172	0.514
				4	12.5	34	5.67E-07	5.535	6.301	0.766
				5	15	40	6.67E-07	5.304	6.525	1.221
Older Between Wheel Path	4.8	81.073	100	1	5	30	5.00E-07	5.894	5.939	0.045
				2	7.5	70	1.17E-06	5.787	6.044	0.257
				3	10	80	1.33E-06	5.73	6.101	0.371
				4	12.5	90	1.50E-06	5.607	6.225	0.618
				5	15	100	1.67E-06	5.461	6.372	0.911
Older Shoulder	5.7	81.073	100	1	5	220	3.67E-06	5.916	5.916	0
				2	7.5	450	7.50E-06	5.916	5.918	0.002
				3	10	625	1.04E-05	5.905	5.928	0.023
				4	12.5	850	1.42E-05	5.891	5.942	0.051
				5	15	950	1.58E-05	5.872	5.96	0.088
West Bound Between Wheel Path	6.6	81.073	100	1	5	30	5.00E-07	5.855	5.981	0.126
				2	7.5	40	6.67E-07	5.765	6.069	0.304
				3	10	70	1.17E-06	5.659	6.173	0.514
				4	12.5	75	1.25E-06	5.542	6.28	0.738
				5	15	80	1.33E-06	5.397	6.433	1.036

Table E-2

Sample Number
East Bound Inner Wheel Path
East Bound Between Wheel Path
West Bound Shoulder
Older Outer Wheel Path
East Bound Shoulder
West Bound Outer Wheel Path
Older Inner Wheel Path A
Older Inner Wheel Path B
West Bound Inner Wheel Path
Older Between Wheel Path
Older Shoulder
West Bound Between Wheel Path

: Calculated Air Permeability for Hot Mix Asphalt Samples

Trial Number	Pressure head (Pa)	T (oC)	T _{STP} (oC)	P (kPa)	P _{STP} (kPa)	Q _{av} (m3/s)	Q _{av} (cc/min)	ν _a (Pa*s)	K _p (darcy)	K _p (cm2)
1	0.70	24	20	101.3	101.3	7.62E-07	45.74	1.84E-05	127.67	1.26E-06
2	3.17	24	20	101.3	101.3	1.30E-06	78.21	1.84E-05	48.15	4.75E-07
3	3.22	24	20	101.3	101.3	1.82E-06	109.22	1.84E-05	66.27	6.54E-07
4	6.73	24	20	101.3	101.3	2.31E-06	138.87	1.84E-05	40.24	3.97E-07
5	11.42	24	20	101.3	101.3	2.79E-06	167.24	1.84E-05	28.58	2.82E-07
1	2.94	23.5	20	102.45	101.3	1.20E-06	72.00	1.83E-05	46.78	4.62E-07
2	2.66	23.5	20	102.45	101.3	1.53E-06	92.02	1.83E-05	66.07	6.52E-07
3	5.80	23.5	20	102.45	101.3	1.76E-06	105.85	1.83E-05	34.87	3.44E-07
4	9.84	23.5	20	102.45	101.3	2.42E-06	144.97	1.83E-05	28.15	2.78E-07
5	9.87	23.5	20	102.45	101.3	3.38E-06	202.69	1.83E-05	39.22	3.87E-07
1	1.18	23.5	20	102.45	101.3	1.66E-06	99.70	1.83E-05	158.36	1.56E-06
2	2.51	23.5	20	102.45	101.3	1.80E-06	108.26	1.83E-05	80.78	7.97E-07
3	5.19	23.5	20	102.45	101.3	3.00E-06	179.95	1.83E-05	64.87	6.40E-07
4	7.98	23.5	20	102.45	101.3	3.62E-06	217.46	1.83E-05	51.00	5.03E-07
5	9.66	23.5	20	102.45	101.3	3.72E-06	222.96	1.83E-05	43.20	4.26E-07
1	1.44	23.5	20	102.45	101.3	2.77E-07	16.62	1.83E-05	19.90	1.96E-07
2	3.43	23.5	20	102.45	101.3	3.97E-07	23.82	1.83E-05	11.94	1.18E-07
3	6.01	23.5	20	102.45	101.3	4.41E-07	26.46	1.83E-05	7.57	7.47E-08
4	9.31	23.5	20	102.45	101.3	4.83E-07	28.99	1.83E-05	5.35	5.28E-08
5	13.13	23.5	20	102.45	101.3	5.57E-07	33.45	1.83E-05	4.38	4.32E-08
1	0.75	23.5	20	102.45	101.3	2.77E-07	16.62	1.83E-05	38.25	3.78E-07
2	3.61	23.5	20	102.45	101.3	3.97E-07	23.82	1.83E-05	11.36	1.12E-07
3	6.68	23.5	20	102.45	101.3	4.94E-07	29.64	1.83E-05	7.63	7.53E-08
4	9.71	23.5	20	102.45	101.3	8.63E-07	51.78	1.83E-05	9.17	9.05E-08
5	13.14	23.5	20	102.45	101.3	1.01E-06	60.81	1.83E-05	7.96	7.85E-08
1	0.28	23.5	20	102.45	101.3	1.20E-06	72.00	1.83E-05	491.13	4.85E-06
2	2.54	23.5	20	102.45	101.3	1.26E-06	75.78	1.83E-05	56.91	5.62E-07
3	4.68	23.5	20	102.45	101.3	1.59E-06	95.27	1.83E-05	38.89	3.84E-07
4	8.37	23.5	20	102.45	101.3	2.07E-06	124.26	1.83E-05	28.37	2.80E-07
5	11.19	23.5	20	102.45	101.3	2.53E-06	152.02	1.83E-05	25.95	2.56E-07
1	0.43	24.5	20	101.8	101.3	3.29E-07	19.75	1.84E-05	84.40	8.33E-07
2	2.54	24.5	20	101.8	101.3	4.92E-07	29.52	1.84E-05	21.41	2.11E-07
3	4.37	24.5	20	101.8	101.3	5.55E-07	33.30	1.84E-05	14.00	1.38E-07
4	8.44	24.5	20	101.8	101.3	7.60E-07	45.60	1.84E-05	9.93	9.80E-08
5	12.36	24.5	20	101.8	101.3	1.06E-06	63.75	1.84E-05	9.48	9.36E-08
1	0.97	24.5	20	101.8	101.3	4.07E-07	24.40	1.84E-05	55.19	5.45E-07
2	3.09	24.5	20	101.8	101.3	5.11E-07	30.65	1.84E-05	21.64	2.14E-07
3	5.33	24.5	20	101.8	101.3	5.73E-07	34.41	1.84E-05	14.11	1.39E-07
4	8.33	24.5	20	101.8	101.3	7.42E-07	44.51	1.84E-05	11.67	1.15E-07
5	11.91	24.5	20	101.8	101.3	1.10E-06	65.87	1.84E-05	12.08	1.19E-07
1	0.88	24.5	20	101.8	101.3	3.10E-07	18.59	1.84E-05	47.54	4.69E-07
2	4.09	24.5	20	101.8	101.3	4.73E-07	28.38	1.84E-05	15.67	1.55E-07
3	5.98	24.5	20	101.8	101.3	5.55E-07	33.30	1.84E-05	12.59	1.24E-07
4	8.91	24.5	20	101.8	101.3	6.15E-07	36.91	1.84E-05	9.37	9.24E-08
5	14.20	24.5	20	101.8	101.3	7.08E-07	42.50	1.84E-05	6.76	6.68E-08
1	0.52	24.8	20	101.85	101.3	5.88E-07	35.27	1.84E-05	124.14	1.23E-06
2	2.99	24.8	20	101.85	101.3	1.34E-06	80.41	1.84E-05	49.56	4.89E-07
3	4.31	24.8	20	101.85	101.3	1.50E-06	89.84	1.84E-05	38.36	3.79E-07
4	7.18	24.8	20	101.85	101.3	1.65E-06	98.87	1.84E-05	25.34	2.50E-07
5	10.58	24.8	20	101.85	101.3	1.79E-06	107.50	1.84E-05	18.69	1.84E-07
1	0.00	24.5	20	102.4	101.3	4.24E-06	254.19	1.84E-05		
2	0.02	24.5	20	102.4	101.3	8.47E-06	508.11	1.84E-05	47698.67	4.71E-04
3	0.27	24.5	20	102.4	101.3	1.15E-05	690.02	1.84E-05	5632.58	5.56E-05
4	0.59	24.5	20	102.4	101.3	1.53E-05	918.01	1.84E-05	3379.49	3.34E-05
5	1.02	24.5	20	102.4	101.3	1.67E-05	1004.16	1.84E-05	2142.38	2.11E-05
1	1.47	24.5	20	102.4	101.3	5.78E-07	34.66	1.84E-05	59.81	5.90E-07
2	3.54	24.5	20	102.4	101.3	7.53E-07	45.17	1.84E-05	32.30	3.19E-07
3	5.98	24.5	20	102.4	101.3	1.29E-06	77.28	1.84E-05	32.69	3.23E-07
4	8.58	24.5	20	102.4	101.3	1.35E-06	81.00	1.84E-05	23.86	2.36E-07
5	12.05	24.5	20	102.4	101.3	1.41E-06	84.56	1.84E-05	17.74	1.75E-07