ATTACHMENT 3

Memo

Date May 7, 2024

From Christina Hovey, RPP, MCIP, Project Planner

Subject Zoning Bylaw Review and Stress Testing for Bill 44 SSMUsH Requirements

Purpose

Bill 44 and subsequent regulations amended the *Local Government Act* to require all local governments to allow 3-6 dwelling units on all residential parcels within the Urban Containment Boundary (excluding in limited circumstances). Going further, section 457.1 specifies that the general zoning powers "must not be exercised in a manner that unreasonably prohibits or restricts the use or density of use required to be permitted under section 481.3." and subsection 481.3(7) requires that "in developing or adopting a zoning bylaw to permit the use and density of use required under this section to be permitted, a local government must consider applicable guidelines, if any under section 582.1. [*provincial policy guidelines related to small-scale multi-family housing].*"

This means that in addition to modifying the Municipality of North Cowichan's Zoning Bylaw 1997, No. 2950 (the zoning bylaw) to permit the required density, we must also ensure that the overall zoning regulations (e.g., setbacks, height, parcel coverage) allows for a building envelope that can reasonably accommodate the required density.

One option to achieve that outcome is to adopt the zoning provisions that are outlined in the sample site standards in the provincial policy manual.[1] However, this is not the preferred option since we are currently undertaking a comprehensive review of the zoning bylaw and since the recommended site standards from the province are a significant departure from our existing zoning standards and would result in a different built form than is currently permitted.

The other option is to complete due diligence to establish whether our existing provisions can reasonably accommodate the proposed density and to identify any existing zoning provisions that ought to be amended. This memo documents the work that was completed to fulfill this objective.

Each restricted zone was reviewed and modeled (referred to as "stress testing") to see whether the required density could be achieved on a typical lot, based on the existing zoning provisions.

[1] The policy manual is available here: https://www2.gov.bc.ca/assets/gov/housing-and-tenancy/tools-for-government/local-governments-and-housing/ssmuh_provincial_policy_manual.pdf
A copy is also saved to the working file for this project.

Where existing zoning provisions make it difficult or impossible to achieve the required density, changes are recommended for those provisions.

Summary of Recommended Changes to Zoning Provisions

The following sections summarize the changes that are recommended to the zoning provisions as a result of the stress testing.

Low Density One- and Two-Family Zones:

The following changes are recommended:

Zoning Provision	Recommended Change	Applicable Zones
Floor space ratio (FSR)	Remove.	All One- and Two-Family Zones
Parcel Coverage	Increase as follows (only where 3 or more units or a detached ADU are provided): • 35% for lots 650 m^2 + • 40% for lots 500 m^2 to 650 m^2 • 45% for lots less than 500 m^2 • 50% for lots less than 400 m^2 (only applies to small lot zones where minimum parcel size is less than 400 m^2)	R2 R2-A R3 R3-S CD1-Area 1 CD4 CD5 CD12 CD18-Area 1 CD20
Side Setbacks	Reduce to 1.5 m	All One- and Two-Family Zones except for R1
Front Yard Encroachments	Allow additional encroachment into front yard setbacks.	General Provisions (apply to all zones)
Front Yard Setbacks	Reduce by 0.5 m	R3, R3-CH, CD5
Rear Yard Setbacks	Reduce by 0.5 m	R3, R3-CH, CD5
Parking	Reduce to 1 space per dwelling unit except for Single-Detached and Two-Family Dwellings. Reduce to 0.75 spaces per dwelling unit in the small lot zones.	All One- and Two-Family Zones. Small lot zones: R3-S CD4 CD18-Area 2 CD20
Driveway Width	Allow the minimum driveway width on a per-unit basis.	R3-CH R3-N

		CD4 CD5

Low Density Multi-Family Zones:
Many of the existing multi-family zones would not permit the minimum required density, even though they technically may permit built forms such as townhouses or apartments.

The following changes are recommended:

Zoning Provision	Recommended Change	Applicable Zones
Minimum site area per dwelling unit / maximum units per hectare.	Reduced so that 4 units can fit onto the minimum parcel size. Where no minimum parcel size exists, a standardized parcel size of 650m^2 was used.	R3-MF R6 R7 CD1 – Area 2 CD13 CD17 CD18 – Area 3 CD22 – Area 4

One- and Two-Family Dwelling Zones:

The following zones were evaluated in this category:
R1, R2, R2-A*, R3, R3-S, R3-CH*, R3-N*, CD1-Area 1, CD4, CD5*, CD6-Area 1, CD12, CD18-Area 1, CD18-Area 2, CD20 (note that the *starred zones are proposed to be merged into other zones (generally the R3 zone) because the provisions are so similar).

Method & Result:
Using 3D modeling software, we modelled sample small-scale 4-unit developments and attempted to place them on modelled parcels for each restricted one- and two-family zone. The stress-testing identified several current provisions that make it difficult to achieve the mandatory density. The recommended changes are explained above.

The modelled 4-unit developments were generated based on recent developments or sample floor plans found on the internet (either being sold as house plans or available units from factory builders). The detailed results are shown in Appendix 1: Modelled Properties and Results. The details of the modelled developments are provided in Appendix 2: Sample Developments.

Note that the goal was to demonstrate that the zoning bylaw provisions can reasonably accommodate 4 units, while making the minimum changes necessary to the zoning bylaw. Therefore, smaller units and developments were selected. The recommended changes to the zoning provision are scaled to allow for modest 3- or 4-unit developments. For clarity, the staff recommendations are based on the opinion that it is not unreasonable for the zoning provisions to limit the resulting development to relatively modest unit sizes (e.g., generally 70-80m^2 (753-861 sq. ft.), but as low as 50m^2 (538 sq. ft.) per unit in the case of the small lot zones). For further context, these unit sizes are not smaller than is typical for modern multi-unit rental apartments.

That said, a skilled designer or architect would be able to optimize a site more than shown in this highly simplified exercise.

Multi-Family Zones:

All multi-family zones were evaluated to ensure they would permit the required density. The following zones were evaluated in this category:
R3-MF, R6, R7, R7-A, R8, MA2, CD1-Area 2, CD2, CD6-Area 1[2], CD6-Area 2, CD6-Area 3, CD9, CD10, CD13, CD14, CD15, CD16, CD17, CD18-Area 3, CD18–Area 4, CD18-Area 5, CD19-Area 2, CD22–Area 1, CD22-Area 2, CD22-Area 3, CD22-Area 4, CD22-Area 5, CD23, CD24.

Two reviews were performed for each:

1) **Minimum site area per dwelling unit / maximum units per hectare:**

The maximum density was evaluated to ensure the zones would permit the minimum required density, even though the zones technically may permit built forms such as townhouses or apartments, they must still be able to accommodate the mandated number of units.

Method:
Calculation: minimum parcel size / minimum required site area per dwelling. If the result is for 4 or more units than the density is okay. If the result was less than 4, the following calculation was used to determine the recommended density: minimum parcel size / 4 = recommended minimum required site area per dwelling. For zones that prescribed a minimum required site area per unit but no minimum parcel size, a standardized parcel size of 650m2 was used to calculate the recommended minimum required site area per dwelling.

Result:

Zone	Provision	Existing	Recommended	Notes/ Calculation
R3-MF	Minimum site area per dwelling unit	230 m2	160 m2	650 m2* / 4 = 162.5 m2 *Zone does not prescribe a minimum lot size.
R6	Minimum site area per dwelling unit	390 m2	290 m2	1,170 m2/4 = 292.5 m2
R7	Minimum site area per dwelling unit	289 m2	280 m2	1,120 m2/4 = 280 m2 Also deleted conversion to units per hectare.

[2] Note that Area 1 of the CD6 zone is built out and the recommendation is to redefine the boundary of this Area so that CD6-Area 1 is a one- and two-family zone and the multi-family portion is part of Area 2.

CD1-Area 2	Minimum site area per dwelling unit	300 m2	275 m2	1,100 m2/4 = 275 m2
CD13	Minimum site area per dwelling unit	325 m2	160 m2	650 m2/4 = 162.5 m2 Also deleted conversion to units per hectare.
CD17	Minimum site area per dwelling unit	250 m2	160 m2	650 m2/4 = 162.5 m2 Also deleted conversion to units per hectare.
CD18 – Area 3	Maximum units/ha	22 units/ha	37 units/ha	1,100m2/4 = 275 m2 10,000 m2/275 m2 = 36.4 units/ha 10,000 m2/22 = 454.5 m2
CD22 – Area 4	Maximum units/ha	24 units/ha	63 units/ha	650m2/4 = 160m2 10,000 m2/160 m2 = 62.5 units/ha 10,000 m2/24 = 416.7 m2

2) **Maximum floor space ratio (FSR):**

The maximum floor space ratios (FSR) were evaluated to ensure that four units on the minimum parcel size would result in a reasonable minimum average unit size.

Method:
Calculation: minimum parcel size X FSR/4 = average unit size for required density.

Result:
No changes are recommended to FSR based on the review. The smallest average unit size for any multi-family zone was over 80m^2 which is adequate for a 2-bedroom unit.

Height:

The Provincial Guidelines recommend that a maximum height of 11m or three storeys be permitted in all low-density residential zones. The zoning bylaw typically restricts height to 9m in these zones. This leads to two questions which are dealt with in turn below:

- Does 9m allow for three storeys? and
- Are three storeys necessary to allow the required density?

Does 9m allow for three storeys?
I reviewed a sample of 10 recent building permits to get an understanding of the built forms and number of storeys that are typical under the 9m height restriction.

The sample included 5 three-storey buildings, generally with a walkout basement or garage, and 3 additional two-storey buildings that had a walkout basement or garage. Although it is difficult to accommodate three full storeys above ground with a maximum height of 9m, a third storey can often fit where it is partially or primarily below ground. Other options to achieve a third storey are to:

- have a smaller third storey where all or a portion of the top storey are within the roof pitch; and/or
- to reduce the ceiling height for each storey. While 9' or 10' ceilings can be desirable, 8' ceilings are also very functional.

Are three storeys necessary to allow the required density?
All the stress-testing completed using the 3D modeling software was completed based on 9m maximum height, two storey typologies for the principal building. Only in the small-lot zones (R3-S, CD4, CD18-Area 2 and CD20) where the minimum lot size is 325m2 or less, did a third storey arguably become necessary to accommodate 4 units. In these lots, increasing the maximum parcel coverage to 50% (per the provincial recommendation) offset this need. As noted above in any case, a third storey can generally be accommodated within the 9m maximum through a combination of a basement storey, smaller third storey (set into the roof peak), and/or slightly lower ceiling heights.

Result
No change is recommended to the permitted height although this will be considered further through the comprehensive zoning bylaw review.

Appendix 1: Modelled Properties & Results

Each subheading evaluates one zone. The bullets at the beginning describe the conclusions the table provides details of the stress test performed. For each zone, parcels were modelled based on the zoning provisions (e.g., minimum frontage and lot size) and/or real existing lots from the zone. Each row in each table describes a sample development placed on a modelled parcel with commentary about whether the sample development meets the zoning provisions for the zone. Details about each sample development are provided in Appendix Two. There are more rows in the tables where it is more difficult to make a sample development work with the existing zoning provisions and for zones that are more widespread.

The last two sections describe:

- Developments on parcels below 280m^2 in the R3 zone. Acknowledging that this is rare, the standard for success was that they could achieve the development without a zoning amendment, but that variances may be required for these cases.
- Potential townhouse developments. This is provided for information only, townhouses are permitted by the zoning provisions and may occur where site conditions allow but it is not recommended to change the zoning provisions to accommodate townhouses at this time.

R1

- No changes required.

R1-Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage	FSR
30m X 58.33m	1,750	Two Bedroom Fourplex	No issues.	10%	0.2:1

R2

- Reducing the side setbacks allows more options and may allow for parking in the rear yard.

R2 -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage	FSR
21 X 42.4	890.4	Two Bedroom Fourplex	Reduce side yard to 1.5m to allow parking in rear. Otherwise only 6 parking spaces maximum can be provided.	20%	0.4:1
21 X 42.4	890.4	Duplex with Suites	2m encroachment into side yard.	23%	0.47:1
21.44 X 42.63	894	Narrow Two Bedroom Fourplex	Corner lot. No issues.	19%	0.4:1
24.5 X 36.72	890	Two Bedroom Fourplex	No issues.	20%	0.4:1
15.23 X 31	785	One Bedroom Fourplex	Cul-de-sac parcel. Parking must be split into in two spots.	21%	0.4:1

R2-A

- Reducing the side setbacks allows more options and may allow for parking in the rear yard.
- Parking an issue in some cases.
- Approaching parcel coverage maximum.
- FSR is over maximum in all but one case.

R2-A -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[3]	FSR
18 X 37.23	670	One Bedroom Fourplex	Only 5 parking spaces.	26% 27%	0.52:1
19.27 X 30.24 (west) 42.2 (east)	697	Two Bedroom Fourplex	(note angled backyard), 1.63m encroachment into side yard. Only 6 parking spaces.	25% 27%	0.5:1
21.18 X 33.11	702	Duplex with Suites	1.82m encroachment into side yard.	30% 32%	0.59:1
21.18 X 33.11	702	Two Bedroom Fourplex	1.5m side yard would allow parking in rear.	25% 27%	0.5:1

[3] Note second calculation of parcel coverage provides a small allowance for decks etc.

R3

- Parking an issue in most cases.
- Encroachments into side and front/rear setbacks in many cases.
- Approaching or over parcel coverage maximum, especially for smaller parcels.
- FSR is over maximum in all but two cases.

R3 -Model:

Parcel Dimensions (m)	**Parcel size (m^2)**	**Sample Development**	**Notes**	**Parcel Coverage[4]**	**FSR**
23 X 30.43	700	Two Bedroom Fourplex	No issues.	25% 27%	0.5:1
15 X 30	450	One Bedroom Fourplex	Only 4 parking spaces. Tight to front and rear setback.	37% 40%	0.7:1
23 X 30.43	700	Duplex with Suites	No issues.	29% 32%	0.6:1
17.65 X 27.1	476	Small Duplex with Suites	Corner lot. Encroaches 0.65m into front or rear yard. No space for parking. If placed sideways total 4m encroachment into front or rear yard.	33% 36%	0.7:1
17.65 X 27.1	476	One Bedroom Fourplex	Corner lot. Encroaches 0.65m into front or rear. No space for parking. Reducing front or rear yard setback to allow for 5 parking spaces.	35% 38%	0.7:1
18.28 X 36.57	667	One Bedroom Fourplex	Corner lot. Only 5 parking spaces, can fit parking in rear of building.	25% 27%	0.5:1

[4] Note second calculation of parcel coverage provides a small allowance for decks etc.

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[4]	FSR
18.28 X 36.57	667	Narrow Two Bedroom Fourplex	Corner Lot. 0.6m encroachment into front or rear yard.	25% 28%	0.5:1
18.28 X 36.15	663	Two Bedroom Fourplex	Lane access. Side yard setback encroachment 0.62. Requires parking to be split between front and rear. 5 parking spaces can fit in rear.	27% 29%	0.53:1
20.6 X 33.18	680	Two Bedroom Fourplex	No issues. Reducing side yard to 1.5m would allow parking in rear.	26% 28%	0.51:1
20.2 X 28.9	583	One Bedroom Fourplex	Placed sideways. Only 6 parking spaces.	28% 31%	0.56:1
20.2 X 28.9	583	Small Duplex with Suites	Side yard encroachment of 0.86m.	27% 31%	0.54:1
21 X 35	735	Duplex with Suites	No issues.	28% 30.4%	0.57:1

R3-S

- Parking an issue in all cases.
- Approaching or encroachments into side and front/rear setbacks in some cases.
- Approaching or over parcel coverage in several cases.
- FSR is over maximum in all cases.

R3-S -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[5]	FSR
11.5 X 28.26	325	One Bedroom Fourplex	Only 3 parking spaces. Length is tight considering parking.	41% 46%	0.81:1
11.5 X 28.26	325	Triplex	Only 3 parking spaces.	24%	0.73:1

[5] Note second calculation of parcel coverage provides a small allowance for decks etc.

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[5]	FSR
			Basement required to stay below maximum height.		
11.8 X 35	413	Small Fourplex	Only 3 parking spaces.	32% 36%	0.64:1
11.5 X 30.4	350	Tiny Fourplex	1.25m encroachment into side yard. Only 3 parking spaces.	33% 38%	0.66:1
11.5 X 30.4	350	Small Fourplex	Only 3 parking spaces.	38% 43%	0.76:1
Width 8 (front) 27.7 (rear) X 34	600	One Bedroom Fourplex	Cul-de-sac, pie shaped lot Building placed sideways. Only 4 parking spaces.	27%	0.54:1

R3-CH

- Recommend merging with R3 zone (except for Gilana Place) as main provisions are similar.
- Encroachments into front/rear setbacks in many cases.
- Parking an issue in most cases.
- Driveway width maximum an issue.
- FSR is over maximum in one case.

R3-CH -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[6]	FSR
14.94, 47.75	714	Narrow Two Bedroom Fourplex	Shares driveway with neighbouring parcel. 0.65m encroachment into front or rear yard. Only 5 parking spaces.	23%	0.47:1
14.94, 47.75	714	One Bedroom Fourplex	1.76m encroachment into side yard. Only 5 parking spaces.	23%	0.46:1

[6] Note second calculation of parcel coverage provides a small allowance for decks etc.

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[6]	FSR
16.5, 37.9	625	One Bedroom Fourplex	0.84m encroachment into front or rear yard. Only 5 parking spaces. Driveway wider than permitted.	27% 29%	0.52:1
16.5, 37.9	625	Small Duplex with Suites	Placed sideways. 2.66m encroachment into front or rear yard.	25% 28%	0.5:1

R3-N

- Recommend merging with R3 zone as main provisions are similar.
- Parking an issue.
- Driveway width maximum an issue.
- FSR is approaching or over maximum in one case.

R3-N -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage	FSR
15 X 41.66	625	Narrow Two Bedroom Fourplex	Only 4 parking spaces. Driveway too wide.	27%	5.3:1
15 X 33.33	500	One Bedroom Fourplex	Lane access. Only 5 parking spaces.	33%	0.65:1

CD1 – Area 1

- See also R-2 model (similar zone)
- Parking an issue in one case.
- Side yard encroachment in one case.
- Approaching or over parcel coverage.
- FSR is over maximum for both.

CD1 – Area 1 -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[7]	FSR
18, 33.33	600	Two Bedroom Fourplex	Only 5 parking spaces.	29% 32%	0.58:1
18, 39	760	Duplex with Suites	Slightly pie shaped towards the back. Encroaches into side yard by 0.9m.	27% 29.5%	0.55:1

CD4

- Parking an issue in all but one case.
- Driveway width maximum an issue.
- Small side yard encroachment in one case.
- Encroachments into front/rear setbacks in two cases.
- Approaching or over parcel coverage in one case.
- FSR is over maximum in all but one case.

CD4 -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[8]	FSR
12 X 27.1	325	Triplex	Requires 0.9m encroachment into rear setback to allow 3 parking spaces. Basement required to stay below maximum height.	33%	0.97:1
12 X 27.1	325	Tiny Fourplex	0.75m side yard encroachment. Only 3 parking spaces.	36% 41%	0.71:1
12 X 27.1	325	Small Fourplex	Requires 1.5 m encroachment into rear setback to allow for 3 parking spaces.	41% 46%	0.81:1
11.7 X 35	410	Triplex	Basement required to stay below maximum height.	26%	0.77:1

[7] Note second calculation of parcel coverage provides a small allowance for decks etc.

[8] Note second calculation of parcel coverage provides a small allowance for decks etc.

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[8]	FSR
11.7 X 35	410	Small Fourplex	Only 3 parking spaces.	33%	0.65:1
18 X 29	468	Tiny Fourplex	Lane access and corner. Only 5 parking spaces.	25%	0.5:1

CD5

- See also R3 zone. Zone identical but allows modular construction.
- Driveway width maximum may be an issue.
- Reduced front or rear yard setback would allow parking.
- Approaching parcel coverage and over FSR for smaller parcel.

CD5 -Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage[9]	FSR
22.5, 22.5	506	Small Duplex with Suites	Lane access. 0.85m encroachment into rear to allow for parking. Exceeds max driveway width.	31% 34%	0.62:1
33.5, 29	971	Two Bedroom Fourplex	Lane access and panhandle (parcel size excludes panhandle). No issues.	18%	0.36:1

CD12

- Parking an issue in some cases.
- Over parcel coverage maximum for smaller parcel.
- FSR is over maximum in all but one case.

CD12 -Model:

[9] Note second calculation of parcel coverage provides a small allowance for decks etc.

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage [10]	FSR
25.6 X 45.43	804	Two Bedroom Fourplex	No issues.	22%	0.44:1
19 X 34	650	Two Bedroom Fourplex	Corner. Only 5 parking spaces.	27%	0.54:1
15 X 33.33	500	One Bedroom Fourplex	Only 4 parking spaces.	33% 36%	0.65:1
15 X 40	600	One Bedroom Fourplex	Only 4 parking spaces.	27%	0.54:1
13.5 X 44.45	600	Narrow Two Bedroom Fourplex	Lane. Parking must be divided into two spots.	28%	0.56:1

CD18 – Area 1

- Parking an issue in most cases.
- FSR is over maximum in one case.

CD18 – Area 1 - Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage [11]	FSR
18.28 X 36.1	660	Two Bedroom Fourplex	Only 4 parking spaces.	27%	0.53:1
19.10 X 36.64	700	Two Bedroom Fourplex	Corner. Parking must be divided into two spots.	25%	0.5:1
15 X 43.33	650	One Bedroom Fourplex	Only 4 parking spaces.	25%	0.42:1

CD18 – Area 2

- Parking an issue in all cases.
- Approaching front/rear setbacks in all cases.

[10] Note second calculation of parcel coverage provides a small allowance for decks etc.
[11] Note second calculation of parcel coverage provides a small allowance for decks etc.

- FSR is over maximum for all.

CD18 – Area 2 -Model:

Parcel Dimensions (m)	**Parcel size (m^2)**	**Sample Development**	**Notes**	**Parcel Coverage** [12]	**FSR**
11 X 29.55	325	Small Fourplex	Only 3 parking spaces. Tight to front/rear setback.	41% 46%	0.81:1
11 X 29.55	325	Triplex	Only 3 parking spaces. Tight to front/rear setback. Requires basement to stay below minimum height.	32%	0.97:1
15.2 X 29.68	459	One Bedroom Fourplex	Only 4 parking spaces. Tight to front/rear setback.	36% 39%	0.71:1
20 (front) 12.42 (back) X 29.85	491	One Bedroom Fourplex	Only 5 parking spaces. Tight to front/rear setback.	33%	0.66:1

CD20

- Front/rear yard encroachment in one case.
- Parking an issue for both.
- FSR is over maximum for both.

CD20 -Model:

Parcel Dimensions (m)	**Parcel size (m^2)**	**Sample Development**	**Notes**	**Parcel Coverage** [13]	**FSR**
10 X 27.5	275	Triplex	1m encroachment into rear yard to allow for 3 parking spaces. Requires basement to stay below minimum height.	38% 44%	1.14:1

[12] Note second calculation of parcel coverage provides a small allowance for decks etc.

[13] Note second calculation of parcel coverage provides a small allowance for decks etc.

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage [13]	FSR
10 X 27.5	275	Small Triplex	Only 3 parking spaces. Requires basement to stay below minimum height.	29%	0.86:1

Parcels under 280m^2 in the R3 Zone

- Variances required for all.
- FSR over for all.

Under 280m^2 R3 - Model:

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage [14]	FSR
9.5 X 18.32	174	Small Triplex	Fits with variances for setbacks and parking.	45% 54%	0.9:1
15.62 X 25.09	196	Small Triplex	Triangle shaped parcel. Fits with variances for setbacks and parking.	40% 48%	1.2:1
11.36 X 24.65	279	Small Triplex	2m rear setback encroachment to fit 3 parking spaces.	28% 34%	0.84:1

Townhouses

- Encroachment into side setback for two cases. Reducing side setbacks increases options in larger parcel zones.
- Parcel coverage approaching or over for three cases.
- FSR over for all.

Townhouses Model:

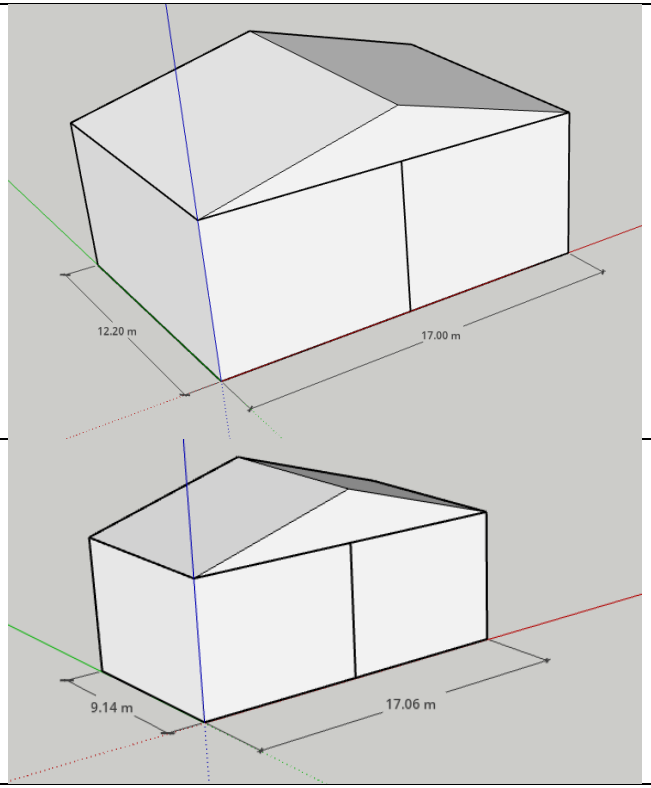
[14] Note second calculation of parcel coverage provides a small allowance for decks etc.

Parcel Dimensions (m)	Parcel size (m^2)	Sample Development	Notes	Parcel Coverage [15]	FSR
30 X 58.33	1,750	Townhouse	R1 Zone. 1.2m encroachment into side setback.	19%	0.58:1
21.44 X 42.63	894	Small Townhouse	Corner lot. No issues.	25%	0.5:1
21.44 X 42.63	894	Townhouse	Corner lot. 0.86 encroachment into side yard to allow 5.8m setback to garage entrance.	38% 40%	1.14:1
18.28 X 36.57	667	Small Townhouse	Corner lot. No issues.	33%	0.66:1
19 X 34	650	Small Townhouse	Corner lot. No issues.	34%	0.68:1

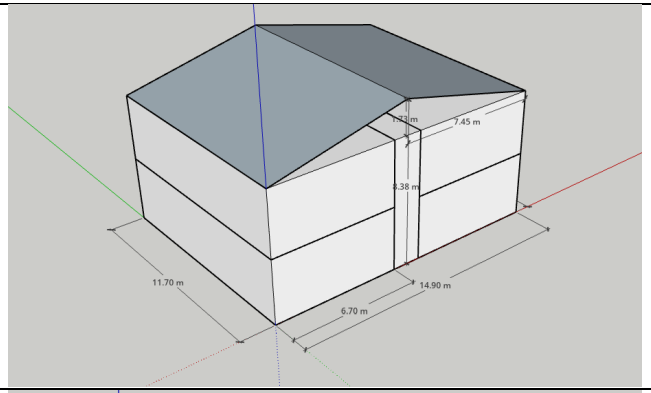
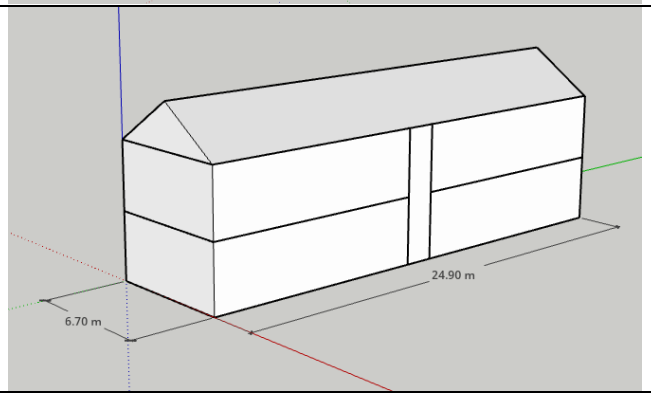
[15] Note second calculation of parcel coverage provides a small allowance for decks etc.

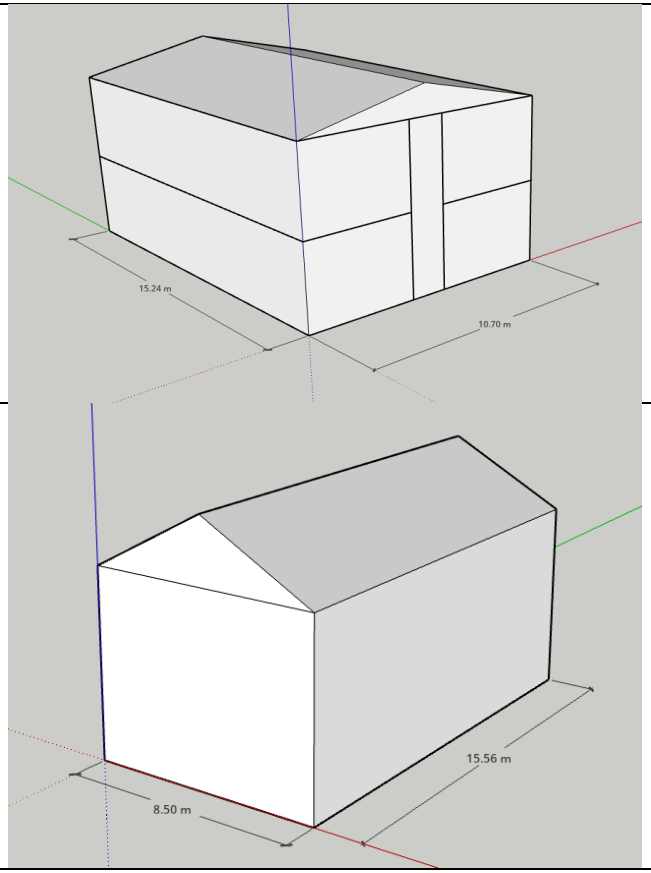
Appendix 2: Sample Developments

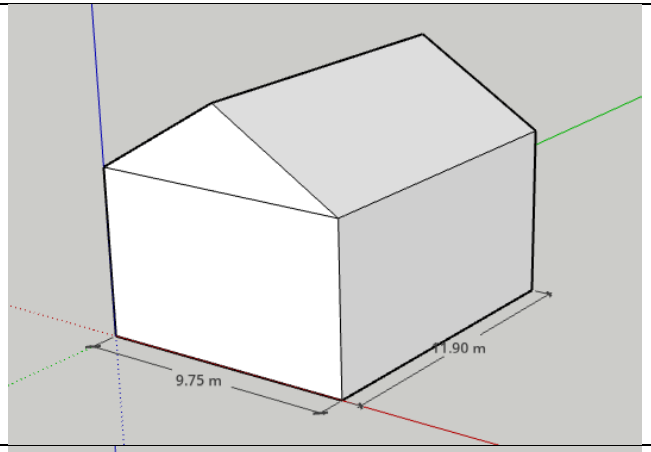
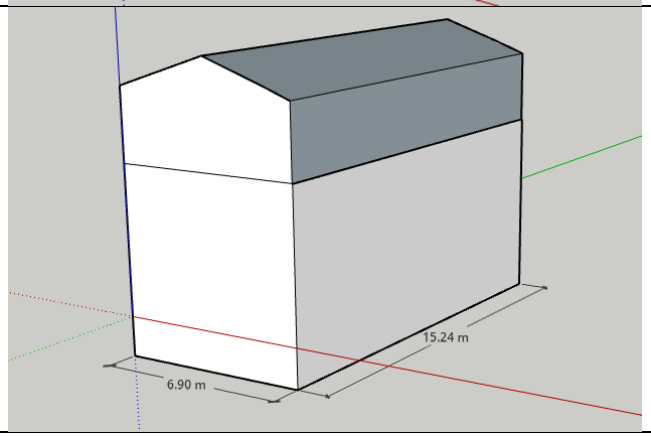
Duplex with Suites

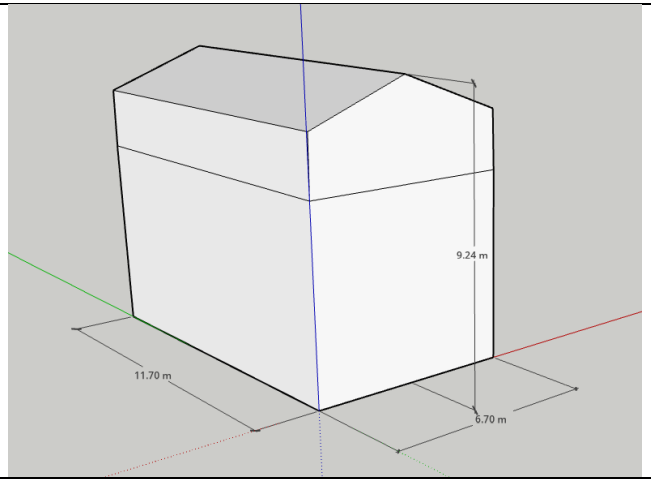
Name	Basis	Total Dimensions & Footprint	Unit Type	Unit Dimensions & Footprint	Image
Duplex with Suites	Building permit for duplex on 822m^2 parcel	17m X 12.2m = 208m^2	Main: 2-3 bedrooms (104m^2) + 1 car garage. Suite: 2 bedrooms (78m^2)	8.5 X 12.2 m = 104m^2 per storey on each side.	
Small Duplex with Suites	Downstairs is sized for a tiny suite + 1 car garage.	17.1m X 9.14m = 156m^2	Main: 2 bedrooms (78m^2) + 1 car garage Suite: studio (43m^2)	8.53m X 9.14m = 78m^2 per storey on each side.	

Multiplexes

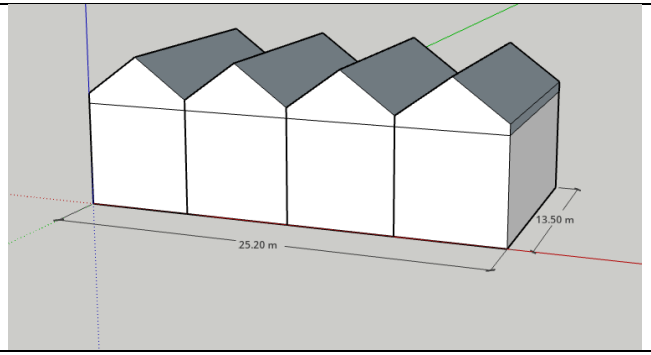
Name	Basis	Total Dimensions & Footprint	Unit Type	Unit Dimensions & Footprint	Image
Two Bedroom Fourplex	2-bedroom units stacked X 2 with 1.5m hallway	11.7m X 14.9m = 175m²	2-bedroom	11.7m X 6.7m = 78m² per unit	
Narrow Two Bedroom Fourplex	2-bedroom units stacked lengthwise X 2 with 1.5m hallway	6.7m X 24.9m = 167m²	2-bedroom	11.7m X 6.7m = 78m² per unit	

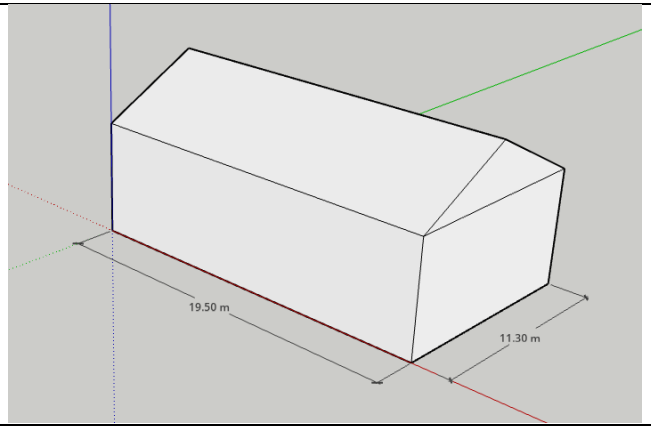
Name	Basis	Total Dimensions & Footprint	Unit Type	Unit Dimensions & Footprint	Image
One Bedroom Fourplex	1-bedroom units stacked X 2 with 1.5m hallway	10.7m X 15.2m = 163m²	1-bedroom	4.6m X 15.2m = 70m² per unit	
Small Fourplex	Sized based on building envelope in R3-S zone.	8.5m X 15.6m= 132m²	Small 1-bedroom	8m X 6.5m = 52m² per unit.	

Name	Basis	Total Dimensions & Footprint	Unit Type	Unit Dimensions & Footprint	Image
Tiny Fourplex	Plan from internet	9.8m X 11.9m= 116m2	Small 1-bedroom	4.3m X 11m = 47m2.	
Triplex	Sized to allow Spacious one bedroom on top storey inset into roof pitch.	6.9m X 15.2m = 105m^2	Two-bedrooms on first two floors and One-bedroom on top storey	One unit per storey for three storeys.	

Name	Basis	Total Dimensions & Footprint	Unit Type	Unit Dimensions & Footprint	Image
Small Triplex	Based on 2 bedroom unit size on ground storey.	6.7X11.5m = 78.4m2	Small two-bedrooms on first two floors and Small 1-bedroom on top storey.	One unit per storey for three storeys.	

Townhouses

Name	Basis	Total Dimensions & Footprint	Unit Type	Unit Dimensions & Footprint	Image
Townhouse	Recent/local 5-unit townhouse	25.2m X 13.5m = 340m^2	Townhouse with 1 car garage	6.3m X 13.5m = 85m^2 per storey	

Small Townhouse	Plan from internet	19.5m X 11.3m = 221m^2	Two-bedroom townhouse without garage	4.7m X 8.2m = 38.5m^2 per storey.	

Individual Unit Sizes:

	Basis	**Unit Dimensions and Footprint**
2 Bedroom	Typical floorplan from internet (can accommodate 2 or 3 bedrooms).	11.7m X 6.7m = 78m^2 (840 sq. ft.)
Spacious 1 Bedroom	Modular unit from local builder.	15.24m X 4.6m = 70m^2 (750 sq. ft.)
Studio/Small 1 Bedroom	Typical floorplan from internet.	(500 sq. ft.)