

Building Height Analysis

Maximum Building Height Comparison and Background

The RS - Small Scale Residential Zone is intended to allow for a range of small scale housing forms, such as single detached housing, semi-detached housing, row housing and multi-unit housing up to three-storeys in height. The RS Zone primarily replaced four low density residential zones that applied to sites within the redeveloping areas¹ of the city: RF1 - Single Detached Residential Zone, RF2 - Low Density Infill Zone, RF3 - Small Scale Infill Development Zone, and RF4 - Semi-detached Residential Zone.

Some sites within the redeveloping areas were located within the Mature Neighbourhood Overlay (MNO). The MNO modified the regulations of the underlying zones, including a more restrictive maximum height. The table below provides a comparison of the maximum height that applied to sites zoned RF1 - RF4 under the previous Zoning Bylaw 12800 to the current RS Zone and the RSF - Small Scale Flex Residential Zone.

Table 1 - Maximum Building Height Comparison

Previous Zoning Bylaw 12800		Zoning Bylaw 20001	
Maximum Height RF1- RF4 Zones		Maximum Height RS Zone	Maximum Height RSF Zone
Inside the MNO	Outside the MNO		
8.9 m	10 m	10.5 m	12 m

Increasing the maximum height to 10.5 m in the RS Zone was intended to better accommodate three-storey developments, address building design considerations, and better align with height allowance for small scale development in the developing areas² of the city, where the RSF Zone is generally applied.

¹ Redeveloping areas consist of any neighbourhood that is fully developed and has opportunities for redevelopment. This area is generally defined as lands within Anthony Henday Drive.

² Areas of the city that are undeveloped with vacant land. This area is located primarily outside Anthony Henday Drive but does not include the Future Growth Area as identified in the City Plan.

The maximum 10.5 m height was determined based on several building design considerations:

- **Taller Floor-to-Ceiling Heights:** To meet market preferences, the design includes a 10 ft. main floor, a 9 ft. second floor (allowing for 8 ft. clearance under HVAC bulkheads), and a more functional third floor.
- **More Livable Basements:** Taller basements were desired to accommodate larger windows above ground level, improving access to natural light for secondary suites.
- **Utility Responsiveness:** Greater flexibility to address development challenges and costs associated with shallow utilities as basement depth could be matched to the shallow utility depth, helping to avoid the need to install lift stations to pump wastewater to the municipal sewer system.
- **Roof Insulation:** To accommodate a higher heel height for required roof insulation.

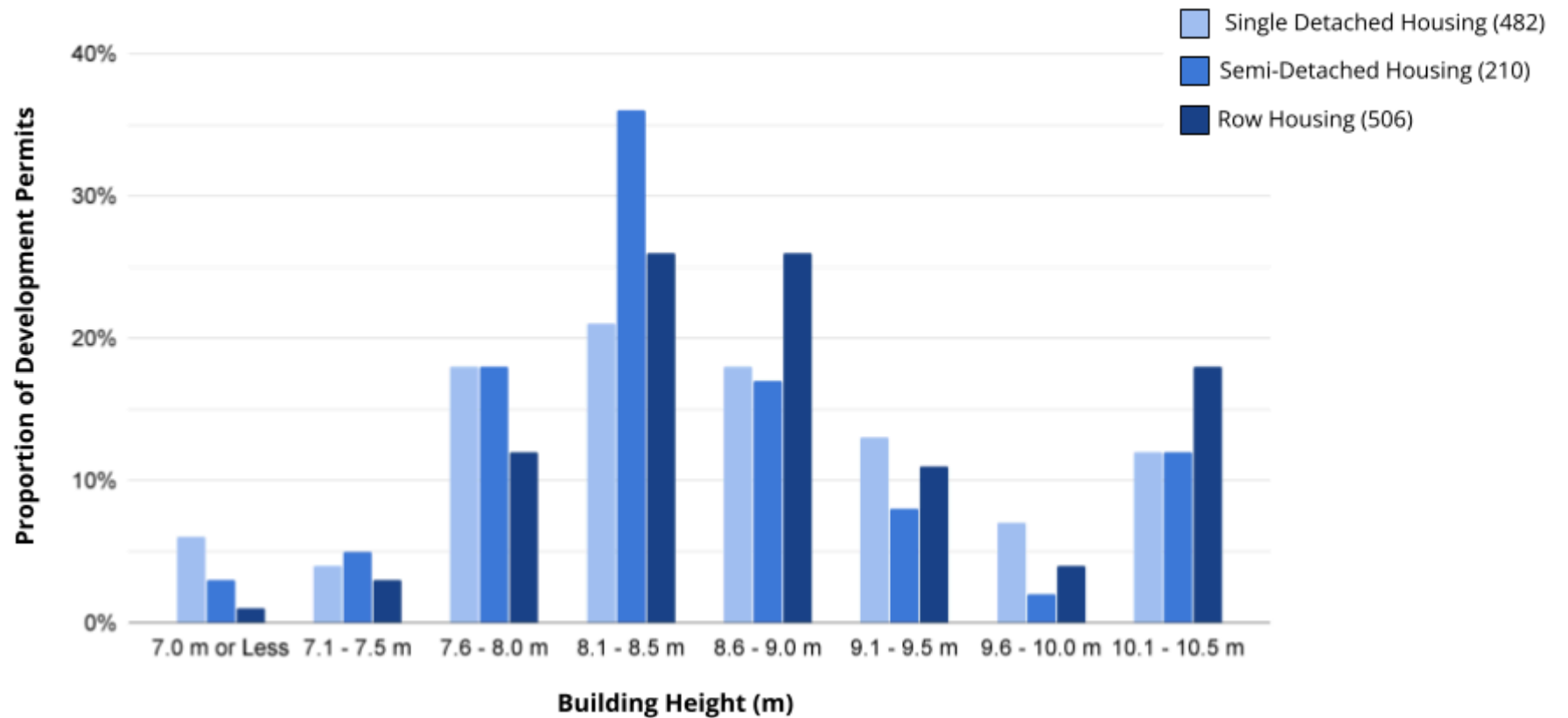
To provide additional flexibility in building design and for taller basements, Zoning Bylaw 20001 retired the maximum 1.5 m basement elevation requirement from the MNO. This change led to taller main floor heights for some two-storey developments, which may account for the perceived increase in the overall maximum height within the RS Zone.

Zoning Bylaw 20001 introduced minor adjustments to simplify how height and grade are calculated. However, the primary method of measuring height based on the vertical distance from the mid-point of the roofline to the average elevation at the corners of the site, prior to construction, has not changed from Zoning Bylaw 12800.

Distribution of Building Height Based on Housing Type

An analysis of development permits issued between January 1, 2024 and November 28, 2025 in the RS Zone reveals that approximately 80 per cent of single detached, semi-detached and row housing developments had a height of 9.5 m or less. During the same time period, 26 development permits were issued for multi-unit housing in the RS Zone. Due to the small sample size, multi-unit housing is not represented in Graph 1. However, 65 per cent of the multi-unit housing developments had a height greater than 9.5 m, suggesting that lowering the maximum height of the RS Zone could disproportionately impact multi-unit housing development.

Graph 1 - Height Distribution in the RS Zone by Housing Type: January 2024 - November 2025



Height Associated with Three-Storey Development

Based on a sample of row housing and multi-unit housing developments approved under the RS Zone between January 1, 2024 and November 28, 2025, three-storey row houses and multi-unit houses tend to be greater than 10 m in height. This data suggests that lowering the maximum height to less than 10 m could have a greater impact on three-storey developments.

Table 2 - Row Housing Height by Number of Storeys in the RS Zone: January 2024 - November 2025

Number of Storeys	Row Housing Development Permits with a Height of 9 m or Greater		
	9 - 9.4 m Height	9.5 - 9.9 m Height	10 m + Height
Two-Storeys	67	18	3
Three-Storeys	1	6	91

Table 3 - Multi-unit Housing Height by Number of Storeys in the RS Zone: January 2024 - November 2025

Number of Storeys	Multi-unit Housing Development Permits with a Height of 9 m or Greater		
	9 - 9.4 m Height	9.5 - 9.9 m Height	10 m + Height
Two-Storeys	1	2	1
Three-Storeys	1	3	12

However, there are examples of three-storey developments lower than 9 m in height built under the previous Zoning Bylaw 12800 within the MNO, as shown in the figures below. Where three-storey buildings are below 9 m in height, they tend to have below-grade basement windows and shorter floor-to-ceiling heights.

Figure 1 - Multi-unit House



Height: 8.9 m

Figure 2 - Semi-Detached House



Height: 8.5 m

Figure 3 - Single Detached House



Height: 8.9 m

Jurisdiction Scan of Maximum Height Limits in Zones Comparable to the RS Zone

A review of zoning bylaws from six other municipalities, focusing on zones comparable to the RS Zone in terms of housing type and infill context, showed maximum height limits ranging from 8.5 m to 12 m.

Height regulations vary across cities, generally focusing on controlling the size of upper floors or adjusting maximums based on surrounding context. For example, some cities directly limit the size of the third storey: Vancouver restricts the third storey to a percentage of the second floor, while Toronto uses specific wall heights and setbacks to regulate the upper floor. Other cities adjust height maximums based on context: Calgary applies an angular plane to limit height on sites next to lower-density zones, and Saskatoon allows increased height for sites near transit areas and growth corridors. Ottawa currently limits height based on specific sub-zone areas and building type, but is proposing to simplify the maximum height to 11 m in their draft Zoning Bylaw.

Table 4 - Jurisdiction Scan

Municipality	Zone	Maximum Height
Vancouver	R1-1 District	<ul style="list-style-type: none"> • 11.5 m, three-storeys • Third storey cannot exceed 50% of the storey below
	RT-3 District	<ul style="list-style-type: none"> • 10.7 m, three-storeys • Third storey cannot exceed 50% of the storey below
Calgary	RC-G District	<ul style="list-style-type: none"> • 11 m, except where sites are next to other low density zones, height is limited by an 45 degree angular plane up to 11 m (starting at the shared lot line at 7 m above grade or the height of the adjacent building, whichever is greater) • For mid-block sites, limits height to 8.6 m for portions of the buildings within rear 60% of the site or the contextual building depth, whichever is greater • For corner sites, limits horizontal cross-section of upper floor that is at 9.5 m above grade to 75% of the horizontal cross-section of the building between average grade and 8.6 m
	H-GO District	<ul style="list-style-type: none"> • 12 m, except where sites are next to other low density zones, height is limited by an 45 degree angular plane up to 12 m (starting at the shared lot line at 8 m above grade or the height of the adjacent building, whichever is greater)
Calgary (Proposed)	H-1I Zone	<ul style="list-style-type: none"> • 11 m, except where sites are next to other low density zones, height is limited by an 45 degree angular plane up to 11 m (starting at the shared lot line at 8 m above grade) • Third storey cannot exceed 75% of the storey below • For mid-block sites, rear residential buildings are limited to 8.6 m
Saskatoon	R1 District	<ul style="list-style-type: none"> • 8.5 m, except: <ul style="list-style-type: none"> ○ 10 m in Transit Development Areas (TDA) and Corridor Growth Areas (CGA), and on corner sites outside of CGA
	R1A District	<ul style="list-style-type: none"> • 10 m, except: <ul style="list-style-type: none"> ○ 8.5 m in established neighbourhoods (outside of the CGA, and on mid-block sites in TDA)
	R1B District	<ul style="list-style-type: none"> • 9 m, except: <ul style="list-style-type: none"> ○ 8.5 m in established neighbourhoods ○ 10 m in CGA, and on corner sites in TDA

	R2 District	<ul style="list-style-type: none"> • 10 m, except: <ul style="list-style-type: none"> ○ 8.5 m in established neighbourhoods ○ 10 m in CGA, and on corner sites in TDA
Winnipeg	R1-S Zone	<ul style="list-style-type: none"> • 10.7 m
	R2 Zone	<ul style="list-style-type: none"> • 10.7 m
Ottawa	R1 Zone	<ul style="list-style-type: none"> • Varies from 8 - 11 m based on sub-zone
	R2 Zone	<ul style="list-style-type: none"> • Varies from 8 - 11 m based on building type and sub-zone
	R3 Zone	<ul style="list-style-type: none"> • Varies from 8 - 11 m based on building type and sub-zone
Ottawa (Proposed)	N1-N3 Zones	<ul style="list-style-type: none"> • 11 m
Toronto	R Zone	<ul style="list-style-type: none"> • 10 m or the height identified in the Height Overlay Map, where applicable • Maximum number of storeys identified in the Height Overlay Map, where applicable • Additional regulations limit wall height (dependent on maximum height and lot width) • Restrictions for steeper roof pitches above the second storey • Upper floor stepback requirements for buildings with flat and shallow roofs (applies to portion of building that exceed maximum wall height)

Reducing Height Impacts on Neighbours

Administration is proposing to reduce the maximum building height from 10.5 m to 9.5 m to reduce height impacts on adjacent neighbours in the RS Zone. Considerations that informed the proposed change include:

- Maximum building heights permitted under the previous Zoning Bylaw 12800.
- Complexity of implementing the proposed change.
- Reducing the visual massing from neighbouring sites and the street.
- The ability to accommodate three-storey development with basement windows slightly above grade.

Administration also considered other regulations in the RS Zone that help reduce the overall scale and perception of

massing of buildings, including minimum setbacks, maximum site coverage, maximum building length and minimum facade articulation requirements. Recent amendments were made to the RS Zone to further reduce the size and scale of buildings, including:

- Maximum building length on mid-block lots reduced to 50% of lot depth or 25 m, whichever is less.
- Minimum side setback increased to 1.9 m if an entrance faces an interior side lot line.
- Minimum articulation requirements, regardless of wall length for front and side walls of row housing and multi-unit housing to minimize perceived massing, eliminate large blank walls, and to add visual interest.

To facilitate a comparison, the modelling below illustrates the proposed change next to what is currently permitted under existing regulations and a one-storey bungalow. The lot size for each site is 15 m wide and 45 m deep. Current and proposed buildings shown have a length of 22.5 m (50 per cent of the lot depth), a 4.5 m front setback, 1.2 m side setbacks, an 18 m rear setback, and 42 per cent site coverage.

Figure 4 - Front View - Flat Roof Maximum Height 9.5 m

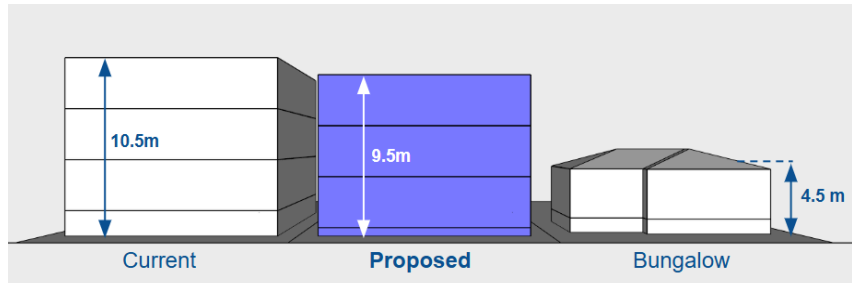


Figure 5 - Front View - Pitch Roof Maximum Height 9.5 m

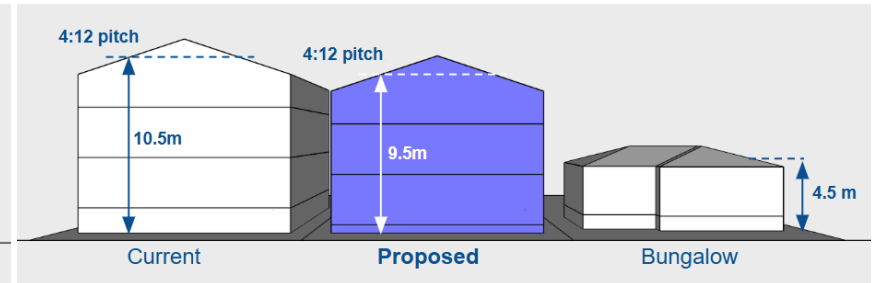


Figure 6 - Perspective - Flat Roof Maximum Height 9.5 m

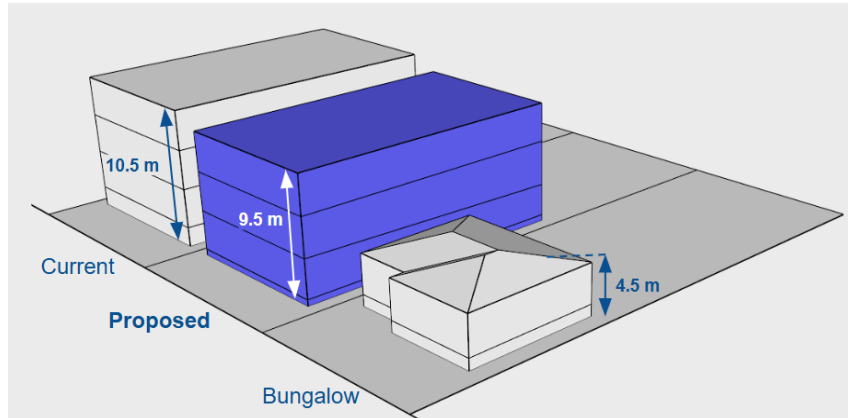


Figure 7 - Perspective - Pitch Roof Maximum Height 9.5 m

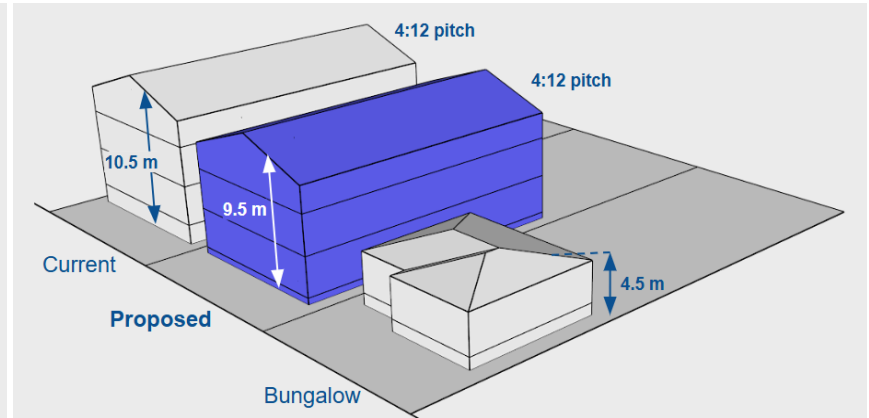


Table 4 - Benefits and Trade-offs

Benefits	Trade-offs
<ul style="list-style-type: none"> • Less complex to implement • Reduces overall building height and mass while still allowing for three-storey development • May result in more 2 storey developments and reduce overlook (fewer storeys containing windows) 	<ul style="list-style-type: none"> • Lower height than what was allowed under previous RF1 - RF4 Zones outside the MNO (10 m) • May require lower floor-to-ceiling heights and lower basements to achieve three-storeys • Might result in dormers to make a third storey more functional • Three-storey developments will likely result in fewer basement windows above ground and basement suites with less access to natural light • May make it more challenging to address shallow utilities to achieve three-storey development with basements • Will result in legal non-conforming buildings that have been approved over 9.5 m in height