TOWN OF CALEDON					
VILLAGE OF ALTON, MAIN STREET NORTH, AND QU	JEEN STREET WE	ST CLASS EA			RVA 184339
DESIGN CRITERIA - 30% SUBMISSION					
Queen St W - Mississauga Rd to Osprey Mills Dr and	James St to Main	St			
	STANDARDS			PROPOSED STANDARD	
			EXISTING		
	TAC	Town	CONDITIONS	DESIGN SPEED	
ITEM				50 (km/h)	NOTES
CLASSIFICATION					
CLASSIFICATION		Residential /			
DOAD OLACCIFICATIONIC	HOUSE	Neighbourhood Collector		1101150	
ROAD CLASSIFICATIONS	UCU50	Odilector		UCU50	
DESIGN SPEED (km/h)	50		50 (Mississauga Rd to	50	
			west of John St)		
POSTED SPEED (km/h)	40	60	40 (west of John St to Main St)	40	
NUMBER OF LANES	2	2	2	2	
TRAFFIC VOLUME AADT	<8000	1000 to 3000	TBD	TBD	to be confirmed by traffic study
TRUCK VOLUME (%)	N/A		TBD	TBD	to be confirmed by traffic study
					, ,
HORIZONTAL ALIGNMENTS					
NC NORMAL CROWN (-0.02m/m) Rmin. (m), e =0.04	950		8000	1000	
CURVE RADIUS WITH SUPERELEV. RATE e=0.04 Rmin (m)	80	130	N/A	N/A	Reduced to 45 in urban curves
RC REVERSE CROWN (+0.02m/m) Rmin (m), e=0.04	115		N/A	N/A	
TAPER RATIO RIGHT TURN	11:1-17:1		N/A	N/A	to be confirmed by traffic study
TAPER LENGTH RIGHT TURN (m)	38.5-59.5		N/A	N/A	to be confirmed by traffic study
PARALLEL LANE LENGTH FOR RIGHT TURN (m)	35-75		N/A	N/A	to be confirmed by traffic study
					, ,
APPROACH TAPER RATIO LEFT TURN (m)	15:1-36:1		N/A	N/A	to be confirmed by traffic study
PARALLEL LANE FOR LT (m)	28.7		N/A	N/A	to be confirmed by traffic study
CROSS SECTIONS					
oness seamons					Side by side operation (Mississauga Hd to
	4.3-4.9 (side by side operation)			4.9 (Mississauga Rd to Osprey	Osprey Mills Dr) Single file operation (James St to Main St)
	3.0-4.0 (single file		3.3-3.9 (rural)	Mills Dr)	Cannot meet Town standard due to property
THROUGH LANE WIDTH (SHARED WITH BIKE) (m)	operation)	4.45	3.0-4.3 (urban)	3.5 (James St to Main St)	constraints.
RIGHT TURN LANE WIDTH (m)	3.25-3.7	3.8	N/A	N/A	to be confirmed by traffic study
LEFT TURN LANE WIDTH (m)	3.25-3.7	3.25	N/A	N/A	to be confirmed by traffic study
TANGENT SECTION CROSS FALL, %	2%	3%	0.5-5	3%	to be committed by traine study
SPLASH PAD / KILLSTRIP (m)	N/A	070	0.8-1.2	0.75	
SIDEWALK WIDTH (m)	1.5-2.0	2.0	1.0-1.5	1.5	
RIGHT OF WAY					
CLEARZONE (m)	1.2 to 1.8	1.2±	0.7 min.	0.6	
				23 (Mississauga Rd to Osprey Mills Dr)	Existing buildings prevent acquisition of wider
STANDARD ROW WIDTH (m)	20-24	20	15-23	15-18 (James St to Main St)	ROW from James St to Main St.
VERTICAL ALIGNMENTS					
MINIMUM GRADE (%)	0.50%	0.75%	0.70%	0.75%	
MAXIMUM GRADE (%)	8.0%	6.0%	5.2	5.20%	
SAG VERTICAL CURVE Kmin HEADLIGHT CONTROL	13	18	8.0	8.0	Streetlighting provided.
SAG VERTICAL CURVE Kmin COMFORT CONTROL	5-6		8.0	8.0	
CREST VERTICAL CURVE Kmin.	7	15	5.0	7.0	
DEGICION CIONE DISTANCE ( ) A SECOND CONTRACTOR ( )					Stopping sight distance, per TAC 2017 is min.
DECISION SIGHT DISTANCE (m) Minimum / Desirable	140 / 200		1	70 TDD	65m (table 2.5.2).
SIGHT DISTANCE FOR TURN MOVEMENT (m)	105			TBD	l .

REGIONAL MUNICIPALITY OF PEEL VILLAGE OF ALTON, MAIN STREET NORTH, ANI	QUEEN STREET WEST C	LASS EA			RVA 184339
DESIGN CRITERIA - 30% SUBMISSION	GOZZNOTNEZI WZOTO	LAGO LA			1177 104000
Main St - Sta. 8+260 to 8+440 and Sta. 9+630 to 0	ueen St				
	STANDARD	STANDARDS		PROPOSED STANDARD	
ITEM	TAC	Town	EXISTING CONDITIONS	DESIGN SPEED 50 (km/h)	NOTES
CLASSIFICATION					
		Residential /			
ROAD CLASSIFICATIONS	UCU50	Neighbourhood Collector		UCU50	
DESIGN SPEED (km/h)	50			50	
POSTED SPEED (km/h)	40	60	40	40	
NUMBER OF LANES	2	2	2	2	
TRAFFIC VOLUME AADT	<8000	1000 to 3000	TBD	TBD	to be confirmed by traffic study
TRUCK VOLUME (%)	N/A		TBD	TBD	to be confirmed by traffic study
HORIZONTAL ALIGNMENTS					
NC NORMAL CROWN (-0.02m/m) Rmin. (m) , e =0.04	950		N/A	N/A	
CURVE RADIUS WITH SUPERELEV. RATE e=0.04 Rmin (m)	80	130	N/A	50	
RC REMOVE CROWN (+0.02m/m) Rmin (m), e=0.04	115	100	N/A	N/A	
TAPER RATIO RIGHT TURN	11:1-17:1		N/A	N/A	to be confirmed by traffic study
TAPER LENGTH RIGHT TURN (m)	38.5-59.5		N/A	N/A	to be confirmed by traffic study
PARALLEL LANE LENGTH FOR RIGHT TURN (m)	35-75		N/A	N/A	to be confirmed by traffic study
APPROACH TAPER RATIO LEFT TURN (m)	15:1-36:1		N/A	N/A	to be confirmed by traffic study
PARALLEL LANE FOR LT (m)	28.7		N/A	N/A	to be confirmed by traffic study
CROSS SECTIONS					
511000 020110110	4.3-4.9 (side by side operation)				
THROUGH LANE WIDTH (SHARED WITH BIKE) (m)	3.0-4.0 (single file operation)	4.45	3.25	3.5	Single file operation
RIGHT TURN LANE WIDTH (m)	3.25-3.7	3.8	N/A	N/A	to be confirmed by traffic study
LEFT TURN LANE WIDTH (m)	3.25-3.7	3.25	N/A	N/A	to be confirmed by traffic study
TANGENT SECTION CROSS FALL, %	2%	3%	0.1-7.0	3%	
SPLASH PAD / KILLSTRIP (m)	N/A	0.00	N/A	0.75	
SIDEWALK WIDTH (m)	1.5-2.0	2.00	1.00	1.50	
RIGHT OF WAY					
CLEARZONE (m)	1.2-1.8	1.2±	0.7 min.	1.95	Measured to face of curb
STANDARD ROW WIDTH (m)	20-24	20	20	20-26	
VERTICAL ALIGNMENTS					
MINIMUM GRADE (%)	0.50%	0.75%	1.20%	1.20%	
MAXIMUM GRADE (%)	8.0% - 10.0%	6.0%	11.30%	10.00%	
SAG VERTICAL CURVE Kmin HEADLIGHT CONTROL	40	40		10.5	Matching existing. Recommend streetlighting in order to mitigate the K value requirement.
SAG VERTICAL CURVE Kmin COMFORT CONTROL	13 5-6	18	6	10.5	order to mangate the it value requirement.
CREST VERTICAL CURVE Kmin.	7	15	4	5.0	
DECISION SIGHT DISTANCE (m) Minimum / Desirable	140 / 200	19	*	27	Reduced sight distance at vertical crest.
SIGHT DISTANCE FOR TURN MOVEMENT (m)	105			21	Transport and the state of the
D.S. C. S. C.	100		<del> </del>	1	

VILLAGE OF ALTON, MAIN STREET NORTH, AND	QUEEN STREET WEST O	CLASS EA			RVA 184339
DESIGN CRITERIA - 30% SUBMISSION Main St - Highpoint Side Road to Sta. 8+260 and \$	Sta. 8+440 to Sta. 9+630				
3 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2					
STANDARD		DS T	EXISTING	PROPOSED STANDARD	-
	TAC	Town	CONDITIONS	DESIGN SPEED	
ITEM				50 (km/h)	NOTES
CLASSIFICATION					
ROAD CLASSIFICATIONS	RCU50	Residential Collector		RCU50	
DESIGN SPEED (km/h)	50			50	
· ,					
			40 (600m south of Mary St to 200m		
			south of Highpoint		
			Side Road) 60 (200m south of		
			Highpoint Side Road		Destad around radiused to 20km/hr through C
POSTED SPEED (km/h)	40	60	to Highpoint Side Road)	40	Posted speed reduced to 30km/hr through S- curve
NUMBER OF LANES	2	2	2	2	
TRAFFIC VOLUME AADT	<5000	1000 to 3000	TBD	TBD	to be confirmed by traffic study
TRUCK VOLUME (%)	≤30		TBD	TBD	to be confirmed by traffic study
HORIZONTAL ALIGNMENTS					
NC NORMAL CROWN (-0.02m/m) Rmin. (m) e =0.06	900		3663	3663	
CURVE RADIUS WITH SUPERELEV. RATE e=0.06 Rmin (m)	60	130	40	60	Reduced to 55 on sharp curve in S-curve
RC REVERSE CROWN (+0.02m/m) Rmin (m), e=0.06	800		N/A	N/A	·
NC NORMAL CROWN (-0.02m/m) Rmin. (m), e =0.04	800		N/A	N/A	
CURVE RADIUS WITH SUPERELEV. RATE e=0.04 Rmin (m)	100		N/A	N/A	
RC REVERSE CROWN (+0.02m/m) Rmin (m), e=0.04	400		N/A	N/A	
TAPER RATIO RIGHT TURN TAPER LENGTH RIGHT TURN (m)	11:1-17:1 38.5-59.5		N/A N/A	N/A N/A	to be confirmed by traffic study to be confirmed by traffic study
PARALLEL LANE LENGTH FOR RIGHT TURN (m)	35-75		N/A N/A	N/A N/A	to be confirmed by traffic study
TANGELLE DINE LENGTH TOTALIGHT TOTAL (III)	00.70		14/74	14/74	to be committed by traine study
APPROACH TAPER RATIO LEFT TURN (m)	8:1-30:1		N/A	N/A	to be confirmed by traffic study
PARALLEL LANE FOR LT (m)	28.7		N/A	N/A	to be confirmed by traffic study
CROSS SECTIONS	3.0-3.7 (DHDV<450)				
THROUGH LANE WIDTH (m)	3.5-3.7 (DHDV>450)	3.8	3.25-4.6	3.3	Meets TAC 2017, Table 4.2.1 & 4.2.2
	3.25-3.7 (DHDV<450)				
RIGHT TURN LANE WIDTH (m)	3.5-3.7 (DHDV>450)	3.8	N/A	N/A	to be confirmed by traffic study
LEFT TURN LANE WIDTH (m)	3.25-3.7 (DHDV<450) 3.5-3.7 (DHDV>450)	3.25	N/A	N/A	to be confirmed by traffic study
TANGENT SECTION CROSS FALL, %	2%	3.23	0.19.0	3%	to be committed by traine study
SIDEWALK WIDTH (m)	1.8-2.0		N/A	N/A	
	1.5 (DHDV<250) 2.0 (250 <dhdv<450)< td=""><td></td><td></td><td></td><td>Assuming DHDV &lt;250 (to be confirmed by</td></dhdv<450)<>				Assuming DHDV <250 (to be confirmed by
	2.5 (DHDV>450)				traffic study)
PAVED SHOULDER (m)	1.5-3.0 (Bicycle Accessible)		0.0-0.8	1.5	Bicycle Accessible Shoulder
RIGHT OF WAY					
CLEARZONE (m)	4.5-5.0		0.7 min.	5.0	Assuming ADT 1500-6000, 4:1 fill slope
STANDARD ROW WIDTH (m)	4.0-0.0		20-30	20-27	plus 1.5-2.0m drainage easement
· · · · · · · · · · · · · · · · · · ·				-	
VERTICAL ALIGNMENTS					
			1		
MINIMUM GRADE (%)	N/A	0.75%	1.45%	1.45%	
MAXIMUM GRADE (%)	7.0 - 10.0%	6.0%	14.35%	12.25%	Will look into increasing K value to meet
OAO VERTION OURVE IS					standard. Alternative would be to recommend
SAG VERTICAL CURVE Kmin HEADLIGHT CONTROL	13	18	6	9	providing streetlighting.
SAG VERTICAL CURVE Kmin COMFORT CONTROL  CREST VERTICAL CURVE Kmin.	5-6 7	15	6	9	
OLEO, TERRORE GOTTE KINN.	,	15	3	4	Stopping sight distance, per TAC 2017 is min.
DECISION SIGHT DISTANCE (m) Minimum / Desirable	140 / 200			20	65m (table 2.5.2).
SIGHT DISTANCE (m) MINIMUM / DESIRABLE SIGHT DISTANCE FOR TURN MOVEMENT (m)	140 / 200		1	TBD	
		+		.55	1