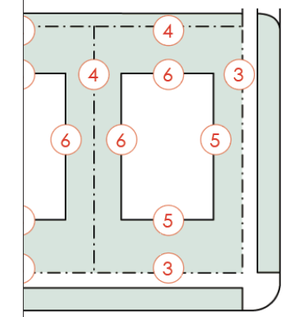
October 25, 2018

	Very Important 2 points	Somewhat Important 1 point	Not Important 0 points	Total	
Building Orientation (ex: where the house has its front)	8	6	0	14	Urban
Building Placement /how far from or close to the street)	8	4	0	12	
Lot Coverage tage of the lot covered by buildings)	12	4	0	16	Lot
Front Yard Paving from driveways, porches, walkways)	10	4	0	14	
nd Garage Placement/Location	2	7	0	9	
Building Mass and Scale	22	0	0	22	Mass
Building Height	18	1	0	19	
Building Articulation ng materials, varying roof lines, etc.)	14	4	0	18	
Home Additions	8	6	0	14	
Porches and Stoops w homes have them? certain styles?)	4	6	0	10	
Roof Styles (architectural design)	2	4	0	6	
Window and Door Types/Styles (architectural desgin)	4	3	0	7	Architecture
Building Material Types	0	6	0	6	

ONS: FRONTAGE & LOT LINES, FAÇADES



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6. **Elevation.** An ext
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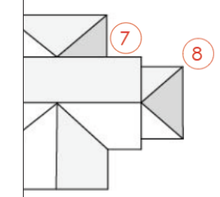
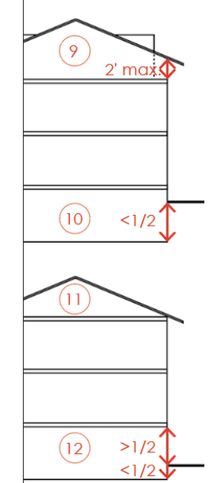
ONS: BUILDING COMPOSITION



7. **Inside Corner**
8. **Outside Corner**

ONS: BUILDING HEIGHT



9. **Half-story.** A story
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10. **Cellar.** That port
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11. **Attic.** The interior
within a pitched r
12. **Basement.** That
the first-floor joists
ceiling height is c
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East Rockville Design Guidelines

Rockville, Maryland

GSA Consulting, Inc. *and* LSG Landscape Architecture *and* Michael Watkins Architect, LLC *for* City of Rockville *and* East Rockville Civic Association

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7. **Final Revisions and Deliverables**

SENT PREVIOUSLY

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   - X1. **Bibliography** .....
   - X2. **Urban Code Sample Pages** .....
     - Code Sample Pages .....
     - SmartCode .....
     - Leander SmartCode .....
     - Cincinnati Form-Based Code .....
     - High River Land Use Bylaw .....
     - Edmonton Mature Neighborhood Overlay .....
     - Westmount Architectural Heritage Area Direct Control .....
     - Character Home Retention Incentive DC District .....
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     - Kentlands Code .....
     - Norfolk Neighborhoods Pattern Book .....
     - Gulf Coast Neighborhoods Pattern Book .....

INTRODUCTION

Applicability

- These design guidelines and standards apply to all new residential detached construction whether an entirely new building or an addition(s) to an existing building. They are a supplement to all applicable City codes, ordinances and adopted plans.
- Any new development within an historic district, or any addition to a structure that has been designated as an historic structure, is subject to approval by the Historic District Commission (HDC).
- Provisions of this document are activated by "shall" when required; "should" when advisory but highly recommended.
- If the provisions of these guidelines and standards conflict with provisions found in other City of Rockville adopted codes, ordinances, or regulations, the provisions in these guidelines and standards control unless otherwise expressly stated.
- Exceptions or variances to these design standards and guidelines may be granted through the appeals process as regulated by the City Zoning Ordinance if: there are site-specific constraints that make it physically infeasible to follow the standards or guidelines; and/or the proposed design maintains the intent and spirit of the standards and guidelines and provides an equal or better design solution in terms of livability for residents and impacts on neighboring properties.

Purpose

The intent of the project is to establish a set of expectations for new and expanded residential detached housing in East Rockville that further strengthens and integrates well into this mature neighborhood. This document provides a predictable review framework for residents, design professionals, contractors, city staff, and elected officials when considering or reviewing a new home or addition.

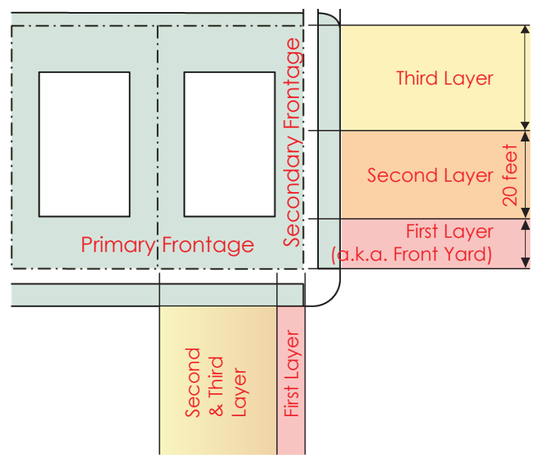
Goals

- Preserve and strengthen the unique and established character of the neighborhood.
- Promote complementary and context sensitive development between new and existing structures, while also allowing creative design.
- Promote site design that preserves the natural features in the neighborhood and minimizes impacts on healthy tree canopy and stormwater management.

Background

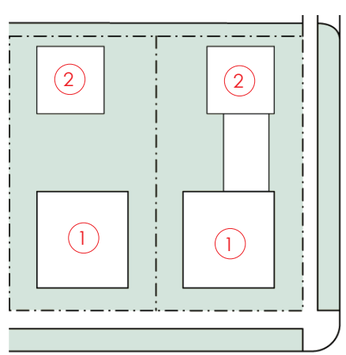
The foundation for this project is the 2004 East Rockville Neighborhood Plan, which recommended the preparation of a guide for new home construction that enhanced both the physical and environmental aspects of the neighborhood. East Rockville is a well-established, predominantly single-family neighborhood located within walking distance of the Rockville Metro Station. Most of the housing stock was built in the 1940s and early 1950s during the development boom that occurred after World War II, however, historic homes dating from the late 1800s, some of the first in Rockville, still stand today. Over the past decade, the neighborhood has experienced increasing development pressure common in transit-proximate, high-cost growth areas. Original homes have been torn down and replaced with much larger structures. Residents have expressed concern about the how the scale and massing of new residential development relates to, and impacts, the established neighborhood, both from the perspective of design and environmental sustainability. This document is in response to those concerns.

DEFINITIONS: LAYERS



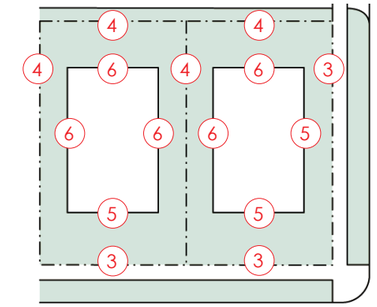
Layer (First, Second and Third). A range of depth of a lot within which certain elements are permitted.

DEFINITIONS: BUILDING DISPOSITION



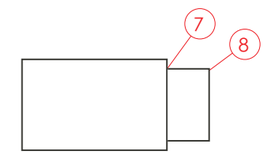
1. **Principal Building.** The main building on a lot, usually located toward the Frontage.
2. **Accessory Building.** A building subordinate to, and located on the same lot with a main/principal building, the use of which is clearly incidental to that of the main/principal building or to the use of the land, and which is not attached by any part of a common wall or common roof to the main building.

DEFINITIONS: FRONTAGE & LOT LINES, FAÇADES & ELEVATIONS

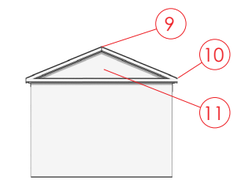


3. **Frontage.** The area between a building Façade and the vehicular lanes, inclusive of its built and planted components. On a corner lot, the primary Frontage is the Frontage which faces the more primary street (typically the street with the narrower Frontage).
4. **Lot Line.** The boundary that legally and geometrically demarcates a Lot.
5. **Façade.** An exterior wall of a building facing a Frontage Line.
6. **Elevation.** An exterior wall of a building not a facing a Frontage Line.

DEFINITIONS: BUILDING COMPOSITION

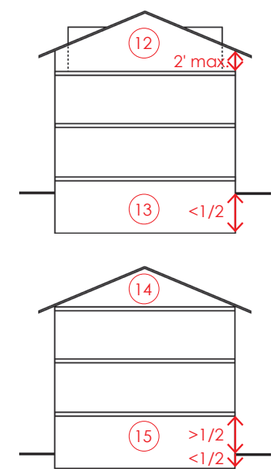


7. **Inside Corner**
8. **Outside Corner**



9. **Ridge**
10. **Eave**
11. **Gable end**

DEFINITIONS: BUILDING HEIGHT



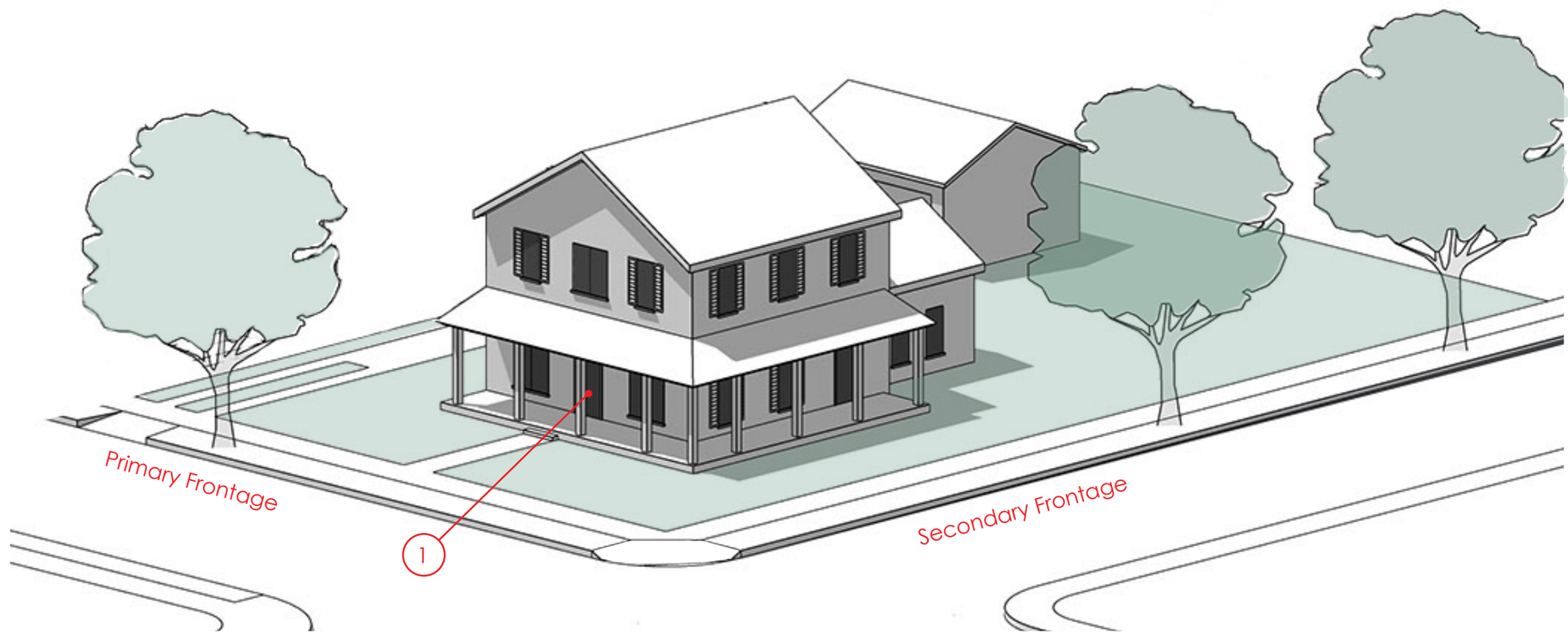
12. **Half-story.** A story under a gable, hip, or gambrel roof, the wall plates of which on the least two (2) opposite exterior walls are not more than 2 feet above the floor of such story.
13. **Cellar.** That portion of a building below the first-floor joists at least half of whose clear ceiling height is below the level of the adjacent ground (compare with Basement).
14. **Attic.** The interior part of a building contained within a pitched roof structure.
15. **Basement.** That portion of a building below the first-floor joists, at least half of whose clear ceiling height is above the level of the adjacent finished grade (compare with Cellar).

BUILDING ORIENTATION (ISSUE 1)

Building orientation refers to the way a building is positioned on its lot and how it relates to neighboring buildings and to the street. Buildings and front entryways that are oriented toward the street establish a welcoming atmosphere along the block and contribute to a walkable environment.

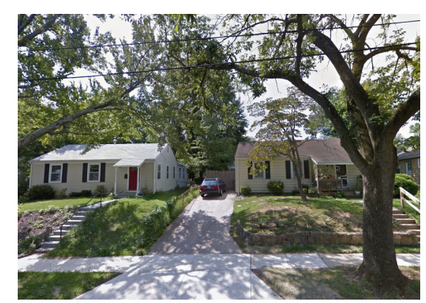
1. The front entrance of the primary building shall face the primary frontage. In the case of an addition or renovation to an existing house, an exception may be made if the design is based on architectural precedent and the entry placement conforms to the historic or original design of the home.

2. On corner lots, both façades shall be similarly designed and detailed and have similar opening proportion, placement, pattern and alignment.



Corner lot, both sides articulated.

Front doors, porches engaging the street.

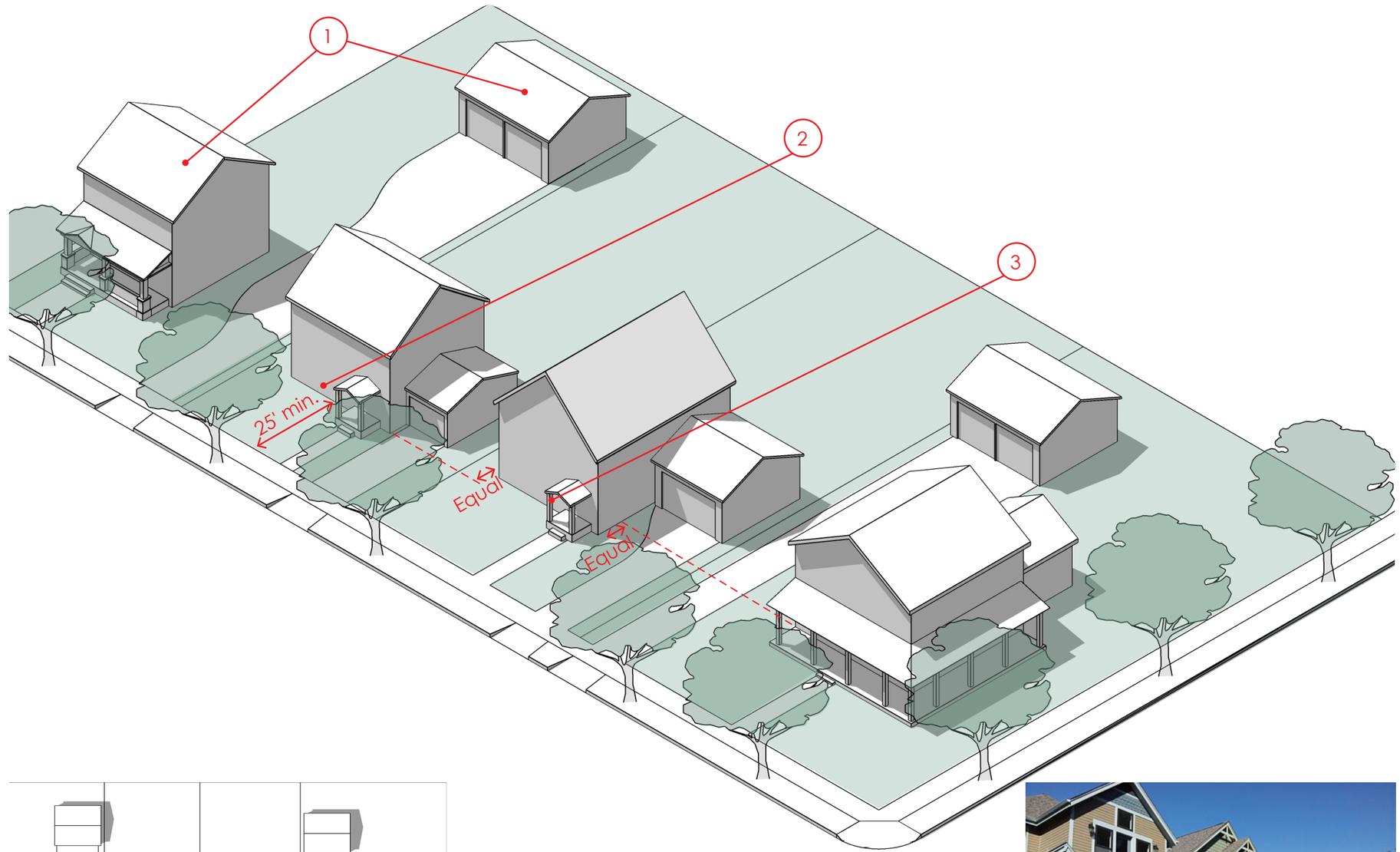

Front walkways connecting to sidewalk.

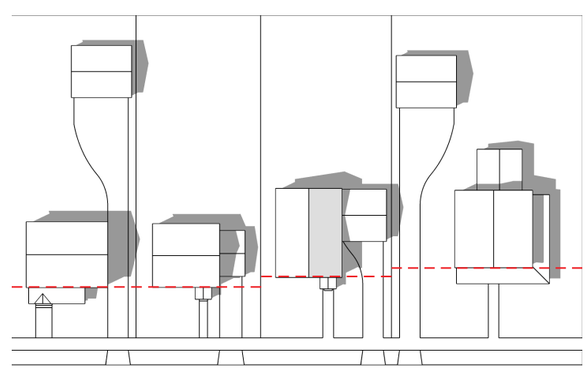
Side entry turned away from the street.

BUILDING PLACEMENT (ISSUE 2)

Maintaining an established setback pattern is a way of preserving neighborhood character. Setbacks may vary slightly, due to topography changes, or to conserve a natural feature, but in general, a consistent front yard appearance should be maintained.

1. One Principal Building may be built at the frontage on each lot. Accessory Buildings to the rear of the principal Building are also permitted.
2. Minimum front setback standards are established by the applicable zoning district: New structures and additions shall be compatible with the prevailing site arrangement, setback distance and orientation of neighborhood houses to reinforce the existing character of the street.
3. Any existing buildings not conforming to an established setback pattern on the block-face shall not be used to determine a setback range.
4. The following may encroach into the required setback: porches (except enclosed porches), stoops, terraces, balconies, bay windows.
5. Façades shall be built parallel to the primary street frontage.
6. Side setbacks for principal Buildings shall be the minimum required by the zoning code.





Plan view of the same block showing setbacks.

Consistent setback pattern.

LOT COVERAGE (ISSUE 3)

As new housing is built, often at a larger footprint than original homes, there is less opportunity for water to be absorbed into the ground and chances of flooding increases. Larger houses are also often accompanied by more paved surfaces, including driveways and walkways, which can exacerbate stormwater issues. Establishing maximum percentages for lot coverage is an effort to better manage stormwater and protect properties from increased water flow.

Lot Coverage: The percentage of lot area covered by buildings, including enclosed porches and accessory buildings.

1. Lot coverage by buildings shall be a maximum 35% of the lot with the exception of covered or uncovered porches facing frontages. Total building footprint (ground floor), not including covered or uncovered porches facing frontages, shall be a maximum of 1,500 s.f.

2. Walks shall be 4 ft. wide max.

3. Front yard impervious coverage shall be a maximum of 40%.

4. Rear yard impervious coverage shall be a maximum of 50%.

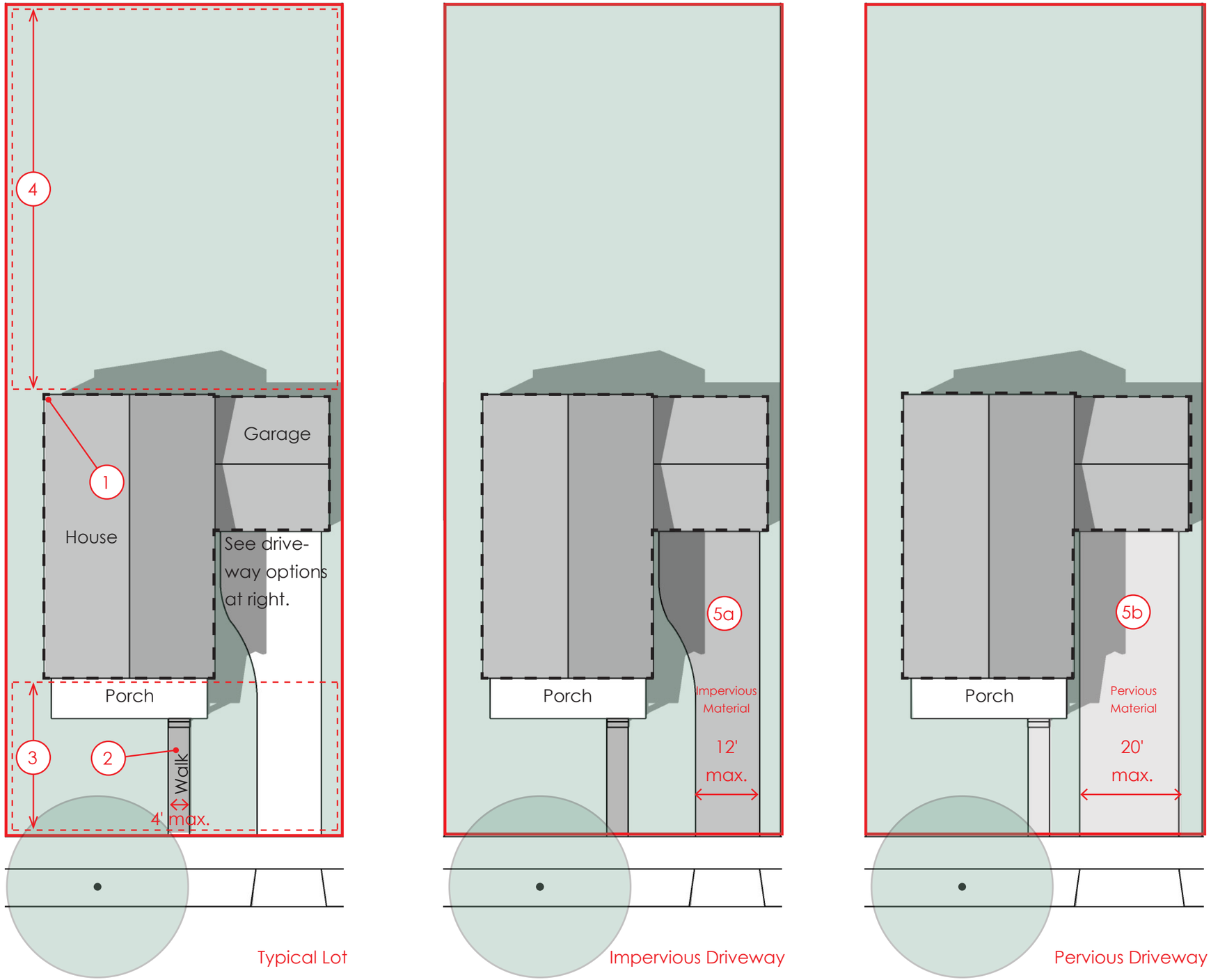
5a. In the first layer, driveways of an impervious material shall be 12 ft. wide max.

5b. Driveways of a pervious material shall be 20 ft. wide max. or 2 car widths max., whichever is less.

Property Line

Building Footprint (< 35% of Lot Area; 1,500 s.f. max.)

Areas Counted as Impervious



PARKING, GARAGES & PAVEMENT (ISSUE 4)

Garages should not be the prominent feature of the front elevation of the home or of the street frontage. Streetscapes that are dominated by garages and driveways give prominence to vehicles rather than reflecting a walkable, inviting neighborhood.

1 In the First Layer, the following are permitted:

- Driveways of 12 feet maximum width.
  - Pervious materials, impervious materials, and paved ruts are permitted.
- Driveways of 20 feet maximum width if permeable materials are utilized.

In the First Layer, the following are prohibited:

- Garages
- Carports

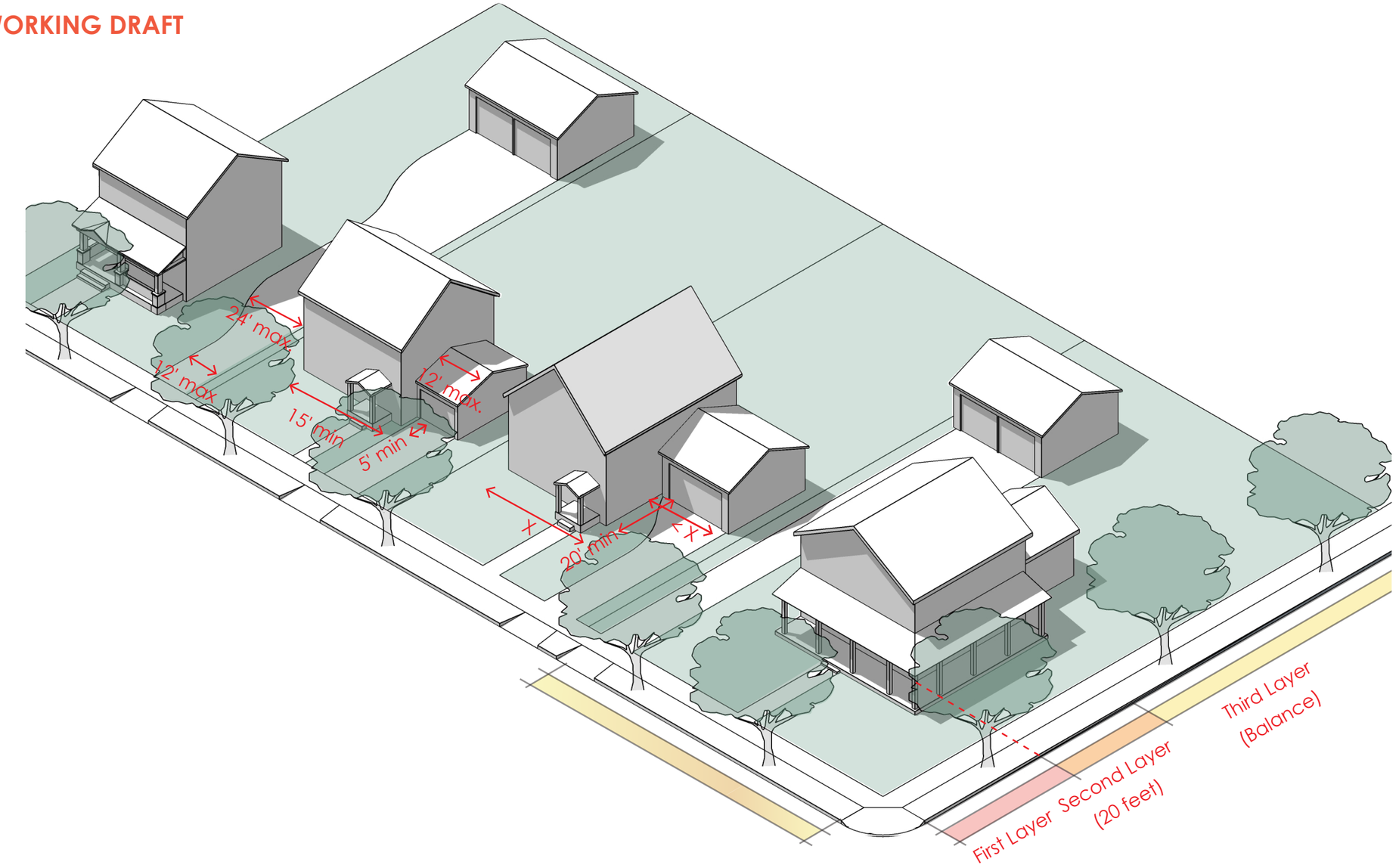
2 In the Second Layer, the following are permitted:

- Driveways of 24 feet maximum width if pervious materials are utilized.
- Driveways of 20 feet maximum width if impervious materials are utilized.
- Paved ruts.
- Garages and carports of 12 feet wide or less placed a minimum of 5 feet behind the façade of the primary building, if façade is at least 15 feet wide.

3 In the Third Layer, the following are permitted:

- Driveways of pervious or impervious materials.
- Paved ruts
- Parking
- Garages
- Carports

In all layers, permeable materials are preferred.



Garage beside house, set back.

Garage in rear yard, paved rut driveway.

Driveway with mixed materials.

Driveway with permeable materials.

ADDITIONS (ISSUE 5)

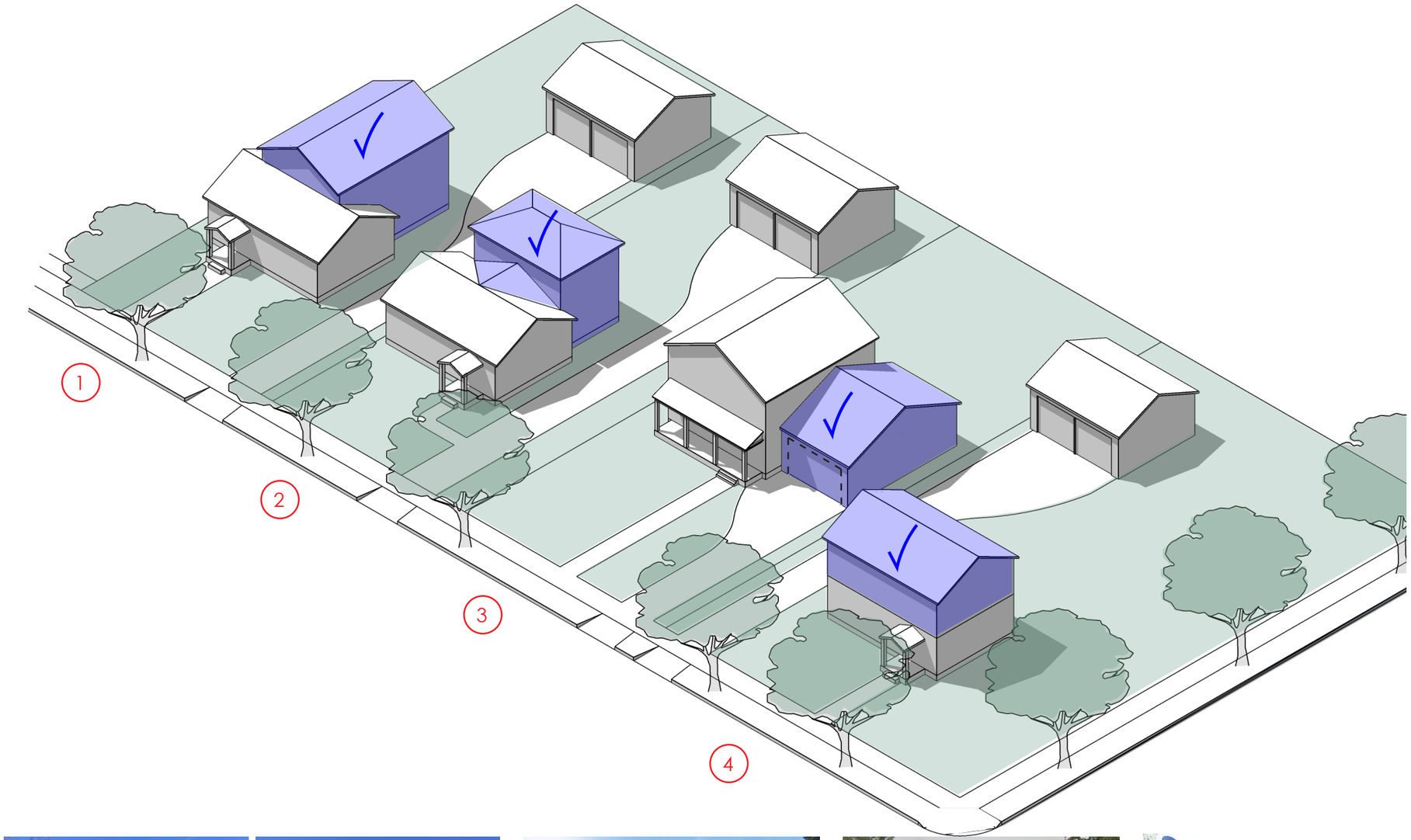
Additions should complement the design and proportions of the original structure. They should be concentrated toward the rear or the side of the existing structure whenever possible. The overall height, massing, and proportions should relate well to adjacent structures as well as to the larger neighborhood context. Additions with a proposed second story along a block of predominantly one-story homes, should demonstrate particular sensitivity regarding the overall scale and proportion as well as window placement and privacy of the new portion of the structure.

1. This addition is desirable because it is secondary in massing to the original structure (for example, it is smaller than, narrower than, shorter than, behind etc. or a combination of these things) and would be relatively inconspicuous from the street. However, the two-story height behind a one-story house barely qualifies as "secondary." If the new roof extended in front of the original ridge, it would not be considered secondary and would be undesirable.

2. This addition is desirable because it is secondary in massing to the original structure (for example, it is smaller than, narrower than, shorter than, behind etc. or a combination of these things) and would be relatively inconspicuous from the street, similar to house 1. Using a roof pitch similar to that of the original structure and a hipped roof help keep the two-story mass from dwarfing the original one-story structure.

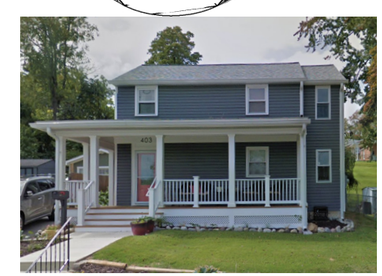
3. A roof eave and ridge that is lower than the original structure is desirable as is a roof that is perpendicular to the original structure.

4. A second-story addition can be desirable if the floor area of the second floor does not extend past the walls of the original structure, resulting in a single simple mass.



Rear addition, front and side views: secondary in massing from the primary street, change in roof lines to minimize mass, symetrical window alignment and placement.

Rear addition doesn't dwarf original, roof ridge is a only a few ft above, & it's relatively inconspicuous from the street.



Set back addition, matches colors & detail, roof ridge & eave lower than those of the original structure.

2nd story addition. Simple massing, symmetric windows with detail, porch breaks-up mass.

ADDITIONS (ISSUE 5)

Shown are some examples of additions which are not desirable.

1. The ridge of the roof of this addition dwarfs the original structure and looks out of place from the street. The ridge of the roof of an addition should not be higher than the ridge of the roof of the principal building unless the addition adds a full story to the Principal Building.

2. Similar to house 1, the two-story addition dwarfs the original one-story structure in front of it. The width of the addition should be less than that of the original structure, especially if the addition is taller.

3. This addition is undesirable because of the extension of the roof, which creates an unbalanced massing.

4. Adding a second-story that is of a greater floor area or extends past the walls of the original structure is undesirable.

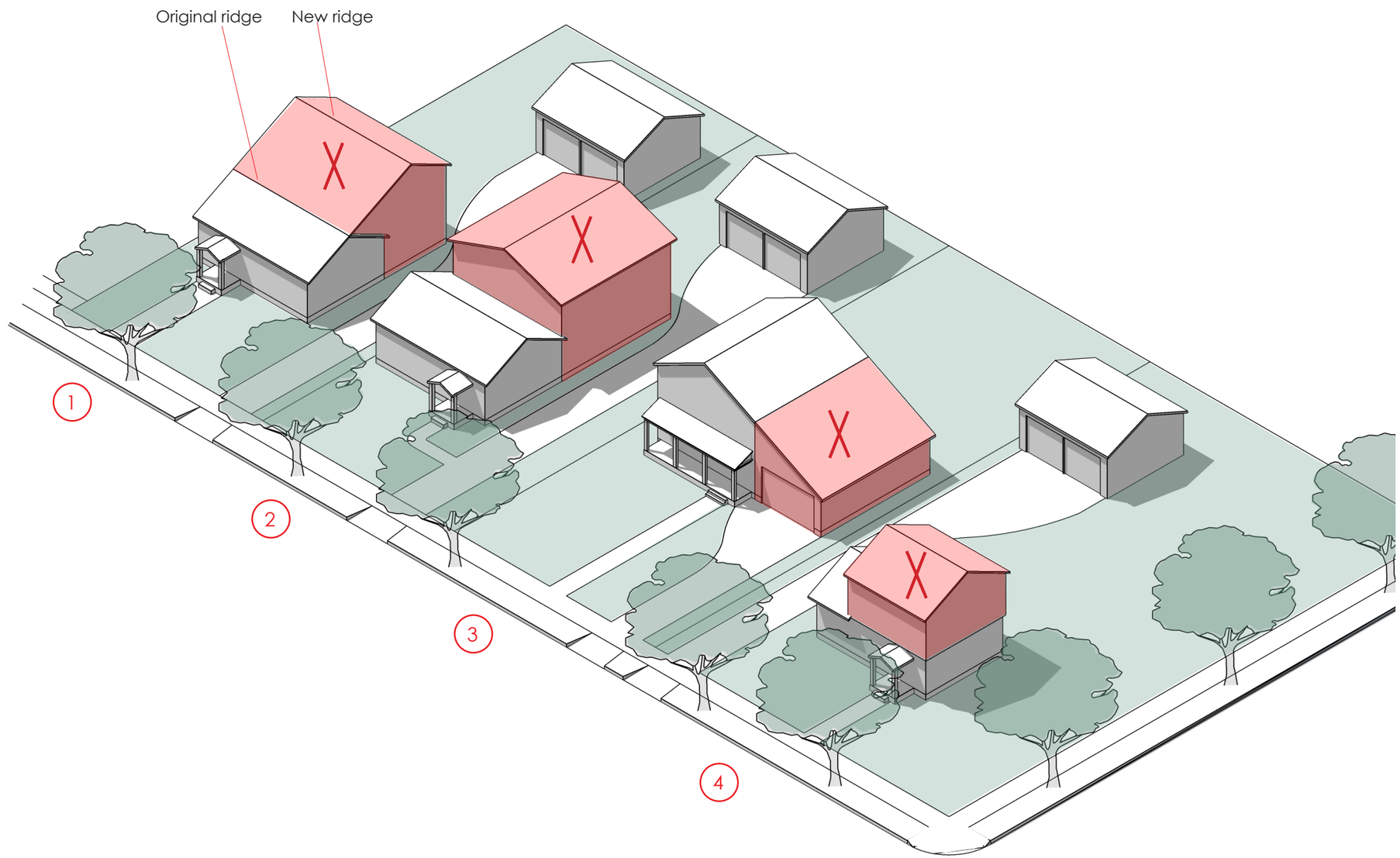
5. The eave of an addition should not be higher than the eave of the principal building unless the addition adds a full story to the Principal Building.

6. Additions to an existing Principal Building shall be secondary in massing, scale and detail to the Principal Building.

7. Additional stories should appear structurally feasible, i.e. openings should be directly above openings in the existing story below.

8. Façades of an additional story shall be the same material as the existing story below, or, an acceptable, appropriate transition between materials shall be included in the design.

9. Window proportions in additional stories shall match those of the predominant windows in the original structure. Alternatively, a style-based justification may be presented or if the windows in the original structure are of poor proportion, an administrative waiver may be requested from the Chief of Zoning.



BUILDING MASSING & SCALE (ISSUE 6)

The size of a typical single-family home is larger today than it was in the first half of the 20th century, when many of the homes in East Rockville were built. Finding a balance between flexibility in design, changing preferences in housing size and styles, and respecting established neighborhood character is one of the primary challenges for design guidelines in older neighborhoods.

The massing and scale of new construction can have the greatest impact on neighborhood character. Larger construction should be sensitive to the existing smaller-scaled neighborhood context. Roof lines, massing, windows, and porches, among other treatments, can have a significant impact on the perceived mass of a building.

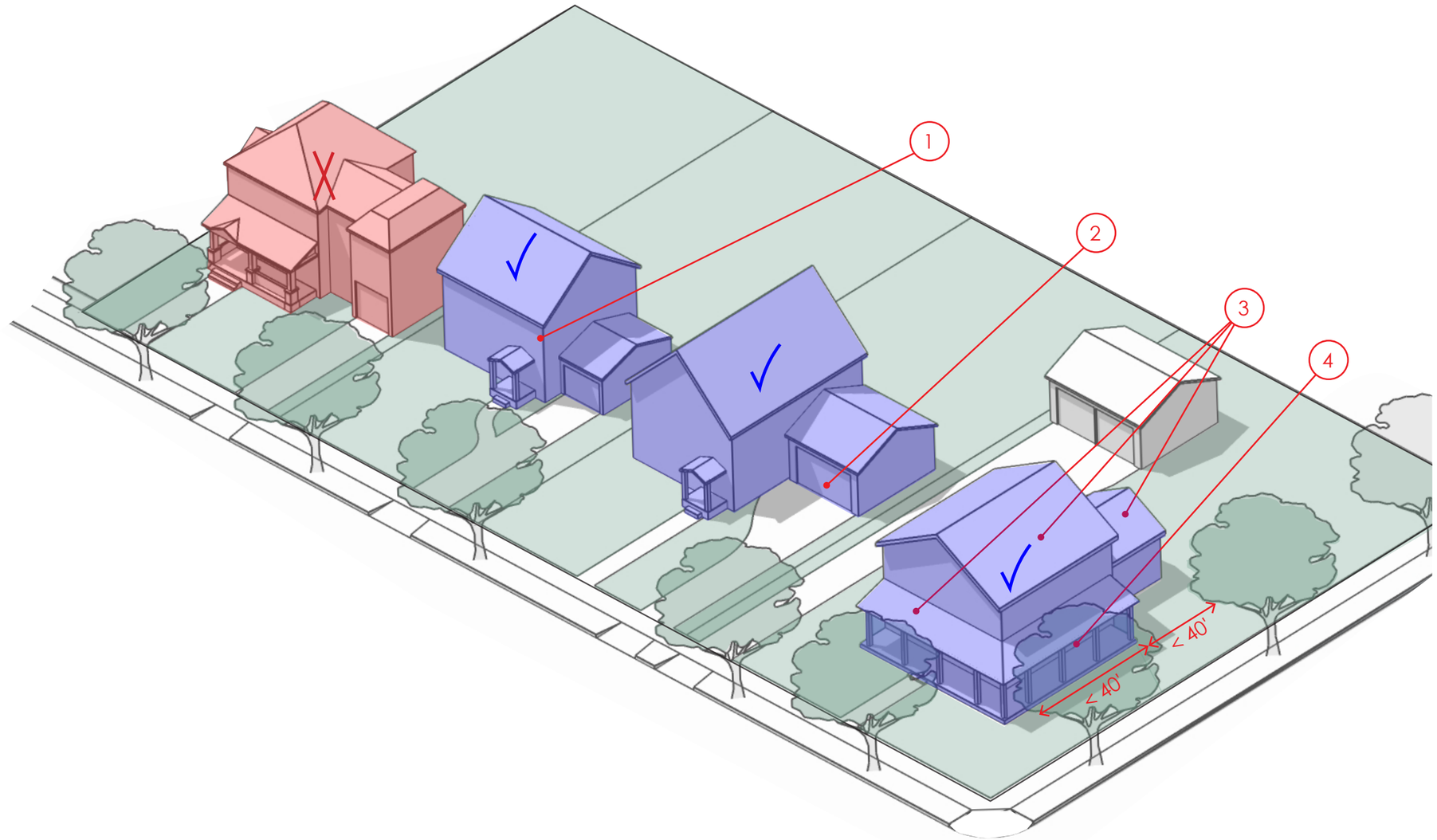
1. Buildings shall have simple massing (few Outside Corners), a similar overall height and similar floor-to-floor height.

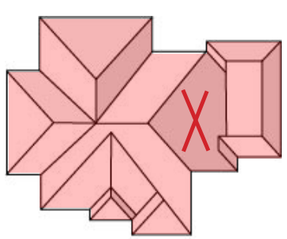
2. Garages shall not be in the primary mass of a building. Garages shall be located beside or behind the principal building and if beside, be setback (see also Issue 4).

3. Building massing should communicate hierarchy. Larger structures should be distributed into smaller masses to minimize the perceived mass of the building.

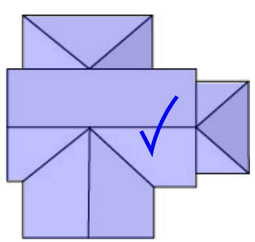
4. No single plane of a facade shall be greater than 40 ft.

5. Using a roof plan as a guide can help keep massing simple. The fewer ridges and valleys and overlapping gables, the simpler the massing.





Complex Roof Plan with many overlapping gables.

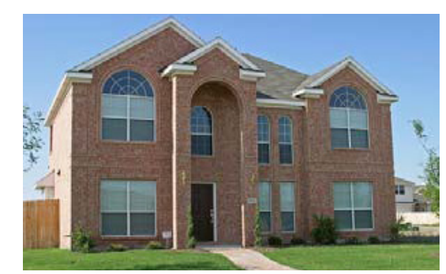


Simple Roof Plan

Simple massing (few outside corners)

Garage next to main structure helps break-up mass and transition to adjacent 1-story.

Simple, distributed massing clearly showing the main body of the house.



Overly bulky and undistributed massing with overlapping roof lines.

BUILDING HEIGHT (ISSUE 7)

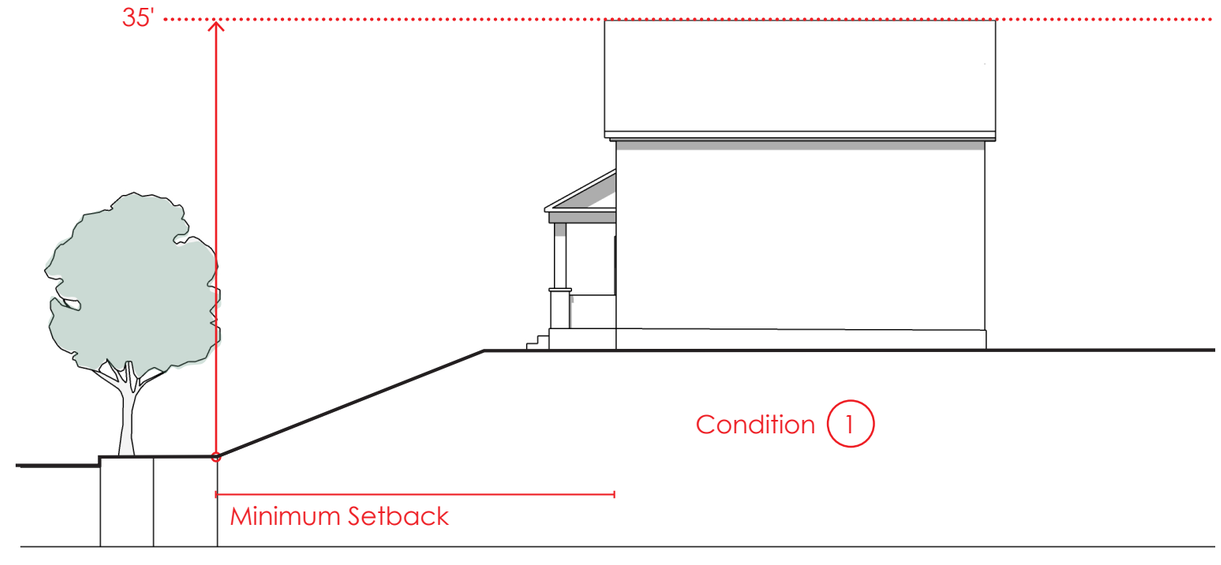
A building's scale is established largely by its height. Relatively consistent building heights establish a certain rhythm to a street. If a building is much taller than its surrounding neighbors it can seem out of place and break the existing rhythm. In older neighborhoods, it is not uncommon for one-story buildings to be replaced with taller, two-story homes.

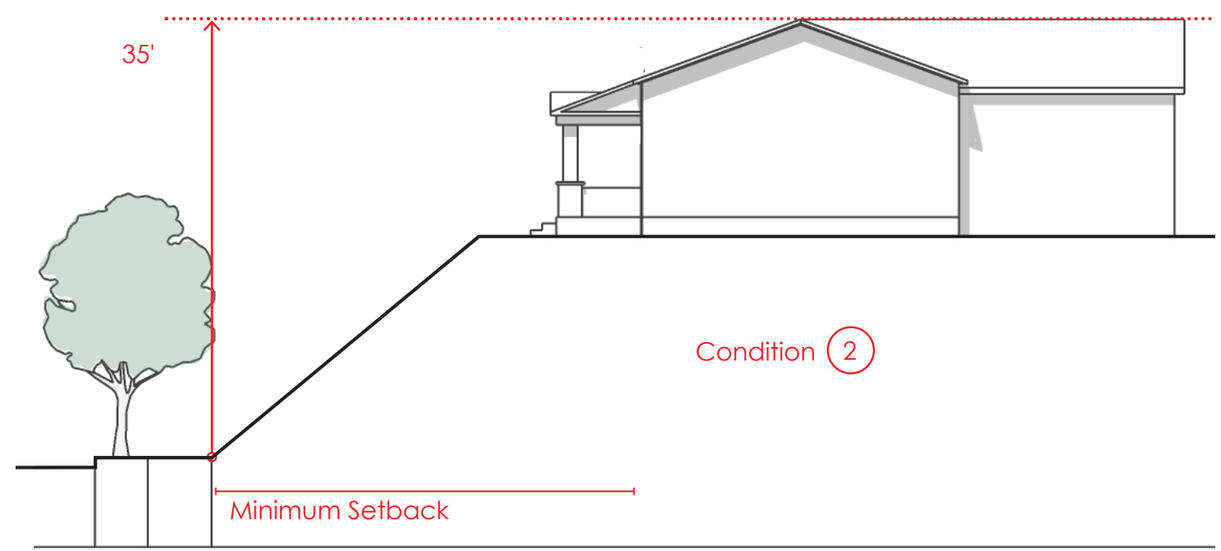
A building can be larger than adjacent structures and still be in scale and harmonious with the neighborhood. Currently, the city's zoning code measures height to the mid-point of the roof. Measuring to the peak provides greater predicability of final maximum building height.

1. Height shall be measured from the average grade at the front property line.

2. On lots where there is a slope that restricts the height to fewer than 2 stories, an exception to maximum height may be granted at the discretion of the Chief of Zoning.

3. Buildings shall be limited to a maximum height of 35 feet and 2.5 stories. Height is measured to the peak of the roof.



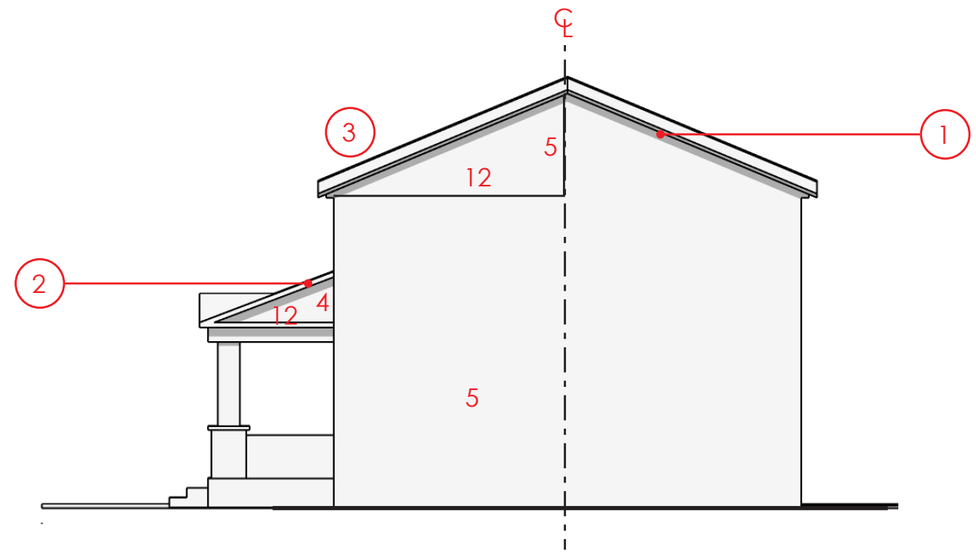


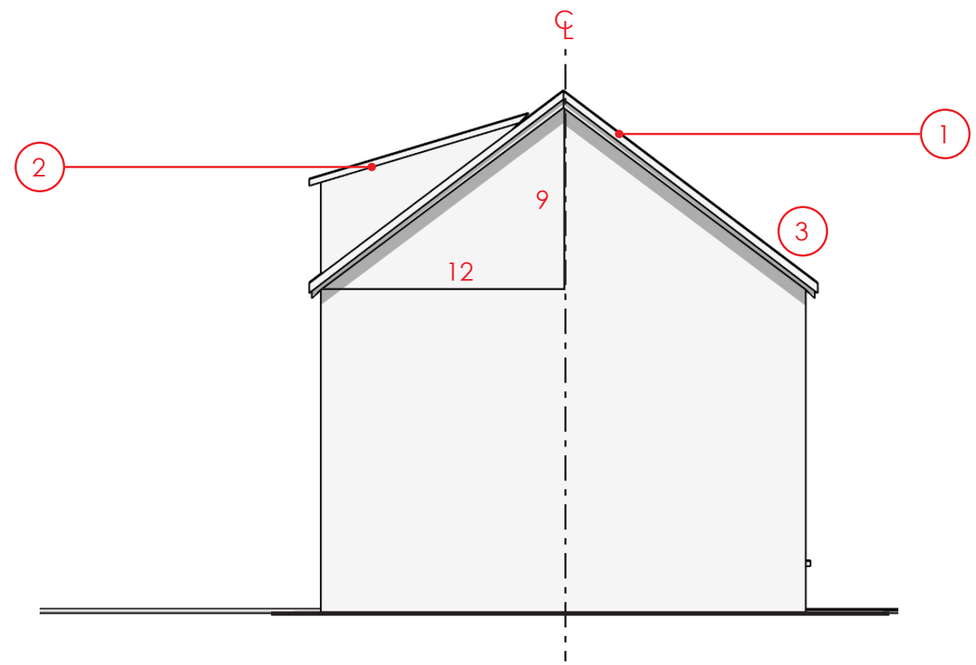
Examples of inconsistent height and mass between new and existing structures.

ROOF PITCH (ISSUE 8)

Pitch is the slope or angle of a roof. The form of a roof can contribute significantly to the mass and proportion of a building. Utilizing a lowered pitch or fewer ridges and valleys (as shown with Issue 6) is another way of reducing the bulk of a structure.

1. Pitched roofs shall be symmetrically sloped. The slope shall be 5:12 to 9:12
2. Porch roofs and attached shed roofs shall be 2:12 to 4:12.
3. Roof pitches shall be appropriate to the style of the building. Roof pitches other than those above may be permitted if demonstrated to be consisted with the style of the building.
4. Buildings with flat or shed roofs shall have a maximum height of 30 feet.





BUILDING ARTICULATION (ISSUE 9)

Articulating a building facade means to provide a variation to its surface, such as framed windows, adding a porch, or off-setting a portion of the elevation. Articulation gives texture to exterior walls, and simple treatments can provide architectural interest and break up the bulk of large structures.

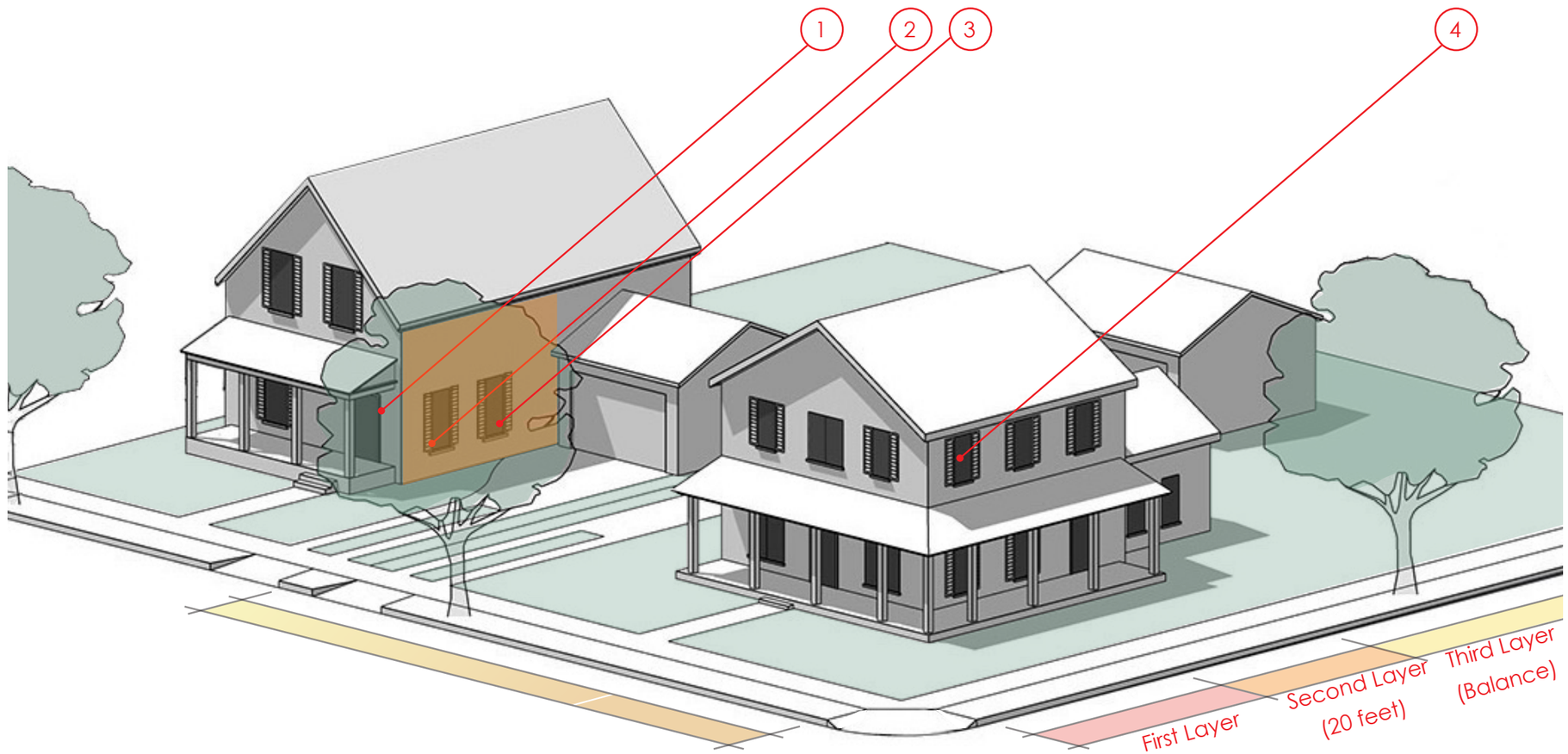
1. The front of the house and the location of the front door shall be clearly visible from the street.

2. Side elevations shall utilize one or more of the following methods to avoid large, blank walls:
   - Include windows. Windows are required on side walls in the second layer. These windows are required to follow the standards for windows facing frontages.)
   - Horizontal element: In addition to the side windows, houses over 2 stories shall utilize a horizontal eave or band on the wall or a change in material (refer to photo).

3. Side elevations shall include windows consistent with the proportion of the windows on the facade. Several windows on side elevations should be placed within the second lot layer.

4. On corner lots, both façades shall be similarly designed and detailed and have similar opening proportion, placement, pattern and alignment.

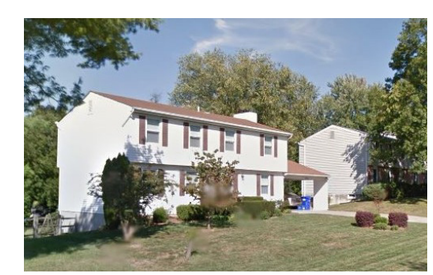
5. All building elements shall be of a consistent style.



Horizontal band, materials change between stories.

Corner House, articulated both façades.

Consistent window proportion.



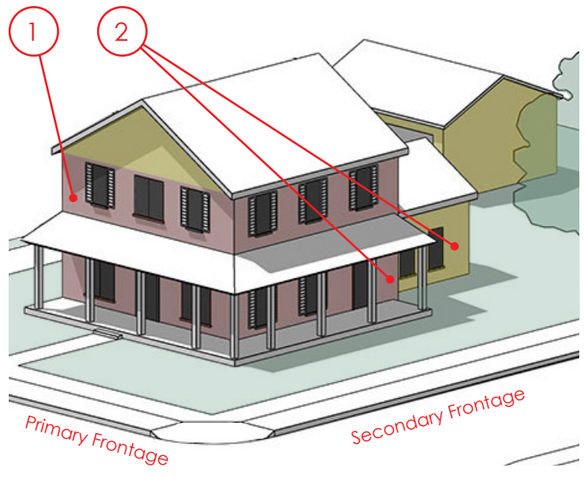
Avoid blank walls on side elevations.

BUILDING MATERIALS (ISSUE 10)

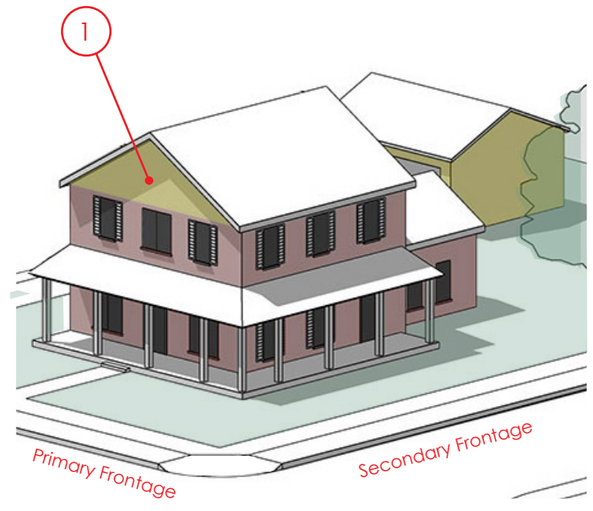
1. Gable ends in the Principal Building should be a single material and the material should be of equal or lesser apparent weight than the material of walls below.

2. If different materials are to be used on the same house, the materials should differentiate the fundamental parts of the building from one another (e.g. the foundation, building walls and top or the principle building and accessory structures).

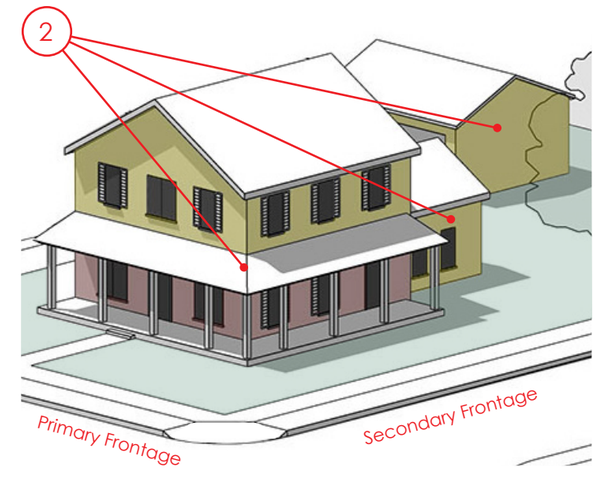
3. Materials should not change at outside corners (brick front, siding side) as this makes the material appear more like wallpaper than the structure of the building.



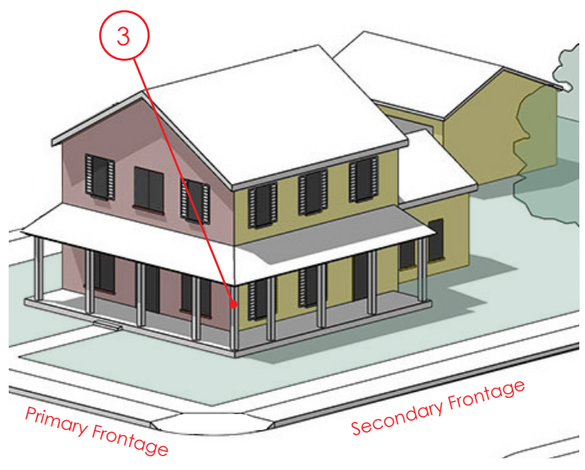
✓ Do: Using one or two materials for the Principal Building and another material for the Backbuilding and Accessory Building is preferred.



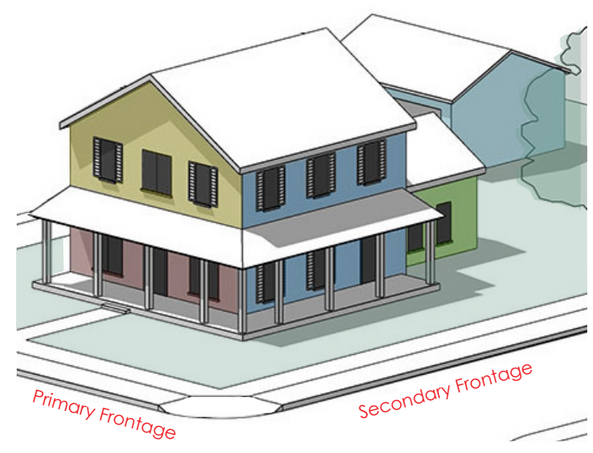
✓ Do: Using one or two materials for the Principal Building and Backbuilding and another material the Accessory Building is preferred.



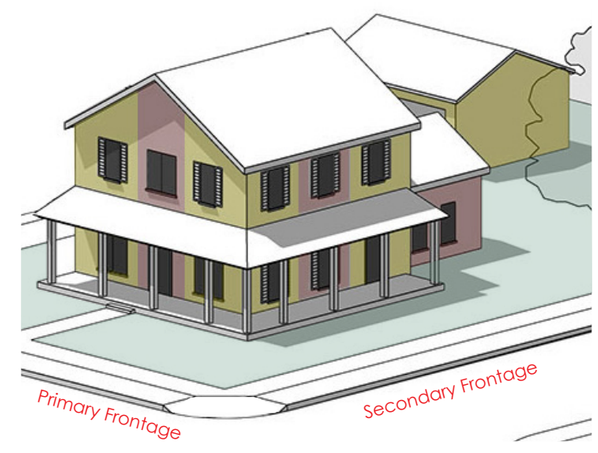
✓ Do: Transitioning between materials between floors is preferred as long as the material on the bottom is the more durable of the two.



✓ Permitted but not preferred: Material transitions around outside corners should be avoided.



✗ Don't: Using more than two materials per Principal Building and one per each Backbuilding and Accessory building is not preferred.

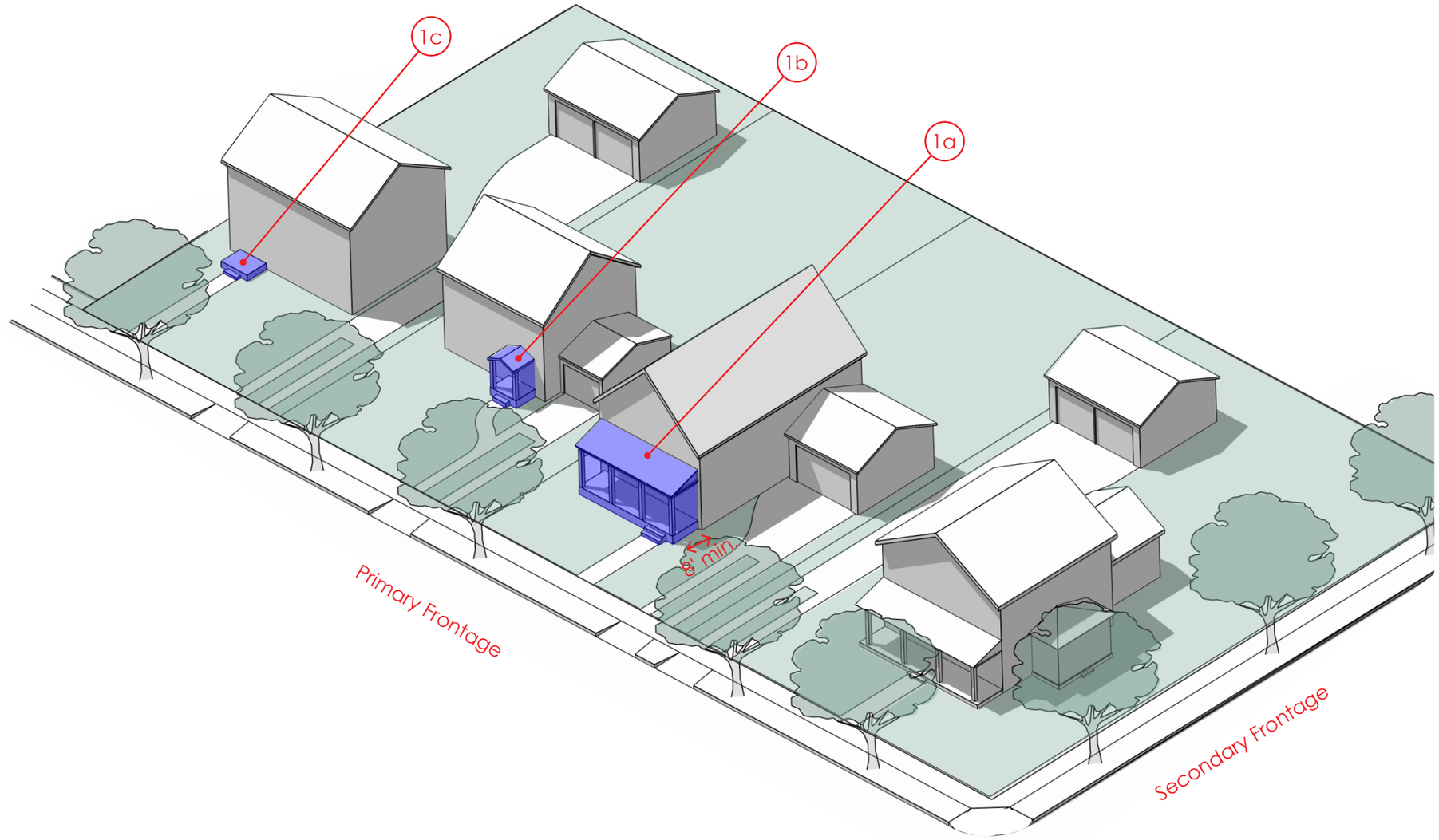


✗ Don't: Single planes should not transition from one material to another along vertical lines.

PORCHES & STOOPS (ISSUE 11)

Porches and stoops add more than just character and interest to a house. They also facilitate community and put more "eyes on the street", as they provide a place for sitting and conversation. Practically, they also provide shelter from the elements, and depending on size, additional living space.

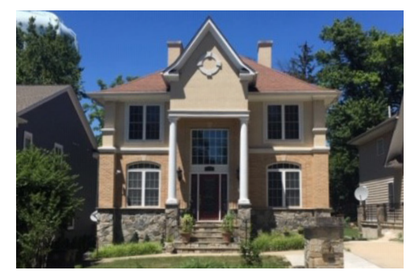
1. New principal buildings shall include a front porch, stoop or uncovered stoop.
   - 1a Covered, unenclosed porch/stoop.
   - 1b Covered porch/stoop.
   - 1c Uncovered porch/stoop.
2. Porches and stoops shall be a minimum of 5 feet deep, but 8 feet minimum is preferred.
3. Porches of two-story height ceilings are not permitted (see image A). Two-story porches with two habitable stories are permitted (see image B). Porch ceilings shall be similar to the ceiling height of the story to which they are attached.



One-story porch.

Uncovered stoop.

Covered porch.


A. Two-story porch.

B. Two one-story porches.