

Visual Enhancement of Zoning Bylaws

by Michael von Hausen & Gloria Venczel

An important, but often overlooked, challenge facing planners is to ensure that their community's zoning bylaws or ordinances can be readily understood by applicants and by the general public.¹ At the same time, zoning bylaws must be detailed and thorough enough to cover a multitude of situations, and must be capable of being effectively enforced.

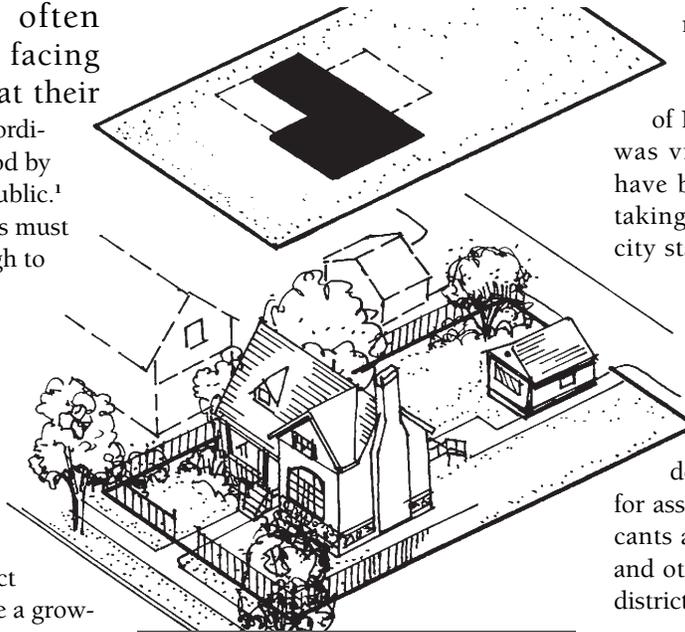
As most planners come to realize, in trying to balance the need for simplicity and comprehensiveness, zoning bylaws present a demanding form of communication. Further compounding the problem is the fact that many communities include a growing number of immigrants and residents whose second language is English.

One way to deal effectively with this challenge is to add illustrations to the zoning bylaw without changing the wording of the provisions themselves. A related option is to supplement the zoning ordinance with public information sheets that can both illustrate and explain various sections of the ordinance.

This article will explore both of these techniques through the experience gained in the recent zoning bylaw graphic enhancement process for the City of New Westminster in British Columbia.

¹ For purposes of this article, we use the term "zoning bylaw" to describe what, in your community, may be called the zoning ordinance or zoning code.

² In our research, we found that a number of communities have incorporated graphic examples in their design guidelines, but not in their zoning ordinances. The City of Cambridge, Massachusetts, however, does have well developed graphical representations of several requirements in its zoning code. Peter Calthorpe and Andres Duany, noted "New Urbanists," have also developed some innovative graphic systems to represent the zoning requirements in some of the more recent New Urbanist communities (for example, Calthorpe's *Orlando Naval Training Center Re-Use Design Standards* and Duany's *Zoning Code for the Town of Seaside, Florida*).



THE GOAL OF GRAPHIC ILLUSTRATIONS IS TO CLARIFY THE WRITTEN LANGUAGE OF THE ZONING BYLAW.

BACKGROUND

In June 2002, New Westminster became one of the first local governments in North America to *systematically* incorporate illustrations into an existing zoning bylaw.² The integration of a series of visual enhancements into the bylaw was the result of work we did with the city's planning staff, followed by feedback from a number of individuals, including residents, architects, and builders.

One of the key goals of the project was to improve the clarity of the zoning bylaw for applicants and the general public. To achieve this goal, we set out to provide a master graphic format for easier reference and so that applicants and others could better understand multiple

requirements often found in single sections of the zoning bylaw. Not every portion of the City of New Westminster's zoning bylaw was visually enhanced. That would have been an extremely costly undertaking. Instead, after discussions with city staff, we decided to focus on four residential and two commercial districts – districts which had received the most frequent inquiries from small project builders and other applicants. Planning staff had often had to deal with time consuming requests for assistance from inexperienced applicants about dimensional, lot coverage, and other requirements in these zoning districts.

DEVELOPING THE VISUAL ENHANCEMENTS

A four-step process was used to develop custom graphics for these zoning districts.

- 1. Background Study.** As already noted, we first did background research on graphic formats in zoning bylaws and ordinances elsewhere.
- 2. Clarification.** The second step involved our gaining a precise understanding of the wording of the zoning bylaw text for each of the zoning districts to be illustrated. This was essential in order to ensure that the graphics would accurately communicate the objectives of the zones and the desired results. We used photographs of houses and commercial projects in these districts in our discussions with city staff. These photos also became a basis for sketches that were used in developing the final graphics.
- 3. Custom Character Graphics.** The third step involved preparation of the actual illustrations specific to the six zoning districts. The illustrations took

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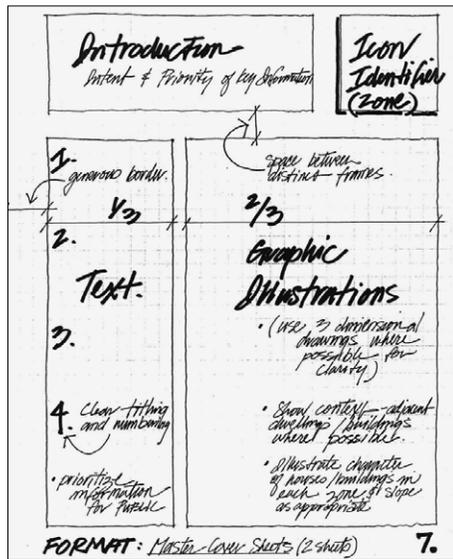


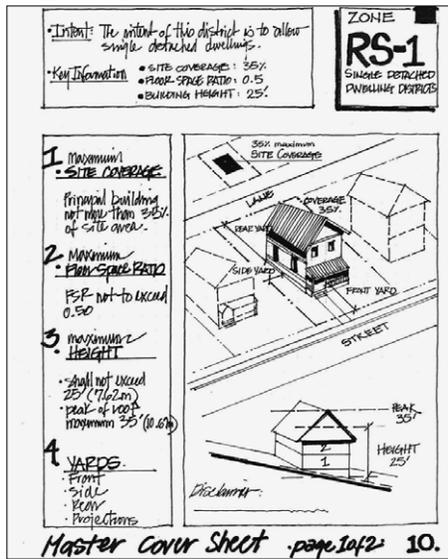
Illustration 2. Master format for the RS-1 district.

into account the particular characteristics and architectural values of the neighborhood that the zone addressed. These local characteristics were then hand drawn in two and three-dimensional illustrations depicting height, site coverage, and yard requirements, including garages, fences, decks, and other site planning elements.

4. Visual Analysis / Page Layout. The fourth step was the visual analysis of the zoning district's text and format. First, we reformatted the layout of the zoning bylaw text for greater visual clarity and to more effectively relate to the new graphic material. Again, this did not involve any changes to the text of the zoning bylaw. *Illustration 2* shows the master format

“The project to include graphics in New Westminster’s Zoning Bylaw represents a major step forward toward making zoning regulations more widely accessible and understandable to all those people who wish to do their own home renovations, or are building their own homes. It is part of our ongoing efforts to review and update our regulations to cut red tape where we can.”

— Helen Sparkes, Mayor of the City of New Westminster.



for the RS-1 (single-family detached) residential district. *Illustration 3* shows the zoning bylaw for the C-2, Community Commercial District.

We also prepared a separate series of information sheets containing graphics and a condensed explanation of the district's zoning requirements. These information sheets would be available for public distribution to allow for easier understanding of the more technical language employed in the zoning bylaw itself. See *Illustration 4*, showing the information sheet for the RS-1 district.

SOME OBSERVATIONS:

Based on our experience in New Westminster, the following may be helpful to others interested in the idea of visual zoning ordinances:

Leave the Zoning Bylaw Words Intact. Unless you are willing to invest a considerable amount of time in overhauling your zoning bylaw, it is much more straightforward to have the graphic illustrations accompany the existing zoning text, rather than seeking to also modify/amend the text. However, the text can and should be reformatted on each page so that text, diagrams, and white space, are visually in balance.

Develop a Clean and Uncluttered Master Format. A clear message starts with a clear page format. The order of information, bold highlighting, and the use of graphic icons for key zone references, all contribute to overall clarity. We have also found that the use of a ratio of 50 percent

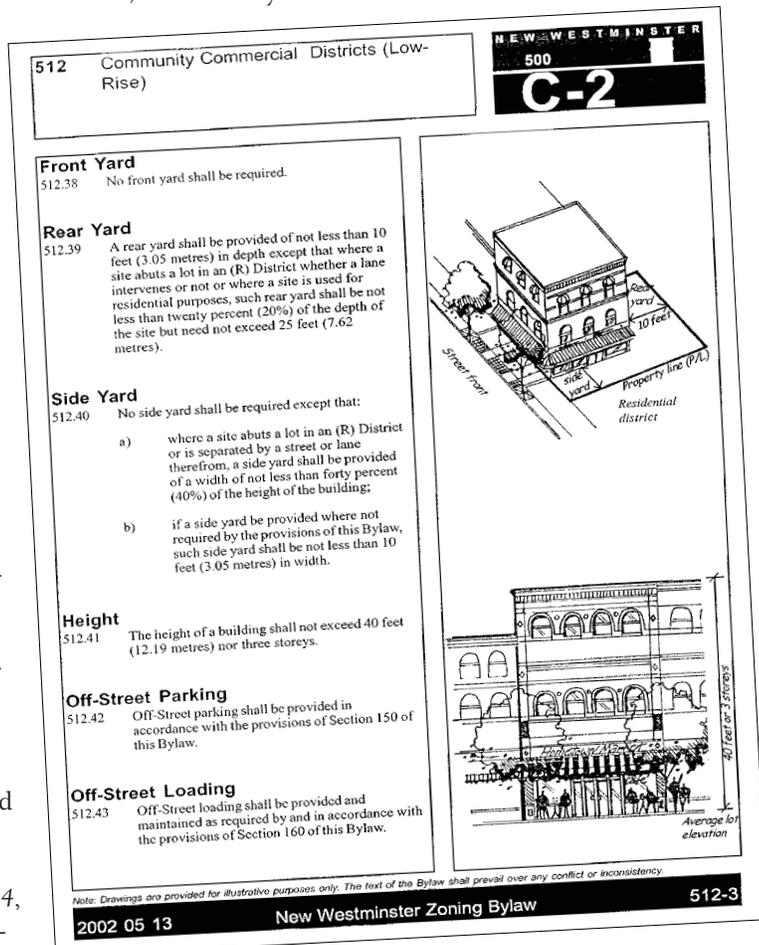


Illustration 3. Zoning bylaw for the C-2, Community Commercial district.

Intent: The intent of this district is to allow single detached dwellings in the Queen's Park, Glenbrooke, Victory Heights and Sapperton neighbourhoods. Secondary suites are allowed if the City's "Requirements for Secondary Suites" are met.

Key Information:
Site Coverage: 35% of lot area
Floor Space Ratio: 50% of lot area
Height: maximum 25 feet to midpoint of roof
maximum 35 feet to peak of roof

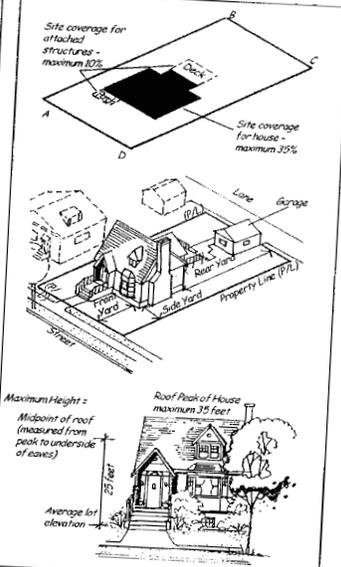


1. SITE COVERAGE
Principal building not to cover more than 35% of lot area. Attached structures (e.g., porches, decks) not to cover more than 10% of lot area.

2. FLOOR SPACE RATIO (FSR)
FSR not to exceed 50% of lot area. FSR means the ratio between the total square footage of all floors of the house (floor space) to the lot size.
Example: $\frac{3,000 \text{ square foot house}}{6,000 \text{ square foot lot size}} = 50\% \text{ FSR}$

3. YARDS
Front Yard: not less than 20% of the site depth but need not exceed 25 feet or the average setback of the two adjacent houses on either side.
Rear Yard: not less than 20% of the site depth but need not exceed 25 feet.
Side Yard: for lots with a frontage of 40 feet or more, side yards of not less than 10%, with any side yard not exceeding 5 feet. For lots less than 40 feet, 4 foot minimum side yards are required.

4. HEIGHT
Building Height: maximum 25 feet.
Roof Peak: maximum 35 feet
Average Lot Elevation = $\frac{\text{Elevation of points A + B + C + D}}{4}$



Note: This is a summary of the zoning schedule only. For additional details, see City of New Westminster Zoning Bylaw No. 6680, 2001.

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Illustration 4. Information sheet for the RS-1 district.

white space to 50 percent graphics can help strike a balance between content and clarity.

Prepare Supplemental Information Sheets. Supplement the zoning bylaw with information sheets available for public distribution separate and apart from the zoning bylaw. For example, the two-page information sheets developed for New Westminster were quite helpful in condensing and explaining the requirements of the several zoning districts. See *Illustration 4* for one page of the RS-1 district information sheets. These information sheets can be reproduced and distributed at a very reasonable cost.

Be Clear But Do Not Oversimplify. While the goal of graphic illustrations is to clarify the written language of the zoning bylaw, this does not mean the illustrations should be overly simple, or drawn as a generic model. Instead, a custom illustration should represent each zone's intentions.

Three Dimensional Illustrations are Most Effective. Three-dimensional hand-drawn illustrations are the most effective

mit applications or inquiries. This will result in a lower cost project, and will yield the most benefits in terms of staff time savings.

SUMMING UP:

The visual enhancement of the City of New Westminster's Zoning Bylaw has created greater clarity for applicants and the general public in understanding zoning requirements. While the wording of the zoning bylaw is not changed by the illustrations (and the text is controlling in court proceedings), the result is expected to save city staff and applicants time in, respectively, explaining and understanding the zoning provisions. Additional user-friendly information sheets, which can be distributed to applicants, clarify the zoning district regulations by summarizing the text and incorporating easy-to-read graphics. While visually enhancing zoning district provisions will not, in and of itself, transform a zoning bylaw into a user-friendly document, it can be one important step in that direction. ♦

technique for illustrating zoning provisions. These drawings will best reflect the unique personality of the neighborhood, while accurately depicting the district's zoning requirements. Three-dimensional illustrations are able to show front and back yard requirements, along with height requirements, in a single drawing. The result is least confusing to most users.

Remember Your Audience. Focus your effort on developing illustrations for those zoning districts that

receive the most per-

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