



SCHEDULE "A":
LAND USE





SCHEDULE "B": MINIMUM DISTANCE SEPARATION I (MDS-I)

Column 1 TYPE OF LIVESTOCK	Column 2 HOUSING CAPACITY	Column 3 NUMBER OF ANIMALS PER LIVESTOCK UNIT (From Table 1)	Column 4 NUMBER OF LIVESTOCK UNITS (Col. 2/Col. 3)
(A) = TOTAL LIVESTOCK UNITS (sum of Column 4)			(A)

If there are more than 300 livestock units, reference must be made to a full set of tables available from the Ministry of Agriculture and Food.

TABLE B.1 ANIMAL GROUPS

ANIMAL GROUP 1	ANIMAL GROUP 2	ANIMAL GROUP 3	ANIMAL GROUP 4	ANIMAL GROUP 5
1 Livestock Unit equals	1 Livestock Unit equals	1 Livestock Unit equals	1 Livestock Unit equals	1 Livestock Unit equals
200 Chicken Broilers 1 Horse ³	4 Adult Sheep ³ 1 Beef Cow ¹ Confinement 10 Feeder Lambs 100 Ducks 5 Emu 4 Adult Goats ³ 10 Feeder Goats 3 Ostrich 500 Pullets 50 Turkeys (>10kg) 75 Turkeys (5-10kg) 100 Turkeys (<5kg)	1 Beef Cow ¹ Yard/Barn 2 Beef Feeder Yard/Barn 1 Dairy Cow ^{1,2} 2 Dairy Heifer yard/Barn 40 Adult Rabbits ⁴ 3 Red Veal <300 kg 125 Chicken Breeder Layers 75 Turkey Breeder Layers	80 Adult Mink ⁴ 40 Adult Fox ⁴ 125 Caged Layers	4 Feeder Hogs 5 Sows/Boars 20 Weaners 4-30 kg 6 White Veal

- 1 Includes calf to 150 kg.
- 2 Multiply the number of milking cows by 1.5 to account for dry cows, heifers and calves on the same farm.
- 3 Includes offspring until weaned.
- 4 Includes offspring to market size.

Select Animal Group 1, 2, 3, 4 or 5, depending on type of animals on farm. If there are animals from different groups, select the highest group number. The group number is used when referring to Table B.2.



LAND BASE ASSESSMENT

Number of tillable hectares* on site _____ x 5 = _____ (B) Potential Livestock Units

* Maximum (B) is 150 Livestock Units

Enter the GREATER OF (A) Total Livestock Units OR (B) Potential Livestock Units

Use this figure to enter Column 1 of Table B.2.



TABLE B.2 MINIMUM DISTANCE SEPARATION FROM LIVESTOCK FACILITY

COLUMN 1	TYPE "A" LAND USE					TYPE "B" LAND USE				
	To permit: <ul style="list-style-type: none"> • up to 3 rural residential lots, either by consent or by plan of subdivision • the severance of an existing dwelling • passive recreational • the building of a dwelling on an existing lot of record • agriculturally related commercial • industrial 					To permit: <ul style="list-style-type: none"> • residential subdivision • active recreational • institutional • commercial • urban expansion • multiple residential • or result in a Rural Residential Cluster 				
Greater of Livestock Units (A) or Potential Livestock Units (B)	Animal Group					Animal Group				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
1-5	39	42	48	60	85	73	78	90	112	160
10	55	60	68	85	98	104	112	128	160	183
15	65	70	80	100	115	122	132	151	188	215
20	72	78	89	111	127	135	146	167	208	238
25	78	84	95	119	136	146	157	179	224	256
30	82	88	101	126	144	154	166	189	237	271
35	86	92	106	132	151	161	173	198	247	283
40	89	96	110	137	157	167	180	206	257	294
45	92	99	113	142	162	173	186	213	266	304
50	95	102	117	146	167	178	192	219	274	313
55	98	105	120	150	172	183	197	225	282	322
60	100	108	123	154	176	188	202	231	289	330
65	102	110	126	158	180	192	207	236	295	338
70	105	113	129	161	184	196	211	241	302	345
75	107	115	131	164	188	200	215	246	308	352
80	109	117	134	167	191	204	219	251	313	358
85	111	119	136	170	194	207	223	255	319	364
90	112	121	138	173	198	211	227	259	324	370
95	114	123	140	176	201	214	230	263	329	376
100	116	125	143	178	204	217	234	267	334	382
110	119	128	146	183	209	223	240	275	343	392
120	122	131	150	188	214	229	246	281	352	402
130	125	134	154	192	219	234	252	288	360	411
140	127	137	157	196	224	239	257	294	368	420
150	130	140	160	200	228	244	262	300	375	428
160	133	143	164	205	234	250	269	307	384	439
170	136	147	168	210	240	256	275	314	393	449
180	139	150	172	214	245	262	282	322	402	460
190	143	154	175	219	251	268	288	329	411	470
200	146	157	179	224	256	273	294	336	420	480
210	149	160	183	229	262	279	301	344	429	491
220	152	164	187	234	267	285	307	351	439	501
230	155	167	194	239	273	291	313	358	448	512

MUNICIPALITY OF NORTH MIDDLESEX ZONING BY-LAW
By-law No. 35 of 2004, As Enacted by Council on _____



COLUMN 1	TYPE "A" LAND USE					TYPE "B" LAND USE				
	To permit: <ul style="list-style-type: none"> • up to 3 rural residential lots, either by consent or by plan of subdivision • the severance of an existing dwelling • passive recreational • the building of a dwelling on an existing lot of record • agriculturally related commercial • industrial 					To permit: <ul style="list-style-type: none"> • residential subdivision • active recreational • institutional • commercial • urban expansion • multiple residential • or result in a Rural Residential Cluster 				
Greater of Livestock Units (A) or Potential Livestock Units (B)	Animal Group					Animal Group				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
240	158	171	195	244	278	297	320	365	457	522
250	162	174	199	248	284	303	326	373	466	532
260	165	177	203	253	290	309	332	380	475	543
270	168	181	207	258	295	315	339	387	484	553
280	171	184	210	263	301	321	345	395	493	564
290	174	188	214	268	306	327	352	402	502	574
300	177	191	218	273	312	333	358	409	511	584
320	182	198	225	281	321	342	368	421	528	602
340	186	201	229	287	328	349	376	430	538	614
360	190	204	234	292	334	358	383	438	548	626
380	193	208	238	297	340	362	390	446	557	637
400	196	211	242	302	345	368	397	453	587	647
420	199	215	245	307	351	374	403	460	575	657
440	202	218	249	311	358	379	409	467	584	667
460	205	221	252	316	361	385	414	473	592	676
480	208	224	256	320	365	390	420	480	599	685
500	210	227	259	324	370	395	425	488	607	694
520	213	229	262	328	374	399	430	491	614	702
540	215	232	265	331	379	404	435	497	621	710
560	218	235	268	335	383	408	440	503	628	718
580	220	237	271	339	387	413	445	508	635	728
600	222	240	274	342	391	417	449	513	642	733
620	225	242	276	346	395	421	454	518	648	741
640	227	244	279	349	399	425	458	523	654	748
660	229	247	282	352	402	429	462	528	660	755
680	231	249	284	355	406	433	466	533	666	761
700	233	251	287	358	410	437	470	538	672	768
720	235	253	289	362	413	441	474	542	678	775
740	237	255	292	365	417	444	478	547	683	781
760	239	257	294	367	420	448	482	551	689	787
780	241	259	296	370	423	451	486	555	694	794
800	243	261	299	373	426	455	490	560	700	800
850	247	266	304	380	434	463	499	570	713	814
900	251	271	309	387	442	471	507	580	725	828
950	255	275	314	393	449	479	516	589	737	842
1000	259	279	319	399	456	486	524	599	748	855

MUNICIPALITY OF NORTH MIDDLESEX ZONING BY-LAW
By-law No. 35 of 2004, As Enacted by Council on _____



COLUMN 1	TYPE "A" LAND USE					TYPE "B" LAND USE				
	To permit: <ul style="list-style-type: none"> • up to 3 rural residential lots, either by consent or by plan of subdivision • the severance of an existing dwelling • passive recreational • the building of a dwelling on an existing lot of record • agriculturally related commercial • industrial 					To permit: <ul style="list-style-type: none"> • residential subdivision • active recreational • institutional • commercial • urban expansion • multiple residential • or result in a Rural Residential Cluster 				
Greater of Livestock Units (A) or Potential Livestock Units (B)	Animal Group					Animal Group				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
1050	263	283	324	405	463	494	532	607	759	868
1100	267	287	329	411	469	501	539	616	770	880
1150	271	291	333	416	476	507	546	624	780	892
1200	274	295	337	422	482	514	553	632	790	903
1250	277	299	341	427	488	520	560	640	800	915
1300	281	302	346	432	494	526	567	648	810	925
1350	284	306	349	437	499	532	573	655	819	936
1400	287	309	353	442	505	538	580	662	828	946
1450	290	312	357	446	510	544	586	670	837	958
1500	293	316	361	451	515	550	592	676	846	966
1550	296	319	364	455	521	555	598	683	854	976
1600	299	322	368	460	528	560	604	690	862	985
1650	302	325	371	464	530	566	609	696	870	995
1700	304	328	375	468	535	571	615	703	878	1004
1750	307	331	378	473	540	576	620	709	886	1013
1800	310	334	381	477	545	581	626	715	894	1021
1850	312	336	384	481	549	586	631	721	901	1030
1900	315	339	388	484	554	590	636	727	908	1038
1950	317	342	391	488	558	595	641	733	916	1046
2000	320	344	394	492	562	600	646	738	923	1055
2100	325	350	400	499	571	609	656	749	937	1070
2200	329	355	405	507	579	617	665	760	950	1086
2300	334	360	411	514	587	628	674	770	963	1101
2400	338	364	416	520	595	634	683	780	976	1115
2500	342	369	421	527	602	642	692	790	988	1129
2600	347	373	427	533	609	650	700	800	1000	1143
2700	351	378	432	539	617	657	708	809	1011	1156
2800	355	382	436	546	623	665	716	818	1023	1169
2900	358	386	441	551	630	672	724	827	1034	1182
3200	369	396	455	568	650	693	746	853	1066	1218
3400	376	405	463	579	662	706	760	869	1086	1241
3600	383	413	472	590	674	719	774	884	1105	1263
3800	390	420	480	600	685	731	767	899	1124	1285
4200	402	433	495	619	707	754	812	928	1160	1325
4400	408	439	502	628	717	765	824	941	1177	1345
4600	414	445	509	636	727	776	835	955	1193	1364



COLUMN 1	TYPE "A" LAND USE					TYPE "B" LAND USE				
	To permit: <ul style="list-style-type: none"> • up to 3 rural residential lots, either by consent or by plan of subdivision • the severance of an existing dwelling • passive recreational • the building of a dwelling on an existing lot of record • agriculturally related commercial • industrial 					To permit: <ul style="list-style-type: none"> • residential subdivision • active recreational • institutional • commercial • urban expansion • multiple residential • or result in a Rural Residential Cluster 				
Greater of Livestock Units (A) or Potential Livestock Units (B)	Animal Group					Animal Group				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
4800	419	451	516	645	737	786	846	967	1209	1382
5000	425	457	523	653	747	798	857	980	1225	1400
7500	483	520	594	743	849	905	975	1114	1393	1591
10000	529	570	652	815	931	993	1069	1222	1527	1745

TABLE B.3 MINIMUM DISTANCE SEPARATION FROM MANURE STORAGE

The following table is used to calculate MDS requirements in metres from manure storages associated with livestock facilities.

Using the resulting MDS distance from Table B.2, read across the appropriate line to Column 1, 2, 3 or 4. Select the distance under the appropriate Land Use Type.

This is the MINIMUM DISTANCE SEPARATION REQUIREMENT from the manure storage of a livestock facility for the establishment of a non-farm use.

Column 1: Roofed or covered storages for manure, runoff, and milkhouse washwater. Includes any covered or roofed concrete, steel or earthen storages, in-barn solid manure packs, and storages under fully slatted floors.

Column 2: Open solid manure pile on concrete slab. Includes the runoff storages (concrete or earthen) used for capturing seepage liquids from solid manure storage or runoff liquids from yards. If yards are scraped into runoff storage, use Column 3 when runoff storage is a concrete or steel tank and Column 4 when runoff storage is earthen. Milkhouse washwater may be added to runoff storage.

Column 3: Open concrete or steel tanks used for storing liquid manure, milkhouse washwater, or yard runoff where yard is scraped into storage.

Column 4: Open earth-sided or earth-sided storage with concrete floor to be used for storing liquid manure or yard runoff when yard is scraped into storage or milkhouse washwater.



MANURE STORAGE DISTANCE

Distance for Livestock Facility from Table 2 (Step 4) (m)	Column 1		Column 2		Column 3		Column 4	
	Covered Storage Systems (m)		Open Solid and Runoff Storage Systems (m)		Open Liquid Tank and Runoff Storage Systems (m)		Earthen Liquid and Runoff Storage Systems (m)	
	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use
40	40	-	55	-	119	-	324	-
45	45	-	60	-	123	-	326	-
50	50	-	65	-	127	-	328	-
55	55	-	70	-	132	-	331	-
60	60	-	74	-	136	-	333	-
65	65	-	79	-	140	-	335	-
70	70	70	84	103	144	241	337	686
75	75	75	89	107	149	246	339	689
80	80	80	94	112	153	250	342	691
85	85	85	99	117	157	254	344	693
90	90	90	103	122	161	258	346	695
95	95	95	108	127	165	263	348	698
100	100	100	113	132	170	267	351	700
110	110	110	123	141	178	275	355	704
120	120	120	133	151	187	284	359	709
130	130	130	142	161	195	292	364	713
140	140	140	152	171	203	301	368	717
150	150	150	162	180	212	309	373	722
160	160	160	172	190	220	318	377	726
170	170	170	181	200	229	326	382	731
180	180	180	191	209	237	335	386	735
190	190	190	201	219	246	343	390	740
200	200	200	210	229	254	351	395	744
210	210	210	220	239	263	360	399	749
220	220	220	230	248	271	368	404	753
230	230	230	239	258	280	377	408	757
240	240	240	249	268	288	385	413	762
260	260	260	268	287	305	402	421	771
280	280	280	288	307	322	419	430	780
300	300	300	307	326	339	436	439	788
320	320	320	327	346	356	453	448	797
340	340	340	346	365	372	470	457	806
360	360	360	366	385	389	487	466	815
380	380	380	385	404	406	504	475	825
400	400	400	404	423	423	521	483	833



MANURE STORAGE DISTANCE

Distance for Livestock Facility from Table 2 (Step 4) (m)	Column 1		Column 2		Column 3		Column 4	
	Covered Storage Systems (m)		Open Solid and Runoff Storage Systems (m)		Open Liquid Tank and Runoff Storage Systems (m)		Earthen Liquid and Runoff Storage Systems (m)	
	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use
450	450	450	453	472	465	563	506	855
500	500	500	501	520	508	605	528	877
550	550	550	550	569	550	648	550	899



MINIMUM DISTANCE SEPARATION SUMMARY:		BUILDING: Base Distance	'F' [] metres	MANURE STORAGE: Base Distance	'S' [] metres
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6
Commercial Use Passive Recreational or Industrial					
Areas zoned or designated Residential, Institutional, Active Recreational, or Commercial. Urban Areas	2.0				
Nearest Side or Rear Lot Line	0.2				
Nearest Road Allowance (Side or Front Lot Line)	0.25				

TABLE C.1 FACTOR 'A' (BARN ODOUR POTENTIAL) AND ANIMALS PER LIVESTOCK UNIT (BASED UPON HOUSING CAPACITY)

ANIMALS PER LIVESTOCK UNIT			FACTOR A:
BEEF	1	Beef Cow ¹	(barn confinement) 0.7
	1	Beef	(barn with yard) 0.8
	2		(barn confinement) 0.7
	2		(barn with yard) 0.8
CHICKEN	125	Caged layers	(manure stored in barn) 1.0
	125	Caged layers	(daily manure removal) 0.8
	125	Chicken Breeder Layers	0.8
	200	Chicken Broilers/Roasters	0.65
	500	Pullets (replacement layers)	0.7
DAIRY	1	Milking Cow ^{1,2}	(tie-stall) 0.65
	1	Milking Cow	(free-stall) 0.7
	2	Dairy Heifers	(barn confinement) 0.7
	2	Dairy Heifers	(barn with yard) 0.8
DUCK	100	Ducks	0.7
EMU	5	Emu	0.7
FOX	40	Adult Fox ⁴	1.1
GOAT	4	Adult Goats ³	0.7
	10	Feeder Goats (>20 kg)	0.7
HORSE	1	Horse ³	0.65



ANIMALS PER LIVESTOCK UNIT			FACTOR A:
MINK	80	Adult Mink ⁴	1.1
OSTRICH	3	Ostrich	0.7
RABBIT	40	Adult Rabbits ⁴	0.8
SHEEP	4	Adult Sheep ³	0.7
	10	Feeder Lambs (>20 kg)	0.7
SWINE	5	Sows/Boars	1.0
	20	Weaners (4-30 kg) ⁵	1.0
	4	Feeder Hogs (30-120 kg)	1.0
TURKEY	50	Meat turkeys (>10 kg)	0.7
	75	Meat Turkeys (5-10 kg)	0.7
	75	Turkey Breeder Layers	0.8
	100	Meat Turkeys (<5 kg)	0.7
	500	Pullets (replacement breeders)	0.7
VEAL	6	White Veal	1.0
	3	Red Veal (<300 kg)	0.8

Notes: For all other animals/poultry use 1 livestock per 450 kg housed at one time (A=0.8).

- 1) Includes calf to 150 kg.
- 2) A dairy farm usually has milking cows, dry cows heifers and calves. Multiply the number of milking cows by 1.5 to account for the followers when they are all kept on the same farm.
- 3) Includes offspring until weaned.
- 4) Includes offspring to market size.
- 5) Multiply number of sows by 2.4 to determine the number of weaners.

TABLE C.2 FACTOR 'B' (FINAL LIVESTOCK UNITS)

Livestock Units	Factor B	Livestock Units	Factor B	Livestock Units	Factor B	Livestock Units	Factor B
5	- 107	95	- 313	500	- 578	1600	- 821
6	- 119	100	- 318	520	- 585	1650	- 829
7	- 129	110	- 327	540	- 592	1700	- 836
8	- 138	120	- 335	560	- 598	1750	- 844
9	- 145	130	- 343	580	- 605	1800	- 851
10	- 152	140	- 350	600	- 611	1850	- 858
12	- 164	150	- 357	620	- 617	1900	- 865
14	- 175	160	- 366	640	- 623	1950	- 872
16	- 183	170	- 374	660	- 629	2000	- 879
18	- 191	180	- 383	680	- 635	2100	- 892
20	- 198	190	- 392	700	- 640	2200	- 905
22	- 205	200	- 400	720	- 646	2300	- 917



Livestock Units	Factor B	Livestock Units	Factor B	Livestock Units	Factor B	Livestock Units	Factor B				
24	-	210	210	-	409	740	-	651	2400	-	929
26	-	216	220	-	418	760	-	656	2500	-	941
28	-	221	230	-	426	780	-	661	2600	-	952
30	-	225	240	-	435	800	-	666	2700	-	963
32	-	230	250	-	444	850	-	679	2800	-	974
34	-	234	260	-	452	900	-	690	2900	-	985
38	-	241	280	-	470	1000	-	713	3200	-	1015
40	-	245	290	-	478	1050	-	723	3400	-	1034
45	-	253	300	-	487	1100	-	733	3600	-	1053
50	-	261	320	-	501	1150	-	743	3800	-	1071
60	-	275	360	-	522	1250	-	762	4200	-	1105
65	-	281	380	-	531	1300	-	771	4400	-	1121
70	-	287	400	-	540	1350	-	780	4600	-	1136
75	-	293	420	-	548	1400	-	789	4800	-	1152
80	-	298	440	-	556	1450	-	797	5000	-	1166
85	-	304	460	-	564	1500	-	805	7500	-	1326
90	-	309	480	-	571	1550	-	813	10000	-	1455

TABLE C.3 FACTOR 'C' (PERCENTAGE INCREASE)

Percentage Increase	Factor C	Percentage Increase	Factor C	Percentage Increase	Factor C			
0-50	-	0.70	120	-	0.86	280	-	1.03
55	-	0.72	130	-	0.88	300	-	1.04
60	-	0.73	140	-	0.90	325	-	1.05
65	-	0.75	150	-	0.91	350	-	1.06
70	-	0.76	160	-	0.92	375	-	1.07
75	-	0.77	170	-	0.94	400	-	1.08
80	-	0.78	180	-	0.95	425	-	1.09
85	-	0.79	190	-	0.96	450	-	1.10
90	-	0.81	200	-	0.97	500	-	1.11
95	-	0.82	220	-	0.99	550	-	1.12
100	-	0.83	240	-	1.00	650	-	1.13
110	-	0.85	260	-	1.02	700	-	1.14

Note: For new livestock farms or if the % increase is greater than 700 percent, use Factor C = 1.14.

TABLE C.4 SITING DISTANCES FOR MANURE STORAGE (METRES)

Column 1: Roofed or covered storages for manure, runoff, and milkhouse washwater. Includes any covered or roofed concrete, steel or earthen storages, in-barn solid manure packs, and storages under fully slatted floors.

Column 2: Open solid manure pile on concrete slab. Includes the runoff storages (concrete or earthen) used for capturing seepage liquids from solid manure storage or



runoff liquids from yards. If yards are scraped into runoff storage, use Column 3 when runoff storage is a concrete or steel tank and Column 4 when runoff storage is earthen. Milkhouse washwater may be added to runoff storage.

Column 3: Open concrete or steel tanks used for storing liquid manure, milkhouse washwater, or yard runoff where yard is scraped into storage.

Column 4: Open earth-sided or earth-sided storage with concrete floor to be used for storing liquid manure or yard runoff when yard is scraped into storage or milkhouse washwater.

MANURE STORAGE BASIC DISTANCE "S"

Minimum Base Distance "F" for the Building (m)	Column 1	Column 2	Column 3	Column 4
	Covered Storage Systems (m)	Open Solid and Runoff Storage Systems (m)	Open Liquid Tank and Runoff Storage Systems (m)	Earthen Liquid and Runoff Storage Systems (m)
40	40	55	119	324
45	45	60	123	326
50	50	65	128	328
55	55	70	132	331
60	60	74	136	333
65	65	79	140	335
70	70	84	144	337
75	75	89	149	340
80	80	94	153	342
85	85	99	157	344
90	90	104	161	346
95	95	108	166	348
100	100	113	170	351
105	105	118	174	353
110	110	123	178	355
115	115	128	182	357
120	120	133	187	360
125	125	138	191	362
130	130	142	195	364
135	135	147	199	366
140	140	152	204	368
145	145	157	208	371
150	150	162	212	373
160	160	172	220	377
170	170	181	229	382
180	180	191	237	386
190	190	201	246	391
200	200	210	254	395
210	210	220	263	399
220	220	230	271	404



MANURE STORAGE BASIC DISTANCE "S"

Minimum Base Distance "F" for the Building (m)	Column 1	Column 2	Column 3	Column 4
	Covered Storage Systems (m)	Open Solid and Runoff Storage Systems (m)	Open Liquid Tank and Runoff Storage Systems (m)	Earthen Liquid and Runoff Storage Systems (m)
230	230	239	280	408
240	240	249	288	413
260	260	269	305	422
280	280	288	322	430
300	300	307	339	439
320	320	327	356	448
360	360	366	389	466
380	380	385	406	475
400	400	404	423	484
420	420	424	440	492
440	440	443	457	501
480	480	482	491	519
500	500	502	508	528
550	550	550	550	550