
















Appendix A: Typology Matrix




	City Centre Street	Avenue	Main Street	
Road Typology				
Example	Highway 7 - Markham City Centre	e.g. Yonge Street - City of Markham/City of Vaughan	e.g. Keele Street - Maple	
Primary Transportation Function	Transit priority, active transportation priority, vehicular movement	Transit priority, active transportation priority, vehicular movement	Active transportation priority, transit supportive, vehicular movement	
OPERATIONAL ATTRIBUTES	ROW Width Range	43m - 60m	43m - 45m	20m - 36m
	Flow Characteristics	Interrupted flow by passive traffic calming (narrow lanes, on-street parking, mid-block crossings) and signals	Uninterrupted flow except at signals and roundabouts	Interrupted flow by passive traffic calming (narrow lanes, on-street parking, mid-block crossings) and signals
	Posted Speed (km/h)	50 - 60	50 - 60	40 - 50
	Maximum Number of Lanes	6 lanes	6 lanes	4 lanes
	Median	Optional: Access Control, Turn Lane Protection, Pedestrian Refuge, Special Character, Landscaped Median	Optional: Access Control, Turn Lane Protection, Pedestrian Refuge, Special Character, Landscaped Median	No
	Local Street Connectivity	Highly porous	Highly porous	Highly porous
	Access Management	Highest degree of private access control desirable. Commercial Landing Zone (CLZ) and/or rear lot servicing provision necessary.	High degree of private access control desirable	Highest degree of private access control desirable. CLZ and/or rear lot servicing provision necessary.
	Transit	Can accommodate dedicated transit facility, transit priority lanes and mixed traffic transit	Can accommodate dedicated transit facility, transit priority lanes and mixed traffic transit	Can accommodate transit priority lanes and mixed traffic transit
	Goods Movement Corridor	Limited goods movement corridor. Ideally restricted to off-peak and/or weekends	Supports goods movement	Limited goods movement corridor. Ideally restricted to off-peak and/or weekends
Cycling Provisions	Cycle track	Cycle track	Cycle track	

Connector	Rural Road	Rural Hamlet Road
		
<i>e.g. Dufferin Street - City of Vaughan</i>	<i>King Road - Township of King</i>	<i>e.g. Leslie Street - Sharon</i>
Goods movement priority, transit priority, active transportation supportive, vehicular movement	Vehicular movement, goods movement, active transportation supportive, agricultural movement	Vehicular movement, active transportation supportive
36m - 45m	26m - 36m	20m - 36m
Uninterrupted flow except at signals, roundabouts and controlled cross walks	Uninterrupted flow except at signals, stop signs, roundabouts and controlled cross walks	Uninterrupted flow except at signals, stop signs, roundabouts and controlled cross walks
60 - 70	80 - 90	50 - 60
6 lanes	4 lanes	4 lanes
Optional: access control, turn lane protection, pedestrian refuge, landscaped median	Optional painted median	Turn lane protection,
Moderately porous	Not porous	Highly porous
Moderate degree of private access control desirable	Access control not necessary	Moderate degree of private access control desirable
Can accommodate dedicated transit facility, transit priority lanes and mixed traffic transit	Can accommodate transit in mixed traffic	Can accommodate mixed traffic transit
Primary goods movement corridor	Primary goods movement corridor	Supports goods movement
Multi-use path	Paved shoulder with buffer, multi-use path optional	Multi-use path

		City Centre Street	Avenue	Main Street
Road Typology				
Example		<i>Highway 7 - Markham City Centre</i>	<i>e.g. Yonge Street - City of Markham/City of Vaughan</i>	<i>e.g. Keele Street - Maple</i>
Primary Transportation Function		Transit priority, active transportation priority, vehicular movement	Transit priority, active transportation priority, vehicular movement	Active transportation supportive, transit supportive, vehicular movement
OPERATIONAL ATTRIBUTES	Crosswalks	Pedestrian crossings formalized only as controlled crosswalks mid-block and at intersection. Dedicated cycle crossing facilities on routes with cycle track.	Pedestrian crossings formalized only as controlled crosswalks. Dedicated cycle crossing facilities on routes with cycle track.	Pedestrian crossings formalized as controlled crosswalks & uncontrolled mid-block crossings. Dedicated cycle crossing facilities on routes with cycle track.
	On-Street Parking	Optional (in curb lane)	No	Optional (in curb lane)
	Minimum Intersection Spacing (m)	215m	215m	215m
	Utilities	Underground & JUT preferred. Spacing must still be reserved for telecom/pedestals/hydro/above ground boxes. Utility tunnels under sidewalk as a means to address space constraints.	Underground and JUT preferred. Spacing must still be reserved for telecom/pedestals/hydro/above ground boxes. Utility tunnels under sidewalk as a means to address space constraints.	Underground and JUT preferred. Spacing must still be reserved for telecom/pedestals/hydro/above ground boxes. Utility tunnels under sidewalk as a means to address space constraints.
	Stormwater Management Approach	Limited space for SWM facilities. Adequate end of pipe treatments should be met, integrate low-impact development approaches.	Spacing should be provided for end of pipe swales and sediment control measures. Option to consider local SWM Ponds as outfall locations. Integrate low-impact development approaches.	Limited space for SWM facilities, Adequate end of pipe treatments should be met. Integrate low-impact development measures with streetscape elements.
	Street lighting	Type of lighting and standards typically set by local municipality. Pedestrian-scale lighting required	Type of lighting and standards typically set by local municipality.	Type of lighting and standards typically set by local municipality. Pedestrian-scale lighting required.
	HOV/ Transit Priority	Optional for four lanes. Required for six lanes	Optional for four lanes. Required for six lanes	Optional (four lanes)/ No (two lanes)

Connector	Rural Road	Rural Hamlet Road
		
<i>e.g. Dufferin Street - City of Vaughan</i>	<i>King Road - Township of King</i>	<i>e.g. Leslie Street - Sharon</i>
Goods movement priority, transit priority, active transportation supportive, vehicular movement	Vehicular movement, goods movement, active transportation supportive, agricultural movement	Vehicular movement, active transportation supportive
Pedestrian crossings formalized only as controlled crosswalks mid-block and at intersection. Dedicated cycle crossing facilities on routes with multi-use path.	Pedestrian crossings at signalized intersections.	Pedestrian crossings formalized only as controlled crosswalks mid-block and at intersection.
No	No	Optional (in curb lane)
215m	300-350m	215m
Utility corridor provided for above ground hydro and below grade telecommunications, gas, storm, and sanitary, to be placed at standard right-of-way offset locations.	Utility corridor provided for above ground hydro and below grade telecommunications, gas, storm, sanitary, to be placed at standard right-of-way offset locations.	Utility corridor provided for above ground hydro and below grade telecommunications, gas, storm, sanitary, to be placed at standard right-of-way offset locations.
Spacing should be provided for end of pipe swales and sediment control measures. Option to consider local SWM ponds as outfall locations. Integrate low-impact development approaches.	Rural ditching and effective sediment control measures e.g. rock check dams etc. to be used. Integrate low-impact development approaches.	Traditional SWM facilities, adequate end-of-pipe treatments should be met, integrate low-impact development approaches.
Type of lighting and standards typically set by local municipality.	Provided at intersections locations as required	Provided at intersections locations as required
Optional for four lanes. Required for six lanes.	N/A	N/A

	City Centre Street	Avenue	Main Street
Road Typology			
Example	<i>Highway 7 - Markham City Centre</i>	<i>e.g. Yonge Street - City of Markham/City of Vaughan</i>	<i>e.g. Keele Street - Maple</i>
Primary Transportation Function	Transit priority, active transportation priority, vehicular movement	Transit priority, active transportation priority, vehicular movement	Active transportation supportive, transit supportive, vehicular movement
URBAN DESIGN ATTRIBUTES	Land Use Designations	Residential, Commercial, Mixed-Use, Office, Institutional, Open Space	Mixed-Use, Residential, Commercial, Institutional, Open Space, Historic Districts
	Land Use Context	Transitioning from medium density to high density, mixed-use city centre.	Existing heritage building fabric not transitioning but with infill development and limited intensification.
	Planned Building Scale & Orientation	Mixture of street-oriented built form of varied size. Increase in density and height in growth centres (Markham, Vaughan, Richmond Hill).	Mixture of small scale street-oriented built form.
	Boulevard Treatment	Boulevard should have an urban cross section including wide sidewalks, frontage zone, transit amenities, public art and street furniture.	The boulevard should have an urban cross section including wide sidewalks, frontage zone, transit amenities, public art and street furniture.
	Soft Landscape Elements	Street trees, shrub/perennial beds, raised planters, green infrastructure.	Street trees, shrub/perennial beds, raised planters, green infrastructure
	Minimum Boulevard Width	7.75m	5.15m

Connector	Rural Road	Rural Hamlet Road
		
<i>e.g. Dufferin Street - City of Vaughan</i>	<i>King Road - Township of King</i>	<i>e.g. Leslie Street - Sharon</i>
Goods movement priority, transit priority, active transportation supportive, vehicular movement	Vehicular movement, goods movement, active transportation supportive, agricultural movement	Vehicular movement, active transportation supportive
Mixed-Use, Residential Commercial, Industrial	Agriculture, Institutional, Industrial, Open Space, Commercial, Residential	Commercial, Residential, Open Space
Predominantly suburban residential/industrial/commercial not transitioning.	Predominantly agriculture with clusters of low density residential, industrial clusters, institutional and commercial uses.	Clusters of low density residential and/or commercial plots, typically at a junction.
Mixture of small to medium scale built form set back from street or not oriented towards the street.	Typical agricultural rural fabric. Variety of built form sizes, oriented to but set back from the street.	Variety of built form sizes, oriented to but set back from the street in rural areas, mixture of small scale street-oriented built form in villages and hamlets.
Boulevard treatment should reflect the street's primary function of moving vehicles. The boulevard should have a semi-urban cross section including multi-use path, pedestrian and transit amenities.	Paved shoulder to support cycling. Multi-use path separated from street optional in higher demand areas.	Multi-use path to support retail activity. Street trees and pedestrian/feature lighting as upgrades.
Street trees, shrub/perennial beds, green boulevards, green infrastructure.	Naturalized drainage swales, street trees where there are no existing trees adjacent to the roadway, green infrastructure.	Street trees, green boulevard, green infrastructure.
6.30m	n/a	4.3m