# APPENDIX 'A' GEOTECHNICAL REPORT

#### APPENDIX 'A' - GEOTECHNICAL REPORT

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The geotechnical report is provided to aid in the Contractor's evaluation of the existing pavement structure and/or soil conditions. The information presented is considered accurate at the locations shown on the Drawings and at the time of drilling. However, variations in pavement structure and/or soil conditions may exist between test holes and fluctuations in groundwater levels can be expected seasonally and may occur as a result of construction activities. The nature and extent of variations may not become evident until construction commences.

## Geotechnical Report for Henderson Highway (Southbound) – Munroe Avenue to Hespeler Avenue

### **Test Hole Locations**





#### **Summary of Core Samples**



# TABLE 1 PAVEMENT CORE SUMMARY SOUTHBOUND HENDERSON HIGHWAY, MUNROE AVENUE TO HESPELER AVENUE

Core No.	Core Location	Pavement Structure Thickness (mm)		kness (mm)	6
		Asphalt	Concrete	Total	Comments
1	Henderson Hwy, southbound curb lane, 0.5 m from curb, 6 m south from pedestrian crosswalk north of Munroe Avenue	150	250	400	Asphalt pavement not bonded to concrete surface     Moderate deterioration of concrete pavement at bond line with asphalt pavement; sound concrete below 225 mm from top of pavement     Limestone base below pavement
2	Henderson Hwy, southbound curb lane, 1.4 m from curb, 20 m north from north entrance to 480 Henderson Highway	75	250	325	Asphalt pavement not bonded to concrete surface     Moderate deterioration of concrete pavement at bond line with asphalt pavement; sound concrete below 160 mm from top of pavement     Granular base below pavement
3	Henderson Hwy, southbound curb lane, 1 m from curb, 5 m north from south wall of 442 Henderson Highway	75	255	330	Asphalt pavement not bonded to concrete surface     Moderate deterioration of concrete pavement at bond line with asphalt pavement; sound concrete below 130 mm from top of pavement     Granular base below pavement
4	Henderson Hwy, southbound median lane, 0.5 m from curb, 1 m south from south wall of 415 Henderson Highway	155	205	360	<ul> <li>Asphalt pavement not bonded to concrete surface</li> <li>Sound concrete below asphalt pavement</li> <li>Granular base below pavement</li> </ul>
5	Henderson Hwy, southbound curb lane, 0.5 m from curb, 7 m south from pedestrian crosswalk north of Larsen Avenue	155	250	405	Fractured asphalt pavement 75mm below surface     Asphalt pavement not bonded to concrete surface     Severe deterioration of concrete below asphalt pavement     Granular base below pavement



Core	Core Location	Pavement Structure Thickness (mm)		kness (mm)	Comments
No.		Asphalt	Concrete	Total	Comments
6	Henderson Hwy, southbound curb lane, 1.4 m from curb, 1 m north from north wall of 336 Henderson Highway	35	210	245	<ul> <li>Asphalt pavement bonded to concrete surface</li> <li>Sound concrete below asphalt pavement</li> <li>Limestone base below pavement</li> </ul>
7	Henderson Hwy, southbound curb lane, 1.4 m from curb, 7 m south from south wall of 276 Henderson Highway	35	235	270	Asphalt pavement not bonded to concrete surface     Slight deterioration of concrete pavement at bond line with asphalt pavement; sound concrete below 60 mm from top of pavement     Limestone base below pavement
8	Henderson Hwy, southbound median lane, 0.5 m from curb, 9 m south from south wall of 263 Henderson Highway	115	220	335	Asphalt pavement not bonded to concrete surface     Moderate deterioration of concrete pavement at bond line with asphalt pavement and at 210 mm below top of pavement     Granular base below pavement
9	Henderson Hwy, southbound curb lane, 0.6 m from curb, 8 m south from pedestrian crosswalk north of Johnson Avenue W	35	235	270	Asphalt pavement not bonded to concrete surface     Sound concrete below pavement to a depth of 230 mm where fracture was identified     Clay/Granular mix below pavement
10	Henderson Hwy, southbound curb lane, 0.6 m from curb, 3 m south from south wall of 200 Henderson Highway	25	275	300	Asphalt pavement not bonded to concrete surface     Moderate deterioration of concrete pavement at bond line with asphalt pavement; sound concrete below 100 mm from top of pavement     Limestone base below pavement
11	Henderson Hwy, southbound median lane, 0.5 m from curb, 4 m south from south wall of 186 Henderson Highway	40	195	235	Asphalt pavement not bonded to concrete surface     Sound concrete below asphalt pavement     Clay subgrade below pavement

#### **Pavement Core Photos**





Core no. 2



Core no. 3



Core no. 4





Core no. 6



Core no. 7



Core no. 8





Core no. 9



Core no. 11