

Regional Municipality of York

Appendix 5D-1 Design Criteria

Prepared by:

AECOM

Project #

60114489

Date:

September, 2011

DESIGN CRITERIA

Western Vaughan - York Region

DESCRIPTION	DESIGN STANDARD	
	DESIGN STANDARD TAC	PROPOSED STANDARD
CLASSIFICATION		
ROAD CLASSIFICATIONS	UCD 70	UCD 70
DESIGN SPEED (km/h)	70	70
POSTED SPEED (km/h)	60	60
HORIZONTAL ALIGNMENTS		
NC NORMAL CROWN (-0.02m/m) Rmin. (m)	3000	3000
CURVE RADIUS WITH SUPERELEV. RATE e=0.06 Rmin (m)	190	200
RC REMOVE CROWN (+0.02m/m) Rmin (m), for e=0.06	1500	1500
CURVE RADIUS WITH SUPERELEV. RATE e=0.04 Rmin (m)	200	200
RC REMOVE CROWN (+0.02m/m) Rmin (m), for e=0.04	800	800
TRANSITION BETWEEN 6-LANE AND 4-LANE :		
PARALLEL LANE (m)	120-195	175
MERGING TAPER (m)	115	120
DIVERGING TAPER (m)	60	80
RIGHT TURN TAPER	50-110	N/A
LEFT TURN TAPER	63	75
LEFT & RIGHT TURN PARALLEL	40-90	60
CROSS SECTIONS		
THROUGH LANE WIDTH (m)	3.5-3.7	3.3
LT TURN LANE WIDTH (m)	3.5-3.3	3.5
RT TURN LANE WIDTH (m)	3.5-3.3	N/A
CURB LANE WIDTH INCL. 1.5m BIKE LANE (m)	3.5-3.3	5.0
TANGENT SECTION CROSS FALL	2%	2%
SIDEWALK WIDTH (m)		1.50
KILL STRIP WIDTH		0.90
MULTI USE PATH		3.00
DRIVEWAY GRADES (MAX %) BEHIND SIDEWALK		10.00%
KILL STRIP CROSS FALL (%)		4.00%
SIDEWALK CROSS FALL (%)		2%
VERTICAL ALIGNMENTS		
MAXIMUM GRADE (%)	7	6
MINIMUM GRADE (%)	0.5	0.5
SAG VERTICAL CURVE Kmin.	20 to 25	25
CREST VERTICAL CURVE Kmin.	16 to 23	25
LAYOUT		
<u>RADIUS OF CURBS AT INTERSECTION</u>		
COLLECTOR TO LOCAL		15
COLECTOR TO COLLECTOR		15
DESIGN VEHICLE		
	WB-20	WB-20
SIGHT LINES AT INTERSECTIONS	20	30
ROW WIDTH (m)		36.0