MEMORANDUM

To: Planning Commission

From: Allison Zike, AICP, Planner
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Adam Weinstein, AICP, Planning and Building Director

Date: February 28, 2019

Subject: Floor Area Ratio (FAR) and Lot Coverage Amendments, File Number CAM18-00258

Staff Recommendation
Receive briefing and follow-up on Planning Commission and Houghton Community Council direction from previous study sessions and discuss potential Zoning Code amendments to the FAR and lot coverage regulations for single-family residential development. Give staff direction on information or code refinements needed in advance of a public hearing scheduled for March 28, 2019.

Background
Review of the City’s FAR and lot coverage regulations has been included in the 2018-20 Planning Work Program. Although these two topics should be considered separately, there are some overlaps in the regulations, warranting a review of the potential amendments at the same time.

Staff originally discussed these topics with the Planning Commission at its April 12, 2018 and September 13, 2018 meetings. At that meeting, Commissioners discussed existing FAR exemptions and lot coverage materials, and requested that staff provide information on how other jurisdictions regulate FAR and lot coverage. No consensus was reached at that time on the recommended changes, and as a result staff is bringing forward more narrowly-scoped code amendments and conducting an additional study session prior to the public hearing.

Prior to the previous study session, staff discussed FAR and lot coverage with local architects, the Master Builders Association, Kirkland Alliance of Neighborhoods (KAN), the Public Works Department and Planning staff with expertise in reviewing applications for single-family housing projects. Staff has conducted additional conversations with KAN representatives and current planning staff and collected more input from design professionals since the September 2018 study session. This outreach did not provide a strong basis for eliminating FAR or lot coverage regulations, since in this robust housing market, there seems to be a tendency for single family projects to be built out to the maximum building envelope. Expanding this envelope further – even marginally – by
eliminating FAR or lot coverage regulations would not address community concerns about perceived building mass. Instead, staff identified opportunities for clarifying the existing regulations and incentivizing good design that could address community concerns that many new single-family homes appear too bulky.

The current demand for large houses is reflected in the design trends that are appearing in Kirkland and throughout the region. The two main design issues that were brought up most in staff’s conversations with stakeholders were that some new single-family houses appear too boxy and massive, and aesthetically incompatible with Kirkland’s older neighborhoods. Community members also expressed concern that many new houses seem to be built too close to existing houses. The proposed amendments are intended to address these concerns, along with clarifying the existing regulations and making them more effective.

**Comparable Jurisdiction Regulations for FAR and Lot Coverage**

At the previous study session, Planning Commission members requested that staff return with information on how other comparable cities regulate FAR and lot coverage. Below is a table summarizing FAR and lot coverage regulations for single-family development in other jurisdictions.

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Floor Area Ratio</th>
<th>Lot Coverage</th>
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</thead>
<tbody>
<tr>
<td>Bellevue</td>
<td>50% FAR maximum for most new single-family homes and additions adding more than 20% of gross floor area. Houses may exceed 50% FAR if they implement design incentives including increased side setbacks and pitched roofs or second story stepbacks. (Bellevue Land Use Code 20.20.010 Note 43)</td>
<td>For Residential zones, the code establishes maximum percentages for lot coverage by structures, hard surface coverage, and impervious surfaces. Also, for Residential zones, a minimum percentage of the front yard is required to be greenscape. (Bellevue Land Use Code 20.20.010)</td>
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<tr>
<td>Bothell</td>
<td>No FAR maximums for single-family residential.</td>
<td>For Residential zones, maximum percentages for lot coverage by buildings, accessory building coverage, and hard surface coverage. (Bothell Municipal Code 12.14.030)</td>
</tr>
<tr>
<td>Redmond</td>
<td>No FAR maximums for single-family residential.</td>
<td>For Residential zones, maximum percentages for lot coverage by structures and impervious surface area. Some Residential zones have a minimum percentage of open space required. (Redmond Zoning Code 21.08)</td>
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Proposed Amendments and Analysis

FAR Zoning Code Amendments
The City’s FAR regulations were adopted in 1999 (Ordinance No. 3709) to help maintain the character of the Market and Norkirk neighborhoods where extensive redevelopment of primarily single-family residences was occurring. It has been nearly 20 years since these regulations were first put in place. We have learned from experience that the regulations have not completely achieved the initial objectives and that there are still valid concerns about boxy, and/or large single-family residential buildings that are aesthetically different from existing houses in established neighborhoods. FAR is not effective within the disapproval jurisdiction of the Houghton Community Council, except for lots in the PLA 3C zone that are less than 7,200 square feet or lots that have less than the minimum lot size created through the small lot provisions of KMC 22.28.042, subdivisions.

Three specific FAR-related problems that staff identified for consideration in the code amendment process are:

- Attempts to maximize building square footage by adding building features (such as covered porches with walls) that are not included in the FAR calculation.

- The allowance of more basement square footage by using deep driveways that are buried below the main structure. Staff is not recommending a change in this allowance since we believe it has a minimal effect on the visible massing of structures, as the driveway itself does not contribute to the bulk and mass of the building.

- The preponderance of flat-roofed single-family houses. While some community members expressed concern about the pervasive nature of flat-roofed residences, staff encountered little support for granting additional height as an incentive for peaked roofs (but more support was identified for incentivizing peaked roofs using other means).

The proposed amendments are outlined below and included in Attachment 1.

1. Add an “intent” section at the beginning of Section 115.42 which describes the purpose of the FAR regulations.

2. Clarify that uncovered and covered decks, porches, and walkways are not exempt from gross floor area calculations for FAR if they are not open on at least three sides or do not have a minimum 50% of the perimeter of the deck, porch, or walkway open.

3. Add a definition for “carport” to clarify areas counted towards FAR.
4. Add a design-based FAR bonus to allow an additional 5% of FAR if certain design elements are used in the design and construction of a detached dwelling unit.

Lot Coverage Zoning Code Amendments:
The existing lot coverage regulations were put in place over 30 years ago. They were designed to address aesthetic concerns (e.g., to limit development on a lot) and to manage storm water. More recently, the Public Works Department has enacted new storm water management regulations, which address the storm water concerns.

Staff received minimal comment on lot coverage, with only a few community members indicating that some parts of the code need to be clarified. There was also a general feeling that the regulations have value and that the aesthetic need for open space is still important. Staff has received a range of feedback from current planners, community members, Planning Commission and Houghton Community Council regarding two specific materials, gravel and artificial turf, and whether they should count towards lot coverage. Currently, gravel counts at 100% of its area towards lot coverage, and artificial turf is generally counted at 50% of its area dependent on installation methods. Staff is specifically seeking feedback from the Council on gravel and artificial turf to guide the proposed definition of hardscape and revisions to the exemptions from lot coverage.

Both neighborhood groups and current Planning staff emphasized that the provision of “green space” with new development is highly desirable, especially within front yards. The proposed code amendments listed below and included in Attachment 2 are therefore focused on open space and aesthetics rather than storm water (which is already the subject of an independent set of regulations).

1. Replace the term “impervious surface” with “hardscape.”

2. Add an “intent” section at the beginning of Section 115.90 which describes the purpose of the lot coverage regulations (i.e., to promote greenery and open space in developed areas).

3. Change title of “Exceptions” section to “Exemptions” for materials that are completely exempt from lot coverage calculations.

4. Clarify which areas beneath eaves, balconies, and other cantilevered portions of buildings are exempt from lot coverage calculations.

5. Clarify requirements for landscaped areas located over subterranean structures, and which are exempt from lot coverage.

6. Add mechanical unit pads to exemptions for attached and detached dwelling units.
7. Make the following changes to the “Exemptions” section of the code, which allows certain exemptions to be calculated at a ratio of 50 percent of the total area covered.

   a. Change title of “Exemptions” section to “Partial Exemptions”.

   b. Remove the two references to the stormwater design manual since stormwater management is no longer part of the intent of the lot coverage regulations.

   c. Add “pavers” to the partial exemptions.

   d. Add artificial turf to the partial exemptions.

8. Provide a definition for “hardscape.” As proposed by staff, the hardscape definition clarifies that gravel is considered hardscape and is not fully or partially exempt from lot coverage calculations.

9. Revise the definition of “landscaping” for clarity

**Next Steps**
The next steps in moving these code amendments forward would be:

- **February 25, 2019:** Houghton Community Council Study Session and recommendation to the Planning Commission
- **February 28, 2019:** Planning Commission Study Session
- **March 28, 2019:** Planning Commission Public Hearing, deliberation and recommendation to City Council
- **April 2019:** City Council Decision
- **April 2019:** Houghton Community Council decision

**Attachments:**

1. Proposed FAR Zoning Code Amendments
2. Proposed Lot Coverage Zoning Code Amendments

cc: File Number CAM18-00258
The proposed amendments are shown below. The new wording is **bold and underlined** and the wording to be removed is **crossed out**.

115.42 Floor Area Ratio (F.A.R.) Calculation for Detached Dwelling Units in Low Density Residential Zones and Attached Dwelling Units in PLA 3C

**The intent of these F.A.R. regulations is to limit the perceived bulk and mass of residential structures as they relate to the right-of-way and adjacent properties and to ensure houses are proportional to lot size. The design incentives in Section 115.42.4 are provided to encourage building massing in the center of each lot, away from neighboring properties.**

1. Gross floor area for purposes of calculating F.A.R. and maximum floor area for detached dwelling units in low density residential zones and attached dwelling units in PLA 3C shall include the entire area within the exterior walls for each level of the structure. It shall also include the area of all carports\(^1\) measured as the area of the carport roof. It shall not include the following:
   a. Attic area with less than five (5) feet of ceiling height, as measured between the finished floor and the supporting members for the roof.
   b. Floor area with a ceiling height less than six (6) feet above finished grade. The ceiling height will be measured to the top of the structural members for the floor above. The finished grade will be measured along the outside perimeter of the building (see Plate 23). **For window wells, finished grade will be measured at the outside perimeter of a window well only when it is designed and constructed to the minimum dimensions necessary for egress.**
   c. On lots less than 8,500 square feet, the first 500 square feet of an accessory dwelling unit or garage contained in an accessory structure, when such accessory structure is located more than 20 feet from and behind the main structure (see subsection (3) of this section for additional information on the required distance between structures); provided, that the entire area of an accessory structure, for which a building permit was issued prior to March 6, 2007, shall not be included in the gross floor area used to calculate F.A.R. For purposes of this section, “behind” means located behind an imaginary plane drawn at the back of the main structure at the farthest point from, and parallel to, the street or access easement serving the residence.
   d. On lots greater than or equal to 8,500 square feet, the first 800 square feet of an accessory dwelling unit or garage contained in an accessory structure, when

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\(^1\) See proposed definition for “carport” at following code text
such accessory structure is located more than 20 feet from and behind the main structure (see subsection (3) of this section for additional information on the required distance between structures); provided, that the entire area of an accessory structure, for which a building permit was issued prior to March 6, 2007, shall not be included in the gross floor area used to calculate F.A.R.

e. Uncovered and covered decks, porches, and walkways that are open on at least three sides or have a minimum 50% of the perimeter of the deck, porch, or walkway open. Deck, porch, or walkway perimeters with the following characteristics are considered open:

1) Do not have walls, or

2) Have open or clear guardrails no taller than the minimum height required by the Building Code, and

3) Have corner posts or columns no wider than 12 inches on any side unless deemed structurally necessary.

f. One (1) exemption of 100 square feet if the dwelling unit has an internal staircase and/or an area with a ceiling height greater than 16 feet.

2. Floor area with a ceiling height greater than 16 feet shall be calculated at twice the actual floor area toward allowable F.A.R. The ceiling height for these areas will be measured to the top of the structural members for the floor above or, if there is no floor above, to the bottom of the structural members for the roof.

3. Separate structures will be regulated as one (1) structure if any elements of the structures, except for the elements listed in subsection (3)(b) of this section, are closer than 20 feet to each other.

a. Two (2) structures connected by a breezeway or walkway will be regulated as one (1) structure if any element of the breezeway or walkway is higher than 10 feet above finished grade.

b. Elements of structures that may be closer than 20 feet to each other are:

1) Elements of a structure no higher than 18 inches above finished grade;

2) Chimneys, bay windows, greenhouse windows, eaves, cornices, awnings and canopies extending no more than 18 inches from the wall of a structure;

3) Stairs extending no more than five (5) feet from the wall of a structure;

4) Porches extending no more than five (5) feet from the wall of a structure if:
i) The porch is no higher than one (1) story and the finished floor of the porch is no more than four (4) feet above finished grade;

ii) Three (3) sides of the porch are open other than railings and solid walls no higher than 42 inches;

iii) No deck, balcony, or living area is placed on the roof of the porch;

iv) The length of the porch does not exceed 50 percent of the wall of the structure to which it is attached;

v) Porch eaves may extend an additional 18 inches from the edge of the porch.

4. Design-based F.A.R. Bonus

a. An additional 5% F.A.R. above the maximum F.A.R. for the zone will be allowed if at least two of the design elements below are used in the design and construction of a detached dwelling unit:

1) With the exception of accessory features, all roof forms consist of ridgelines peaked near the center of the structure, with a minimum pitch of 4 feet vertical to 12 feet horizontal. Accessory features include, but are not limited to, covered entries, dormers, etc.

2) All structures are set back from side property lines by at least 7 1/2 feet.

3) The gross floor area of any floor above the first story at street or vehicular access easement level shall be reduced by a minimum of 15 percent of the floor area of the first story. The floor area reductions above the first story shall be incorporated along the entire length of the facade of one or both facades facing the side property lines in order to provide separation between neighboring residences.

b. The above F.A.R. incentive cannot be combined with any other F.A.R. incentive in this Code or the Kirkland Municipal Code.

This section is not effective within the disapproval jurisdiction of the Houghton Community Council, except for those lots in PLA 3C that are less than 7,200 square feet or lots that have less than the minimum lot size created through the small lot provisions of KMC 22.28.042, subdivisions.

PROPOSED ZONING CODE DEFINITION(S) FOR TERMS USED IN ABOVE REGULATIONS
5.10.xxx Carport
A roofed area of sufficient dimensions to park a vehicle which is connected or
directly adjacent to a driving surface

EXISTING ZONING CODE DEFINITIONS FOR TERMS USED IN ABOVE REGULATIONS

5.10.320 Finished Grade
The final contour of the land surface prior to landscaping.

5.10.325.5 Floor Area Ratio (F.A.R.)
The maximum permitted gross floor area allowed, expressed as a percentage of the lot size (gross floor area / lot size = F.A.R.). See KZC 115.42.

5.10.345 Ground Floor
The floor of a structure that is closest in elevation to the finished grade along the façade of the structure that is principally oriented to the street which provides primary access to the subject property.

5.10.340 Gross Floor Area
The total square footage of all floors in a structure as measured from either the interior surface of each exterior wall of the structure or, if the structure does not have walls, from each outer edge of the roof. Exterior areas may constitute gross floor area. See Chapter 115 KZC.
LOT COVERAGE REGULATIONS

The proposed amendments are shown below. The new wording is **bold and underlined** and the wording to be removed is *crossed-out*.

115.90 Calculating Lot Coverage

1. **General** – The area of all structures and pavement and any other **hardscape** impervious surface on the subject property will be calculated as a percentage of total lot area. If the subject property contains more than one (1) use, the maximum lot coverage requirements for the predominant use will apply to the entire development. Lot area not calculated under lot coverage must be devoted to open space as defined in KZC 5.10.610.

   **The intent of these lot coverage regulations is to limit areas of hardscape, place an emphasis on landscaping with natural materials, and to increase vegetated spaces throughout the City.**

2. **Exemptions-Exceptions** the following are exempt from the lot coverage calculation.

   a. An access easement or tract that is not included in the calculation of lot size will not be used in calculating lot coverage for any lot it serves or crosses.

   b. Pervious Areas **of landscaping** below eaves, balconies, and other cantilevered portions of buildings.

   c. **Planted** Landscaped-areas at least two (2) feet wide and 40 square feet in area located over subterranean structures if the Planning Official determines, based on site-specific information submitted by the proponent and prepared by a qualified expert, **that** soil and depth conditions in the **planted** landscaped area will provide **adequate space for proposed plantings to mature to a size typical for their species** cleansing and percolation similar to that provided by existing site conditions.

   d. Rockeries and retaining walls, unless located adjacent to or within 12 inches of another impervious surface such as a patio, building or parking area.
e. Public sidewalk if located within a public easement on private property.

f. **Hardscape surface under HVAC and similar types of mechanical equipment for detached or attached dwelling units only.**

3. **Partially Exempt Materials** Exemptions – The following materials exemptions will be calculated at a ratio of 50 percent of the total area covered. Exempted area shall not exceed an area equal to 10 percent of the total lot area. Installation of exempted surfaces shall be done in accordance with the current adopted stormwater design manual:

a. Permeable pavement (non-grassed).

b. **Pavers no larger than 12”x12” per individual paver**

c. Grassed modular grid pavement.

d. Open grid decking over pervious non-hardscaped area.

e. **Artificial Turf**

d. Pervious surfaces in compliance with the stormwater design manual adopted in KMC 15.52.060.

PROPOSED NEW ZONING CODE DEFINITION FOR TERM USED IN ABOVE REGULATIONS

5.10.xxx Hardscape

Hardscape is a placed, created, constructed or compacted hard surface area, which is unavailable for landscaping as defined by KZC 5.10.465. Hardscape surfaces include, but are not limited to: building foundations, patios, driveways, parking lots, concrete or asphalt paving, gravel, or other similar surfaces. Hardscape surfaces do not include open space as defined in this code.

PROPOSED REVISIONS TO ZONING CODE DEFINITIONS FOR TERMS USED IN ABOVE REGULATIONS
5.10.465 **Landscaping**
The planting, removal and maintenance of vegetation along with the movement and displacement of earth, topsoil, rock, bark and similar substances **and/or associated** done in conjunction with the planting, removal and maintenance of vegetation.

**EXISTING ZONING CODE DEFINITIONS FOR TERMS USED IN ABOVE REGULATIONS**

5.10.610 **Open Space**
Vegetated and pervious land not covered by buildings, roadways, sidewalks, driveways, parking areas, plazas, terraces, swimming pools, patios, decks, or other similar impervious or semi-impervious surfaces.

5.10.651 **Pervious Surface**
For properties within the jurisdiction of the Shoreline Management Act, see Chapter 83 KZC. Otherwise, as opposed to impervious surfaces, these are surfaces that allow water to infiltrate into the ground. Pervious surfaces include pervious paving, lawn, landscaping, bare ground, wood chips, pasture and native vegetation areas. For the purposes of compliance with storm water development regulations, impervious and pervious surfaces are defined pursuant to Chapter 15.52 KMC.