

June 3, 2024

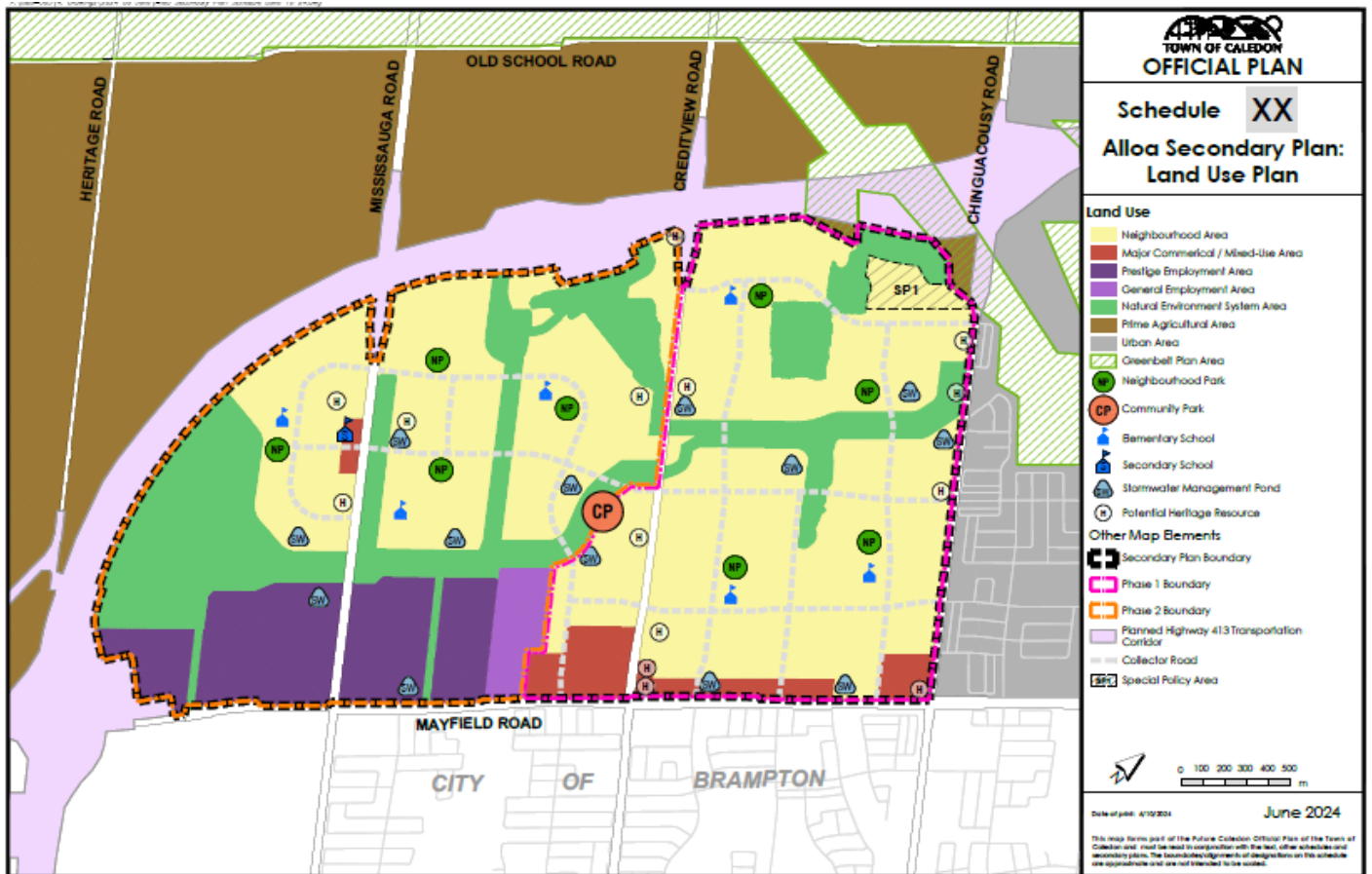
Memorandum to: Alloa Landowners Group
 From: Cynthia Clarke, President
 Quadrant Advisory Group Limited

Re: Alloa Secondary Plan: Student Accommodation & School Site Needs Analysis

Quadrant Advisory Group was retained by Alloa Landowners Group to assess student accommodation needs that would be generated by the development of the subject lands, which are located north of Mayfield Road, west of Chinguacousy Rd., and south of the planned Highway 413.

The elementary school site needs projected herein for both the Peel District School Board (PDSB) and the Dufferin-Peel Catholic District School Board (DPCDSB) are based on the development of 14,084 residential units at buildout, supporting a projected population of just over 40,000 persons.

The Alloa Secondary Plan development lands are shown below.



The process to project the number of elementary and secondary students to be generated from the development lands, requires the determination of appropriate Board-specific pupil yields representative of each planned residential typology (i.e., single detached, standard towns, back-to-back towns, dual frontage towns, rear lane towns and condominium apartments). The derivation of Board-specific pupil yields was based on the 2021 Census data, and historical PDSB/DPCDSB apportionment shares, as described below.

Development-specific Data Sources:

During February 9th to November 30th, 2022 Statistics Canada released the profile data compiled as part of the May 11, 2021 Census undertaking. The majority of the census elements used to examine school age population and dwelling units are based on 100% sampling; although there is typically a nominal population undercount particularly in large urban areas, but less so in the under 18 age cohorts.

Census data was extracted at the dissemination area (DA) level¹ enabled the consultants to match the type of development within specific DAs, to the types of development proposed within the Secondary Plan development lands. The census data extracted and analyzed included:

- Population density; females of primary child-bearing years; total pre-school (0-3 years) and elementary school age (4-13 years) population and elementary school age pupil yield for all education service providers;
- Total occupied dwellings disaggregated by density type, low-rise and high-rise apartments; period of construction; condominium ownership; # of bedrooms;
- Before tax household income; age of household maintainer data;
- Census families in private households; families with children; total families with children and average # of children in households with children.

The 2021 Census is used to determine elementary and secondary pupil yields applicable to all education service providers in any given community. There are five (5) education service providers in each Ontario community: English language public and Catholic and French-language public and Catholic, as well as private and secular independent schools. Subsequent to deriving relevant overall pupil yields (i.e. for the school-age population as a whole), they are apportioned by individual school boards and service providers based on their proportionate share of the 2021/22 student enrolment data.

Finally, it is important to assess whether there will be any surplus and available pupil places that might serve to accommodate students to be generated by development of the Alloa Secondary Plan lands. When assessing the potential to utilize surplus spaces apportionment shares in the areas of NW Brampton and Caledon itself, the 10-year student enrolment projections and school capacities reported in the most recent long-term accommodation of facilities master plans for the PDSB and DPCDSB, are considered.

¹ A Census dissemination area is the smallest standard geographic area for which all census data are disseminated



Alloa Secondary Plan Residential Development

There are a total of 14,084 new dwelling units within the subject lands. The density mix is expected to be:

- Low density single & semi detached 25.5%
- Medium density (including low-rise apartments) 59.1%
- High rise 15.4%

1. Low Density Single and Semi-Detached Dwellings:

There are a total of 2,171 single detached dwellings proposed in Phase 1 on lot frontages ranging from 36' to 50'. More than 43% of the single detached units will be situated on lots with 42' frontages. A sampling of 2021 Census DAs included both the Town of Caledon and the City of Brampton in order to ensure a robust sample size on which to draw low density pupil yield conclusions (i.e. just under 26,000 dwellings). Only DAs where, on average more than 92% of the units were of the 'low density' category and more than 93% indicate as occupied during the 2006 through 2021 Census period, were chosen as the 'low density' sample. The net sample size comprised just over 16,600 dwellings and derived an overall elementary yield of 0.6457 pupils per household for all education service providers. The overall secondary yield is 0.264 pupils per household.

2. Townhouses:

There are few development blocks that are wholly made up of back-to-back, rear lane, or dual frontage townhomes outside of the City of Ottawa, and indicated as occupied units during the 2006 to 2021 Census period. The following data was used to determine overall pupil yields for various medium density residential typologies.

Standard Towns –

A total of 2,515 units where 100% of the units within the dissemination comprised medium density typologies, were used to derive overall pupil yields. The DAs were located within the GTA and Ottawa. Overall elementary pupil yield of 0.42346 and secondary yield of 0.1829 was derived from the sampling.

Back2back Towns –

The City of Ottawa historical build permit data identifies which medium density units are configured as back2back townhomes. A sample size of more than 26,700 dwelling units was used to determine an overall elementary pupil yield of 0.4796 and a secondary yield of 0.1527.



Dual Frontage and Rear Lane Towns –

Very few rear lane or dual frontage townhouse configurations have been specified in the Ottawa or GTA building permit data, but given the typical size of these units, smaller sized townhouse units were used as the sample source (i.e., less than 2,000 sq ft in size). More than 7,300 units were included in this sampling. An overall elementary pupil yield of 0.3111 and overall secondary pupil yield of 0.1266 was derived for dual frontage and rear lane townhouses.

Stacked Towns and Low-rise Apartment Units -

Recent GTA residential developments comprising mixed-use stacked townhouses and low-rise apartments were used as the basis for the sampling in this dwelling category. The determination of overall pupil yields assumes 43% of the units to be townhouses at the base of low-rise apartments, or ground-related within the development lands. The remaining 53% of the units are assumed to be low-rise apartment units. A combined overall elementary pupil yield of 0.2779 and secondary yield of 0.1077 was derived for this category of mixed use residential development.

3. Condominium Apartments:

Apartments less than 700 sq ft in Size –

A total of 33,225 high density units in Ontario, where more than 64% of the units were unit sizes comprising bachelor and 1-bedroom configurations, were sampled. More than 88% of these units were occupied during the 2006 to 2021 census periods. The sample yielded an overall elementary pupil yield of 0.04545 pupils per household and secondary yield of 0.01701 pupils per household.

Apartments greater than 700 sq ft in Size –

A 2021 Census sampling of 11,150 high-rise development units where more than 75% of the units were occupied as of the 2006 census undertaking or later, was extracted from DAs in the GTA. In analyzing the units accommodating 2 bedrooms or more, the overall pupil yield derived was 0.06547 elementary pupils per household and 0.01794 secondary pupils per household.

Apportionment Shares:

The 2021/2022 student enrolment data for the PDSB and the DPCDSB was extracted from each Board's capital plans². The 10-year enrolment projections for each board indicate that the PDSB does not expect to have any available and surplus spaces within reasonable distance to the development area. For the DPCDSB, the Board's facilities master plan indicates a total of 562 surplus permanent spaces at St. Edmund Campion CSS in NW Brampton, along with the potential for portable classrooms.

² Peel DSB Annual Planning Document 2022/23, November 2, 2022 and Dufferin-Peel Catholic DSB Long Term Facilities Master Plan Historical and Projected Enrolment: 2011-2031, dated April 5, 2022



The analysis respecting apportionment shares concludes the following percentages of the total 2021 Census population:

Share of 2021 Census Population:	4-13 yrs	14-17 yrs
PDSB Apportionment Share	56.33%	65.91%
DPCDSB Apportionment Share	33.73%	31.95%

Determining # of Students to be Generated within the Alloo Secondary Plan

When the PDSB and DPCDSB's share of the overall pupil yields (i.e. apportionment share) is determined and subsequently applied to appropriate dwelling unit category, the total number of pupils projected to be generated by the development and occupancy of the 14,084 new residential units, is derived. The projected students derived from the Alloo Secondary Plan, and for the PDSB and the DPCDSB, are shown below:

TOTAL ALLOO SECONDARY PLAN DETERMINATION OF STUDENT ACCOMMODATION NEEDS										
	# of Hectares	Units per Hectare	Unit Count	Unit Mix	Assumed PPU's	Projected Population	PDSB Projected Elementary Pupils	DPCDSB Projected Elementary Pupils	PDSB Projected Secondary Pupils	DPCDSB Projected Secondary Pupils
All Units	228.4		14,084			40,005	2,960	1,461	1,387	110
Assumed Site Capacity ¹							978	741	1,725	1,245
# of New Schools Required							3.0	2.0	0.8	0.1

For the Peel DSB, the analysis derives a total of 2,960 elementary students and 1,387 secondary students. For the Dufferin-Peel Catholic DSB a total of 1,461 elementary students are derived. On the secondary panel, the Board's own facilities master plan³ determines that, at the end of next decade, there should be at least 562 permanent pupil places at St. Edmund Campion CSS in NW Brampton, as well as more than 600 surplus spaces at St. Michael's CSS in Bolton (although this is some distance from the development lands), to offset the 672 additional secondary students derived from the Alloo development lands.

Determining School Site Needs

The number of pupils that can be accommodated on any particular school site is based on recently constructed schools, their OTG capacities and an assumption that the school sites can accommodate 15% of the total enrolment in portables in order to accommodate 'peak' enrolments.

This analysis determines the need for three (3) PDSB elementary and one (1) secondary site. For the DPCDSB there is a need for two (2) elementary school sites to serve the Alloo Secondary Plan development lands.

³ Peel DSB Annual Planning Document 2022/23, November 2, 2022 and Dufferin-Peel Catholic DSB Long Term Facilities Master Plan Historical and Projected Enrolment: 2011-2031, dated April 5, 2022



ALLOA SECONDARY PLAN - DETERMINATION OF STUDENT ACCOMMODATION & SCHOOL SITE NEEDS

	# of Hectares	Units per Hectare	Unit Count	Unit Mix	Assumed PPU's	Projected Population	PDSB Projected Elementary Pupils	DPCDSB Projected Elementary Pupils	PDSB Projected Secondary Pupils	DPCDSB Projected Secondary Pupils
Phase 1 Units:										
Single Detached - 36' frontage	72.35	30	458	5.0%	3.64	1,666	166	100	80	39
Single Detached - 38' frontage			579	6.3%		2,109	211	126	101	49
Single Detached - 42' frontage			938	10.2%		3,414	341	204	163	79
Single Detached			196	2.1%		713	71	43	34	17
Standard Towns	42.75	60	525	5.7%	3.3	8,464	125	75	63	31
Back2Back Towns - 18' frontage			474	5.2%			128	77	48	23
Back2Back Towns - 21' frontage			201	2.2%			54	32	20	10
Dual Frontage Towns			175	1.9%			31	18	15	7
Rear Lane Town Homes			260	2.8%			46	27	22	11
Rear Lane Town Homes			931	10.2%			163	98	78	38
Medium density stacked townhomes; multi-unit & low-rise apartments < 6 stories	16.44	150	2,466	26.9%	2.07	5,105	386	231	175	85
Condominium Apts >70 m ²	9.81	200	981	10.7%	2.07	2,031	36	22	12	6
Condominium Apts <70 m ²			981	10.7%	2.07	2,031	25	15	11	5
TOTALS	141.35		9,164	100.0%		25,533	1,784	1,068	821	398
Surplus Available Capacity by 2031							-	-311		-562
Net Pupil Place Requirement							1,784	757	821	-164

	# of Hectares	Units per Hectare	Unit Count	Unit Mix	Assumed PPU's	Projected Population	PDSB Projected Elementary Pupils	DPCDSB Projected Elementary Pupils	PDSB Projected Secondary Pupils	DPCDSB Projected Secondary Pupils
Phase 2 Units:										
Single and semi detached	47.29	30	1,419	28.8%	3.639	5,164	516	309	247	120
Medium density townhouses	27.94	60	1,677	34.1%	3.299	5,532	400	240	202	98
Medium density stacked townhomes; multi-unit & low-rise apartments < 6 stories except SP1 at 20+ stories	10.75	150	1,612	32.8%	2.07	3,337	252	151	114	55
Mixed Use high-rise apartments	1.06	200	212	4.3%	2.07	439	8	5	3	1
TOTALS	87.04		4,920			14,472	1,176	704	566	274
Surplus Available Capacity by 2031							-	0	-	0
Net Pupil Place Requirement							1,176	704	566	274

TOTAL ALLOA SECONDARY PLAN DETERMINATION OF STUDENT ACCOMMODATION NEEDS

	# of Hectares	Units per Hectare	Unit Count	Unit Mix	Assumed PPU's	Projected Population	PDSB Projected Elementary Pupils	DPCDSB Projected Elementary Pupils	PDSB Projected Secondary Pupils	DPCDSB Projected Secondary Pupils
All Units	228.4		14,084			40,005	2,960	1,461	1,387	110
Assumed Site Capacity¹							978	741	1,725	1,245
# of New Schools Required							3.0	2.0	0.8	0.1

Notes: 1. 'Site Capacity' includes permanent OTG capacity plus 15% in portables to accommodate 'peak' enrolments



Conclusions:

Therefore, the consultants conclude the need for five (5) elementary sites and one (1) secondary site.

There are several options for assessing the amount of land required to provide the five (5) elementary sites and one (1) secondary site. There is a direct correlation between the # of acres taken up by school sites, and the ability to generate enough residential development on the net developable lands to support sustainable school populations. The increased density being approved for residential development today has a significant impact on the 'predicted' fair market value (FMV) of the lands when the increased density approvals are taken into consideration. Given that there are no available funding sources to buy land for school sites, other than education development charges (EDCs), for EDC-eligible school boards, and EDCs will only recover a portion of the increased FMV value due to the legislative 'cap', it is more important than ever to encourage school boards to intensify school sites (decrease building footprints, podium schools as part of mixed use developments, underground parking where financially feasible, etc.), and for the municipalities to not only locate their parks adjacent to the schools, but enter into agreements for exclusive use of a portion of the park, by the adjacent school board, during school hours.

The potential for school configurations other than conventional 1-acre per 100 students, is a discussion that must be held with the school boards involved. As part of this discussion, it is important to understand what portion of the net developable lands are proposed to be taken up by conventional school sites configurations and what student population is required to sustain student enrolment through the applicable pupil yield cycles.

