TABLES

TABLE 1: SUMMARY OF SELECTED ELEMENTS OF CURRENT RURAL ROAD DESIGN STANDARDS							
Functional Classification	**Traffic Volume (vpd)**	**Design Speed**	**Posted Speed**	**Road Width**	**Design Life**	**Surface Type**	**Right-of-Way**
Rural Grid Road – Class I	Greater than 1,000 vpd	100 km/h	80 km/h (in some cases 50 km/h)	9m (3.5m lanes, 1.0m shoulder)	20 years	Hotmix Asphalt	40m
Rural Grid Road – Class II	250 vpd to 1,000 vpd	90 km/h	80 km/h (in some cases 50 km/h)	7.5m (3.75m lanes)	10 years	Coldmix Asphalt	40m (30m min.)
Rural Grid Road – Class III	Less than 250 vpd	90 km/h	80 km/h (in some cases 50 km/h)	7.5m (3.75m lanes)	N/A	Gravel with Spot Dust Suppressant	30m
Rural Grid Road – Class IV	Less than 250 vpd	90 km/h	80 km/h (in some cases 50 km/h)	7.5m (3.75m lanes)	N/A	Dust Suppressant	30m
Rural Hamlet Road – High Density Parcel Development	Refer to Urban Engineering Services Standards (2005) Section B Roads						
Rural Hamlet Road – Low Density Parcel Development	Not Defined	Not Specified	Not Specified	8.5m (3.5m lanes, 0.75m shoulders)	20 years	Type ACR Asphalt Surface Course with Type III Asphalt Base Course	30m
Rural Residential Subdivision Road (Country Residential Subdivision)	Not Defined	Not Specified	Not Specified	8.5m (3.5m lanes, 0.75m shoulders)	20 years	Type ACR Asphalt Surface Course with Type III Asphalt Base Course	30m (with a 3.5m easement on either side)
Rural Commercial Developments	Not Defined	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified	Not Specified
Rural Industrial Local Roadway	Not Defined	Not Specified	Not Specified	9.0m	Not Specified	Type ACO Asphalt Surface Course with Type III Asphalt Base Course	30m (with a 3.5m utility easement on either side)
Rural Industrial Collector Roadway	Not Defined	Not Specified	Not Specified	11.5m	Not Specified	Type ACO Asphalt Surface Course with Type III Asphalt Base Course	30m (with a 3.5m utility easement on either side)

Source: Compiled from various Strathcona County sources

TABLE 2: KILOMETRES BY SURFACE TYPE & AVERAGE TRAFFIC VOLUMES ON VARIOUS RURAL ROAD CLASSES (2008)						
Functional Road Classification	**Vehicles/day Average (Range)**	**Kilometres by Existing Surface Type (%)**				
		Paved Hotmix Asphalt	**Paved Coldmix Asphalt**	**Dust-Suppressed Gravel**	**Gravel**	**TOTAL**
Class I Grid	2,180 (500 – 13,000)	43.30 (54.4%)	35.70 (45.6%)	0	0	79.00 (100%)
Class II Grid	440 (60 – 1,400)	2.60 (0.6%)	481.98 (98.2%)	0	5.90 (1.2%)	490.48 (100%)
Class III Grid	40 (20 - 100)	1.25 (0.7%)	1.10 (0.7%)	10.80 (8.1%)	121.90 (90.4%)	135.05 (100%)
Class IV Grid	130 (40 - 450)	0.40	1.60 (0.9%)	230.00 (98.7%)	1.00 (0.4%)	233.00 (100%)
Subtotal Class I to IV Grid Roads		**47.55 (5.0%)**	**520.38 (55.5%)**	**240.80 (25.7%)**	**128.80 (13.8%)**	**937.53 (100%)**
Country Residential	N/A (40 - 180) (est.)	147.84 (44.4%)	185.66 (55.6%)	0	0	333.50 (100%)
Hamlet	N/A (40 - 300) (est.)	20.49 (67.7%)	7.96 (25.8%)	0.20	1.97 (6.5%)	30.62
TOTAL RURAL ROADS		**216 (16.6%)**	**714 (54.8%)**	**241 (18.5%)**	**131 (10.1%)**	**1,301.65 (100%)**

Source: Strathcona County

TABLE 3: KILOMETRES IN VARIOUS TRAFFIC VOLUME RANGES ON RURAL GRID ROADS							
GRID ROADS EXCLUDING THE HEARTLAND AREA							
Km in given Vehicle Per Day (veh/day) Range							
Vehicle Per Day Range	**0-100**	**101-250**	**251-500**	**501-1000**	**1001-2000**	**2001+**	**Total km**
Class I (km)	0.00	0.00	3.90	22.20	27.80	18.40	72.30
%	0.0%	0.0%	5.4%	30.7%	38.5%	25.4%	100.0%
Class II (km)	46.30	97.01	153.62	120.15	18.10	0.80	435.98
%	10.6%	22.3%	35.2%	27.6%	4.2%	0.2%	100.0%
Class III (km)	113.80	7.50	2.80	1.60	0.00	0.00	125.70
%	90.5%	6.0%	2.2%	1.3%	0.0%	0.0%	100.0%
Class IV (km)	95.00	116.50	15.10	1.60	0.00	0.00	228.20
%	41.6%	51.1%	6.6%	0.7%	0.0%	0.0%	100.0%
Total Class I to IV (km)	255.10	221.01	175.42	145.55	45.90	19.20	862.18
%	29.6%	25.6%	20.3%	16.9%	5.3%	2.2%	100.0%
GRID ROADS IN THE HEARTLAND AREA ONLY							
Km in given Vehicle Per Day (veh/day) Range							
Vehicle Per Day Range	**0-100**	**101-250**	**251-500**	**501-1000**	**1001-2000**	**2001+**	**Total km**
Class I (km)	0.00	0.00	0.00	0.00	0.00	6.70	6.70
%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Class II (km)	19.30	11.10	9.60	6.40	5.90	2.20	54.50
%	35.4%	20.4%	17.6%	11.7%	10.8%	4.0%	100.0%
Class III (km)	6.90	1.60	0.00	0.05	0.80	0.00	9.35
%	73.8%	17.1%	0.0%	0.5%	8.6%	0.0%	100.0%
Class IV (km)	0.00	3.20	1.60	0.00	0.00	0.00	4.80
%	0.0%	66.7%	33.3%	0.0%	0.0%	0.0%	100.0%
Total Class I to IV (km)	26.20	15.90	11.20	6.45	6.70	8.90	75.35
%	34.8%	21.1%	14.9%	8.6%	8.9%	11.8%	100.0%
TOTAL GRID ROAD KM (INCLUDING HEARTLAND AREA)							**937.53**

Source: Strathcona County

TABLE 4: RURAL ROAD KILOMETRES BY ROAD CLASSIFICATION IN VARIOUS ROAD-TOP WIDTH RANGES (2008)

Road Classification	Current Design Road-top Width (m)	No. of Kilometres by Road-top Width Range (m)											
		Less than 5.0 m	5.0-5.4 m	5.5-5.9 m	6.0-6.4 m	6.5-6.9 m	7.0-7.4 m	7.5-7.9 m	8.0-8.4 m	8.5-8.9 m	9.0- 9.9 m	10.0 or more m	Total Km
Class I (km)	9.0	0	0	0	0	9.6	15.1	12.1	10.9	3.2	17.6	9.9	79.0
%		0.0%	0.0%	0.0%	0.0%	12.2%	19.1%	16.1%	13.8%	4.1%	22.3%	12.5%	100.0%
Class II (km)	7.5	0.1	1.6	52.7	102.2	205.0	83.0	28.5	11.4	1.4	4.4	0.2	490.5
%		0.0%	0.3%	10.%	20.8%	41.8%	16.9%	5.8%	2.3%	0.3%	0.9%	0.0%	100.0%
Class III (km)	7.5	9.9	8.1	24.2	23.2	31.0	17.7	11.4	1.7	4.2	2.5	1.3	135.1
%		7.3%	6.0%	17.%	17.2%	22.9%	13.1%	8.4%	1.3%	3.1%	1.9 %	1.0 %	100.0%
Class IV (km)	7.5	0.2	1.0	17.6	48.9	104.6	39.8	9.6	8.0	3.3	0	0	233.0
%		0.1%	0.4%	7.6%	21.0%	44.9%	17.1%	4.1%	3.4%	1.4%	0.0 %	0.0 %	100.0%
Total Class I to IV (km)		**10.2**	**23.6**	**91.7**	**232.2**	**317.0**	**138.2**	**63.1**	**32.6**	**8.9**	**24.5**	**11.4**	**937.5**
%		1.1%	1.1%	10.%	18.6%	37.3%	16.6%	6.6%	3.4%	1.3%	2.6 %	1.2 %	100.0%
CRS (km)	8.5	1.2	0	0.4	20.3	158.1	103.2	1.5	17.7	16.9	14.1	0	333.5
%		0.4%	0.0%	0.1%	6.1%	47.4%	30.9%	0.4%	5.3%	5.1%	4.2%		100.0%
Hamlet (km)	9.0	3.8	1.6	3.0	3.5	7.2	5.2	4.7	0	0.2	1.0	0.6	30.6
%		12.4 %	5.2 %	9.8 %	11.4 %	23.5 %	17.0%	15.4%	0.0 %	0.7 %	3.3 %	2.0 %	100.0%
TOTAL RURAL ROADS		**15.2**	**24.2**	**95.1**	**256.0**	**482.3**	**246.6**	**69.3**	**50.3**	**26.0**	**39.6**	**12.0**	**1301.6**
%		**1.2 %**	**1.8 %**	**7.3 %**	**19.7 %**	**37.0 %**	**18.9%**	**5.3 %**	**3.8 %**	**2.0 %**	**3.0 %**	**0.9 %**	**100.0%**

Source: Strathcona County

TABLE 5: STRATHCONA COUNTY HISTORICAL BUDGETS FOR RURAL ROADS AS % OF TOTAL COUNTY BUDGETS (MILLIONS OF DOLLARS)									
Fiscal Year	Operating Budget			Capital Budget			TOTAL BUDGET (Operating & Capital)		
	Rural Roads	County	Rural Roads as % of County	Rural Roads	County	Rural Roads as % of County	Rural Roads	County	Rural Roads as % of County
2009	4.557	141.0	3.2%	8.992	91.0	9.9%	13.549	232.0	5.8%
2008	3.585	166.4	2.2%	10.085	73.5	13.7%	13.670	239.3	5.7%
2007	3.228	147.1	2.2%	7.131	111.2	6.4%	10.359	258.3	4.0%
2006	2.535	133.9	1.9%	5.514	56.9	9.7%	8.049	190.8	4.2%
2005	2.306	145.2	1.6%	4.782	49.4	9.7%	7.088	194.6	3.6%

Source: Strathcona County

TABLE 6: AVERAGE 4-YEAR (2006-2009) ANNUAL RURAL ROAD EXPENDITURE ALLOCATIONS BY ROAD CLASS & TYPE OF WORK								
Functional Road Classification	**2008 Length (km)**	**Annual Average 4-Year (2006-2009) Expenditure ($)**						
		Hotmix Overlay (Capital)	**Coldmix Overlay (Capital)**	**Initial Overlay (Capital)**	**Maintenance (Operating)**	**Total Expenditure $**	**Total Expenditure %**	**Total Expenditure $ per km**
Class I	79	219,312	0	0	109,814	329,126	3.1%	4,166
Class II	491	0	3,221,470	466,216	967,606	4,655,292	43.6%	9,481
Class III	135	0	0	0	384,521	384,521	3.6%	2,848
Class IV	233	0	0	0	1,338,474	1,338,474	12.5%	5,745
Class III & IV Combined	368	0	0	0	1,722,995	1,722,995	16.1 %	4,682
Total Grid Roads	**938**	**219,312**	**3,221,470**	**466,216**	**2, 800,415**	**6,707,413**	**62.8%**	**7,151**
Country Residential Roads	333	3,312,759	0	0	486,717	3,799,476	35.6%	11,410
Hamlet Roads*	31	134,299	0	0	37,025	171,319	1.6%	5,526
Total Rural Roads	**1302**	**3,666,366 34.3%**	**3,221,470 30.2%**	**466,216 4.4%**	**3,324,157 31.1%**	**10,678,208 100%**	**100%**	**8,201**

* Provincial funding included.

Source: Strathcona County

TABLE 7: ANNUAL RURAL ROADS BUDGET ALLOCATIONS RECOMMENDED IN THE 1995 RURAL ROADS MASTER PLAN							
Road Classification	**Network Length (km)**	**1995 Dollars**					
		Reconstruction / Strengthening (Capital)	**Surface Rehabilitation (Capital)**	**Maintenance (Operating)**	**Total Expenditure $**	**Total Expenditure %**	**Expenditure per km**
Class I Network	161	1,030,000	57,000	266,000	1,353,000	25.3 %	8,400
Class II Network	495	0	1,410,000	540,000	1,950,000	36.5 %	3,900
Class III Network	*	*	*	*	*	*	*
Class IV Network	*	*	*	*	*	*	*
Class III & IV Combined	386	0	N/A	777,000	777,000	14.6 %	2,000
Total Grid Roads	**1,042**	**1,030,000**	**1,467,000**	**1,583,000**	**4,080,000**	**76.4 %**	**3,900**
Country Residential Roads	296	329,000	561,000	300,000	1,190,000	22.3 %	12,300
Hamlet Roads	28	0	3,000	67,000	70,000	1.3 %	4,000
Total Rural Roads	**1,366**	**1,359,000 (25.4%)**	**2,031,000 (38.0%)**	**1,950,000 (36.5%)**	**5,340,000 (100%)**	**100%**	**3,900**

* Not shown separately in the 1995 RRMP.

Source: Strathcona County

TABLE 8: AVERAGE 4-YEAR (2006-2009) EXPENDITURES BY ROAD CLASS COMPARED TO THE 1995 RRMP RECOMMENDATIONS				
Design Classification	**Average Annual 2006-2009 Expenditure Allocation ($)**	**Average Annual 2006-2009 Expenditure Allocation (%)**	**1995 RRMP Suggested Expenditure Allocation ($)**	**1995 RRMP Suggested Expenditure Allocation (%)**
Class I Network	329,126	3.1 %	1,353,000	25.3 %
Class II Network	4,655,292	43.6 %	1,950,000	36.5 %
Class III and IV Combined	1,722,995	16.1 %	777,000	14.6 %
Total Grid Roads	**6,707,413**	**62.5 %**	**4,080,000**	**76.4 %**
Country Residential Roads	3,799,476	35.6 %	1,190,000	22.3%
Hamlet Roads *	171,319	1.6 %	70,000	1.3 %
Total Rural Roads	**10,678,208**	**100 %**	**5,340,000**	**100 %**

* Provincial funding included.

Source: Strathcona County

TABLE 9: ALTERNATIVE STRATEGIES FOR PRESERVING OR DELAYING PAVEMENT WIDTH LOSS

Strategy	Effect on Width Loss	Technical Aspects	Cost Implications
1. Use maintenance to delay overlay	Existing width is maintained for a longer period of time; this can lead to longer overlay cycles.	Increased maintenance required for the delay period.	Modest increase in ongoing maintenance costs; high cost for overlay is deferred.
2. Reduce coldmix overlay thickness from 50mm to 40mm	Very slight reduction in width loss of less than 0.04m (2:1 side slope assumed).	May be more difficult to restore crown and may result in inadequate overlay thicknesses in some locations.	20% reduction in coldmix material cost.
3. In-place Recycling – Full depth reclamation (FDR)	Reuses existing granular and asphalt bound material. Can only maintain/reduce width loss if the subgrade is reshaped during subgrade preparation or if the overlay thickness can be reduced significantly. Removes existing crack history and mitigates reflection cracking.	Requires a granular layer for recycling. Fine grained subgrade soils can not be incorporated into the FDR. Requires an asphalt bound wearing surface. FDR material needs to be engineered.	Potential cost savings only if the overlay thickness can be reduced due to the increased load carrying capacity of the stabilized FDR.
4. In-place Recycling - Cold In-Place Recycling (CIR)	Can only reduce width loss if the overlay thickness can be reduced significantly. Reuses a portion of the existing asphalt bound layer. Removes existing crack history and mitigates reflection cracking.	Requires an asphalt bound wearing surface. CIR material needs to be engineered.	Potential cost savings only if the overlay thickness can be significantly reduced.
5. Cold Mill 40mm and overlay 40mm	Existing width is not changed.	Does not add strength to the pavement structure. Opportunity to recycle cold millings.	Increased cost due to cold milling. Recycling of cold millings may reduce costs.
6. Base stabilization and overlay	Can only maintain/reduce width loss if the subgrade is reshaped during subgrade preparation or if the overlay thickness can be reduced significantly. Reuses existing granular and asphalt bound material. Removes existing crack history and mitigates reflection cracking.	Experience and judgment required to determine locations for stabilization and to determine moisture conditioning requirements. Reshaping of the subgrade results in a lower road profile and potential for weaker subgrade support conditions.	Modest additional cost to double handle the scarified material and reshape the subgrade during subgrade preparation.
7. Longer overlay cycles	Existing width is maintained for a longer period of time. Comparing a 10 year to a 14 year coldmix cycle over a 40 year period, an 10 year cycle (50mm and 2:1 sideslopes) would result in a total width loss of 1.0m vs. 0.6m for a 14 year cycle.	Increased maintenance required for the delay period.	Modest increase in ongoing maintenance costs; can result in the reduction of 1 or 2 overlays; high cost for overlay is deferred
8. Grade widening	Pavement width is reconstructed to meet present standards with an allowance for future overlays.	May require purchase of Right-of-Way.	Very high capital cost. Lowest maintenance cost of all strategies.
9. Overlay with subgrade sideslope improvement	Maintains existing pavement width.	Sidesloping may reduce ditch bottom width.	Additional cost.
10. Surface treatment (graded aggregate or double seal) to replace asphalt bound surface course following Base Stabilization	Maintains existing width.	Would require improved workmanship of stabilized layer to provide a smooth and proper cross-section; cycle to next overlay would be reduced to 6 to 8 years.	Graded aggregate seal coat is less expensive than coldmix.

TABLE 10: CHARACTERISTICS OF HOTMIX AND COLDMIX OVERLAYS					
Overlay Type	**Performance**	**Maintenance**	**Future Recyclability**	**Cost Implications**	**Other**
Hotmix	-An engineered mix with less risk of specification deficiencies. -High risk of introducing thermal cracking. -Higher risk of random cracking due to deeper seated subgrade movements or frost heaving. -Higher risk of longitudinal construction joint cracking. -Less risk of construction quality being affected by adverse weather conditions. -Potential for increased service life and longer overlay cycles.	-Increased maintenance for crack filling. -Coldmix patches on a hotmix surface may not be tolerated by the public. -Higher cost to repair localized failures.	-Reduced potential for in-place recycling; would need to be cold milled and recovered for recycling.	-Latest County information suggests in-place costs of hotmix and coldmix are similar. -Maintenance costs could increase. -May require higher quantities in order to restore cross-section with a paver.	-Reduced utilization of County resources as hotmix laydown would be tendered. -Allows for a thicker layer to be constructed based on traffic loading conditions.
Coldmix	-Higher risk of poor performance (sweating, surface ravel). -More forgiving and flexible surface is more resistant to cracking due to deeper seated movements or frost heaving. -Potential for reduced service life and shorter overlay cycles.	-Well established in-house maintenance practices. -Coldmix patches on a coldmix surface are tolerated by the public.	-Can be re-worked or recycled by incorporating into base stabilization.		

TABLE 11: RURAL ROADS BUDGET DISTRIBUTION: 1995 RRMP, CURRENT AND FUTURE RECOMMENDED							
Functional Road Classification	**1995 RRMP Recommended Allocation**		**2006-2009 Average Annual Allocation**		**FUTURE Recommended Allocation**		
	$	%	$	%	$	%	$ Change from 2006-2009
Class I Network	1,353,000	25.3 %	329,126	3.1 %	1,529,126	14.3%	$400,000 from Class II, and $800,000 from CRS
Class II Network	1,950,000	36.5 %	4,655,292	43.6 %	4,255,292	39.8%	$400,000 to Class I
Class III and IV Combined	777,000	14.6 %	1,722,995	16.1 %	1,722,995	16.1%	No change
Total Grid Roads	**4,080,000**	**76.4 %**	**6,707,413**	**62.5 %**	**7,507,413**	**70.2%**	$800,000 from CRS
Country Residential Roads	1,190,000	22.3%	3,799,476	35.6 %	2,999,476	28.2%	$800,000 to Class I
Hamlet Roads*	70,000	1.3 %	171,319	1.6 %	171,319	1.6%	No change
Total Rural Roads	**5,340,000**	**100 %**	**10,678,208**	**100 %**	**10,678,208**	**100 %**	No change

* Provincial funding included.

TABLE 12: RECOMMENDED FUTURE BUDGET ALLOCATION PERCENTAGES COMPARED TO THE 1995 RECOMMENDATIONS AND THE 2006-2009 ACTUAL EXPENDITURE ALLOCATIONS

Design Classification	1995 RRMP Suggested Allocation %	2006-2009 4-year Average Annual Expenditure Allocation %	Recommended Future Allocation %	% to % Change from 2006-2009 Allocation to Future Allocation
Class I Network	25.3 %	3.1 %	14.3%	+ 11.2 %
Class II Network	36.5 %	43.6 %	39.8%	- 3.8 %
Class III and IV Combined	14.6 %	16.1 %	16.1%	0 %
Total Grid Roads	**76.4 %**	**62.8 %**	**70.2%**	**+ 7.4 %**
Country Residential Roads	22.3%	35.6 %	28.2%	-7.4 %
Hamlet Roads *	1.3 %	1.6 %	1.6%	0 %
Total Rural Roads	**100 %**	**100 %**	**100 %**	**0 %**

* Provincial funding included.

TABLE 13: PROPOSED CLASSIFICATION SYSTEM CRITERIA

Factor or Characteristic	Description	Classification Criteria						
		Class I	Class II	Class III – Dust-Suppressed	Class IV - Gravel	Country Residential Subdivision Roads	Hamlet Roads	Industrial Roads
Traffic Volume and Type	Traffic volume (AADT) and proportion of truck traffic.	Greater than 1,000 vehicles per day (vpd), expect moderate to high proportion of truck (SU and TT) traffic (10% to 15%).	250 vpd to 1,000 vpd, expect moderate proportion of truck (SU and TT) traffic (5% to 10%).	Less than 250 vpd, expect low proportion of truck (SU and TT) traffic (less than 5%).	Less than 250 vpd, expect low proportion of truck (SU and TT) traffic (less than 5%).	Typically less than 250 vpd but may be greater. Very low proportion of truck (SU and TT) traffic (close to 0%).	Typically less than 250 vpd but may be greater. Very low proportion of truck (SU and TT) traffic (close to 0%).	Traffic volumes vary, but expect a high proportion of truck (SU and TT) traffic (greater than 20%) in all volumes.
Function	Likely closest to the Transportation Association of Canada (TAC) definitions of service function and land service. This answers the question, "Is the primary function land access or traffic movement from point A to B, or both?"	Primary function is traffic movement (Major Rural Arterial), but in a rural environment some access to adjacent properties must be considered where access cannot otherwise be provided.	Primary function is traffic movement with the (Minor Rural Arterial), with access to adjacent property very close as a secondary priority.	Primary function is access to adjacent properties, and of equal importance is traffic movement (Rural Collector) This classification of roadway also has four or more residential accesses per link (intersection to intersection up to 1.6 km) that require spot dust suppressant.	Primary function is access to adjacent properties, and of equal importance is traffic movement (Rural Collector).	Primary function is access to adjacent properties, traffic movement is secondary (Rural Local).	Primary function is access to adjacent properties, traffic movement is secondary (Rural Local).	Primary function is access to adjacent properties, and of equal importance is traffic movement (Rural Collector).
Connection to the Provincial Highway Network	It serves the need to connect specific areas to the highway system, particularly the future interchange locations along Highway 21 which will form the future outer ring road.	Provides direct connection to the provincial highway network and most likely at a future interchange location along Highway 21.	May or may not provide access to the provincial highway network.	Is not likely to provide direct access to the provincial highway network.	Is not likely to provide direct access to the provincial highway network.	Is not likely to provide direct access to the provincial highway network.	Is not likely to provide direct access to the provincial highway network.	May or may not provide access to the provincial highway network.
Spatial Hierarchical System	Part of this is "Connections" as described in the TAC guide, for example a Class II road feeds traffic up to a Class I road, and the Class I road feeds traffic up to the provincial highway system. The other part of this is the graphical or spatial reference to a network of nodes and links.	Provides direct connection to a provincial highway, to an urban arterial roadway, to another Class I roadway, or to a Class II roadway.	Provides direct connection to a Class I roadway, to another Class II roadway and to a Class III or Class IV roadway.	Provides direct connection to a Class II roadway and to another Class III or Class IV roadway.	Provides direct connection to a Class II roadway and to another Class III or Class IV roadway.	Provides connection to other internal subdivision roads, and may be the main access to the subdivision from the higher classification of road.	Provides connection to other internal hamlet roads, and may be the main access to the hamlet from the higher classification of road.	Provides connection to other internal industrial subdivision roads, and may be the main access to the industrial subdivision from the higher classification of road.
Continuity	Continuity in terms of traffic volume, standards, width and so on.	Within the rural road network, there may be unique segments that are bounded on both sides by a higher classification of roadway, but do not meet the functional and service criteria for that higher classification of roadway as described in this table. For continuity, the unique segment (could be referred to as "stranded" segment) will be considered at the higher classification. Where classifications on either side of the unique segment are different, but bother higher, engineering judgment will be used in assigning the classification for the unique segment, with the intent of consistency in the increasing or decreasing classifications along any roadway.						

Special Area Considerations

There may be considerations for special areas (such as the area around the Northern Bear Golf Course) and the associated road network, that require engineering judgment and the application of design standards outside those associated with the classifications described above to meet the unique uses of the area. In these special cases, County personnel should refer to the Transportation Association of Canada, Geometric Design Guide for Canadian Roads. Of specific importance are the roads within the Country Residential Policy Area and the Rural/Urban Transition Policy Area. Rural Grid Roads in these two special areas will be a minimum of Class II even if current traffic volumes are less than 250 vpd. For segments of roadway that are on the fringe of the urban area of Sherwood Park, the nature of the infrastructure required to serve the needs of the traveling public and surrounding development may be different than those met by a Class I road as described above and provided for by the applicable design standards. The nature of traffic volumes and character, surrounding land use, future development, access management, travel speed, collision history and other features may require unique and specific considerations. In these cases, County personnel should use engineering judgment and refer to the Transportation Association of Canada, Geometric Design Guide for Canadian Roads to identify the specific requirements for these segments of road to meet the current and future needs.